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About the electronic version

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The digital edition of this book was sponsored by Mary Weston, daughter of General Sir Howard Kippenberger who served as one of the Editors-in-Chief of the Official History of New Zealand in the Second World War.

All unambiguous end-of-line hyphens have been removed, and the trailing part of a word has been joined to the preceding line. Every effort has been made to preserve the Māori macron using unicode.

Some keywords in the header are a local Electronic Text Centre scheme to aid in establishing analytical groupings.

Revisions to the electronic version

11 November 2004

Colin Doig

Added name tags around various names of people, places, and organisations.

31 August 2004

Jamie Norrish

Added link markup for project in TEI header.

26 August 2004

Jamie Norrish

Corrected typos: "Bivorac" to "Bivouac" in caption following page 144; "form" to "from" in caption following page 504. Moved map to correct position following page 506. Added missing caption to photograph following page 304. Corrected captions for photos following page 504. Replaced duplicated photos following page 504 with correct photos.

2 August 2004

Jamie Norrish

Added funding details to header.

27 July 2004

Jamie Norrish

Added missing text on page iv.

4 June 2004

Jamie Norrish

Completed TEI header. Added omitted text (printer details) on title page.

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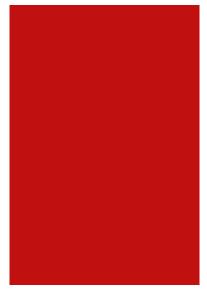
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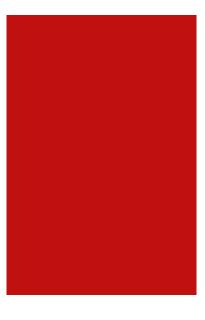
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Stand Mines of Asia College Birth Anna Standy (Br. 1999)

Divisional Signals

C. A. 203.MAX

MATCH ON ASSAULT

DIVISIONAL SIGNALS DIVISIONAL SIGNALS Divisional Signals

[FRONTISPIECE]



Linemen working after snowfall at Castelfrentano, Italy

Linemen working after snowfall at Castelfrentano, Italy

[TITLE PAGE]

Official History of New Zealand in the Second World War 1939–45 Divisional Signals

C. A. BORMAN

WAR HISTORY BRANCH

DEPARTMENT OF INTERNAL AFFAIRS WELLINGTON, NEW ZEALAND

1954 PRINTED AND DISTRIBUTED BY



Hermes, the son of Zeus and Maia, the messenger of the gods, commonly figured as a youth, with the *caduceus* or rod, *petasus* or brimmed hat, and *talaria* or winged shoes. Identified with the Roman Mercury which is the insignia of the Royal Corps of Signals throughout the British Empire.

FOREWORD

Foreword



BY

THE author of this volume, Mr Allan Borman, has been given a responsible job, because in writing this history he is telling the story of one of the most efficient units of the New Zealand Division. For that reason I am glad to write this foreword, because it gives me the chance of placing upon record the debt the Division owes to the skill and devotion of our Signal Service.

The 2nd New Zealand Divisional Signals, under Major Agar, were the first unit of our Expeditionary Force to see active service in World War II. At short notice, they took over the signals of the Western Desert Corps, and took part in Lord Wavell's Libyan campaign in December 1940. From that victorious start, they continued to serve with great efficiency and devotion throughout the whole of the war. They were set a very difficult task in Greece and Crete in 1941, and through all the heavy fighting in the Western Desert, including the Battle of Alamein. They fought right through to Tunis, where they finished in May 1943. When the Division moved to Italy, they fought continuously, and finished their active service in the final dash which liberated Trieste in May 1945.

The efficiency of a highly trained technical unit depends upon the quality of the men from which the rank and file are drawn, and also to a great extent upon the men responsible for their training. In both respects we as a Division were well served. New Zealand sent men from the Post and Telegraph Department to maintain our Signal Units, and we were fortunate indeed to have senior officers of the quality of the late Colonel Sam Allen, a Regular soldier, and those that followed, Colonels Agar, Grant, Pryor, Ingle and Foubister.

The Divisional Signals had six years' hard service in a series of most difficult campaigns. I am glad to pay a tribute to this excellent unit, and I hope this history will have the wide circulation it deserves.

Bernard Fryberg

Deputy Constable and Lieutenant-Governor

Windsor Castle

PREFACE

Preface

A FAMOUS author—Somerset Maugham, I think—once said that fact is a poor story-teller. He asserts that it often has the makings of an interesting situation but fails to develop it, leaving the main theme and wandering along paths of seeming irrelevance that have no climax. Well, that is exactly how I found some of the War Diaries that Signals wrote during the six years of the last war; some of them I wrote myself! Certainly there was a good deal of useful material in them but most of them—particularly those written by the Signal sections attached to field regiments—teemed with small irrelevancies. For example, what can one make of a lengthy repetitive string of consecutive daily entries which say, 'Section organisation and training'? Or perhaps, 'Three ORs provided for regimental picquet'? Or, worse still, on one dreadful occasion, 'Lunch at 1300 hours'!

I fear that a lot of readers may find that parts of this story are rather dull and tedious and, perhaps, needlessly repetitive. Other parts they may decide are fairly interesting reading. But these things I shall leave them to judge for themselves.

Although this is a book about the war it contains no heroics and not very much blood. It is a story about several more or less self-contained Signals sub-units which, in a rather sprawling organisation, spread into almost every formation and unit of the Second New Zealand Expeditionary Force. It tells how the men of these sections groped and fumbled through their tasks in the early days of the war; how they gradually became more proficient as the months and years passed; and how they evenually attained a mastery of the art and practice of communications in battle that was the envy of many other formations of Eighth Army. It tells also of the indomitable courage which sustained them in defeat in those dark hours in Greece and Crete and in the

Western Desert in mid-1942.

In the brief manner which is all that is possible in the story about a supporting arm like Divisional Signals, I have tried to pay tribute to the valour of the infantryman and the gunner and the men of all those other units with which Signals was so closely associated during the war.

To those who assisted me in the making of this book I owe many grateful thanks. They are too many for me to mention them individually, but I must say a special word of appreciation to Charles Brewer who, as secretary of the Second Divisional Signals unit history committee, has given me very valuable assistance indeed, frequently at considerable personal inconvenience to himself. I must also express my gratitude to Lieutenant-Colonel Agar for his consistent help and encouragement.

In conclusion, I have to acknowledge the most valuable assistance which I had in my task, that which was accorded me by the staff of the War History Branch in the correction and checking of my early drafts. To Messrs. I. McL. Wards, W. E. Murphy, R. Walker and R. L. Kay I am particularly grateful.

UPPER HUTT

20 June 1954

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CHAPTER 1 — MOBILISATION

CHAPTER 1 Mobilisation

O_N4 September 1939 a *New Zealand Gazette* Extraordinary proclaimed:

His Excellency the Governor-General has it in command from His Majesty the King to declare that a state of war exists between His Majesty and the Government of the German Reich, and that such a state of war has existed from 9.30 p.m., New Zealand Standard Time, on the third day of September, 1939.

Within a matter of hours certain units and servicemen were mobilised; among these was a signal office detachment, drawn from the Central Military District Signal Company of the New Zealand Corps of Signals (Territorial Force). The detachment's immediate task was to provide certain signal communications within Central Military District, these including internal telephone services between District Headquarters, Headquarters Area 5 and Army Headquarters.

Enlistment for the Special Force began on 12 September. In order to safeguard essential industries and services the Government had considered it necessary to impose some restrictions on enlistments. These restrictions were governed by a schedule of what were called 'important occupations'. The need for such a procedure had come about as a result of some unfortunate experiences during the First World War, when enlistment had been carried out regardless of the effect produced by the depletion of certain essential categories of tradesmen. During the enlistment of men for the Special Force in the Second World War it was inevitable, of course, that some enthusiastic recruits should mis-state their civil occupations to avoid being drafted to similar work in the Army. It is necessary to mention these points because there is no doubt that some of the difficulties encountered in 1939 in obtaining skilled tradesmen, such as Morse operators and linemen for Divisional Signals, can be traced to the failure of some recruits to disclose their true

occupations.

Early in October 1939 a serious difficulty in the supply of skilled tradesmen for Divisional Signals was revealed. Many of the men drafted to the unit had no special qualifications of value to Signals. It was known, however, that there were many employees of the Post and Telegraph Department who had enlisted for service with the Special Force but had not been called up. The matter was taken up promptly with Headquarters Mobilisation Camp, Trentham. Later it was found that some of the men concerned had been called up but had been posted to other units where it was apparent that their special aptitudes and skill were not being usefully employed. Stronger representations were then made to Headquarters Mobilisation Camp, and it was pointed out that these men were in the 'important occupations' class and had been released by the Post and Telegraph Department on the understanding that their services were required in their technical trades. In these later representations emphasis was laid on the impossibility of producing qualified technicians and Morse operators of the required standard in a few months from men who had had no previous experience.

Timely though these representations were, they unfortunately did not have the desired effect. At the end of November it was again found necessary to press strongly for assurances that men whose special qualifications fitted them for employment in Divisional Signals, more particularly Morse operators, linemen and technicians qualified in wireless communications, should be posted to that unit.

A General Staff instruction on 8 September directed that officers and NCOs above the rank of lance-corporal were to report to their respective training centres throughout the country on the 23rd. Officers of the Regular Force were appointed as adjutants, and Permanent Staff warrant officers and NCOs as regimental sergeant-majors and regimental quartermaster-sergeants. Training directives for the various arms of the Special Force were issued in September. It is interesting to note that Territorials were not to be told at any stage of their training to 'forget all that they had ever learned'.

Officers and NCOs who had been selected for service with the Special Force were notified by telegram on 20 September that they were required to report for duty on the 27th. On that date nine officers and nineteen NCOs of the New Zealand Corps of Signals assembled at Trentham Mobilisation Camp, ready to undergo an intensive five-day premobilisation course of instruction. By 3 October, when the main draft of Divisional Signals entered camp, a skeleton training and administrative organisation was already in operation. In those early weeks of mobilisation the responsibility of administration and training fell to the Regular Force personnel. Major Allen, ¹ of the New Zealand Staff Corps, whose appointment at that time was Commander No. 1 Camp and who at the outbreak of war was OC Area 4 at Hamilton, was well known to most of the Divisional Signals men in the camp. He had for a number of years been Signals Staff Officer at Headquarters Central Military District in Wellington, and his connection with signals organisation led to his appointment later in the year as CO Divisional Signals in the Special Force. Although Allen's appointment was nominally that of Commander No. 1 Camp, his principal responsibility was the training and organisation of the Divisional Signals unit. In this task he had the able assistance of Captain Vincent, DCM, MM, ² of the New Zealand Staff Corps, Adjutant of the new unit.

Captain Agar, ³ who had commanded the Central District Signal Company for some time before he joined the Special Force, was appointed to command No. 1 Company of Divisional Signals. Staff-Sergeant Stevenson, ⁴ of the New Zealand Permanent Staff, was RSM.

To accommodate the Special Force an immediate start had been made on the erection of permanent hutted mobilisation camps. Tented camps were established at Trentham to accommodate the troops while the huts were being erected, and by 3 October some hutted sleeping and messing accommodation was available. In the Divisional Signals' area, however, sleeping huts had not yet been started and mess halls, kitchens, and hot-shower houses were still incomplete.

Fifty-nine men of the main draft for Divisional Signals marched into camp on 3 October. They were followed by ninety-nine on the 4th and another forty-four on the 5th.

In the early days of mobilisation the private soldier spent much time waiting in queues. He stood in long queues to receive his food; he stood patiently in pay queues, where his position from the front of a seemingly interminable line depended solely on his place in the alphabetical register; he stood in other long queues and shuffled forward one slow step at a time to receive as a reward for his patience a uniform which fitted his frame only where it touched. As he looked at his new boots his heart sank. Perhaps, if he were not too young, he had heard of 'Bill Masseys'; or perhaps other dim recollections of the massive footwear that his father had worn in the First World War stirred his apprehension. Fortunately there were many there who were Territorials and had learned to tame the army boot. In many of the bell tents which stretched in four straight rows towards the shower houses and administrative buildings at the southern end of the camp, groups of men put on their new garb; odd assortments of serge tunics and trousers made up sombre combinations of dusty brown and bilious green, while here and there battered brass buttons flaunted their motif of verdigris.

A vast amount of administrative work, such as the issue of clothing, medical and dental examinations, protective inoculations, and the completion of personal files and paybooks, was crammed into the first week of mobilisation. On 9 October, however, training commenced in earnest. The men were grouped into thirteen small parties, each of which, every morning from Monday till Friday, carried out basic training, which comprised infantry, small-arms and physical training. In the afternoons they were rearranged into another thirteen groups, according to their knowledge of the Morse code, for training in Morse flag, Morse buzzer and Morse lamp. This type of training ceased at the end of October, and from then until the end of November the men were grouped for specialist training as operators, despatch riders, linemen, drivers, and workshops personnel. New recruits, of whom fifty-five had

marched in during October, were associated with the operator group for Morse training.

From Monday until Friday each day began with a forty-minute period of infantry and small-arms training. This was followed by trade training in six periods, each lasting forty minutes, and the day closed with thirty minutes of physical training. In the evenings the men were encouraged to attend voluntary classes in Morse training. Each group concentrated on those phases of signal work with which it was directly concerned. Operators and technicians had the use of four No. 9 wireless sets and thirteen No. 1 sets. During November the arrival of thirty-two new motor vehicles, including nineteen 8-cwt WT (wireless telegraphy) trucks, enabled considerable progress to be made in the training of drivers. Unfortunately no motor-cycles had yet been made available for the training of despatch riders. Repeated representations to Camp Headquarters were without avail, so despatch riders had to be content with instruction in map-reading and other less exciting forms of training. This continued, except for occasional spells of driving and vehicle maintenance with the drivers' group, throughout the whole of the despatch riders' training in New Zealand, as the unit did not receive any motor-cycles until shortly after its arrival in Egypt.

An epidemic of influenza had been hindering the progress of training to a serious extent and the number of Divisional Signals men in hospital or 'sick on leave' began to rise sharply in the last week of October. A mobilisation camp order issued on the 26th directed that 'epidemic' units were not to move more than one mile from the camp during training. Leave, however, was not curtailed. In the opening days of November the epidemic continued to wax and wane, reaching its peak on the 9th, when seventy-two men of Divisional Signals were in hospital or excused duty. By the middle of the month the number affected had decreased rapidly.

The composition of the Special Force was announced on 16 October by the Director of Mobilisation, and the Divisional Signals unit became 2 New Zealand Divisional Signals. The name given to the Special Force was 2 New Zealand Division; the designation 2 New Zealand Expeditionary Force, by which the whole force despatched overseas was to be known, was not adopted until 12 December 1939. The decision that 2 NZEF was to go overseas was made public on 23 November. At the same time it was announced that Major-General B. C. Freyberg, VC, had been appointed to command the Force. General Freyberg was to leave England as early as possible for New Zealand to inspect the officers and men of his new command.

The announcement that the Special Force would be despatched overseas had a stimulating effect on the training of the men in camp, on the men themselves, and on recruiting. The attitude of the public towards the men in camp also changed appreciably after the announcement. The average New Zealander had been more than a little complacent about the war up to this stage, and an idea seemed to have prevailed that the men were enjoying a good holiday in camp. A large number of people really believed that when the men had completed their three months' training they would be returned to their civil occupations. Cases of obstruction of uniformed men had occurred in several places, while open scoffing by hooligans had been frequent. One soldier, Signalman O'Hara, ⁵ had been accosted in his own home town by some village louts, one of whom even had gone so far as to spit in O'Hara's direction to demonstrate his contempt for a uniformed soldier.

In Wellington several fights had occurred between hoodlums and military patrols when the offensive heckling to which they were subjected had exhausted the servicemen's patience. A favourite stamping ground for these louts was the Hotel St. George corner, where several small parties of Divisional Signals men had been molested and abused on a number of occasions. Towards the end of November the activities of these parties of yahoos had reached such a pitch of insolence that some of the men decided to organise a punitive expedition into the city. Brian Fargus, ⁶ a Divisional Signals soldier of imposing stature and impressive muscular proportions, was the instigator of this move. Ostensibly, the party which Fargus selected for

the task was to be a picket, but he selected his men with an eye to Rugby characteristics rather than military deportment. The party set off on a Friday evening and made its way to the Hotel St. George area. Fargus sent two of his men forward to act as decoys for the hoodlums while he and the rest of the picket lurked in the throng which surged through lower Willis Street. The two decoys reached the corner and in a short time the louts appeared and commenced to heckle them and shoulder them about the footpath. Suddenly Fargus and his party burst out of the crowd and the fun commenced. After a decent interval the officer in charge of the picket, Captain John Feeney, 7 appeared and, judging that the decontamination had reached a satisfactory stage, called the party off. It is interesting to record that this particular area was free for some time from the unwelcome activities of street loafers.

Towards the end of November the first contingent of Divisional Signals began to assume some resemblance to the organisation which would enter the field. Men were posted to headquarters to fill its establishment, while the majority were drafted to the component parts of No. 1 Company which, besides its company headquarters, comprised a wireless section (A), a cable section (B), an operating section (D), a technical maintenance section (M), and a small section (C) of electricians, instrument mechanics, and fitters which would be attached to Divisional Cavalry. Two other sections, one of which (E) would be attached to 4 Field Regiment of the Divisional Artillery and the other (J) to 4 Infantry Brigade, completed the establishment of First Echelon Signals.

In addition to the small 'schemes' held as part of the regular collective training programme, two out-of-camp exercises were carried out early in December. The first of these occupied only a single day, but Major Allen, who watched the work of the various sections with a critical eye, attached much importance to this first attempt at advanced training. The tremendous enthusiasm shown by the men was a heartening sign. When another exercise, this time on a more ambitious scale, was held a couple of weeks later in the Wairarapa district, some

valuable experience in signal office organisation was obtained, but probably the most useful lesson learned during the two days and a night of this training scheme was the precarious balance demonstrated between day and night wireless communications.

Although the No. 1 wireless set gave very satisfactory performances during daylight, a number of wireless operators had some slight stirrings of suspicion as to its limitations at night. There was, however, modest satisfaction at the splendid performances of the new No. 9 wireless sets, whose additional power and more suitable frequency range enabled them to maintain communications during darkness with satisfactory efficiency.

In the cable and operating sections there were other difficulties. The line-telegraph instrument then in use for training was the Fullerphone Mark III, a device of First World War vintage. These Fullerphones were not capable of sustaining stable adjustment for any length of time and were a dreadful trial to those who operated them and to the instrument mechanics responsible for their maintenance.

The men of B (cable) Section also had their little troubles, but these were more easily solved than those in the wireless and operating sections. Nevertheless, there were unsuspected pitfalls into which even experienced men were prone to stumble, and the former Post and Telegraph linemen, cable jointers and faultmen, of whom there was a fairly high proportion in the cable section, began to see that the change of technique from civil line construction to the laying out and maintenance of field cable was not merely an automatic transfer of skilled experience.

At the close of the exercise the two days' work was submitted to a searching but very helpful analysis by Major Allen, who laid strong emphasis on the many useful lessons brought out by the scheme and the manner in which they might be studied for the benefit of future training.

A mild stir arose when two officers, a warrant officer, three sergeants, and four other ranks were hastily despatched on final leave on 5 December. They comprised Divisional Signals' portion of two advance parties that were to proceed immediately to Egypt, one to attend special courses of instruction at an overseas base, and the other, consisting mainly of quartermaster-sergeants, cooks and clerks, to make messing and quartering arrangements, in readiness for the arrival of the main body of the First Echelon in Egypt. Lieutenant Burns, 8 Second-Lieutenant Wilkinson, ⁹ Sergeants Andrews, ¹⁰ Jones ¹¹ and Pedersen, ¹² and Corporals Healy 13 and Tankard 14 were the Divisional Signals' quota in the advanced instruction party, and Sergeant-Major Waters, 15 Lance-Corporal Christie 16 and Signalman Robinson 17 were included in the advanced administrative party. After the four days' final leave, which afforded them the last opportunity to see their wives, families, and sweethearts and to make their farewells, the members of the two parties reassembled at Trentham on 10 December and embarked at Wellington next day.

Echelon of 2 NZEF was placed on active service. The significance of this, which was explained very carefully to all ranks of Divisional Signals by Major Allen, was that the Army Act now had a much wider and deeper application. Emphasis was laid on the provisions for arrest, trial, and punishment for offences by soldiers on active service. In peacetime soldiering many offences were prone to be regarded as misdemeanours of a venial kind; under active service conditions the provisions of Sections 1 to 44 of the Army Act were inviolable.

The 14th December marked the commencement of fourteen days' final leave for all ranks. From the 16th, when the last of the leave drafts moved out, until the 28th, when the first of the men began to return, an unruffled calm lay over the camp. Behind the scenes, however, embarkation preparations were moving to a close, and by the time all the troops had returned to camp arrangements were complete.

On Sunday, New Year's Eve, HMS Ramillies, the first British battleship to visit Wellington, appeared in the harbour and berthed at Pipitea Wharf. Within a few days the Leander and Canberra, which with the Ramillies were to form the ocean escort for the First Echelon's transports, were also in port. HMS Leander was to provide the local escort for sailings between Wellington and Lyttelton. By this time six large ships waited in the port, all or most of them now clad in their wartime garb of drab grey. By arrangement with the Harbour Board, barricades were erected at the entrances of Glasgow and King's wharves and placed under police guard. Each transport was examined by the naval authorities to ascertain its defensive state, armament and convoy equipment, and the approaches to the ports of Wellington and Lyttelton were swept by mine-sweepers.

Meanwhile, with the return of the troops from final leave, the mobilisation camp at Trentham had awakened from its fortnight's spell of calm and was now the scene of much bustle and seeming confusion. General leave was discontinued and the issue of overseas kit and similar preparations



FIRST ECHELON OFFICERS OF DIVISIONAL SIGNALS BACK ROW: Captains A. E. Smith, R. L. C. Grant, Lieutenants D. M. Burns, R. Dasler, Second-Lieutenant A. G. Holms, Lieutenant C. G. Pryor FRONT ROW: Lieutenant D. M. McFarlane, Captains J. Feeney, J. Vincent, DCM, MM, Lieutenant-Colonel S. F. Allen, Major G. L. Agar, Lieutenant C. A. Borman, Captain E. L. J. Marshall, Lieutenant N. G. Fletcher

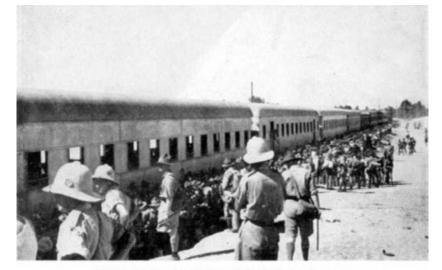
FIRST ECHELON OFFICERS OF DIVISIONAL SIGNALS

BACK ROW: Captains A. E. Smith, R. L. C. Grant, Lieutenants D. M. Burns, R. Dasler, Second-Lieutenant A. G. Holms, Lieutenant C. G. Pryor FRONT ROW: Lieutenant D. M. McFarlane, Captains J. Feeney, J. Vincent, DCM, MM, Lieutenant-Colonel S. F. Allen, Major G. L. Agar, Lieutenant C. A. Borman, Captain E. L. J. Marshall, Lieutenant N. G. Fletcher



Embarking on HMT Dunera at Wellington, 4 January 1940

Embarking on HMT Dunera at Wellington, 4 January 1940



Third Echelon detraining at Maadi, September 1940

Third Echelon detraining at Maadi, September 1940



A 'bread-van' wireless truck



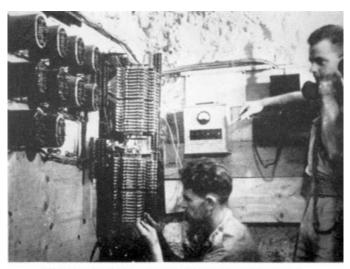
Western Desert Force Signals' camp at Baggush, 1940

Western Desert Force Signals' camp at Baggush, 1940



Men's mess at Baggush

Men's mess at Baggush



Underground exchange at Western Desert Force Headquarters— F. L. W. Stubbs testing and J. W. Bateman on telephone

Underground exchange at Western Desert Force Headquarters—F. L. W. Stubbs testing and J. W. Bateman on telephone

Sgt A. D. Morgan on a No. 9 wireless set, Western Desert



Sgt A. D. Morgan on a No. 9 wireless set, Western Desert

for embarkation stimulated the men's sense of expectancy. On 31 December General Freyberg inspected and addressed a parade of all units of the First Echelon in Trentham.

Divisional Signals took part in a farewell parade through the streets of Wellington on 3 January. After the march past the troops assembled in front of the steps of Parliament Buildings, where they were addressed by the Governor-General (Viscount Galway), the Prime Minister (Rt Hon M. J. Savage), the Leader of the Opposition (Hon A. Hamilton), and the Dominion President of the Returned Soldiers' Association (Mr B. J. Jacobs). In the afternoon, after the men had returned to Trentham, the camp was opened to visitors to give friends and relatives an opportunity to make last farewells.

That evening the details of the routine for embarkation next morning appeared in routine orders, and the fever of expectancy ran high. As the camp subsided into silence, the last notes of Lights Out marked the culmination of twelve weeks of zeal and industry; when the bugles sounded again at dawn they had a new note—a prelude to high adventure.

2 NZ DIVISIONAL SIGNALS IN 1940

Brief Details of Organisation and Appointments on Embarkation *

HQ 2 Divisional Signals	Located at HQ NZ Division	
	Commanding Officer	Lt-Col S. F. Allen
	Second-in-Command	Maj G. L. Agar
	Adjutant	Capt J. Vincent, DCM, MM, Croix de Guerre (Belg.)
	Quartermaster	Capt E. L. J. Marshall
	Regimental Sergeant-Major	WO I W. F. Stevenson
HQ No. 1 Company	Located at HQ NZ Division	
	Company Commander	Capt R. L. C. Grant
A Section	Located at HQ NZ Division	
		Provided
		wireless
		communications
		between HQ NZ Division and
		infantry
		brigades.
	Officer Commanding	Capt A. E. Smith
	Second-in-Command	Lt C. A. Borman
B Section	Located at HQ NZ Division	
	Laid and maintained field cable between HQ NZ Division and infantry brigades, and between HQ NZA and field regiments.	
	Officer Commanding	Lt R. Dasler
C Section	Attached to Divisional Cavalry Regiment.	
	Provided and maintained wireless communications to HQ NZ Division and maintained regimental signal equipment.	
	Officer Commanding	Lt D. M. McFarlane
D Section	Located at HQ NZ Division.	

Provided and operated Signal Office at HQ NZ Division. Also provided Despatch Rider Letter Service (DRLS) and Special Despatch Rider (SDR) service between HQ NZ Division and infantry brigades, and between HQ NZ Division and field regiments.

Officer Commanding

Capt J. Feeney

Second-in-Command

Lt C. R. Ambury

M Section Located at HQ NZ Division.

Technical Maintenance Section responsible for first-line maintenance of Division's signal equipment and first-line maintenance of Signals' vehicles at HQ NZ Division.

Appointment of Officer Commanding M
Section vacant at time of embarkation as
Technical Maintenance Officer, Lt H. W.
Wilkinson, had embarked with Advance
Party in December 1939; he resumed
appointment of TMO on rejoining unit at
Maadi in February 1940.

E, F and G

Attached to 4, 5, and 6 Field Regiments, respectively.

Sections

Provided line, wireless, and despatch-rider communications down to command posts of field batteries.

Officer Commanding E Section

Lt N. G.

Fletcher

Officer Commanding F Section

Lt H. W. Robins

Officer Commanding G Section

Lt A. S. D. Rose

H Section Attached to 7 Anti-Tank Regiment.

Provided wireless communications down to anti-tank batteries.

Officer Commanding

Lt T. M.

Paterson

J, K and Attached to HQ 4, 5, and 6 Infantry L Brigades, respectively.

Sections

Provided line, wireless, and despatch-rider communications down to headquarters of

Officer Commanding J Section	Lt C. G. Pryor †
Second-in-Command J Section	2 Lt A. G. Holms
Officer Commanding K Section	Lt E. V. Fry
Second-in-Command K Section	Lt A. S. Frame
Officer Commanding L Section	Lt T. H. Jory
Second-in-Command L Section	Lt N. W. Laugesen

¹ Brig S. F. Allen, OBE, m.i.d.; born Liverpool, 17 May 1897; Regular soldier; CO ₂ NZ Div Sigs and OC NZ Corps of Sigs 5 Jan 1940-27 Sep 1941; CO 21 Bn Dec 1941-May 1942, Jun-Jul 1942; comd 5 Bde 10 May-12 Jun 1942; killed in action 15 Jul 1942.

² Maj J. Vincent, MBE, DCM, MM, m.i.d., Croix de Guerre (Belgian); Otaki; born Stratford-on-Avon, 14 Feb 1895; Regular soldier; Cant Regt 1 NZEF, 1914-19; Adjt 2 NZ Div Sigs Jan-Sep 1940; OC Composite Trg Depot Jan-Apr 1941; OC Signal School, Base, Apr-Oct 1941; OC Signal Wing, Army School of Instruction, Trentham, Nov 1943-Apr 1948.

³ Lt-Col G. L. Agar, DSO, OBE, ED, m.i.d.; Auckland; born Auckland, 18 Jun 1905; telegraph engineer; 2 i/c 2 NZ Div Sigs Sep 1939–May 1940, Feb-Aug 1941; DCS and OC Corps Sigs WDF Jun-Oct 1940; OC Corps Sigs Oct 1940-Feb 1941; DCSO Anzac Corps Apr-May 1941; CO ₂ NZ Div Sigs 27 Sep 1941-21 Sep 1942, 26 Nov 1942-4 Jun 1943; OC NZ Corps of Sigs 27 Sep 1941-4 Jun 1943; SSO Sigs Army HQ 15 Sep 1943-16 Dec 1944.

⁴ 2 Lt W. F. Stevenson; born England, 14 Sep 1908; Regular soldier; died of wounds 27 Nov 1941.

⁵ Capt R. E. O'Hara, m.i.d.; Masterton; born Masterton, 24 Feb 1916; telegraphist; Adjt 2 NZ Div Sigs Jan-Jul 1943.

⁶ WO 1 B. C. Fargus; Brisbane; born England, 25 Mar 1915; radio announcer.

- ⁷ Capt J. Feeney; born Scotland, 17 Jul 1905; civil servant; wounded 29 Nov 1941; died at sea 5 Dec 1941.
- ⁸ Lt-Col D. McN. Burns, m.i.d., Legion of Merit (US); Wellington; born Carterton, 8 Oct 1910; telegraph engineer; Adjt 2 NZ Div Signs Sep 1940-Jul 1941; OC J Sec Jul-Oct 1941; OC 3 NZ Div Sigs 1942-44; SSO Signals, Army HQ (in NZ), 1944-45.
- ⁹ Capt H. W. Wilkinson; Wellington; born Christchurch, 18 Nov 1913; Post and Telegraph engineer; Adjt 2 NZ Div Sigs 1941; wounded 25 Nov 1941.
- ¹⁰ Maj A. A. Andrews; Wainui, Banks Peninsula; born Fairlie, 28 Sep 1909; civil servant.
- ¹¹ S-Sgt J. L. Jones, EM; Auckland; born Wellington, 24 Feb 1912; P and T lineman.
- ¹² Capt N. S. Pedersen, MBE; Papakura; born Wellington, 12 Apr 1910; civil servant; now Regular soldier.
- ¹³ Capt T. G. Healy, m.i.d.; Stratford; born NZ 2 Feb 1918; P and T clerk.
- ¹⁴ WO II V. S. Tankard, m.i.d.; Waimana; born Napier, 7 Sep 1912; P and T clerk.
- ¹⁵ Capt F. E. Waters, EM; Te Awamutu; born Renwicktown, Marlborough, 12 Jul 1905; RQMS 2 NZ Div Sigs Nov 1939-Nov 1940; RSM Nov 1940-Jan 1941; QM and OC Adm Sec Sep 1941-Jun 1943; 2 i/c Army Sigs, Army HQ, Dec 1944-Jun 1945; CO NMD Sigs Jun 1945-Jan 1946.
- ¹⁶ S-Sgt R. D. Christie; Upper Hutt; born Australia, 31 Jan 1902; civil servant.

¹⁷ S-Sgt C. H. B. Robinson, EM; Christchurch; born Blenheim, 21 Jan 1918; P and T clerk; p.w. 1 Jun 1941.

^{*} Third Echelon Signals were commanded during the voyage to Egypt by Maj G. H. Heal, who was later seconded from 2 NZ Divisional Signals to other duties. Other officers who embarked with Third Echelon Signals were Lt L. J. Froude and 2 Lt A. G. Hultquist of the Reinforcement Section of 2 NZ Divisional Signals.

[†] On embarkation with Advance Party in December 1939, Lt D. M. Burns relinquished command of J Section to Pryor and was appointed Asst-Adjutant on rejoining unit at Maadi in February 1940. See also diagram on page 26.

DIVISIONAL SIGNALS

[SECTION]

O_N4 September 1939 a *New Zealand Gazette* Extraordinary proclaimed:

His Excellency the Governor-General has it in command from His Majesty the King to declare that a state of war exists between His Majesty and the Government of the German Reich, and that such a state of war has existed from 9.30 p.m., New Zealand Standard Time, on the third day of September, 1939.

Within a matter of hours certain units and servicemen were mobilised; among these was a signal office detachment, drawn from the Central Military District Signal Company of the New Zealand Corps of Signals (Territorial Force). The detachment's immediate task was to provide certain signal communications within Central Military District, these including internal telephone services between District Headquarters, Headquarters Area 5 and Army Headquarters.

Enlistment for the Special Force began on 12 September. In order to safeguard essential industries and services the Government had considered it necessary to impose some restrictions on enlistments. These restrictions were governed by a schedule of what were called 'important occupations'. The need for such a procedure had come about as a result of some unfortunate experiences during the First World War, when enlistment had been carried out regardless of the effect produced by the depletion of certain essential categories of tradesmen. During the enlistment of men for the Special Force in the Second World War it was inevitable, of course, that some enthusiastic recruits should mis-state their civil occupations to avoid being drafted to similar work in the Army. It is necessary to mention these points because there is no doubt that some of the difficulties encountered in 1939 in obtaining skilled tradesmen, such as Morse operators and linemen for Divisional Signals, can be traced to the failure of some recruits to disclose their true

occupations.

Early in October 1939 a serious difficulty in the supply of skilled tradesmen for Divisional Signals was revealed. Many of the men drafted to the unit had no special qualifications of value to Signals. It was known, however, that there were many employees of the Post and Telegraph Department who had enlisted for service with the Special Force but had not been called up. The matter was taken up promptly with Headquarters Mobilisation Camp, Trentham. Later it was found that some of the men concerned had been called up but had been posted to other units where it was apparent that their special aptitudes and skill were not being usefully employed. Stronger representations were then made to Headquarters Mobilisation Camp, and it was pointed out that these men were in the 'important occupations' class and had been released by the Post and Telegraph Department on the understanding that their services were required in their technical trades. In these later representations emphasis was laid on the impossibility of producing qualified technicians and Morse operators of the required standard in a few months from men who had had no previous experience.

Timely though these representations were, they unfortunately did not have the desired effect. At the end of November it was again found necessary to press strongly for assurances that men whose special qualifications fitted them for employment in Divisional Signals, more particularly Morse operators, linemen and technicians qualified in wireless communications, should be posted to that unit.

A General Staff instruction on 8 September directed that officers and NCOs above the rank of lance-corporal were to report to their respective training centres throughout the country on the 23rd. Officers of the Regular Force were appointed as adjutants, and Permanent Staff warrant officers and NCOs as regimental sergeant-majors and regimental quartermaster-sergeants. Training directives for the various arms of the Special Force were issued in September. It is interesting to note that Territorials were not to be told at any stage of their training to 'forget all that they had ever learned'.

Officers and NCOs who had been selected for service with the Special Force were notified by telegram on 20 September that they were required to report for duty on the 27th. On that date nine officers and nineteen NCOs of the New Zealand Corps of Signals assembled at Trentham Mobilisation Camp, ready to undergo an intensive five-day premobilisation course of instruction. By 3 October, when the main draft of Divisional Signals entered camp, a skeleton training and administrative organisation was already in operation. In those early weeks of mobilisation the responsibility of administration and training fell to the Regular Force personnel. Major Allen, ¹ of the New Zealand Staff Corps, whose appointment at that time was Commander No. 1 Camp and who at the outbreak of war was OC Area 4 at Hamilton, was well known to most of the Divisional Signals men in the camp. He had for a number of years been Signals Staff Officer at Headquarters Central Military District in Wellington, and his connection with signals organisation led to his appointment later in the year as CO Divisional Signals in the Special Force. Although Allen's appointment was nominally that of Commander No. 1 Camp, his principal responsibility was the training and organisation of the Divisional Signals unit. In this task he had the able assistance of Captain Vincent, DCM, MM, ² of the New Zealand Staff Corps, Adjutant of the new unit.

Captain Agar, ³ who had commanded the Central District Signal Company for some time before he joined the Special Force, was appointed to command No. 1 Company of Divisional Signals. Staff-Sergeant Stevenson, ⁴ of the New Zealand Permanent Staff, was RSM.

To accommodate the Special Force an immediate start had been made on the erection of permanent hutted mobilisation camps. Tented camps were established at Trentham to accommodate the troops while the huts were being erected, and by 3 October some hutted sleeping and messing accommodation was available. In the Divisional Signals' area, however, sleeping huts had not yet been started and mess halls, kitchens, and hot-shower houses were still incomplete.

Fifty-nine men of the main draft for Divisional Signals marched into camp on 3 October. They were followed by ninety-nine on the 4th and another forty-four on the 5th.

In the early days of mobilisation the private soldier spent much time waiting in queues. He stood in long queues to receive his food; he stood patiently in pay queues, where his position from the front of a seemingly interminable line depended solely on his place in the alphabetical register; he stood in other long queues and shuffled forward one slow step at a time to receive as a reward for his patience a uniform which fitted his frame only where it touched. As he looked at his new boots his heart sank. Perhaps, if he were not too young, he had heard of 'Bill Masseys'; or perhaps other dim recollections of the massive footwear that his father had worn in the First World War stirred his apprehension. Fortunately there were many there who were Territorials and had learned to tame the army boot. In many of the bell tents which stretched in four straight rows towards the shower houses and administrative buildings at the southern end of the camp, groups of men put on their new garb; odd assortments of serge tunics and trousers made up sombre combinations of dusty brown and bilious green, while here and there battered brass buttons flaunted their motif of verdigris.

A vast amount of administrative work, such as the issue of clothing, medical and dental examinations, protective inoculations, and the completion of personal files and paybooks, was crammed into the first week of mobilisation. On 9 October, however, training commenced in earnest. The men were grouped into thirteen small parties, each of which, every morning from Monday till Friday, carried out basic training, which comprised infantry, small-arms and physical training. In the afternoons they were rearranged into another thirteen groups, according to their knowledge of the Morse code, for training in Morse flag, Morse buzzer and Morse lamp. This type of training ceased at the end of October, and from then until the end of November the men were grouped for specialist training as operators, despatch riders, linemen, drivers, and workshops personnel. New recruits, of whom fifty-five had

marched in during October, were associated with the operator group for Morse training.

From Monday until Friday each day began with a forty-minute period of infantry and small-arms training. This was followed by trade training in six periods, each lasting forty minutes, and the day closed with thirty minutes of physical training. In the evenings the men were encouraged to attend voluntary classes in Morse training. Each group concentrated on those phases of signal work with which it was directly concerned. Operators and technicians had the use of four No. 9 wireless sets and thirteen No. 1 sets. During November the arrival of thirty-two new motor vehicles, including nineteen 8-cwt WT (wireless telegraphy) trucks, enabled considerable progress to be made in the training of drivers. Unfortunately no motor-cycles had yet been made available for the training of despatch riders. Repeated representations to Camp Headquarters were without avail, so despatch riders had to be content with instruction in map-reading and other less exciting forms of training. This continued, except for occasional spells of driving and vehicle maintenance with the drivers' group, throughout the whole of the despatch riders' training in New Zealand, as the unit did not receive any motor-cycles until shortly after its arrival in Egypt.

An epidemic of influenza had been hindering the progress of training to a serious extent and the number of Divisional Signals men in hospital or 'sick on leave' began to rise sharply in the last week of October. A mobilisation camp order issued on the 26th directed that 'epidemic' units were not to move more than one mile from the camp during training. Leave, however, was not curtailed. In the opening days of November the epidemic continued to wax and wane, reaching its peak on the 9th, when seventy-two men of Divisional Signals were in hospital or excused duty. By the middle of the month the number affected had decreased rapidly.

The composition of the Special Force was announced on 16 October by the Director of Mobilisation, and the Divisional Signals unit became 2 New Zealand Divisional Signals. The name given to the Special Force was 2 New Zealand Division; the designation 2 New Zealand Expeditionary Force, by which the whole force despatched overseas was to be known, was not adopted until 12 December 1939. The decision that 2 NZEF was to go overseas was made public on 23 November. At the same time it was announced that Major-General B. C. Freyberg, VC, had been appointed to command the Force. General Freyberg was to leave England as early as possible for New Zealand to inspect the officers and men of his new command.

The announcement that the Special Force would be despatched overseas had a stimulating effect on the training of the men in camp, on the men themselves, and on recruiting. The attitude of the public towards the men in camp also changed appreciably after the announcement. The average New Zealander had been more than a little complacent about the war up to this stage, and an idea seemed to have prevailed that the men were enjoying a good holiday in camp. A large number of people really believed that when the men had completed their three months' training they would be returned to their civil occupations. Cases of obstruction of uniformed men had occurred in several places, while open scoffing by hooligans had been frequent. One soldier, Signalman O'Hara, ⁵ had been accosted in his own home town by some village louts, one of whom even had gone so far as to spit in O'Hara's direction to demonstrate his contempt for a uniformed soldier.

In Wellington several fights had occurred between hoodlums and military patrols when the offensive heckling to which they were subjected had exhausted the servicemen's patience. A favourite stamping ground for these louts was the Hotel St. George corner, where several small parties of Divisional Signals men had been molested and abused on a number of occasions. Towards the end of November the activities of these parties of yahoos had reached such a pitch of insolence that some of the men decided to organise a punitive expedition into the city. Brian Fargus, ⁶ a Divisional Signals soldier of imposing stature and impressive muscular proportions, was the instigator of this move. Ostensibly, the party which Fargus selected for

the task was to be a picket, but he selected his men with an eye to Rugby characteristics rather than military deportment. The party set off on a Friday evening and made its way to the Hotel St. George area. Fargus sent two of his men forward to act as decoys for the hoodlums while he and the rest of the picket lurked in the throng which surged through lower Willis Street. The two decoys reached the corner and in a short time the louts appeared and commenced to heckle them and shoulder them about the footpath. Suddenly Fargus and his party burst out of the crowd and the fun commenced. After a decent interval the officer in charge of the picket, Captain John Feeney, 7 appeared and, judging that the decontamination had reached a satisfactory stage, called the party off. It is interesting to record that this particular area was free for some time from the unwelcome activities of street loafers.

Towards the end of November the first contingent of Divisional Signals began to assume some resemblance to the organisation which would enter the field. Men were posted to headquarters to fill its establishment, while the majority were drafted to the component parts of No. 1 Company which, besides its company headquarters, comprised a wireless section (A), a cable section (B), an operating section (D), a technical maintenance section (M), and a small section (C) of electricians, instrument mechanics, and fitters which would be attached to Divisional Cavalry. Two other sections, one of which (E) would be attached to 4 Field Regiment of the Divisional Artillery and the other (J) to 4 Infantry Brigade, completed the establishment of First Echelon Signals.

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valuable experience in signal office organisation was obtained, but probably the most useful lesson learned during the two days and a night of this training scheme was the precarious balance demonstrated between day and night wireless communications.

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Echelon of 2 NZEF was placed on active service. The significance of this, which was explained very carefully to all ranks of Divisional Signals by Major Allen, was that the Army Act now had a much wider and deeper application. Emphasis was laid on the provisions for arrest, trial, and punishment for offences by soldiers on active service. In peacetime soldiering many offences were prone to be regarded as misdemeanours of a venial kind; under active service conditions the provisions of Sections 1 to 44 of the Army Act were inviolable.

The 14th December marked the commencement of fourteen days' final leave for all ranks. From the 16th, when the last of the leave drafts moved out, until the 28th, when the first of the men began to return, an unruffled calm lay over the camp. Behind the scenes, however, embarkation preparations were moving to a close, and by the time all the troops had returned to camp arrangements were complete.

On Sunday, New Year's Eve, HMS Ramillies, the first British battleship to visit Wellington, appeared in the harbour and berthed at Pipitea Wharf. Within a few days the Leander and Canberra, which with the Ramillies were to form the ocean escort for the First Echelon's transports, were also in port. HMS Leander was to provide the local escort for sailings between Wellington and Lyttelton. By this time six large ships waited in the port, all or most of them now clad in their wartime garb of drab grey. By arrangement with the Harbour Board, barricades were erected at the entrances of Glasgow and King's wharves and placed under police guard. Each transport was examined by the naval authorities to ascertain its defensive state, armament and convoy equipment, and the approaches to the ports of Wellington and Lyttelton were swept by mine-sweepers.

Meanwhile, with the return of the troops from final leave, the mobilisation camp at Trentham had awakened from its fortnight's spell of calm and was now the scene of much bustle and seeming confusion. General leave was discontinued and the issue of overseas kit and similar preparations



FIRST ECHELON OFFICERS OF DIVISIONAL SIGNALS BACK ROW: Captains A. E. Smith, R. L. C. Grant, Lieutenants D. M. Burns, R. Dasler, Second-Lieutenant A. G. Holms, Lieutenant C. G. Pryor FRONT ROW: Lieutenant D. M. McFarlane, Captains J. Feeney, J. Vincent, DCM, MM, Lieutenant-Colonel S. F. Allen, Major G. L. Agar, Lieutenant C. A. Borman, Captain E. L. J. Marshall, Lieutenant N. G. Fletcher

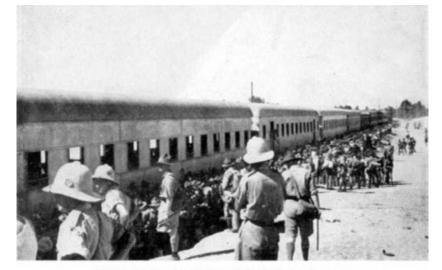
FIRST ECHELON OFFICERS OF DIVISIONAL SIGNALS

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Embarking on HMT Dunera at Wellington, 4 January 1940

Embarking on HMT Dunera at Wellington, 4 January 1940



Third Echelon detraining at Maadi, September 1940

Third Echelon detraining at Maadi, September 1940



A 'bread-van' wireless truck



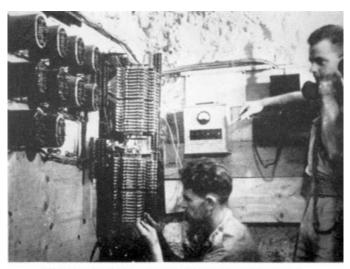
Western Desert Force Signals' camp at Baggush, 1940

Western Desert Force Signals' camp at Baggush, 1940



Men's mess at Baggush

Men's mess at Baggush



Underground exchange at Western Desert Force Headquarters— F. L. W. Stubbs testing and J. W. Bateman on telephone

Underground exchange at Western Desert Force Headquarters—F. L. W. Stubbs testing and J. W. Bateman on telephone

Sgt A. D. Morgan on a No. 9 wireless set, Western Desert



Sgt A. D. Morgan on a No. 9 wireless set, Western Desert

for embarkation stimulated the men's sense of expectancy. On 31 December General Freyberg inspected and addressed a parade of all units of the First Echelon in Trentham.

Divisional Signals took part in a farewell parade through the streets of Wellington on 3 January. After the march past the troops assembled in front of the steps of Parliament Buildings, where they were addressed by the Governor-General (Viscount Galway), the Prime Minister (Rt Hon M. J. Savage), the Leader of the Opposition (Hon A. Hamilton), and the Dominion President of the Returned Soldiers' Association (Mr B. J. Jacobs). In the afternoon, after the men had returned to Trentham, the camp was opened to visitors to give friends and relatives an opportunity to make last farewells.

That evening the details of the routine for embarkation next morning appeared in routine orders, and the fever of expectancy ran high. As the camp subsided into silence, the last notes of Lights Out marked the culmination of twelve weeks of zeal and industry; when the bugles sounded again at dawn they had a new note—a prelude to high adventure.

DIVISIONAL SIGNALS

2 NZ DIVISIONAL SIGNALS IN 1940

2 NZ DIVISIONAL SIGNALS IN 1940

Brief Details of Organisation and Appointments on Embarkation st

HQ 2 Located at **HQ NZ Division**

Divisional Signals

Commanding Officer Lt-Col S. F.

Allen

Second-in-Command Maj G. L. Agar

Adjutant Capt J. Vincent,

DCM, MM, Croix de Guerre (Belg.)

Quartermaster Capt E. L. J.

Marshall

Regimental Sergeant-Major WO I W. F.

Stevenson

HQ No. 1 Located at HQ NZ Division

Company

Company Commander Capt R. L. C.

Grant

A Section Located at HQ NZ Division

Provided wireless

communications between HQ NZ Division and

infantry brigades.

Officer Commanding Capt A. E.

Smith

Second-in-Command Lt C. A. Borman

B Section Located at HQ NZ Division

Laid and maintained field cable between HQ NZ Division and infantry brigades, and

between HQ NZA and field regiments.

Officer Commanding Lt R. Dasler

C Section Attached to Divisional Cavalry Regiment.

Provided and maintained wireless communications to HQ NZ Division and maintained regimental signal equipment.

Officer Commanding

Lt D. M. **McFarlane**

D Section Located at HQ NZ Division.

Provided and operated Signal Office at HQ NZ Division. Also provided Despatch Rider Letter Service (DRLS) and Special Despatch Rider (SDR) service between HQ NZ Division and infantry brigades, and between HQ NZ Division and field regiments.

Officer Commanding

Capt J. Feeney

Second-in-Command

Lt C. R. Ambury

M Section Located at HQ NZ Division.

Technical Maintenance Section responsible for first-line maintenance of Division's signal equipment and first-line maintenance of Signals' vehicles at HQ NZ Division.

Appointment of Officer Commanding M Section vacant at time of embarkation as Technical Maintenance Officer, Lt H. W. Wilkinson, had embarked with Advance Party in December 1939; he resumed appointment of TMO on rejoining unit at Maadi in February 1940.

G

E, F and Attached to 4, 5, and 6 Field Regiments, respectively.

Sections

Provided line, wireless, and despatch-rider communications down to command posts of field batteries.

Officer Commanding E Section

Lt N. G.

Fletcher

Officer Commanding F Section

Lt H. W. Robins

Officer Commanding G Section

Lt A. S. D. Rose

H Section Attached to 7 Anti-Tank Regiment.

Provided wireless communications down to anti-tank batteries.

J, K and L Sections	Attached to HQ 4, 5, and 6 Infantry Brigades, respectively.	
	Provided line, wireless, and despatch-rider communications down to headquarters of infantry battalions.	
	Officer Commanding J Section	Lt C. G. Pryor †
	Second-in-Command J Section	2 Lt A. G. Holms
	Officer Commanding K Section	Lt E. V. Fry
	Second-in-Command K Section	Lt A. S. Frame
	Officer Commanding L Section	Lt T. H. Jory

Lt T. M. Paterson

Lt N. W.

Laugesen

Officer Commanding

Second-in-Command L Section

DIVISIONAL SIGNALS

CHAPTER 2 — TO EGYPT AND THE UNITED KINGDOM

CHAPTER 2

To Egypt and the United Kingdom

AT 9 a.m. on 4 January 1940 Divisional Signals evacuated its lines and handed in barrack stores in preparation for the move to the railway siding at Trentham. The unit marched out at five minutes to ten and entrained shortly afterwards. The officer in charge of the train had been instructed by Major Allen to inspect the carriages and allocate accommodation in accordance with the marching-out state. Armed with a piece of chalk in one hand and a copy of Field Service Regulations in the other, he had assiduously set about the task of marking each carriage with the number of officers, warrant officers and staffsergeants, or sergeants and rank and file it was to hold. Having done this and carefully numbered each carriage from 1 at the front to 12 (the baggage van) at the end, he was horrified to observe that a shunting engine had detached the three leading carriages and was attaching them to the rear of the train. The guard and the engine driver, both stolid and unimaginative men, were not moved by the subaltern's appeals. There the three stood in debate while the unit turned the corner and marched resolutely along the dusty road towards the mutilated train. When the CO arrived he took in the situation at a glance, turned a frosty stare upon his unfortunate OC Train, and instructed him to get the men aboard.

And so the train moved off, with the men surging through the carriages searching for a vacant space in which to deposit their sea kits and other impedimenta. Glass tinkled musically as some soldier, manoeuvring for position, inadvertently thrust his rifle through a carriage window; sergeants cursed and the men replied suitably in inaudible undertones.

The train ran to the ship's side and the unit embarked immediately on the *Dunera*, a specially constructed troopship chartered by the British Government before the war to transport troops and their families to and from India and other eastern stations. She had cabin

accommodation for officers, warrant officers and sergeants, but all other ranks were quartered on troop decks. Here the men were divided into messes, each of which, consisting of about eighteen men, was accommodated at a long wooden table. At night the men slept in hammocks slung above these tables. The hammocks were stowed away at reveille, Navy fashion, in lockers in the ship's hold.

Six ships were to carry the First Echelon to Egypt—the Orion, Rangitata, Sobieski, Empress of Canada, Strathaird, and Dunera. Except for the last, they offered the comforts and facilities to which peacetime tourists were accustomed. The Dunera lacked the spacious promenade and sun decks of the passenger liners, with the result that the space available on her for training and recreation was limited.

The Dunera sailed at 1.30 p.m. on 4 January, arrived at Lyttelton at daybreak next day, embarked 20 Battalion, 4 Field Ambulance, and 4 Field Hygiene Section from Burnham Mobilisation Camp in the afternoon, and sailed again at 4 p.m. to rendezvous with the remainder of the New Zealand convoy in Cook Strait. When the ship pulled away from the Lyttelton wharf, Captain Vincent hoisted to the foremast yard-arm a unit flag which had been presented to Divisional Signals by the Regimental Association of the Central District Signal Company. The flag was in the colours of the New Zealand Corps of Signals, with a figure of Mercury—the Corps' insignia throughout the British Empire and affectionately known to all signalmen as 'Jimmy'—embroidered in the centre.

The *Dunera* was accompanied by HMS *Leander*, which had sailed with her from Wellington, and by the *Sobieski*, which had embarked 27 (Machine Gun). Battalion from Burnham Camp. The three ships joined the remainder of the convoy early next morning, and the six ships then steamed westward in formation, with the naval escort lying far ahead and out on the flanks.

The snow cap of Mount Egmont was still showing above the mist on the horizon at 6 p.m., and as dusk fell the escort vessels closed in on the transports and took up their stations along both sides of the convoy. When darkness came no lights showed anywhere, except for the occasional blinking of Aldis lamps on the bridge of the Commodore's ship, the *Orion*, and the answering signals of one of the other ships. To most of the men aboard the *Dunera* an ocean voyage in a large ship was a new experience, and here and there along the rails and in little groups about the darkened decks could be seen men in earnest discussion. Some stood silently, heads bent over the rail, listening to the soft swish-swish of the water along the ship's side and watching the faint fluorescence which glowed momentarily in the broken wave tops. Occasionally the serenity of the evening would be broken when the double curtains which formed the light traps screening the entrances to the ship's vestibules were thrust aside as someone stepped out onto the deck, and from within would come the sound of animated conversation and laughter.

On that first night at sea ship's routine orders carried a number of appointments and promotions. Major Allen was promoted to lieutenant-colonel and appointed to command 2 New Zealand Divisional Signals, and Captain Agar became a major with the appointment of second-incommand of the unit. Captain Vincent was appointed Adjutant 2 New Zealand Divisional Signals, his previous appointment having been Adjutant Divisional Signals, Special Force. ¹

At sea 'Jock' Vincent was in his second element. In his early youth he had served in sail, and his conversation had never quite lost the salty tang of the sea. He was probably the most colourful figure that served in Divisional Signals, and the men were inclined to show him more deference than they did more senior officers. He was a veteran of the First World War, during which he served in Egypt, France, and at Gallipoli in the signal platoon of 1 Battalion, Canterbury Regiment. At the battle of the Somme in 1916 he was awarded the MM, and at the third battle of Ypres in October 1917 he earned the simultaneous award of the DCM and the Belgian Croix de Guerre. Jock's reticence about the double row of ribbons on his tunic was, like that of most soldiers, difficult to penetrate, but on rare occasions when the conversational

bait was cunningly offered, his reserve would recede a little. On one such occasion, when a group of soldiers had just been 'blown up' by Jock for some minor defection, one of them skilfully steered the conversation round to the Ypres battle. From there it was an easy course to the Croix de Guerre, which Jock proudly stated had been presented to him by the Belgian Commander-in-Chief himself. When another soldier ventured a question about the DCM, however, Jock said abruptly, 'Picked it up over a counter in London', and walked off. In May 1918, after passing out from the Officer Cadet Training Unit at Cambridge, Vincent returned to France, but after a short period there was sent back to England to take up the appointment of OC Signal School at Sling Camp. When he returned to New Zealand at the end of the war he went back to civilian life, but joined the Army again in 1924 and served in the Regular Force until the outbreak of the Second World War.

As the ships crossed the Australian Bight the weather turned very cold. To add to the discomfort, the wind freshened appreciably and the motion of the ship began to make itself felt. One by one, and sometimes by twos or threes, the training groups began to diminish as men went below 'to put their heads down'. The uneasy motion of the ship continued until the run across the Bight was completed, but when the convoy rounded Cape Leeuwin and turned north towards Fremantle, the sea lost its choppiness and attendances at training classes returned to normal. At this stage, however, the vaccination of all ranks was commenced, and the discomfort experienced by many was much more acute than that caused by seasickness a few days earlier.

Training programmes were now running smoothly, although they had to be curtailed to some extent to allow all units aboard a fair share of the limited deck space available. Shifts of operators were doing duty on the ship's bridge, where they received some useful practice in visual signalling in inter-convoy signals. The same limitations of space also restricted physical and recreational training, so that sports meetings were limited to tugs-of-war, medicine-ball games, and wrestling and boxing. Early in the voyage a series of preliminary boxing bouts was

staged and some very satisfactory and enjoyable performances resulted.

Early in the afternoon of 18 January the convoy arrived off Fremantle and approached the port in a long line, in which the Dunera was almost last. She remained in the stream and did not enter the port proper until next day. Next morning the ship's boats were lowered and numbers of the men rowed around the transports to exchange greetings with other troops. Only the Australian vernacular can do justice to some of the good-natured banter that greeted the visitors. By the time the excursionists had returned to the Dunera and the boats were hoisted in, some impatience was being displayed by most of those on board at the protracted delays in the pay and shore-leave arrangements. Shortly afterwards, however, the ship tied up at her berth, and after the longawaited pay had been issued, parties started making their way ashore. In a remarkably short time the streets of Perth were being turned into a soldiers' playground, and after the visitors had ranged the city for a couple of hours, traffic control and other municipal arrangements were beginning to show signs of strain. Some of the business places suffered too, but the depredations were confined mostly to the acquisition of souvenirs, some of which —pot plants, cane chairs, and articles of household utility— disclosed an unusual taste. The citizens of Perth were extremely tolerant of all these happenings; indeed, some of them brought out their cars and took parties of the less exuberant for sightseeing trips.

Shore leave expired at 12.30 a.m. on the 19th, and for half an hour after midnight parties of roysterers straggled across the wharf and onto the ship in noisy confusion. Most of the souvenirs had long since been cast by the wayside, but there were some notable exceptions. One of these was a magnificent stuffed kangaroo mounted on a handsome wooden stand. It had been removed bodily from a shop in Perth during the afternoon and was brought aboard and deposited on one of the mess decks, where it remained until the ship reached Suez. Acting under instructions from Lieutenant-Colonel Allen, the Adjutant and the RSM assembled the men as they came aboard at one side of a cleared space

on one of the decks. Together with the CO, Adjutant, and RSM stood Sergeant Thomas, ² armed with a complete roll of the unit. When each man's name was called he was to step smartly across a clear space on the deck to the place allotted for the 'sheep'. Captain Vincent, an old soldier, knew a thing or two about methods of 'rigging' roll-calls, so the procedure on this occasion was designed to be foolproof. As each man passed across the deck under the watchful eyes of the Adjutant and the RSM, the former would pass the word to Sergeant Thomas, who carefully ticked the man's name on the roll.

The CO silently watched the proceedings and gave no sign that his equanimity was disturbed in any way by the unusual garb and bearing of some of his men. One sat on the deck and played happily with a mechanical toy, while nearby another clutched his felt hat, through the crown of which the juice of mangled fruit dripped stickily onto the deck. All went well until the name of Signalman Keane ³ was called. Keane, standing close beside the CO, drew himself up, threw out his chest with a deep breath, thrust his shoulders back and opened his mouth. An earsplitting roar rent the air: 'HERE, Sir!' The CO, who had not seen Keane standing so close, jumped like a shot stag. The Adjutant stepped close to Keane and spoke some well-chosen and prophetic words.

The convoy sailed from Fremantle next afternoon and, as the ships swung into formation outside the port, police launches brought off those who had overstayed their leave. As these men climbed the rope ladders at the ship's side they received a tumultuous welcome from the soldiers lining the rails. Here and there among the latecomers could be seen some unconventional attire, consisting of curious combinations of Australian slouch hats and tunics and New Zealand serge trousers.

Next morning the unit orderly room was the scene of unusual bustle as delinquents were haled before the CO to answer for their misdemeanours of the previous day. Some had overstayed their leave, while others were charged with 'not being in possession of their regimental necessaries, to wit, hats felt, badges hat, ditto collar, etc.' One case concerned WO II 'Sandy' McNab, ⁴ CSM of No. 1 Company, who

had not answered his name at the memorable roll-call the previous night, and therefore was deemed to have been absent without leave. Actually Sandy, owing to a slight indisposition not connected in any way with the potency of Australian beer, had come aboard early in the afternoon and, at the time of the roll-call, was asleep in his cabin. When he was asked by the CO if he could call any witness to corroborate his statement, Sandy named Lance-Sergeant Harry Hodgson, ⁵ who shared the cabin. After a swift search an orderly found Hodgson taking a short nap in his cabin. To put Harry in the picture the CO read the charge again and recounted McNab's statement. He looked up and said, 'What have you to say concerning this charge, Sergeant Hodgson?' Harry, having been roused suddenly from his sleep, was still a little confused and bewildered by the proceedings; he stood rigidly to attention, fixed his eyes on the wall about three feet immediately above the CO's head, and burst out, 'Not guilty, Sir'. The CO contrived to smother his amusement at the unsolicited plea and explained the situation more clearly, whereupon Harry regained his composure and tendered the required testimony.

As the voyage continued north-westwards towards Colombo in fine weather and calm seas, the men began to find the daily routine irksome and monotonous. Training was being continued, but the programme was upset by the large number of men who were required for ship's duties and fatigues. For the purposes of administration, discipline and organisation, a ship's staff had been appointed for the voyage from the military personnel aboard. The OC Troops was Lieutenant-Colonel Kippenberger, ⁶ CO 20 Battalion. There were also a ship's adjutant, a ship's quartermaster, a ship's baggage officer and other appointments, including a ship's RSM, who was WO I Stevenson, of Divisional Signals. Ship's standing orders were issued by OC Troops at the beginning of the voyage and covered daily routine, parades, bounds, special instructions for the safety of the ship, and other matters of organisation and discipline. Besides the duties of ship's guard, submarine lookouts, antiaircraft LMG posts, lifeboat guards and ship's police, units aboard were required to supply orderlies and fatigues. As the Dunera was a trooper

and therefore in a different class from the other ships in the convoy, more men were required for more duties than on those ships. For the voyage Divisional Signals was called upon to supply 102 permanent fatigues, including 30 mess orderlies, 13 men for the galley party, 10 for signal duties on the bridge, details for deck scrubbing, bakehouse, butcher's shop, canteen stores and armoury, and a number for cooks' assistants. In addition Divisional Signals was 'unit for duty' one week in every four. This involved the provision of 60 sentries, 28 deck scrubbers, four fatigues for the hammock room, and two for the sergeants' mess. This brought the number required for fatigues and duties to 196 out of the unit's total strength of 287.

With the exception of some diarrhoea and vomiting and the usual discomforts which accompany the initial vaccination for smallpox, the health of the troops on the *Dunera* was good throughout the voyage. The most common illnesses were tonsillitis, mild influenza, measles, and diarrhoea. The last was attributed by the medical officers on board to tainted butter and the excessive consumption of sweets from the ship's canteen. The tainted butter was a sore point with the troops, who had complained about it earlier in the voyage. Scant notice was taken of these complaints at first, but they persisted and finally it was found that they were justified. Inadequate cool-store accommodation on the ship was found to be the cause, and for the rest of the voyage New Zealand butter was issued to the messes.

In their leisure time the men found various occupations. There were books from the ship's library, card games, the popular Tombola—or housie, as it is universally known—and the surreptitious and pernicious Crown and Anchor schools. In spite of the threats published in ship's routine orders of severe penalties for the operators of this game, the schools persisted. A few boards were confiscated, but the operators turned to the device of chalking their 'boards' on the decks. On the approach of the ship's police these 'boards' were quickly rubbed out and the operators scuttled to safety.

As the convoy approached the tropics the weather became very hot and the conditions on the men's mess decks almost intolerably uncomfortable. Arrangements were made for the men to sleep on deck, and awnings were rigged for this purpose. The one bottle of beer which each man was entitled to each day was a pleasant solace in the comparative cool of the evening, but later in the voyage supplies of New Zealand beer were exhausted and a Scotch draught beer carried on the ship was issued at fourpence a pint. This beer was a poor substitute and was disliked by the men on account of its flatness and strong taste of vinegar.

At noon on 30 January the convoy arrived at Colombo, and advances in pay in Ceylon currency were made to all ranks in preparation for shore leave. As at Fremantle, there were irritating delays in getting the leave parties away, and it was not until 11 a.m. next day that the men got ashore. Leave expired at 4.30 p.m.

The convoy sailed at 11 a.m. on 1 February. A large number of cases in which men were charged with being absent without leave during the short stay at Colombo were dealt with on the basis of a punishment scale devised by OC Troops. As a result of their unofficial extension of leave many men of the unit sustained uncomfortable gaps in their paybook balances. Others went to swell the number of those available daily from the defaulters' parade for duties and fatigues. This number was now embarrassingly high and the ship's RSM was hard put to it to devise means of employment.

Escorted by the aircraft carrier HMS Eagle and three other ships, Ramillies, Sussex and Hobart, the convoy made its way in calm seas and fine weather across the Arabian Sea on the final leg of the journey to Egypt. Preparations for disembarkation commenced, and excitement began to run high. Late in the afternoon of 10 February the convoy increased speed and left the Dunera to proceed alone. With a speed of between nine and twelve knots, she was the slowest ship in the convoy, and her position far astern of the other ships as each day dawned had

often been the subject of some derisive but good-natured comment from the Commodore's ship, the *Orion*.

The Dunera arrived at Port Tewfik on 12 February and berthed during the morning. The Secretary of State for Dominion Affairs, Mr Anthony Eden, who had flown from England to welcome the New Zealand and Australian contingents, came aboard with Major-General Freyberg and addressed the troops. Disembarkation commenced at 5.30 next morning and the troops entrained immediately on the quay. The journey took them through Moascar to the outskirts of Cairo, where the train was diverted to a branch line running to a siding near Maadi village. The troops detrained at 1 p.m. and marched to the divisional area in the desert on the outskirts of Maadi.

Maadi Camp, as the troops saw it for the first time that day, was a comfortless sight. From the fringe of the Nile Delta it sprawled out into the desert for a distance of two miles, to melt into the edge of an arid and desolate wilderness which stretched eastwards towards the Gulf of Suez. The camp itself sat on top of a plateau overlooking the Delta, and in the middle rose a rocky knoll which was in later years to be known to the irreverent as 'Bludgers' Hill'. Owing to the late start that had been made on the construction of the camp, the hutting was not completed when the First Echelon arrived, but the work was being pushed ahead rapidly so that there would be only the minimum interference with the troops' comfort. More than 150 huts were to be built for cookhouses, messrooms, canteens, and shower houses, but not all of them had been completed and for the first few days the men had their meals in marquees. The troops slept in tents, one NCO and seven men in each. Each man was provided with a low plank bed, a bolster and a mattress, and after the hot meal which was served immediately the unit arrived in the area, the work of settling in began.

Later that afternoon Divisional Signals' members of the two advance parties which had left New Zealand in December returned to the unit. Since their arrival in Egypt on 9 January the advanced instruction party had been attached to 4 Indian Divisional Signals at Mena, a British

camp near the Pyramids, some miles to the west of Cairo. Since 7 February they had been employed, together with some Royal Signals men, in erecting tents in the New Zealand Divisional Signals' area at Maadi. According to their account, which was later amply confirmed by the experiences of the newcomers, this work had been extremely arduous, each tent-peg hole having to be drilled with a pneumatic drill in the hard rock shelf which lay only a few inches beneath the sand.

The advanced administrative party had been attached to 7 Hussars in a camp near the railway siding where the troops had detrained and which was later to be known as Digla Camp.

It was the end of the Egyptian winter, but the days were pleasantly warm in this arid land. The early mornings and evenings, however, were very chilly, and the men spent that first night in fitful sleep. The sudden drop in temperature at nightfall was frequently the cause of chills, but the men soon learned to don heavier clothing when the sun went down. These chills were a common cause of a minor malady, known locally as 'Gippy tummy'. In reality it was a mild form of dysentery. Rheumatic affections were fairly common in Egypt and there were odd cases of malaria. Typhoid, not uncommon amongst the natives, was relatively rare in European communities.

Between the months of March and May, but rarely at other times of the year, the prevailing north wind veers to the south-west, producing the hot, dust-laden khamsin, beside which the Canterbury nor'-wester is a mere zephyr. During the summer months, from May to October, the temperature is sub-tropical, and in April it can be very hot. Spells of great heat do not often last long, but a shade temperature of over 110 degrees is occasionally reached.

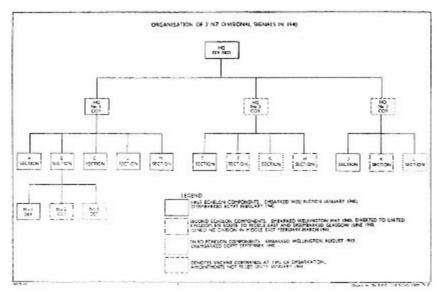
In a remarkably short time the men were settled into their new camp, and by the early morning of their second day in Maadi order was beginning to emerge from the apparent chaos and makeshift arrangements which had greeted their arrival. The CO, with his Adjutant and headquarters staff, and the Quartermaster and his myrmidons were

ensconced in their offices and stores in two of the few completed huts, and there was much going to and fro between the company lines and unit headquarters.

During the afternoon of this second day in Egypt Divisional Signals began to operate the Divisional Headquarters telephone exchange and signal office. On the same day the unit took part in a parade which was addressed by the Assistant Provost Marshal of the Cairo Area, who spoke about the city and the pitfalls there which beset the unwary. It was a friendly talk in which official edicts concerning the standard of behaviour expected of troops on leave, the respect that was to be accorded the religious customs of the country, and other matters relating to correct soldierly deportment were expressed in a pleasant and tactful manner. He was a pleasant fellow and his eyes twinkled as he spoke discreetly of the frail sisters of the great city and the wiles with which they might seek to snare the newcomer in their raucous and tawdry haunts. The troops who listened attentively to the address, which concluded with a special warning about the sanctity of the Egyptian tarboosh and the prevalence of counterfeit money, were suitably impressed, and many of those who expected to go to Cairo on leave that evening already saw the pits of Hell yawning at their feet.

That day, also, the unit received thirty-six motor vehicles with which it was able to commence training immediately. These vehicles included six 15-cwt Morris wireless trucks and, to the elation of the despatch riders, twenty Norton motor-cycles. The sixteen despatch riders of D Section, who had had no training in their trade owing to the complete lack of cycles in New Zealand mobilisation camps, now commenced riding practice in the desert with great enthusiasm and zeal.

By 16 February the signals organisation was taking shape. Besides the Divisional Headquarters telephone exchange operating in the unit area, two satellite exchanges were now in use, one in 4 Brigade's area, towards the eastern end of the camp, and the other in 4 Field Regiment's area, on the flat below Divisional Headquarters. A despatchrider letter service from the Divisional Headquarters signal office served Headquarters 4 Infantry Brigade and all units on four daily runs. A similar service to Headquarters British Troops in Egypt, in Cairo, was also inaugurated.



ORGANISATION OF 2 NZ DIVISIONAL SIGNALS IN 1940

Arrangements had been made for parties of officers, NCOs, and men from Divisional Signals to be attached to various British units and formations to receive some advanced training in the tactical handling of Signals in the field. The first party, consisting of Lieutenant McFarlane ⁷ (OC C Section) and twenty-nine other ranks, marched out to Egypt Command Signals at Abbassia Barracks on 16 February. Four days later Second-Lieutenant England ⁸ and five other ranks of 14 Light Aid Detachment, an Ordnance unit which had been attached to Divisional Signals very shortly after the First Echelon's arrival in Egypt, and which was to remain in close and happy association with Signals for the duration of the war, marched out to a British unit for a special course of instruction in the work of light aid detachments.

Until the end of the month small parties from Divisional Signals continued to move out on similar attachments, the two largest consisting of Captain Grant ⁹ (OC No. 1 Company), Lieutenant Pryor ¹⁰ (OC J Section), and twenty-two other ranks who went to 4 Indian

Divisional Signals, and twenty-two other ranks under Lieutenant Dasler ¹¹ (OC B Section) and Lieutenant Fletcher ¹² (OC E Section) who were attached to a Royal Signals unit at Mersa Matruh in the Western Desert. The party under Captain Grant participated in a number of exercises carried out by 4 Indian Division and 7 Armoured Division, which were at this time the only complete divisions in Egypt. The experience gained by Divisional Signals personnel during these attachments and the contacts they made with their opposite numbers in Royal Signals units later proved of immense value to the New Zealanders.

At Mersa Matruh the other party, which included ten linemen from B and D Sections and a number of operators from E and J Sections, was attached to 22 Infantry Brigade, which comprised the Matruh garrison. The linemen were supposed to be undergoing a course of instruction on the mechanical cable-layer, but saw very little of this equipment as much of their time was spent in assisting Royal Signals in the repair and overhaul of the garrison's underground cable system. This consisted of 12-pair DCLC (dry core, lead covered) cable, which had been laid about 1936 but had never worked very satisfactorily. The 1st Battalion of the Welch Regiment was among the units of the Matruh garrison, and the arrival of the New Zealanders immediately stimulated old Rugby rivalries, especially as the Welch battalion had in its ranks two or three international players. Captain Dasler managed to scratch up a team of sorts from his men and some New Zealand Divisional Engineers who were also at Matruh at the time. This team accepted the Welch challenge and was soundly beaten by thirty points to three.

Meanwhile, at Divisional Headquarters in Maadi Camp, the completed phases of the Division's work and its future tasks had been surveyed by the GOC at a training conference on 15 February. The preliminary training of the First Echelon and its concentration in Egypt having been completed, the second stage, the organisation and administration of the force on a tactical or war footing, was about to begin. The third stage was to consist of collective training in the form of exercises on a divisional scale. The policy of training was to be a short-

term one, as the aim was for the force to be ready to take the field in two months; it was recognised that there was little use in embarking on a long-term policy of preparation which might have to be abandoned in the face of a sudden necessity.

By this time most New Zealanders had made several visits to Cairo on leave and were becoming comfortably familiar with the streets, principal shops and cabarets. It was clear, too, that a considerable number of the more curious-minded had pushed their reconnaissances fairly deep into the less salubrious quarters of the city. Their experiences on these adventures, however, rarely emerged into the light of open discussion, but were reserved for the discreet confidences of their own particular cronies.

It had not taken the average New Zealander very long to size up the predatory instincts and technique of the wily Egyptian, and within a few weeks most soldiers were able to pit their cunning against that of the long-practised vendors of curios and other interesting commodities, without losing too many points. In the cabarets and dance halls, the New Zealand soldier appeared to have got the measure of bartenders and proprietors, and after the first verbal exchanges, which were conducted in a curious mixture of ungrammatical English and kitchen Arabic, containing some flowery passages in recriminatory profanity, the soldier continued to enjoy the liquor of his choice at a price which suited his modest income. To many officers it was one of the war's unexplained mysteries how a soldier could draw his twenty shillings every Friday and go off to town and lurch back into camp in the early hours of the morning with his skin full of grog and his pockets filled with several pounds' worth of curios and souvenirs.

They were happy warriors, these New Zealanders, and although many taxi and gharry drivers suffered rudely at their hands at times, there was a spirit of exuberant goodwill between them and the Egyptian city-dweller which continued without any really serious rupture throughout the war. Each called the other 'George'—a sobriquet adopted by both parties—and each slapped the other's back while both roared with

laughter at each other's sallies.

At the time of the First Echelon's arrival in Egypt five service canteens—known as Naafi (Navy, Army and Air Force Institutes)—were established in Maadi Camp. Four of these were in permanent wooden buildings and the fifth was housed in a large marquee in Divisional Signals' lines, immediately opposite Divisional Headquarters' offices and buildings.

They were built to a standard plan: large wooden buildings bordered by a wide verandah and roughly L-shaped in layout. Each Naafi was divided into three sections: a corporals' bar, a men's bar with a central canteen and kitchen where light meals could be bought, and, attached to the foot of the L, a smaller annexe which served as a writing and recreation room and library. Naafi was a service institution which worked in peacetime as well as in war and was really a club for the men run for the benefit of the three services. From the gross sales of the institutes a rebate of 6 per cent was paid to the regimental funds of units, but in practice it was found that the cost of breakages reduced this rebate.

Contracts were let in the camp for conservancy—the collection of waste and rubbish—and for laundry, boot repairing, tailoring and swill collection. Native contractors in evil-smelling and ramshackle trucks collected table and kitchen waste from bins placed outside messrooms and kitchens.

There was little to relieve the tedium, and as March came there appeared signs of restlessness and indiscipline among men whose interests and energies had been spent in the first flush of enthusiasm of the early days in this strange land. Training had settled down into a regular routine, and officers and NCOs were polishing company and section organisation in readiness for the expected divisional exercises. Perhaps some of these younger and less experienced officers were too strict, because much of the dissatisfaction of the men was traced to the relentless application of the disciplinary code. Another cause, although

less important, was the irregularity of mail from New Zealand.

With April came the official summer season in Egypt, and the issue of shorts, shirts, and hose-tops to the men. The warmer weather brought with it the first khamsin, which caused a good deal of discomfort and some minor damage in the camp. With the heat, too, came the fly—the filthy, pertinacious Egyptian fly, beside which the New Zealand variety is a timid weakling.

Early in the month interest developed into speculation as rumours of the arrival of the Second Echelon began to circulate. Certain preparations for the move of the Division to Helwan Camp had not passed unnoticed.

The first divisional exercise began in the El Saff area, south of Helwan, on 22 April and continued until the early morning of the 25th, Anzac Day. On the following day, which was a pay day, the troops were in a slightly elated mood, and there was a good deal of harmless horseplay in the camp. That evening the camp cinema, which was filled to capacity with men who had just returned from the rigours of the fourday exercise in the desert, came in for some rough treatment. Screenings at this cinema, which was owned and operated by a gentleman named Shafto-or 'Shufti' as the men called him-were seldom satisfactory owing to frequent breakdowns and long delays while the film was being mended. Often after such an interruption the screening would be resumed with a large piece of the reel cut out, with the result that the continuity of the story would be completely lost. Usually the audience would greet such treatment with nothing more harmful than loud booing and cat-calls, but on this particular evening the stoppages were much more frequent than usual and the gaps in the story more exasperating, with the result that the usual more or less good-natured raillery changed quickly into a concerted outcry for the repayment of the patrons' money. As the uproar increased the manager took fright and ran for refuge to the operating box, where he locked himself in. The angry troops surged around inside the crazy building,

breaking up chairs and hurling some of them through the screen. Outside, a part of the crowd was wreaking its displeasure on the building itself. They strained mightily at the walls, and in a few minutes the building collapsed inwards like a house of cards. It was a tumultuous affair, in which it is feared that many Divisional Signals men lent their willing support.

After three months of the heat and tedium of camp life, the troops listened again to the persistent voice of rumour. The tension between Italy and the Allies seemed to be working up to a climax, and when the news was received early in May that Britain was diverting her shipping to the Middle East by the Cape route to avoid the passage of the Mediterranean, it seemed that the possibility of action was drawing near. Many British units were moving to stations in the Western Desert, and speculation was rife as to the possible movements of the New Zealand Division in the very near future. In Egypt the news at this time was scanty and confused, and there were conflicting reports of the battles being fought in France. Rumours were current that the New Zealand Division was to be sent there, and when at the end of May news was received that the Second Echelon had been diverted to England, speculation and conjecture flourished with renewed vigour.

Early in the year, on 12 January, the main draft of men for the Second Echelon had moved into the various mobilisation camps in New Zealand, Divisional Signals being drafted to Trentham. The signals component of the contingent, consisting of four officers and 108 other ranks, made up the establishments of one infantry brigade signal section, one field regiment signal section, and a number of linemen to augment the cable section then with the First Echelon in Egypt; it included also the number required to form H Section, which would provide communications in the field for 7 Anti-Tank Regiment, part of which was being recruited from New Zealanders resident in the United Kingdom. Three of the officers, Lieutenants Robins, ¹³ Frame ¹⁴ and Paterson, ¹⁵ had been called up during the previous November, but the senior signals officer of the contingent, Lieutenant Fry, ¹⁶ did not enter

camp until the end of January.

Revised training syllabuses, based on the training programmes laid down for the militia in the United Kingdom, replaced those issued in 1939 for the First Echelon. As it was expected that the time available for training in New Zealand would not be likely to exceed eight weeks, the new programmes were so designed that specialists arms would receive a good grounding in their work so that they might take advantage of more advanced training at an overseas base. In Signals a satisfactory standard of individual training was quickly attained. Although the only wireless equipment available was some No. 1 wireless sets and two No. 9 sets, operators were given some very valuable training organised on an intelligent basis. Despatch riders received very useful instruction, which was to stand them in good stead in England towards the end of the year. Throughout the training period evening classes in a variety of subjects were held, but these, especially the Morse operating classes, were not received at all favourably by the men.

All ranks were despatched on final leave on 14 March. When they returned to camp at the end of the month, however, it was learned that the Second Echelon would not embark for at least another month, and plans were made for more advanced training to be carried out. This took the form of brigade signals exercises. Headquarters of units and formations were represented by wireless and line terminals, and much good work was done by the linemen with the aid of an improvised cable wagon. Fifth Brigade staff took a keen interest in these out-of-camp training schemes, most of which were carried out in the Tauherenikau area, and Brigadier Hargest ¹⁷ made frequent visits to the various sections during the exercises.

On 27 April the Second Echelon marched through the streets of Wellington and was given a civic farewell at Parliament Buildings. Relatives and friends were admitted to the camp on the 27th and 28th, and the troops embarked on 1 May. The convoy sailed next day, but even at this late date its destination was still in some doubt.

Towards the end of April the Admiralty had mentioned the possibility of diverting the convoy to the United Kingdom via the Cape of Good Hope because of the uncertainty of Italy's intentions. During May, while the convoy was on its way, its destination was the subject of a long exchange of cables between the United Kingdom and New Zealand Governments, and it was decided that the uncertainty of developments in the Mediterranean made it undesirable for the convoy to pass through the Red Sea. Finally the New Zealand Government agreed that the Second Echelon should, if the circumstances required, be diverted to the United Kingdom.

During the voyage the usual difficulties of shipboard training were encountered, although Signals on the Empress of Britain was not hindered by the same space limitations that had so hampered the training of the First Echelon signals on the Dunera. On the Empress the ship's tennis court, allotted to Signals, provided sufficient space for a company parade. Rifles were on issue to most of the other ranks, but other training equipment, which consisted mostly of telephones D Mark III and some cable, was hopelessly inadequate. On the ship's bridge Signals obtained a good deal of useful training in the exchange of interconvoy messages by Aldis lamp. On two occasions during the voyage TEWTs (tactical exercises without troops) were organised by the brigade staff, and these provided additional training for Signals. Cable was run between all exercise headquarters on the ship and much written signal traffic was handled by the operators on the telephones.

On 10 May the convoy reached Fremantle, where the troops were given shore leave. Perth resounded again to the glad cries of visiting New Zealanders, ably assisted in their revels by a large number of young Australian soldiers bent on making the occasion a celebration. The citizens showed their hospitality to the visitors in traditional Australian style but were a little too lavish with their liquor. The convoy sailed again on 12 May and within a few hours normal shipboard routine was resumed. Two delinquents from Signals failed to rejoin the ship at Fremantle, but they turned up in England a few weeks later.

Except for minor complaints such as colds, sore throats, and some other slight ailments, the health of the troops during the voyage was good. Messing arrangements were very satisfactory—indeed it would have been surprising had they not been, as the men were waited on by the ship's regular staff of stewards.

In the late evening of 15 May, at a point south-west of Cocos Island, the convoy suddenly changed course and steamed westwards. This did not pass unnoticed, and there was a good deal of excited discussion and speculation. The voyage continued towards Cape Town, and now the cooler temperatures allowed the men to infuse a little more energy into recreational pastimes, which included boxing and wrestling contests, tugs-of-war, and other deck games. On 25 May, as the convoy approached the South African coast after having made a wide sweep to the south to avoid minefields reported to be off Cape Aquelhas, news was received that one of the ships, the Empress of Japan, could not proceed beyond Cape Town owing to the refusal of her Chinese crew to venture into the Atlantic. The troops which she was carrying were to be redistributed between the Empress of Britain and the Andes, and by the time the convoy reached Cape Town on the morning of 26 May most of the transhipment arrangements were complete. The transhipment took place on the 30th while the convoy was at Cape Town. Much readjustment of accommodation on the Empress of Britain was necessary as a result, but most of the extra space required was found by using the lounge and enclosed promenade deck.

During the five days the convoy lay at Cape Town the troops were granted frequent shore leave and, as at Fremantle, were given a warm and hospitable welcome. The convoy left Cape Town on the morning of 31 May and headed north into the South Atlantic. Freetown was reached on 7 June, but troops were not given shore leave there and the convoy continued its voyage the following day. On 14 June it was met by HMS Hood, the aircraft carrier Argus, and six destroyers. Early next day the ships passed a large quantity of wreckage, and at midday the bow of a large tanker blazing like a huge torch was sighted. During the afternoon

there were three submarine alarms but no attacks developed. Land came into view on the morning of the 16th, and at two o'clock that afternoon the convoy anchored in the Firth of Clyde off Greenock, after a voyage of forty-six days in which 17,000 miles had been covered.

Disembarkation began on the 17th, but Signals did not go ashore until two days later, when they entrained for a destination in the Aldershot Command. They arrived at Mytchett Place on the 20th and marched to their camp. The area allotted the unit was timbered grassland where tents had already been erected under the trees, and as the men marched silently to their new camp they marvelled at the cheerfulness in those dark days of the civilians who had gathered to welcome them.

Assisted by a British unit, the New Zealanders were soon comfortably settled in the camp and began to take stock of their new surroundings. It was beautiful summer weather, and the trees provided a pleasant shade from the heat of the day. Near at hand Mytchett Lake provided a popular swimming place.

A few nights after the Second Echelon's arrival an air raid alarm caused a mild stir. Men awoke from a sound sleep to the wailing of sirens, and some of them, clad only in steel helmets and shirt tails, rushed around in the darkness, colliding violently with tree trunks and searching vainly for the slit trenches on which they had expended so much energy during the day.

Signals was kept together in 5 Brigade Headquarters' area as a Divisional Signals pool, and no attempt was made to farm sections out to their respective units and formations. The unit was required to provide men to operate the telephone exchange installed at 2 NZEF (UK) Base Camp at Mytchett, while the remainder were organised into skeleton Nos. 1, 2 and 3 Companies to provide signal communications for a divisional headquarters, a brigade headquarters, a field regiment, and an anti-tank regiment.

At this time no signal equipment had arrived for training, so towards the end of June all hands went off to London on forty-eight hours' leave to see the sights. Even Signalman Theyers ¹⁸ went because there was no one left in the camp to cross his Crown and Anchor board with silver. On this first London visit the lads stepped out very bravely with their tunics freshly brushed and brass buttons glittering in the sunlight. All arrived back at Mytchett safely, although some who had made a lightning tour of London's hostelries in order 'to view the relics' were a little the worse for wear.

Soon after the unit's arrival in the area the CSO Aldershot Command, Colonel Neale, of Royal Signals, paid a visit and arranged for the loan of some training equipment, including Fullerphones Mark IV, telephones D Mark V, and some cable and tools, which enabled preliminary training to begin. Later a Royal Signals liaison officer was attached to pass on the latest information about training and equipment. Towards the end of June signal equipment began to arrive in greater quantities, and the first battle dress to be worn by the Second Echelon made its appearance.

The work of getting the sets and other instruments into operating order was begun immediately, and for a few days the unit's few instrument mechanics and electricians were very busy. To add to their worries, instruments began to return from the training squads for adjustments as a result of the rough handling by heavy-handed operators. On numbers of D Mark V buzzer units the perspiring electricians found the contact screws turned down so tightly that they could not be loosened except with pliers. Finally, in desperation over the appalling rate of destruction of such delicate instrument components, Lieutenant Fry threatened that any soldier below the rank of sergeant who had the temerity to touch a buzzer unit would be placed in irons. As a result of this surprising departure from Fry's usual patience and tact, the men began to exercise a little more care with the equipment, and the destruction rate fell sharply.

On 6 July King George VI visited Mytchett and inspected units of the contingent. The royal party arrived in Signals' area about 3.30 p.m. and, as His Majesty had previously requested that no parade should be called for the occasion, training squads were quickly arranged in preparation for the informal inspection.

Later in the month 2 NZEF (UK) was absorbed into 7 Canadian Corps, which was formed on 16 July, and shortly afterwards Divisional Signals was visited by Colonel Genet, Chief Signal Officer of the Canadian Corps, who arranged to lend the unit three Canadian Signals NCO instructors for a short period.

About this time a mild flutter occurred between certain staff officers and Signals over delays in completing priority telephone calls. There were few experienced operators in the unit, but those who took their turn on duty at the exchange strove manfully with the huge volume of traffic that the signal system was carrying. This matter of priority calls began to assume the proportions of a major dispute, and when some of the operators were threatened with disciplinary action because of their failure to complete immediately certain priority calls that were known to be merely private calls, Lieutenant Fry thought that authority should be asked to define just what constituted a priority call, and who should or should not have authority to originate such calls. The result of this was that Headquarters 2 NZEF (UK) reduced arbitrarily both the number of private calls and the number of officers authorised to make priority calls. This kind of dispute was by no means confined to the Second Echelon in England. From time to time the same sort of trouble occurred in Maadi Camp, where abuses of telephone privileges by impetuous young officers occasionally incurred the displeasure of authority.

Air raids were now becoming more frequent, and almost every evening the sound of sirens and the droning of enemy planes were heard. The enemy's objective in this area was the important RAF experimental station nearby at Farnborough, and the odd sticks of bombs that fell

occasionally in and around the camp caused some interruption to the men's rest at night.

The amount of signal traffic being handled was increasing rapidly, and in addition a vast amount of administrative traffic was beginning to flow out from Headquarters Southern Command at Aldershot, about one and a half miles from Mytchett. Most of this traffic was being handled by despatch-rider letter service, and the despatch riders, who had a particularly difficult task at first trying to find their way in the immense network of roads, from which all signposts had long since been removed for security reasons, soon began to burn up the miles within the command and between Mytchett and London. At night there were many dangers from unlighted traffic and the ingenious road-blocks with which enthusiastic local Home Guard units bestrewed the countryside.

An operation instruction issued by 2 NZEF (UK) on 9 August set out the arrangements that were to be made in the event of a move. At that time the force was at eight hours' notice to move; on receipt of a warning order all men on leave were to be recalled. Except when absent on duty, all troops were confined to their camps and all base kits and surplus equipment were returned to store. A divisional exercise to test the efficiency of these arrangements was carried out from 27 to 29 August.

The 2nd NZEF (UK), now in an operational role, left the Aldershot Command on 5 September for Kent, where it occupied positions covering the Folkestone- Dover area. This was the month when the German Air Force commenced its mass raids on the south of England in an endeavour to open the way for an airborne and seaborne invasion attempt. The War Office now decided that the strength of Divisional Signals 2 NZEF (UK) should be increased by posting to the unit Royal Signals men from British units. In addition to the 15 Royal Signals despatch riders already attached, there were to be 2 officers, 40 operators, 18 linemen, 5 fitters, 5 instrument mechanics, and about 20 drivers. Additional equipment to be supplied included cable stores for a B Section detachment, two No. 9 wireless sets and six No. 11 sets. Other

equipment enabled an infantry brigade signal section to be almost completely equipped, while D and M Sections received approximately half of their normal war equipment scale. Additional transport was also supplied, and the unit now found itself with eleven 8-cwt wireless trucks, seven 30-cwt trucks, three 15-cwt trucks, one 3-ton lorry, and an additional twenty-four motor-cycles.

On 9 September Major P. G. Goodeve-Docker, Royal Signals, from 2 London Division Signals, assumed command of 2 New Zealand Divisional Signals (UK), and Lieutenant Fry became Adjutant. The following day Captain D. Mansel, Royal Signals, was attached to the unit from 12 Corps, to which the Second Echelon had now passed. A teleprinter and No. 9 wireless set terminals, together with men of Royal Signals to operate them, were provided at the New Zealand Divisional Headquarters by 12 Corps Signals. The arrival of additional men, transport, and equipment created some difficult administrative problems, but in a remarkably short time the company and section organisations began to assume the appearance of a conventional signals establishment.

Divisional exercises, with the signal sections providing the normal communications within units and formations, were continued into October. At first a number of weaknesses in intercommunication were disclosed, but as the training progressed it became very noticeable how the brigade commanders' control of battle exercises was improved by the use of radio telephony. The experience gained by the various signal sections in these exercises was very valuable and realistic. One particular incident that occurred in 5 Brigade towards the end of October served to bring home to the staff and Signals alike one very important lesson in the employment of wireless. Very early in the morning of 25 October a message received at Headquarters 5 Brigade from Divisional Headquarters ordered a stand-to, which was to commence at 3 a.m. The message also asked that a reply be sent as soon as the brigade was ready to move. Later another message stated that the stand-to order was only a practice exercise to test the brigade's state of readiness for a sudden move. The principal weakness disclosed was the

failure of one unit to open its WT set immediately it received the warning order.

This failure to open wireless communications in similar circumstances was a lesson that had to be learned and relearned again and again in Divisional Signals, not only in the Second Echelon, but later in the unit as a whole when the three echelons had been concentrated for some time in the Middle East. Indeed, it was not until late in 1941 in Libya that the 'drill' of automatically opening wireless terminals immediately upon the failure of normal line communications, or in other circumstances likely to require the instant use of all forms of communications, became one of the most important principles of signal communications in the field.

By the beginning of November the Battle of Britain was drawing to a close with the ignominious defeat of the German Air Force, and the possibility of invasion had receded. It had originally been intended that the Second Echelon should have been relieved of its operational role during September, and arrangements were then in hand for its departure for the Middle East. These arrangements were cancelled early in September and, although the postponement was not intended to delay the echelon's departure beyond the end of October, it was not until November that the New Zealanders returned to the Aldershot area.

Major Goodeve-Docker relinquished command of Signals on 13

November, and was succeeded by Captain Mansel, who in turn was succeeded by Captain MacSweeney, also of the Royal Signals, on 9

December. The unit was inspected by the Princess Royal, Colonel-in-Chief of the Royal Signals, on 26 November. This was no cursory appraisal but a searching and critical inspection, such as any zealous commanding officer might envy for its thoroughness. During the inspection Her Royal Highness detected an unfastened pocket button on the battle-dress blouse of one soldier. Flicking the unfastened pocket flap with her finger she turned a cold and inquiring stare upon the section officer accompanying her. Fortunately the soldier had the wit to step back smartly, restore his dress and then regain his place.

By this time all sections were occupied in the bustle of preparation for the long-awaited voyage to the Middle East. The first of the unit to move was the transport of H Section, which left for the embarkation port early in December. The suddenness of the movement order caught H Section with its embarkation arrangements incomplete, and technical stores and equipment had to be hurriedly dismantled and packed. Wireless sets were left in their rigid mountings in trucks in accordance with the CSO's instructions, but the commanding officer of 7 Anti-Tank Regiment, during his inspection of all vehicles before embarkation, insisted that they should be removed from the trucks and shipped separately. The protests of Lieutenant Paterson, OC H Section, were unavailing, and a last-minute rush to dismantle the sets ensued before the trucks were sent off.

The section vehicles, together with those of the regiment, reached Glasgow after a four-day journey. The drivers had one night and a day to see something of Glasgow before they embarked on the Rangitiki on 13 December. The convoy was attacked by the German raider Admiral Scheer on Christmas morning, but the ships dispersed and left the naval escort to deal with the intruder. There was no other unusual event during the voyage to Suez, which was reached on 16 February 1941 after a long run around the Cape. The remainder of H Section and 7 Anti-Tank Regiment sailed from Avonmouth, near Bristol, on 17 December, and F Section with 5 Field Regiment from Liverpool the following day. K Section, with Headquarters 5 Brigade, embarked on the Duchess of Bedford at Newport in Wales on 3 January and sailed on the 7th for Belfast, where the convoy lay at an anchorage off Bangor in Belfast Lough until the 12th. Early that morning the convoy left Belfast on the long voyage to Suez.



New Zealand signalmen, Western Desert Force Signals,
Sollum, Christmas Eve 1940

BACK ROW: D. C. Mundy, J. C. Clark, J. A. Hannigan, R. W. Minett,
K. J. Hayes, K. E. Gallagher, F. W. Sell, E. R. McPherson
FRONT ROW: F. L. Oakley, A. Heseltine, F. L. W. Stubbs

New Zealand signalmen, Western Desert Force Signals, Sollum, Christmas Eve 1940

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Front Row: F. L. Oakley, A. Heseltine, F. L. W. Stubbs



Repairing a bombdamaged line

Repairing a bomb-damaged line

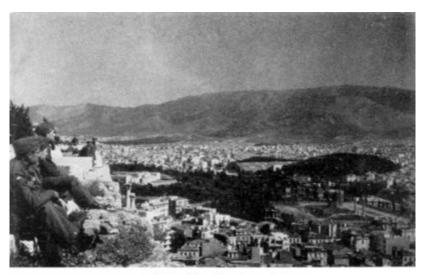


Wireless section detachment at Bomba, Cyrenaica
Wireless section detachment at Bomba, Cyrenaica



A flood outside the orderly room at Burbeita

A flood outside the orderly room at Burbeita



Athens from the Acropolis
Athens from the Acropolis



Signal office and main exchange, Divisional Headquarters, Kalokhori, Greece

Signal office and main exchange, Divisional Headquarters, Kalokhori, Greece



Technical maintenance work at Katerini. E. B. Ross, W. McKay, J. M. Lowe and R. C. Ashby

Technical maintenance work at Katerini. E. B. Ross, W. McKay, J. M. Lowe and R. C. Ashby



North-east of Mount Olympus

North-east of Mount Olympus



- ¹ These promotions and appointments dated from 14 Dec 1939, when 2 NZEF was placed on active service.
- ² S-Sgt W. Thomas; Auckland; born Auckland23 Jul 1904; clerk.
- ³ Sigmn D. E. Keane; Helensville; born NZ 2 Oct 1906; civil servant; p.w. Apr 1941.
- ⁴ WO I A. T. McNab; Waiotahi, Bay of Plenty; born Picton, 26 Dec 1911; mechanician; RSM 2 NZ Div Sigs Jan-Jun 1941; RSM 2 NZEF Base Sigs Jul-Sep 1941.
- ⁵ L-Sgt H. Hodgson; Wellington; born Wellington, 17 Oct 1904; Public Service chauff r.
- ⁶ Maj-Gen Sir Howard Kippenberger, KBE, CB, DSO and bar, ED, m.i.d., Legion of Merit (US); Wellington; born Ladbrooks, 28 Jan 1897; barrister and solicitor; 1 NZEF 1916-17; CO 20 Bn Sep 1939-Apr 1941, Jun-Dec 1941; commanded 10 Inf Bde, Crete, May 1941; 5 Bde Jan 1942-Jun 1943, Nov 1943-Feb 1944; 2 NZ Div 30 Apr-14 May 1943 and 9 Feb-2 Mar 1944; twice wounded; Editor-in-Chief, NZ War Histories.
- ⁷ Capt D. M. McFarlane; Hamilton; born Invercargill, 2 Dec 1914; P and T engineer; OC C Sec Sigs Jan-Jun 1940, Nov 1940-

- May 1941; Tech Maint Officer Western Desert Force Signals Jun-Nov 1940; OC K Sec May-Nov 1941; p.w. 27 Nov 1941.
- ⁸ Maj R. H. England; Christchurch; born Christchurch, 24 Jul 1905; engineer; OC Ord Fd Pk Dec 1941-Feb 1942; SOME 5 NZ Div 1942; DADOS 1943; OC MT Wkshops and VHR, Burnham, 1944; DDMT SMD 1945.
- ⁹ Col R. L. C. Grant, OBE, m.i.d.; Dunedin; born Leeston, 25 May 1906; telegraph engineer; OC 1 Coy Div Sigs 1940-41, 1943; HQ Coy 1942; 2 i/c Corps Sigs WDF Aug-Sep 1940; CO Creforce Sigs May 1941; comd Sig School Base Dec 1941-Apr 1942, Apr-May 1943; CO Div Sigs 21 Sep-26 Nov 1942, 4 Jun-29 Dec 1943, 27 Mar-28 May 1944, 28 Jun 1944-17 Jan 1945; OC NZ Corps of Sigs 4 Jun-29 Dec 1943, 19 Mar 1944-17 Jan 1945; CSO NZ Corps 19-27 Mar 1944; served in United Nations Military Observer Group, Pakistan.
- ¹⁰ Col C. G. Pryor, OBE, m.i.d.; Whangarei; born Beckenham, England, 2 Aug 1907; telegraph engineer; OC J Sec Sigs 1940-41; HQ, 1, 2 and 3 Companies 1941-43; CO Div Sigs 29 Dec 1943-27 Mar 1944; OC NZ Corps of Sigs 29 Dec 1943-19 Mar 1944; CSO NZ Corps 9 Feb-19 Mar 1944.
- ¹¹ Maj R. Dasler; Christchurch; born Oamaru, 26 May 1912; mechanician; OC D Sec Sigs Jun 1941-Jan 1942, K Sec Jan-Jul 1942, 3 Coy Jul 1942-Jan 1943, 4 Sqn Sigs Jan-Jun 1943.
- ¹² Capt N. G. Fletcher, ED; Whangarei; born Auckland, 2 May 1906; civil servant; OC E Sec Sigs Jun 1940-Jan 1941, 2 Coy Jan 1941-Jun 1942.
- ¹³ Capt H. W. Robins; Lower Hutt; born Nelson, 6 Jan 1905; civil servant; OC F Sec Sigs 1941; p.w. 1 Jun 1941.
- ¹⁴ Maj A. S. Frame; Wellington; born Herbert, North Otago, 11 Aug 1908; telegraph operator.

- ¹⁵ Capt T. M. Paterson, m.i.d.; born NZ 24 Dec 1912; farmer; died of wounds 16 Jul 1942.
- ¹⁶ Maj E. V. Fry, ED; born NZ 2 Jan 1897; public servant; died Auckland, 13 Jul 1949.
- ¹⁷ Brig J. Hargest, CBE, DSO and bar, MC, m.i.d.; born Gore, 4 Sep 1891; farmer; Member of Parliament 1931-44; Otago Mounted Rifles 1914-20 (CO 2 Bn, Otago Regt); commanded 5 Bde May 1940-Nov 1941; p.w. 27 Nov 1941; escaped 1943; killed in action, France, 12 Aug 1944.
- ¹⁸ Sigmn C. J. Theyers; Hastings; born Alexandra, 15 Nov 1907; motor trimmer.

DIVISIONAL SIGNALS

CHAPTER 3 — WESTERN DESERT FORCE

CHAPTER 3 Western Desert Force

Meanwhile, as a result of the deterioration of relations with Italy, whose intentions began to emerge more clearly after the success of the German attacks in France, a tense mood of expectancy pervaded the preparations being made for operations in the Western Desert of Egypt. The military situation in the Middle East gave the Italians a tremendous advantage—in numbers. There was estimated to be over 215,000 Italian troops in Libya, and over 200,000 in Italian East Africa. The British garrison in Egypt at this time comprised about 36,000 troops, which included only two complete formations: 7 Armoured Division and 4 Indian Division. The New Zealand troops consisted of 4 Brigade Group only. In addition, the Italians had a very considerable numerical advantage in the air. Very little equipment had been sent to the Middle East and no single British unit or formation was fully equipped.

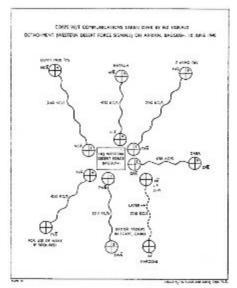
In the Western Desert the British foremost defended positions were at Mersa Matruh, about 200 miles west of Alexandria and 120 miles from the Libyan frontier. There was a railway and road as far as Matruh, and a good metalled road from Matruh to Sidi Barrani, but no good road between Barrani and the frontier. The small harbour of Sollum, near the frontier, had no port facilities, and there was no water supply. It was impossible, therefore, to maintain any large number of troops on the frontier, even had they been available, and the British policy was to allow the enemy to move into Egypt and on to the British defences at Matruh, where he would be met in force. There was, however, a small covering force— 7 Armoured Division less one armoured brigade—on the frontier, and this force was ready to attack the Italian frontier posts as soon as trouble occurred.

In Europe the German armour and air force were inflicting blow after heavy blow on the hapless French. Stimulated by the imminence of France's collapse, Italy embarked on her ignominious Egyptian adventure with a declaration of war against the Allies on 10 June 1940.

In Maadi Camp things began to happen quickly as plans completed some time before were brought into use. These plans included the detaching of parts of several New Zealand units to assist British units in the forward areas. Probably the most important of these tasks was that which fell to a detachment of Divisional Signals, which left Maadi Camp on 9 June for Maaten Baggush to take over the operation of signal communications for Western Desert Force.

Early in 1940 Royal Signals in the Middle East had found that its resources in men and equipment were taxed to the utmost by the everincreasing burden of communications. When, on the declaration of war by Italy, Headquarters 6 (British) Division moved into the Western Desert to become the nucleus of Western Desert Force, it was found that Royal Signals did not have the men in Egypt or Palestine with the necessary technical qualifications and training to provide communications for the new force. As there was no immediate prospect of the New Zealand Division being used for operations—only the First Echelon having arrived in Egypt at that time—representations were made to Major-General Freyberg for the temporary employment of the major part of No.1 Company, 2 New Zealand Divisional Signals, together with a Royal Signals detachment from Egypt Command Signals, as Corps Signals for the Western Desert Force. The period of employment was to be for three weeks, after which it was expected that a Royal Signals unit would arrive from the United Kingdom to take over; actually it was not until February 1941 that the last of the New Zealanders were released to return to their own unit. After some persuasion, General Freyberg agreed to the proposal.

And so it happened that seven officers and 122 other ranks of Divisional Signals began one of the first operational tasks in which New Zealanders were engaged in the Middle East. Major Agar, second-incommand of Divisional Signals, was appointed to command the new unit and became Deputy CSO of the Western Desert Area. He was assisted by Major M. A. Lloyd, of Egypt Command Signals. Although deputed



CORPS W/T COMMUNICATIONS TAKEN OVER BY NZ SIGNALS
DETACHMENT (WESTERN DESERT FORCE SIGNALS) ON ARRIVAL BAGGUSH, 10 JUNE 1940

to carry out all liaison work with the Egyptian State Telegraphs and Telephones Department, Lloyd actually performed the duties of staff officer to the Deputy CSO.

The New Zealand detachment arrived at Baggush on the evening of 9 June and began to settle into its new camp, which was situated on the north of a ridge about half a mile from the sea. The following day a mobile wireless section from Egypt Command Signals, consisting of one officer and twenty- two other ranks and equipped with three wireless sets No.3 and three wireless sets No. 9, arrived and was attached to the unit. On the same day detachments of New Zealand other ranks were sent to 5 (British) Infantry Brigade at El Daba and to 22 (British) Infantry Brigade in the Matruh garrison. Communication with Headquarters British Troops in Egypt was established with a No.9 set shortly after the unit arrived at Baggush. The telephone exchange and signal office, which were in a dugout about half a mile from the main camp area, were taken over from 4 Indian Divisional Signals. The traffic chart in the signal office showed that fifty signal messages had been handled that day.

The New Zealanders soon became acquainted with Rafai Effendi, an engineer of the Egyptian State Telegraphs and Telephones, who was responsible for the civil communications between Ikingi Maryut, near

Alexandria, and Mersa Matruh. Rafai held a commission in the Egyptian Army, but rarely wore uniform. His headquarters was at Baggush and he was of great assistance to Corps Signals Western Desert Force in its work of providing reliable permanent-line communications between important points along the coast.

By the end of the first week of their stay at Baggush the men were becoming accustomed to the organisation and routine of the new Western Desert Force. A despatch-rider letter service was now in operation between Baggush and the advanced headquarters of 7 Armoured Division near Sidi Barrani, a distance of 115 miles. Already great difficulty was being experienced by despatch riders in locating the headquarters of units owing to the rapidity of troop movements in the area, while the amount of traffic handled daily in the signal office was mounting rapidly. From the modest fifty messages on the day of the unit's arrival, the traffic had by the fourth day mounted to 450 messages.

In addition to Lieutenant Dasler and his B Section linemen, Corps Signals Western Desert Force had an Indian line construction section commanded by Subedar Joginda Singh, a Sikh of imposing appearance and attractive personality. He was an ex-champion wrestler and it was rumoured that he had his own way of dealing with any infringements of discipline within his section. He was subsequently twice decorated and granted a King's commission.

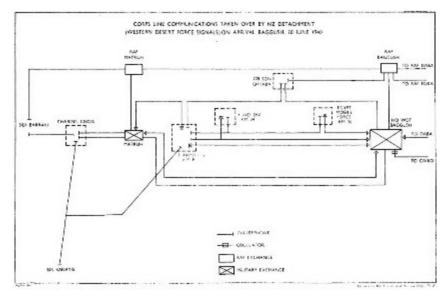
As the days passed the network of communications grew rapidly from the relatively simple organisation with which Corps Signals Western Desert Force began—a few lines from the Western Desert Force headquarters at Baggush to the Matruh garrison, the rear and advanced headquarters of 7 Armoured Division, and two RAF army co-operation squadrons which had been placed under the operational control of the force. There was also a fairly simple system of wireless communications, but at that time wireless silence had been imposed throughout the area. Except for a number of sets operated by A Section for the interception of Italian wireless traffic, the main burden of communications fell on the

line circuits and despatch-rider letter service.

The first wireless task of any importance fell to A Section when a detachment manned by Signalmen Riseborough, ¹ Moran ² and Browne ³ accompanied Lieutenant-General R. N. O'Connor, Commander of Western Desert Force, on an extensive reconnaissance of the forward areas, during which they covered 400 miles of desert in nine days. In the neighbourhood of Buqbuq, near the Libyan frontier, the small party was attacked by three Italian planes; this so incensed Browne that he leaped from the truck and fired three shots with his rifle, an action which he claimed was the first by a New Zealander against the enemy in Africa.

The cable section was now beginning to experience some trouble with overhead lines damaged by bombs in the desultory Italian raids which occurred regularly at night over the area. At Matruh the section carried out a major deviation job on the main permanent line from Headquarters Western Desert Force to 7 Armoured Division. Passing through the town on the main pole route, this line had sustained considerable damage from enemy raids, and the deviation, designed to reduce the effects of bomb damage, took the line about four miles around the outskirts of Matruh.

Towards the end of June the first fatal casualty sustained by



CORPS LINE COMMUNICATIONS TAKEN OVER BY NZ DETACHMENT (WESTERN DESERT FORCE SIGNALS) ON ARRIVAL BAGGUSH, 10 JUNE 1940

Gough, 4 a despatch rider for Corps Signals, was seriously injured in a collision on the Baggush- Matruh road on the night of the 28th. He died the following day and was buried at Daba. A party of three officers and twenty men from Corps Signals attended the funeral. Gough's death served to emphasize the hazardous nature of the despatch riders' work, especially at night when they had to ride without lights on roads whose bitumen surfaces could be discerned only with great difficulty. Despite these difficulties the twenty-four despatch riders had an amazing appetite for work. On a roster of three shifts each of eight hours, the shift from 4 p.m. until midnight was the most trying. Frequent night trips were normal, and it was usual to have two or three special despatch riders out at one time during the night. Casualties through riding accidents were unusually high and, as the original number of despatch riders was steadily reduced, an increasing burden of work was thrown on those that remained. All this, however, had little effect on their enthusiasm, and throughout the war many of these diehards used to assert that their five months with the Western Desert Force in 1940 were the most varied and enjoyable of their wartime experiences.

Divisional Signals in the Middle East occurred when Signalman

In the camp area at Baggush life was proceeding smoothly, despite the increasing pressure of work caused by the arrival of more and more units in the area. There was a little time for recreational pursuits, the most popular of which was the daily swim in the pleasant sea-water lagoon near the camp. Here the outer rocky reef prevented the dangerous undertow prevalent on other parts of the coast.

About this time an amusing incident occurred when Lieutenant McFarlane, emerging early one morning from the underground signal office where he had been on duty as signalmaster, observed a low bank of vapour lying close to the ground and apparently advancing towards the headquarters area. A gas attack at this time seemed improbable, but McFarlane, not to be prevented from using his slight knowledge of antigas measures by fear of ridicule, decided on the spot that it would be better to be safe then than sorry later. He therefore gave the gas alarm.

At that time it was not the custom to carry anti-gas respirators during normal working routine, and as the camp area was a good half mile from the headquarters, the signal office staff was defenceless against the supposed gas attack. McFarlane ordered the men to saturate their handkerchiefs in their urine and tie them over their mouths and nostrils, but before this drastic action could be taken, the vapour, which was merely a low fog caused by local humidity conditions, was suddenly dissipated by a fresh breeze blowing in from the sea. Poor McFarlane had to face much good-natured raillery over this incident, but many of the wiser heads had their own private thoughts about such commendable and timely application of anti-gas principles.

Bomb damage from air attacks continued to disrupt the overhead line circuits, especially in the Matruh area. To make the circuits less susceptible to interruption, the cable section worked hard on the installation of an underground system. Some 6500 yards of 14-pair 40-lb. armoured cable was laid from the eastern end of the RAF landing ground, south of the main road, to the headquarters area at Baggush, and then across the road to the western end of the landing ground, where it rejoined the permanent-line route. The trenching for the cable was done by Cypriot pioneers, and rock outcrops were drilled by sappers from 4 Indian Division. As standard cable-laying gear was not available, a 3-ton lorry was rigged with railway sleepers bolted to the frame and was used to support bottle jacks borrowed from the Egyptian State Telegraphs and Telephones Department. This improvised equipment required very careful handling, but the work was carried on without any serious hitch.

Other underground cabling work was being carried out by the section in the Matruh garrison area, where the existing cable had sustained some slight fractures owing to the shifting of the sand dunes in which it had been laid some years ago. At a point near the junction of the main road and railway at the eastern approaches to the town, the cable ran into the garrison area from the poled-line termination for about three-quarters of a mile to the garrison signal office, and from there continued

on to serve the various headquarters offices of the garrison. The general layout of the underground cable was in the form of a large reversed letter C, interrupted at intervals by concrete joint boxes, inside which the cable pairs were strapped across. It was decided that the completion of this partial loop to form a ring would provide a particularly useful underground parallel circuit which could only be interrupted by bomb damage if both arms were hit simultaneously. The circuit consisted of 25-pair, 12 ½-lb. DCLC cable. Some damage had also occurred at the entrance to the concrete joint boxes, where the movement of the cable in the shifting dunes had fractured the concrete seals and damaged the cable sheath. The greater part of the work on this cable system was carried out by Captain Smith ⁵ and Signalman Mundy, ⁶ both former cable jointers in the New Zealand Post Office.

Later, when the Italians began to intensify their air attacks on Matruh in September, the underground cable was damaged on a number of occasions, but repairs were quickly effected and communications seldom interrupted for any appreciable time. On one occasion the assistance of a Royal Engineers unit was required to remove an unexploded 250-pound bomb which had landed directly on the cable trench. Direct bomb hits on the cable trench had the effect of stretching the sheath, which caused the conductors to be broken for about four inches. Usually the armour remained unbroken.

About this time enemy aircraft dropped an unusual type of delayed-action bomb, which soon came to be known as the thermos bomb because of its resemblance to a thermos flask. Impact with the ground brought into operation an ingenious cocking device which made the bomb sensitive to the slightest vibration of the ground in its vicinity. Each morning after the nightly Italian raids, Royal Engineers had a busy time locating and exploding these bombs to prevent damage and casualties. On several occasions during these demolitions spans of overhead wires were brought down in a tangled mass, and B Section had a feverish time carrying out repairs to restore communications as quickly as possible.

An increase in enemy movements in the frontier area early in September suggested that an Italian advance into Egypt was imminent. Since the start of hostilities in June contact with the enemy had been limited to patrol activities and attacks on his frontier posts. Operations continued on these lines throughout July and August until 13 September, when the enemy crossed the frontier and occupied Sollum, and the British forces in the forward areas commenced their planned withdrawal. The Italians reached Sidi Barrani, which was merely a collection of a few stone houses and a landing ground, on the 16th, and there they remained until the British offensive early in December.

For six oppressive months the headquarters of Western Desert Force remained static, but the amount of signal traffic increased enormously as the Western Desert began to fill up rapidly with troops and supplies in preparation for the offensive. The work of extending the system of communications went on steadily: existing permanent-line routes were adapted to meet the needs of the expanding forces, multi-wire underground cables were installed to serve important headquarters, and a network of field cable on the ground comprised the less important and alternative routes.

A few days before the offensive opened south of Sidi Barrani on 9 December, Western Desert Force began the advance which was to carry it to Benghazi in a few weeks. Signals now encountered their first tasks in mobile operations. At first the advance moved away from the permanent overhead line routes, so that a large part of the responsibility for communications fell on field cable, and much depended on the speed with which it could be laid and recovered as the advance progressed. By the early hours of 6 December Headquarters Western Desert Force was established south-west of Matruh and about 27 miles south of the coast. The main group of Signals was under the command of a Royal Signals officer, Lieutenant Lovelock. His senior NCO, Lance-Sergeant Tankard, with the assistance of Lance-Sergeant Vaughan 7 and his signal office detachment, quickly set up his signal office and opened communication with 7 Armoured Division. The signal traffic soon reached a high level,

but three shifts working a 24-hour service handled it with ease.

Although Royal Signals, to whom New Zealand Signals had handed over Corps Signals Western Desert Force in November, was now responsible for communications, the greater part of the New Zealand detachment remained with the force and continued to provide communications under Royal Signals command. Those who remained were No. 1 Company (lines), commanded by Major Smith, and No. 2 Company (signal office and wireless), under Captain Feeney. Lieutenant Dasler remained with his B Section men, and Lieutenant Ambury 8 continued as second-in-command to Feeney. Lieutenant McFarlane had returned, together with the despatch riders of D Section, to New Zealand Divisional Signals at Helwan. In November, when Lieutenant-Colonel Agar was admitted to 2 New Zealand General Hospital at Helwan and relinquished command of Corps Signals Western Desert Force to Major C. D. Clapp, of Royal Signals, Major Grant remained as second-in-command.

On the morning of 9 December British artillery opened the offensive which was to put the Italians to rout. The volume of signal traffic soared rapidly and the number of 'Operations' and 'Important' priority messages soon taxed the circuits to their utmost. After the expulsion of the Italian forces from their positions south of Sidi Barrani, Headquarters Western Desert Force moved forward and by dusk on the 22nd was established at Halfaya Pass, near the Libyan frontier. There had been no enemy troops in Egypt since 16 December, and the greater part of the Italian Cyrenaican Army had withdrawn within the perimeter defences of Bardia. By this time the British advance had converged towards the coast and thus had returned to the route of the civil poled-line circuits. In their desperate haste the Italians had made little or no attempt to demolish these lines.

The New Zealand linemen were in their element. From dawn to dusk they repaired and extended the lines to conform to the rapidly changing pattern of communications as the advance swept on, and the wireless detachments of No. 2 Company bridged the gaps while the lines were being extended and repaired. At the same time continuous wireless communication was maintained with mobile formations of 7 Armoured Division. When the enemy's retreat became headlong flight and the speed of the pursuit increased, the burden of communications fell on wireless to a much greater extent.

The New Zealanders spent Christmas Day near Halfaya, on the escarpment above Sollum. They were tired, dirty and unshaven, but in the right mood to appreciate the New Zealand Patriotic Fund parcels which arrived for the occasion.

Although another detachment of Royal Signals joined the unit on New Year's Eve, the New Zealanders were not released. When British tanks and infantry entered Bardia on 4 January, they moved westwards with Headquarters 13 Corps ⁹ towards Tobruk and Bomba. On 11 January Lieutenant-Colonel Agar, now discharged from hospital and eager to join in the chase, arrived at Corps Headquarters, then at Gambut.

Immediately after the fall of Bardia on 5 January preparations began for the capture of Tobruk, which the enemy held in two perimeter lines of defence, of which the outer was 30 miles in length and the inner 19 miles. In the two weeks that elapsed before the attack was launched the perimeter defences were contained by 6 Australian Division and 7 Armoured Division. Headquarters 13 Corps remained at Gambut; after the fall of Tobruk it was to move westwards to Bomba.

On instructions from the CSO 13 Corps (Colonel F. A. H. Mathew), for whom he was acting as signals liaison officer, Lieutenant-Colonel Agar, accompanied by his driver and batman (Signalmen Wrathall ¹⁰ and Clarke ¹¹) and a Rhodesian line NCO from Royal Signals, set out on 16 January to reconnoitre west of Tobruk the poled-line circuit which followed the main coast road from Bardia, through Tobruk towards Bomba, Derna and beyond. They moved along the Trigh Capuzzo, through El Adem to Acroma, where they encountered the Support Group of 7 Armoured Division, and from there went northwards to the coast

road, where they began the reconnaissance eastwards towards the perimeter defences of Tobruk as far as the advanced British posts would allow them to go. The Colonel then turned west again and moved along the coast road through Gazala to a point 90 kilometres east of Derna. This was far beyond the Support Group's screen, so the Colonel, deeming it imprudent to proceed farther, returned to Headquarters 13 Corps, where he reported that the circuits were in good condition except for some slight disrepair due to deferred maintenance and some damage near the perimeter defences caused by shellfire.

At this stage in the campaign Dasler's B (cable) Section linemen attached to 13 Corps Signals were organised in two detachments, one under Sergeant Bateman ¹² for main-line maintenance work, and the other under Corporal Jones ¹³ to lay and maintain field cable. When the attack on Tobruk commenced at 5 a.m. on 21 January, Jones's detachment, which until then had been stationed at Headquarters 6 Australian Division, about five miles west of Headquarters 13 Corps at Gambut, was sent forward to 16 Australian Brigade to extend the line from the divisional headquarters as the brigade advanced. At Headquarters 13 Corps Bateman's detachment, together with a Royal Signals line detachment, was placed under Lieutenant-Colonel Agar, whose instructions were to bridge the gaps in the poled-line circuits through Tobruk as soon as possible after the town was entered by the Australians.

The road along which the main line lay ran straight from Bardia to a point about four miles south of Tobruk, where it branched sharply to the right towards the town and to the left towards El Adem, eight miles to the south. Some days earlier Bateman and his detachment had carried out some preliminary maintenance work on this line as far as the road junction, which was the forward limit of the Australian positions and where two battalions sat astride the main road. Working slowly along the line, examining spans and poleheads and making repairs where faults were found, Bateman's detachment proceeded with a little more caution to avoid going beyond the Australians' forward positions. But

there was a dust-storm blowing, and in the poor visibility the detachment reached the road junction and continued on without noticing that they were approaching uncomfortably close to the Italian defences. Suddenly a light gun ahead fired several rounds straight down the road, to the consternation of Bateman and his men, who turned their 3-ton lorry around quickly and scuttled back towards the road junction and the safety of the Australian lines.

Tobruk fell on the second day of the attack, 22 January, and it was then that the linemen's work commenced in earnest. From the point he had reached on the main line just south of the perimeter defences a few days previously, Batemen set his detachment to lay quad cable (a rubber-sheathed cable containing four independent conductors) into the town to join up with the poled line running to the west. Meanwhile Lieutenant-Colonel Agar had set the Royal Signals line detachment to work inside the perimeter to restore the circuits in the centre of the town and on the western side of the defences, but as their progress was too slow he diverted Bateman's detachment to the west to work back towards Tobruk and meet them. By midday next day the main line running through Tobruk towards Bomba was completely restored, and line communication both forward and to the rear firmly established.

The A Section wireless detachments of New Zealand Signals under Lieutenant Ambury, which had been employed forward with an Australian brigade during the Bardia attack on 3 January, were withdrawn and redistributed for the Tobruk operations to provide more stable communications between Headquarters 6 Australian Division and 13 Corps, which had not been served very satisfactorily at Bardia by the Australian Signals. The No. 9 set detachment manned by Signalmen O'Hara, Hutt, ¹⁴ Broadmore ¹⁵ and Gaughan ¹⁶ at 16 Australian Brigade was withdrawn to Headquarters 6 Division to work back to the control set at Headquarters 13 Corps, manned by Signalmen Moran, Butterworth ¹⁷ and Hartigan. ¹⁸ To replace the New Zealand set at Headquarters 16 Brigade, the Australians withdrew a set from one of their own battalions.

The happy-go-lucky attitude which these Australian Signals adopted

towards their communication responsibilities was aptly illustrated on the second day of the Tobruk attack, when Signalman Lew Thomas, ¹⁹ one of the linemen in Corporal Jones's detachment with 16 Brigade, was suddenly accosted by the operator on the rear-link wireless set to Headquarters 6 Division. Having closed down his set and climbed out of his vehicle, the Australian said casually: 'Keep an eye on the set, will you? I'm off to see what there is in the way of loot.' Thomas spent several uncomfortable hours at the set wondering what he was supposed to do until the operator returned.

Bomba saw the end of the campaign for most of the New Zealand Signals. On 2 February Captain Feeney and sixty-six other ranks returned to Tobruk, where they embarked for Alexandria en route to rejoin Divisional Signals at Helwan. During the sea voyage the men were employed as escorts for 1500 Italian prisoners being taken back to Egypt.

At Bomba Royal Signals took over all signal office duties, and the only New Zealanders who remained with 13 Corps Signals were the four wireless detachments. These detachments, together with an M Section detachment and under the command of Major Smith, moved on 4 February with Main Corps Headquarters to Msus, in the rear of 7 Armoured Division. The object of this move across the Benghazi bulge was to intercept the remnants of the Italian forces fleeing south towards El Agheila. Contact was made at Soluch and a sharp engagement resulted in the utter rout of the enemy. The armoured division then pushed northwards to Benghazi, which surrendered on 7 February. Major Smith, with his wireless and M Section detachments, entered Benghazi with Corps Head- quarters in time to take over the civil telephone exchange intact.

For the New Zealand Signals who served with Western Desert Force and 13 Corps in General Wavell's campaign of December 1940 and early 1941, the fall of Benghazi marked the end of their first desert operations. The task on which they had embarked so hopefully eight

months before had yielded lessons of considerable value to Divisional Signals. Some of these lessons were to have a long and persistent effect on the work of the unit, particularly during the difficult desert campaigns of 1941 and 1942. Nor were these lessons for Signals alone. Captured enemy documents disclosed that the Italians had a very considerable knowledge of the British order of battle. It was with some misgivings that the staff of 13 Corps learned that the enemy had acquired this knowledge through defective security, particularly in the composition of signal messages transmitted by wireless.

At the same time the Corps' staff had a lively appreciation of the value of wireless in mobile desert operations, amply demonstrated by the ease of command and control given Headquarters 7 Armoured Division by its armoured office vehicles complete with wireless installations. During the fast-moving operations of the 1940 campaign the means of control by other divisional and formation commanders left much to be desired. Wide frontages, dispersion in depth, and great distances put a premium on wireless communications, which demanded sufficient reliable equipment and well-trained operators. Unskilled wireless operators are a hindrance to the conduct of successful mobile operations. In 7 Armoured Division the staff office and signal office were virtually combined, and this should have been the case at the headquarters of all other formations. There should be no separation between the command office and the signal unit, and it is wrong in practice and principle to make such a distinction as, for example, brigade headquarters and signal section. In war neither exists usefully without the other. ²⁰

The last of the New Zealanders who had served with 13 Corps Signals, three officers and seventeen other ranks, rejoined Divisional Signals at Helwan on 17 February 1941. A week later General Freyberg inspected and addressed a parade of all men of Divisional Signals who had served with Corps Signals Western Desert Force and 13 Corps Signals. In appreciation of the services rendered by New Zealand Signals in the campaign, Lieutenant-General O'Connor, Commander 13 Corps,

published a special order of the day; this was conveyed to the commanding officer of Divisional Signals by Colonel Mathew, CSO 13 Corps, who wrote:

но 13 corps 3 feb 41

Dear ALLEN

Now that the bulk of the New Zealand Signals are being returned to you I am writing to tell you how much we have appreciated having them with us and how sorry we are to lose them. Without their help during the last few months we should not have been able to maintain the CORPS communications and we shall find it difficult to maintain in the future the high standard they have set. I enclose a copy of a Special Order of The Day issued by the CORPS Commander, which shows how much he valued their work. Thanking you again very much for lending this very useful contingent and wishing the whole of the New Zealand Divisional Signals the 'Best of Luck' in the future.

F. Mathew Colonel
Chief Signal Officer 13 corps

HEADQUARTERS 13 CORPS
SPECIAL ORDER OF THE DAY BY COMMANDER 13 CORPS

New Zealand Divisional Signals

On the departure of the New Zealand Signals the Western Desert Force is losing one of its original and most trusted components. It is with the greatest regret that I bid them farewell, and I know that their loss will be keenly felt by the many friends they have made. Their work has been outstanding throughout and I know that the Force could not have carried out its tasks without their help. I take this opportunity, therefore, of thanking them for their most excellent work, so freely

given, and wish them the best of luck in the future.

R. N. O' Connor Lieutenant-General

Commander 13 corps

In the Field 31 JAN 41

- ² Capt A. D. Moran, m.i.d.; Auckland; born Russell, 29 Apr 1916; telegraphist; Adjt Div Sigs Sep 1944-Jan 1945; wounded 18 Dec 1944.
- ³ Sgt J. M. Browne; Wellington; born South Africa, 23 Apr 1910; radio mechanic.
- ⁴ Sigmn I. L. Gough; born Wellington, 16 Jul 1915; carpenter; died as result of accident 29 Jun 1940.
- ⁵ Maj A. E. Smith, MBE, ED; Auckland; born England, 6 Mar 1903; cable jointer foreman; OC NMD Sigs Coy 1930-39; A Sec and 1, 3 and HQ Coys Div Sigs 1939-42; 1 Coy WDF Sigs and 13 Corps Sigs 1940-41.
- ⁶ Sigmn D.C.Mundy, MM; Blenheim; born NZ 10 Sep 1915; cable jointer.
- ⁷ Capt L. E. Vaughan; Hastings; born Takapau, 30 Oct 1915; telegraphist; OC G Sec and 14 AA Sig Sec 1942, D Sec 1943.
- ⁸ Maj C. R. Ambury, m.i.d.; Paremata; born New Plymouth, 18 Sep 1910; radio and electrical engineer; OC 1 and 2 Coys 4 Div Sigs (in NZ) 1942; CO 4 Div Sigs 1943; OC 4 Sqn Sigs 1944; 1 Coy 1944-45; OC 3 Coy and 2 i/c 2 NZ Div Sigs 1945; twice

¹ Sgt R. C. Riseborough; Whitianga; born Hastings, 10 Dec 1911; telegraphist.

wounded.

- ⁹ On 1 Jan 1941 Western Desert Force became 13 Corps.
- ¹⁰ L-Cpl R. Wrathall; Masterton; born England, 10 Sep 1913; mechanic; p.w. 29 Apr 1941.
- ¹¹ Sigmn M. S. Clarke; Wellington; born England, 7 Jan 1918; spray painter; p.w. 28 Apr 1941.
- ¹² Maj J. W. Bateman, MM, m.i.d.; Kairanga, Manawatu; born Wellington, 4 Feb 1916; lineman; OC F Sec Sigs Jun-Oct 1942, L Sec Jun-Aug 1943, D Sec Apr-Sep 1944, HQ Coy Sep-Dec 1944, 4 Sqn Dec 1944-Feb 1945, 1 Coy Feb-Mar 1945.
- ¹³ S-Sgt C. R. C. Jones; Napier; born Russell, 5 Feb 1908; mechanician.
- ¹⁴ Sigmn R. G. Hutt; Wellington; born NZ 27 Jul 1918; electrician.
- ¹⁵ Lt J. F. Broadmore; Timaru; born NZ 5 Feb 1915; clerk.
- ¹⁶ L-Sgt W. Gaughan; Henderson; born Auckland, 6 Aug 1911; postman.
- ¹⁷ L-Cpl A. R. A. Butterworth, m.i.d.; Okato; born NZ 6 Aug 1915; telegraphist; p.w. April 1941.
- ¹⁸ L-Cpl G. T. Hartigan; Auckland; born Westport, 21 Dec 1913; telegraphist; p.w. 13 Sep 1941.
- ¹⁹ Sigmn L. J. W. Thomas; Blenheim; born Blenheim, 1 Apr 1916; labourer.

Lt-Gen O'Connor states this in a report on the campaign.					

DIVISIONAL SIGNALS

[SECTION]

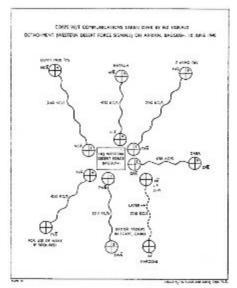
Meanwhile, as a result of the deterioration of relations with Italy, whose intentions began to emerge more clearly after the success of the German attacks in France, a tense mood of expectancy pervaded the preparations being made for operations in the Western Desert of Egypt. The military situation in the Middle East gave the Italians a tremendous advantage—in numbers. There was estimated to be over 215,000 Italian troops in Libya, and over 200,000 in Italian East Africa. The British garrison in Egypt at this time comprised about 36,000 troops, which included only two complete formations: 7 Armoured Division and 4 Indian Division. The New Zealand troops consisted of 4 Brigade Group only. In addition, the Italians had a very considerable numerical advantage in the air. Very little equipment had been sent to the Middle East and no single British unit or formation was fully equipped.

In the Western Desert the British foremost defended positions were at Mersa Matruh, about 200 miles west of Alexandria and 120 miles from the Libyan frontier. There was a railway and road as far as Matruh, and a good metalled road from Matruh to Sidi Barrani, but no good road between Barrani and the frontier. The small harbour of Sollum, near the frontier, had no port facilities, and there was no water supply. It was impossible, therefore, to maintain any large number of troops on the frontier, even had they been available, and the British policy was to allow the enemy to move into Egypt and on to the British defences at Matruh, where he would be met in force. There was, however, a small covering force—7 Armoured Division less one armoured brigade—on the frontier, and this force was ready to attack the Italian frontier posts as soon as trouble occurred.

In Europe the German armour and air force were inflicting blow after heavy blow on the hapless French. Stimulated by the imminence of France's collapse, Italy embarked on her ignominious Egyptian adventure with a declaration of war against the Allies on 10 June 1940. In Maadi Camp things began to happen quickly as plans completed some time before were brought into use. These plans included the detaching of parts of several New Zealand units to assist British units in the forward areas. Probably the most important of these tasks was that which fell to a detachment of Divisional Signals, which left Maadi Camp on 9 June for Maaten Baggush to take over the operation of signal communications for Western Desert Force.

Early in 1940 Royal Signals in the Middle East had found that its resources in men and equipment were taxed to the utmost by the everincreasing burden of communications. When, on the declaration of war by Italy, Headquarters 6 (British) Division moved into the Western Desert to become the nucleus of Western Desert Force, it was found that Royal Signals did not have the men in Egypt or Palestine with the necessary technical qualifications and training to provide communications for the new force. As there was no immediate prospect of the New Zealand Division being used for operations—only the First Echelon having arrived in Egypt at that time—representations were made to Major-General Freyberg for the temporary employment of the major part of No.1 Company, 2 New Zealand Divisional Signals, together with a Royal Signals detachment from Egypt Command Signals, as Corps Signals for the Western Desert Force. The period of employment was to be for three weeks, after which it was expected that a Royal Signals unit would arrive from the United Kingdom to take over; actually it was not until February 1941 that the last of the New Zealanders were released to return to their own unit. After some persuasion, General Freyberg agreed to the proposal.

And so it happened that seven officers and 122 other ranks of Divisional Signals began one of the first operational tasks in which New Zealanders were engaged in the Middle East. Major Agar, second-incommand of Divisional Signals, was appointed to command the new unit and became Deputy CSO of the Western Desert Area. He was assisted by Major M. A. Lloyd, of Egypt Command Signals. Although deputed



CORPS W/T COMMUNICATIONS TAKEN OVER BY NZ SIGNALS
DETACHMENT (WESTERN DESERT FORCE SIGNALS) ON ARRIVAL BAGGUSH, 10 JUNE 1940

to carry out all liaison work with the Egyptian State Telegraphs and Telephones Department, Lloyd actually performed the duties of staff officer to the Deputy CSO.

The New Zealand detachment arrived at Baggush on the evening of 9 June and began to settle into its new camp, which was situated on the north of a ridge about half a mile from the sea. The following day a mobile wireless section from Egypt Command Signals, consisting of one officer and twenty- two other ranks and equipped with three wireless sets No.3 and three wireless sets No. 9, arrived and was attached to the unit. On the same day detachments of New Zealand other ranks were sent to 5 (British) Infantry Brigade at El Daba and to 22 (British) Infantry Brigade in the Matruh garrison. Communication with Headquarters British Troops in Egypt was established with a No.9 set shortly after the unit arrived at Baggush. The telephone exchange and signal office, which were in a dugout about half a mile from the main camp area, were taken over from 4 Indian Divisional Signals. The traffic chart in the signal office showed that fifty signal messages had been handled that day.

The New Zealanders soon became acquainted with Rafai Effendi, an engineer of the Egyptian State Telegraphs and Telephones, who was responsible for the civil communications between Ikingi Maryut, near

Alexandria, and Mersa Matruh. Rafai held a commission in the Egyptian Army, but rarely wore uniform. His headquarters was at Baggush and he was of great assistance to Corps Signals Western Desert Force in its work of providing reliable permanent-line communications between important points along the coast.

By the end of the first week of their stay at Baggush the men were becoming accustomed to the organisation and routine of the new Western Desert Force. A despatch-rider letter service was now in operation between Baggush and the advanced headquarters of 7 Armoured Division near Sidi Barrani, a distance of 115 miles. Already great difficulty was being experienced by despatch riders in locating the headquarters of units owing to the rapidity of troop movements in the area, while the amount of traffic handled daily in the signal office was mounting rapidly. From the modest fifty messages on the day of the unit's arrival, the traffic had by the fourth day mounted to 450 messages.

In addition to Lieutenant Dasler and his B Section linemen, Corps Signals Western Desert Force had an Indian line construction section commanded by Subedar Joginda Singh, a Sikh of imposing appearance and attractive personality. He was an ex-champion wrestler and it was rumoured that he had his own way of dealing with any infringements of discipline within his section. He was subsequently twice decorated and granted a King's commission.

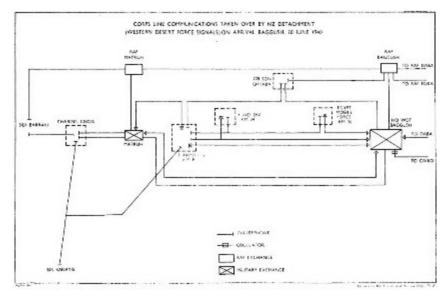
As the days passed the network of communications grew rapidly from the relatively simple organisation with which Corps Signals Western Desert Force began—a few lines from the Western Desert Force headquarters at Baggush to the Matruh garrison, the rear and advanced headquarters of 7 Armoured Division, and two RAF army co-operation squadrons which had been placed under the operational control of the force. There was also a fairly simple system of wireless communications, but at that time wireless silence had been imposed throughout the area. Except for a number of sets operated by A Section for the interception of Italian wireless traffic, the main burden of communications fell on the

line circuits and despatch-rider letter service.

The first wireless task of any importance fell to A Section when a detachment manned by Signalmen Riseborough, ¹ Moran ² and Browne ³ accompanied Lieutenant-General R. N. O'Connor, Commander of Western Desert Force, on an extensive reconnaissance of the forward areas, during which they covered 400 miles of desert in nine days. In the neighbourhood of Buqbuq, near the Libyan frontier, the small party was attacked by three Italian planes; this so incensed Browne that he leaped from the truck and fired three shots with his rifle, an action which he claimed was the first by a New Zealander against the enemy in Africa.

The cable section was now beginning to experience some trouble with overhead lines damaged by bombs in the desultory Italian raids which occurred regularly at night over the area. At Matruh the section carried out a major deviation job on the main permanent line from Headquarters Western Desert Force to 7 Armoured Division. Passing through the town on the main pole route, this line had sustained considerable damage from enemy raids, and the deviation, designed to reduce the effects of bomb damage, took the line about four miles around the outskirts of Matruh.

Towards the end of June the first fatal casualty sustained by



CORPS LINE COMMUNICATIONS TAKEN OVER BY NZ DETACHMENT (WESTERN DESERT FORCE SIGNALS) ON ARRIVAL BAGGUSH, 10 JUNE 1940

Gough, 4 a despatch rider for Corps Signals, was seriously injured in a collision on the Baggush- Matruh road on the night of the 28th. He died the following day and was buried at Daba. A party of three officers and twenty men from Corps Signals attended the funeral. Gough's death served to emphasize the hazardous nature of the despatch riders' work, especially at night when they had to ride without lights on roads whose bitumen surfaces could be discerned only with great difficulty. Despite these difficulties the twenty-four despatch riders had an amazing appetite for work. On a roster of three shifts each of eight hours, the shift from 4 p.m. until midnight was the most trying. Frequent night trips were normal, and it was usual to have two or three special despatch riders out at one time during the night. Casualties through riding accidents were unusually high and, as the original number of despatch riders was steadily reduced, an increasing burden of work was thrown on those that remained. All this, however, had little effect on their enthusiasm, and throughout the war many of these diehards used to assert that their five months with the Western Desert Force in 1940 were the most varied and enjoyable of their wartime experiences.

Divisional Signals in the Middle East occurred when Signalman

In the camp area at Baggush life was proceeding smoothly, despite the increasing pressure of work caused by the arrival of more and more units in the area. There was a little time for recreational pursuits, the most popular of which was the daily swim in the pleasant sea-water lagoon near the camp. Here the outer rocky reef prevented the dangerous undertow prevalent on other parts of the coast.

About this time an amusing incident occurred when Lieutenant McFarlane, emerging early one morning from the underground signal office where he had been on duty as signalmaster, observed a low bank of vapour lying close to the ground and apparently advancing towards the headquarters area. A gas attack at this time seemed improbable, but McFarlane, not to be prevented from using his slight knowledge of antigas measures by fear of ridicule, decided on the spot that it would be better to be safe then than sorry later. He therefore gave the gas alarm.

At that time it was not the custom to carry anti-gas respirators during normal working routine, and as the camp area was a good half mile from the headquarters, the signal office staff was defenceless against the supposed gas attack. McFarlane ordered the men to saturate their handkerchiefs in their urine and tie them over their mouths and nostrils, but before this drastic action could be taken, the vapour, which was merely a low fog caused by local humidity conditions, was suddenly dissipated by a fresh breeze blowing in from the sea. Poor McFarlane had to face much good-natured raillery over this incident, but many of the wiser heads had their own private thoughts about such commendable and timely application of anti-gas principles.

Bomb damage from air attacks continued to disrupt the overhead line circuits, especially in the Matruh area. To make the circuits less susceptible to interruption, the cable section worked hard on the installation of an underground system. Some 6500 yards of 14-pair 40-lb. armoured cable was laid from the eastern end of the RAF landing ground, south of the main road, to the headquarters area at Baggush, and then across the road to the western end of the landing ground, where it rejoined the permanent-line route. The trenching for the cable was done by Cypriot pioneers, and rock outcrops were drilled by sappers from 4 Indian Division. As standard cable-laying gear was not available, a 3-ton lorry was rigged with railway sleepers bolted to the frame and was used to support bottle jacks borrowed from the Egyptian State Telegraphs and Telephones Department. This improvised equipment required very careful handling, but the work was carried on without any serious hitch.

Other underground cabling work was being carried out by the section in the Matruh garrison area, where the existing cable had sustained some slight fractures owing to the shifting of the sand dunes in which it had been laid some years ago. At a point near the junction of the main road and railway at the eastern approaches to the town, the cable ran into the garrison area from the poled-line termination for about three-quarters of a mile to the garrison signal office, and from there continued

on to serve the various headquarters offices of the garrison. The general layout of the underground cable was in the form of a large reversed letter C, interrupted at intervals by concrete joint boxes, inside which the cable pairs were strapped across. It was decided that the completion of this partial loop to form a ring would provide a particularly useful underground parallel circuit which could only be interrupted by bomb damage if both arms were hit simultaneously. The circuit consisted of 25-pair, 12 ½-lb. DCLC cable. Some damage had also occurred at the entrance to the concrete joint boxes, where the movement of the cable in the shifting dunes had fractured the concrete seals and damaged the cable sheath. The greater part of the work on this cable system was carried out by Captain Smith ⁵ and Signalman Mundy, ⁶ both former cable jointers in the New Zealand Post Office.

Later, when the Italians began to intensify their air attacks on Matruh in September, the underground cable was damaged on a number of occasions, but repairs were quickly effected and communications seldom interrupted for any appreciable time. On one occasion the assistance of a Royal Engineers unit was required to remove an unexploded 250-pound bomb which had landed directly on the cable trench. Direct bomb hits on the cable trench had the effect of stretching the sheath, which caused the conductors to be broken for about four inches. Usually the armour remained unbroken.

About this time enemy aircraft dropped an unusual type of delayed-action bomb, which soon came to be known as the thermos bomb because of its resemblance to a thermos flask. Impact with the ground brought into operation an ingenious cocking device which made the bomb sensitive to the slightest vibration of the ground in its vicinity. Each morning after the nightly Italian raids, Royal Engineers had a busy time locating and exploding these bombs to prevent damage and casualties. On several occasions during these demolitions spans of overhead wires were brought down in a tangled mass, and B Section had a feverish time carrying out repairs to restore communications as quickly as possible.

An increase in enemy movements in the frontier area early in September suggested that an Italian advance into Egypt was imminent. Since the start of hostilities in June contact with the enemy had been limited to patrol activities and attacks on his frontier posts. Operations continued on these lines throughout July and August until 13 September, when the enemy crossed the frontier and occupied Sollum, and the British forces in the forward areas commenced their planned withdrawal. The Italians reached Sidi Barrani, which was merely a collection of a few stone houses and a landing ground, on the 16th, and there they remained until the British offensive early in December.

For six oppressive months the headquarters of Western Desert Force remained static, but the amount of signal traffic increased enormously as the Western Desert began to fill up rapidly with troops and supplies in preparation for the offensive. The work of extending the system of communications went on steadily: existing permanent-line routes were adapted to meet the needs of the expanding forces, multi-wire underground cables were installed to serve important headquarters, and a network of field cable on the ground comprised the less important and alternative routes.

A few days before the offensive opened south of Sidi Barrani on 9 December, Western Desert Force began the advance which was to carry it to Benghazi in a few weeks. Signals now encountered their first tasks in mobile operations. At first the advance moved away from the permanent overhead line routes, so that a large part of the responsibility for communications fell on field cable, and much depended on the speed with which it could be laid and recovered as the advance progressed. By the early hours of 6 December Headquarters Western Desert Force was established south-west of Matruh and about 27 miles south of the coast. The main group of Signals was under the command of a Royal Signals officer, Lieutenant Lovelock. His senior NCO, Lance-Sergeant Tankard, with the assistance of Lance-Sergeant Vaughan 7 and his signal office detachment, quickly set up his signal office and opened communication with 7 Armoured Division. The signal traffic soon reached a high level,

but three shifts working a 24-hour service handled it with ease.

Although Royal Signals, to whom New Zealand Signals had handed over Corps Signals Western Desert Force in November, was now responsible for communications, the greater part of the New Zealand detachment remained with the force and continued to provide communications under Royal Signals command. Those who remained were No. 1 Company (lines), commanded by Major Smith, and No. 2 Company (signal office and wireless), under Captain Feeney. Lieutenant Dasler remained with his B Section men, and Lieutenant Ambury 8 continued as second-in-command to Feeney. Lieutenant McFarlane had returned, together with the despatch riders of D Section, to New Zealand Divisional Signals at Helwan. In November, when Lieutenant-Colonel Agar was admitted to 2 New Zealand General Hospital at Helwan and relinquished command of Corps Signals Western Desert Force to Major C. D. Clapp, of Royal Signals, Major Grant remained as second-in-command.

On the morning of 9 December British artillery opened the offensive which was to put the Italians to rout. The volume of signal traffic soared rapidly and the number of 'Operations' and 'Important' priority messages soon taxed the circuits to their utmost. After the expulsion of the Italian forces from their positions south of Sidi Barrani, Headquarters Western Desert Force moved forward and by dusk on the 22nd was established at Halfaya Pass, near the Libyan frontier. There had been no enemy troops in Egypt since 16 December, and the greater part of the Italian Cyrenaican Army had withdrawn within the perimeter defences of Bardia. By this time the British advance had converged towards the coast and thus had returned to the route of the civil poled-line circuits. In their desperate haste the Italians had made little or no attempt to demolish these lines.

The New Zealand linemen were in their element. From dawn to dusk they repaired and extended the lines to conform to the rapidly changing pattern of communications as the advance swept on, and the wireless detachments of No. 2 Company bridged the gaps while the lines were being extended and repaired. At the same time continuous wireless communication was maintained with mobile formations of 7 Armoured Division. When the enemy's retreat became headlong flight and the speed of the pursuit increased, the burden of communications fell on wireless to a much greater extent.

The New Zealanders spent Christmas Day near Halfaya, on the escarpment above Sollum. They were tired, dirty and unshaven, but in the right mood to appreciate the New Zealand Patriotic Fund parcels which arrived for the occasion.

Although another detachment of Royal Signals joined the unit on New Year's Eve, the New Zealanders were not released. When British tanks and infantry entered Bardia on 4 January, they moved westwards with Headquarters 13 Corps ⁹ towards Tobruk and Bomba. On 11 January Lieutenant-Colonel Agar, now discharged from hospital and eager to join in the chase, arrived at Corps Headquarters, then at Gambut.

Immediately after the fall of Bardia on 5 January preparations began for the capture of Tobruk, which the enemy held in two perimeter lines of defence, of which the outer was 30 miles in length and the inner 19 miles. In the two weeks that elapsed before the attack was launched the perimeter defences were contained by 6 Australian Division and 7 Armoured Division. Headquarters 13 Corps remained at Gambut; after the fall of Tobruk it was to move westwards to Bomba.

On instructions from the CSO 13 Corps (Colonel F. A. H. Mathew), for whom he was acting as signals liaison officer, Lieutenant-Colonel Agar, accompanied by his driver and batman (Signalmen Wrathall ¹⁰ and Clarke ¹¹) and a Rhodesian line NCO from Royal Signals, set out on 16 January to reconnoitre west of Tobruk the poled-line circuit which followed the main coast road from Bardia, through Tobruk towards Bomba, Derna and beyond. They moved along the Trigh Capuzzo, through El Adem to Acroma, where they encountered the Support Group of 7 Armoured Division, and from there went northwards to the coast

road, where they began the reconnaissance eastwards towards the perimeter defences of Tobruk as far as the advanced British posts would allow them to go. The Colonel then turned west again and moved along the coast road through Gazala to a point 90 kilometres east of Derna. This was far beyond the Support Group's screen, so the Colonel, deeming it imprudent to proceed farther, returned to Headquarters 13 Corps, where he reported that the circuits were in good condition except for some slight disrepair due to deferred maintenance and some damage near the perimeter defences caused by shellfire.

At this stage in the campaign Dasler's B (cable) Section linemen attached to 13 Corps Signals were organised in two detachments, one under Sergeant Bateman ¹² for main-line maintenance work, and the other under Corporal Jones ¹³ to lay and maintain field cable. When the attack on Tobruk commenced at 5 a.m. on 21 January, Jones's detachment, which until then had been stationed at Headquarters 6 Australian Division, about five miles west of Headquarters 13 Corps at Gambut, was sent forward to 16 Australian Brigade to extend the line from the divisional headquarters as the brigade advanced. At Headquarters 13 Corps Bateman's detachment, together with a Royal Signals line detachment, was placed under Lieutenant-Colonel Agar, whose instructions were to bridge the gaps in the poled-line circuits through Tobruk as soon as possible after the town was entered by the Australians.

The road along which the main line lay ran straight from Bardia to a point about four miles south of Tobruk, where it branched sharply to the right towards the town and to the left towards El Adem, eight miles to the south. Some days earlier Bateman and his detachment had carried out some preliminary maintenance work on this line as far as the road junction, which was the forward limit of the Australian positions and where two battalions sat astride the main road. Working slowly along the line, examining spans and poleheads and making repairs where faults were found, Bateman's detachment proceeded with a little more caution to avoid going beyond the Australians' forward positions. But

there was a dust-storm blowing, and in the poor visibility the detachment reached the road junction and continued on without noticing that they were approaching uncomfortably close to the Italian defences. Suddenly a light gun ahead fired several rounds straight down the road, to the consternation of Bateman and his men, who turned their 3-ton lorry around quickly and scuttled back towards the road junction and the safety of the Australian lines.

Tobruk fell on the second day of the attack, 22 January, and it was then that the linemen's work commenced in earnest. From the point he had reached on the main line just south of the perimeter defences a few days previously, Batemen set his detachment to lay quad cable (a rubber-sheathed cable containing four independent conductors) into the town to join up with the poled line running to the west. Meanwhile Lieutenant-Colonel Agar had set the Royal Signals line detachment to work inside the perimeter to restore the circuits in the centre of the town and on the western side of the defences, but as their progress was too slow he diverted Bateman's detachment to the west to work back towards Tobruk and meet them. By midday next day the main line running through Tobruk towards Bomba was completely restored, and line communication both forward and to the rear firmly established.

The A Section wireless detachments of New Zealand Signals under Lieutenant Ambury, which had been employed forward with an Australian brigade during the Bardia attack on 3 January, were withdrawn and redistributed for the Tobruk operations to provide more stable communications between Headquarters 6 Australian Division and 13 Corps, which had not been served very satisfactorily at Bardia by the Australian Signals. The No. 9 set detachment manned by Signalmen O'Hara, Hutt, ¹⁴ Broadmore ¹⁵ and Gaughan ¹⁶ at 16 Australian Brigade was withdrawn to Headquarters 6 Division to work back to the control set at Headquarters 13 Corps, manned by Signalmen Moran, Butterworth ¹⁷ and Hartigan. ¹⁸ To replace the New Zealand set at Headquarters 16 Brigade, the Australians withdrew a set from one of their own battalions.

The happy-go-lucky attitude which these Australian Signals adopted

towards their communication responsibilities was aptly illustrated on the second day of the Tobruk attack, when Signalman Lew Thomas, ¹⁹ one of the linemen in Corporal Jones's detachment with 16 Brigade, was suddenly accosted by the operator on the rear-link wireless set to Headquarters 6 Division. Having closed down his set and climbed out of his vehicle, the Australian said casually: 'Keep an eye on the set, will you? I'm off to see what there is in the way of loot.' Thomas spent several uncomfortable hours at the set wondering what he was supposed to do until the operator returned.

Bomba saw the end of the campaign for most of the New Zealand Signals. On 2 February Captain Feeney and sixty-six other ranks returned to Tobruk, where they embarked for Alexandria en route to rejoin Divisional Signals at Helwan. During the sea voyage the men were employed as escorts for 1500 Italian prisoners being taken back to Egypt.

At Bomba Royal Signals took over all signal office duties, and the only New Zealanders who remained with 13 Corps Signals were the four wireless detachments. These detachments, together with an M Section detachment and under the command of Major Smith, moved on 4 February with Main Corps Headquarters to Msus, in the rear of 7 Armoured Division. The object of this move across the Benghazi bulge was to intercept the remnants of the Italian forces fleeing south towards El Agheila. Contact was made at Soluch and a sharp engagement resulted in the utter rout of the enemy. The armoured division then pushed northwards to Benghazi, which surrendered on 7 February. Major Smith, with his wireless and M Section detachments, entered Benghazi with Corps Head- quarters in time to take over the civil telephone exchange intact.

For the New Zealand Signals who served with Western Desert Force and 13 Corps in General Wavell's campaign of December 1940 and early 1941, the fall of Benghazi marked the end of their first desert operations. The task on which they had embarked so hopefully eight

months before had yielded lessons of considerable value to Divisional Signals. Some of these lessons were to have a long and persistent effect on the work of the unit, particularly during the difficult desert campaigns of 1941 and 1942. Nor were these lessons for Signals alone. Captured enemy documents disclosed that the Italians had a very considerable knowledge of the British order of battle. It was with some misgivings that the staff of 13 Corps learned that the enemy had acquired this knowledge through defective security, particularly in the composition of signal messages transmitted by wireless.

At the same time the Corps' staff had a lively appreciation of the value of wireless in mobile desert operations, amply demonstrated by the ease of command and control given Headquarters 7 Armoured Division by its armoured office vehicles complete with wireless installations. During the fast-moving operations of the 1940 campaign the means of control by other divisional and formation commanders left much to be desired. Wide frontages, dispersion in depth, and great distances put a premium on wireless communications, which demanded sufficient reliable equipment and well-trained operators. Unskilled wireless operators are a hindrance to the conduct of successful mobile operations. In 7 Armoured Division the staff office and signal office were virtually combined, and this should have been the case at the headquarters of all other formations. There should be no separation between the command office and the signal unit, and it is wrong in practice and principle to make such a distinction as, for example, brigade headquarters and signal section. In war neither exists usefully without the other. ²⁰

The last of the New Zealanders who had served with 13 Corps Signals, three officers and seventeen other ranks, rejoined Divisional Signals at Helwan on 17 February 1941. A week later General Freyberg inspected and addressed a parade of all men of Divisional Signals who had served with Corps Signals Western Desert Force and 13 Corps Signals. In appreciation of the services rendered by New Zealand Signals in the campaign, Lieutenant-General O'Connor, Commander 13 Corps,

published a special order of the day; this was conveyed to the commanding officer of Divisional Signals by Colonel Mathew, CSO 13 Corps, who wrote:

но 13 corps 3 feb 41

Dear ALLEN

Now that the bulk of the New Zealand Signals are being returned to you I am writing to tell you how much we have appreciated having them with us and how sorry we are to lose them. Without their help during the last few months we should not have been able to maintain the CORPS communications and we shall find it difficult to maintain in the future the high standard they have set. I enclose a copy of a Special Order of The Day issued by the CORPS Commander, which shows how much he valued their work. Thanking you again very much for lending this very useful contingent and wishing the whole of the New Zealand Divisional Signals the 'Best of Luck' in the future.

Yours

F. Mathew Colonel

Chief Signal Officer 13 corps

DIVISIONAL SIGNALS

HEADQUARTERS 13 CORPS — SPECIAL ORDER OF THE DAY BY COMMANDER 13 CORPS

HEADQUARTERS 13 CORPS SPECIAL ORDER OF THE DAY BY COMMANDER 13 CORPS

New Zealand Divisional Signals

On the departure of the New Zealand Signals the Western Desert Force is losing one of its original and most trusted components. It is with the greatest regret that I bid them farewell, and I know that their loss will be keenly felt by the many friends they have made. Their work has been outstanding throughout and I know that the Force could not have carried out its tasks without their help. I take this opportunity, therefore, of thanking them for their most excellent work, so freely given, and wish them the best of luck in the future.

R. N. O' Connor Lieutenant-General

Commander 13 corps

In the Field 31 JAN 41

DIVISIONAL SIGNALS

CHAPTER 4 — CONCENTRATION OF THE DIVISION

CHAPTER 4

Concentration of the Division

On the outbreak of war with Italy and the departure of the seven officers and 122 other ranks who were to become Corps Signals with Western Desert Force, the remainder of 2 New Zealand Divisional Signals left in Maadi Camp entered on a period of inactivity and boredom relieved only by a few ineffective Italian air raids on Cairo and the RAF station at Helwan. It was midsummer in Egypt and the heat and flies aggravated the sense of restlessness which both officers and men felt in their enforced inactivity. The coming of war had, of course, quickened certain activities in the camp, but these had little colour against the background of stories that commenced to filter back from the forward areas in the Western Desert, where British troops and New Zealand Signals were engaged in operations against the enemy.

When the news of Italy's declaration of war was received on 10 June, security measures were taken in Maadi Camp. All troops were confined to their unit lines and leave was suspended. Vehicles were moved to dispersal positions and all sleeping tents were struck and moved to an old disused quarry, known universally as Wog Gully, to the north of the unit lines and adjacent to the camp cinema.

The absence of the greater part of No. 1 Company with Western Desert Force left Divisional Signals in Maadi Camp with a total muster of six officers and seventy-one other ranks, excluding E Section with 4 Field Regiment. As there was no immediate prospect of the return of No. 1 Company, Lieutenant-Colonel Allen recommended to Divisional Headquarters that some other means of strengthening his unit should be adopted, for the meantime at any rate. His plan was that approximately a hundred men—preferably regimental signallers—should be withdrawn from other units of the First Echelon and trained in divisional signals trades to as high a standard as possible in the period available before the Division could be expected to take the field.

This plan was accepted, and preparations began immediately to put it into practice, with the result that what was virtually the first Divisional Signal School in 2 NZEF commenced training in the unit's lines. Brigadier Puttick, ¹ temporarily in command of 2 NZEF while General Freyberg was in the United Kingdom, gave his immediate approval to the withdrawal of forty-four regimental signallers from infantry and artillery units for training in the two divisional signals key trades of operator and lineman. In the Brigadier's own words, 'We cannot afford the time [for certain administrative arrangements to be completed before the school commenced]. Every day may count. If necessary the concentration of the men in Divisional Signals lines must wait, the men living with their units.... I want the utmost possible drive put behind this scheme. Course must start not later than the 15th July.'

The school opened for training at 9 a.m. on 15 July and continued until 14 September, when the forty-four men undergoing instruction were absorbed temporarily into Divisional Signals. It was a profitable venture which tided the unit over the uncertain days of late 1940 when the fortunes of war had not yet fallen to General Wavell's outnumbered forces in the Western Desert.

In September the weather was noticeably cooler in Maadi Camp, especially at nights. Mosquitoes had become much more numerous and there was a marked increase in malarial infections. Early in the month the Division left Maadi for the Western Desert where, after a few days' bivouac at El Daba, it occupied an area at Maaten Burbeita, a few miles east of Headquarters Western Desert Force at Maaten Baggush. Burbeita was a pleasant change from the dreary drabness of Maadi Camp. Bathing parades were organised daily, the men being conveyed to the beaches, about two miles from the camp area, in unit transport.

Meanwhile J Section, under the command of Lieutenant Pryor, with Second-Lieutenant Holms ² as second-in-command, had been detached from Headquarters 4 Infantry Brigade and sent to the Western Desert to take up line-of-communication duties at El Daba. The section had left

Maadi on 27 August and for about three weeks, with the assistance of twenty-three other ranks attached from 4 Indian Divisional Signals, Egypt Command Signals and 2 New Zealand Divisional Signals, had carried out the duties of area signals at Daba. There was a commodious network of underground passages and rooms for the line-of-communication headquarters there. The signalmen were quartered in EPIP tents, which were dug into the ground to a depth of almost three feet as protection against the Italian air raids on every second or third night.

J Section was at Daba for about three weeks only, but during that short time was responsible for certain line, wireless and despatch rider communications between Fuka, 30 miles to the west, and Ikingi Maryut, some 90 miles to the east, near Alexandria. Much of the permanent-line maintenance was done by Egyptian State Telegraphs linemen under the supervision of J Section, but there was plenty of work for all.

During its stay at Daba an unusual innovation was introduced into J Section's activities by one of the despatch riders, Signalman Helm, ³ who was intensely interested in Oriental lore and was always poking about in out-of-the-way places in search of fresh knowledge. He had a remarkable capacity for striking up acquaintance with all sorts of people. As soon as J Section had settled in at Daba he had nosed out a nearby detachment of the Egyptian Camel Corps, and before many days had passed he and the Sudanese camel men were as thick as thieves. It was not long before he could not only ride a camel but had learned how to groom and care for the unpleasant beast.

One afternoon Helm suddenly appeared outside the section orderly room mounted serenely on a magnificent white camel. J Section had always been proud of its versatility, and on this occasion the opportunity to demonstrate it was promptly seized. Helm was given some despatches for Headquarters 2 New Zealand Divisional Signals, which was then in the Daba area and only a few miles away. Off he trotted on his camel, and arrived outside the headquarters just as the Adjutant emerged. The latter was very excited at the sight of one of the unit's signalmen

perched cross-legged on the high saddle of his unusual mount, and immediately fetched the Colonel. Helm pronounced the Arabic word which caused the beast to lurch to its knees and 'fold up' so that its rider could alight. In high glee, the Colonel brought the divisional Intelligence Officer and persuaded him to expend one of his precious official films on the camel despatch rider.

By 19 September E and J Sections had rejoined 4 Infantry Brigade, which was then occupying the defensive 'box' at Burbeita. The brigade headquarters' area was pleasantly situated near the beach, and the men, who had much time to themselves, indulged in the usual recreational activities, which of course included a lot of swimming. During October, November and December, Signals took part in a number of brigade exercises in the area south of Garawla.

Meanwhile a reorganisation of Headquarters Divisional Signals had taken place as a result of the incorporation of the trainees from the recently disbanded Signal School. Signals New Zealand Division, the designation by which that part of the unit employed at Divisional Headquarters was to be known, now comprised six officers, two warrant officers, two staff-sergeants, two sergeants and 106 rank and file. The unit was organised into Headquarters, which comprised the CO, QM, Adjutant and 8 other ranks; Headquarters Company, commanded by Captain Vincent, consisted of A (wireless) Section, with 18 other ranks, under Lieutenant Borman, ⁴ B (cable) Section, with 13 men, under Lance-Corporal Smith, ⁵ D (operating) Section, with 52 men, under Sergeant Fargus, and M (maintenance) Section, with 10 men, under Lieutenant Wilkinson.

On 25 September the GOG and the GSO I (Colonel Stewart ⁶) arrived at Headquarters New Zealand Division from Maadi, where they had arrived the previous day from the United Kingdom. Orders were given almost immediately for the Division to return to Maadi Camp, and the move took place three days later. Signals arrived at Maadi with Divisional Headquarters on the 29th. Some rearrangement of unit areas

had taken place since August, and the men of Signals now found themselves in the old 4 Field Ambulance area in Duigan Road.

It was here that Captain Vincent first heard the sobriquet by which he had been known for some time by the troops. It was late on a hot afternoon when the unit arrived back in the camp in an unpleasantly warm and heavily dust-laden wind. The men were to be accommodated eight to an EPIP tent, of which only a few had been erected. There was some little confusion, and by the time the men had been fed the evening light was beginning to fail. Inside most of the tents the gear lay about in untidy heaps, while section officers and NCOs exhorted the men to straighten things up a little before the Captain's arrival on a rumoured inspection of the lines. In one of the tents Corporal Bennett 7 was cajoling his men into some semblance of activity while he kept watch through the laced canvas entrance for the arrival of Captain Vincent, who meanwhile had approached unobserved and was peering through a convenient opening at the other end. The officer was just in time to hear Bennett say, 'Come on chaps. Put a jerk into it—old Igree'll be here in a minute and there'll be hell to pay when he sees this mess.' And so 'Igree' 8 he became and 'Igree' he remained, even when he returned to New Zealand at the end of 1941 to become OC Signal Wing at the Army School of Instruction at Trentham.

On the day the Division arrived back in Maadi Camp it was greeted with the news that the Third Echelon had just arrived at Suez.

Military conscription was introduced in New Zealand on 22 June 1940. Intending volunteers were allowed a month's grace in which to offer their services, 22 July being the last day on which they could do so. Two months earlier, on 15, 16 and 17 May, the main drafts of the Third Echelon had marched into camp.

The training programmes at the mobilisation camps had been based on an estimate that the time available would not be less than eight weeks and might even be extended to twelve. The first fortnight was largely occupied with the issue of clothing, bedding, and equipment as they became available. Because of the wet weather at Trentham it became necessary to adjust programmes to enable training to be carried out in the men's quarters. There was a high incidence of sickness, including an influenza epidemic which lasted for three or four weeks. The directive for signals training also had to be amended, as it had been based, apparently, on the assumption that all signalmen in the contingent had had some previous training. This was not the case, some 60 per cent of the men having had no previous training whatever. This meant that more time had to be devoted to training in basic trade subjects than had been provided for in the original programme.

The Divisional Signals of the Third Echelon were trained in the Signal Wing of the Army School of Instruction under the direct control of Captain Heal 9 and Lieutenant Horwood, 10 both Regular officers of the New Zealand Staff Corps. During the first month the men received general training, in which route marches were a prominent feature. In the second month the programme expanded to take in individual training and trade training. Up-to-date equipment, which included four No. 9 wireless sets, a number of 408-watt charging sets, six and ten-line universal call switchboards, Fullerphones Mark IV, and telephone sets D Mark V, provided the men with an incentive to put all their energies into their new tasks. At that time, too, the contingent was going through a drill and 'spit and polish' phase, and much time was spent in squad drill, rifle exercises, and guard-mounting practice. Morse operating, a popular form of instruction during the normal training hours, took on a different complexion, however, when compulsory evening classes were introduced.

August opened with the bustle and hurry of embarkation arrangements and preparations for final leave. The men were sent on leave on the ist and returned to camp a fortnight later. At the time there was some doubt whether this was really to be 'final' leave, but on the return of the men to camp units began immediately to complete their embarkation preparations, and it seemed that the day of departure was not far off. The echelon was placed on active service as from 5 p.m. on

13 August. A farewell parade, consisting of a march through the streets of Wellington followed by a short farewell ceremony, was held on the 17th.

The Third Echelon Signals embarked at Wellington on 20 August on the Orcades, which sailed immediately for Lyttelton, where 26 Battalion and other units from Burnham Camp were to embark. But the sinking of the Turakina in the Tasman, some 260 miles west of New Plymouth, by a German raider on the 20th delayed the departure of the echelon from New Zealand, and the Orcades lay at Lyttelton for a week before the troops from Burnham embarked. At one stage it was contemplated that Signals should disembark and be accommodated at Burnham, but this proposal was dropped and the men remained on the ship, from which they were given daily leave ashore.

The 26th Battalion and 6 Field Ambulance embarked on the 27th and the Orcades left its moorings and anchored in the stream near the harbour entrance. She put to sea late that night, and joined the Empress of Japan and Mauretania at a rendezvous in Cook Strait at nine o'clock next morning. The convoy was escorted by HMS Achilles, which was joined by HMAS Perth next day. On the following day, however, the Achilles returned to New Zealand.

During the early part of the voyage, when a fairly heavy swell in the Australian Bight caused seasickness among many of the men, only elementary signal training was carried out on the *Orcades*. Actually, owing to the lack of adequate equipment aboard, little more than elementary training was possible.

Divisional Signals on the *Orcades*, numbering 112 all ranks, were under the command of Major Heal, with whom there were five other officers: Lieutenant Jory, ¹¹ a former Territorial officer, and Lieutenants Laugesen, ¹² Rose ¹³ and Froude, ¹⁴ and Second-Lieutenant Hultquist. ¹⁵ There was one warrant officer, WO II Foubister, ¹⁶ a Regular soldier of the New Zealand Permanent Staff who had been a signals instructor for a number of years, and who was eventually to become CO 2 New Zealand

Divisional Signals in Italy. Four sergeants and 101 other ranks made up the remainder.

Third Echelon Signals completed the war establishment of Divisional Signals and consisted of G Section (I officer, I sergeant and 26 other ranks), L Section (2 officers, 2 sergeants and 33 other ranks), and a cable-section detachment of eleven men. Together with a similar detachment with the Second Echelon in the United Kingdom, this cable-section detachment would complete B (cable) Section, of which the major part was with the First Echelon. In addition there were one officer, one sergeant and two men as the first reinforcements for the Third Echelon Signals, and two officers and thirty other ranks who were reinforcements for Divisional Signals as a whole.

The convoy arrived off Fremantle at midday on 4 September and the men were given leave ashore that afternoon. The ships sailed again next day and passed through the tropics in fine weather and calm seas.

Bombay was reached on the afternoon of 14 September. The transports anchored in the stream and preparations were commenced for the transhipment of troops and stores.

While the stores were being transhipped the troops from the *Orcades* were taken ashore and accommodated at a transit camp in a sports stadium before embarking next day on the *Ormonde*. The transhipment was not carried out without some difficulties, and the move from the comfortable and well-found *Orcades* to the crowded and uncomfortable quarters of the *Ormonde* was not popular. The men found their new ship dirty, and made concerted complaints about the cramped and overcrowded quarters, unclean food, and the insanitary condition of the ship's latrines. Because of the continuous rain—it was just at the end of the monsoon season—the men were prevented from spending their time on deck, and their enforced stay below aggravated the discomforts of the overcrowded quarters.

Had the full facts concerning the ship been explained to the troops at the time, there is no doubt that a good deal of the discontent and restlessness which led to the *Ormonde* incident would have been allayed. The *Ormonde* was a 15,000-ton ship which had been trooping almost continuously since the outbreak of war—to Narvik, France and the Middle East—and had only the day before disembarked a British contingent, thus leaving little time for the crew to clean the troops' quarters. Moreover, it has been alleged that some of the crew were inciting the troops; there were references to the *Altmark* and 'hell-ship'. Such things, together with the unfavourable reaction caused by the move from the comfortable peacetime passenger accommodation of a 23,000-ton liner to an overcrowded wartime transport, fanned the flames of discontent.

The ship was to sail at 1.15 p.m. on 19 September, but shortly before that time a large body of men occupied the bridge and wheelhouse. They informed the captain that they were taking charge and that the ship would not be permitted to sail until their grievances were adjusted. A deputation of soldiers then waited upon the OC Convoy to present their complaints. At 1.30 p.m. the captain reported that he had missed the convoy and that he could not take the ship to sea. An offer of armed assistance from the Admiralty authorities to control the ship was declined by the OC Convoy, who went ashore with the OC Troops to explain the situation to the naval and embarkation authorities. They were told that the convoy had been slowed down to enable the Ormonde to join it as soon as possible. The action of the troops in preventing the ship from sailing was described by the naval authorities as serious. After returning to the ship, the OC Troops addressed a conference of officers, at which he informed them that most of the men's complaints could be adjusted and that the most difficult problem, that of accommodation, would be met by allowing a thousand men to sleep on deck. Early next morning guards were posted and the ship sailed at 7 a.m. without further incident, rejoining the convoy that day at 3 p.m.

In a report to Headquarters 2 NZEF the OC Convoy stated that the Ormonde was overcrowded and that the sanitary arrangements were unsatisfactory. The health of the troops, however, had been good, and as soon as the ship had left the depressing conditions at Bombay the men had settled down. From Bombay the voyage had continued without further incident. The GOC stated that he was satisfied that the arrangements made by the authorities at Bombay were not satisfactory. He was not satisfied, however, that junior officers had properly realised their responsibilities. It was their duty, he said, to keep morale up by moving around among the men, explaining that everyone realised that things were not right but that efforts were being made to remedy them; by getting the men to make what improvements they could by their own efforts; by using every means in their power to minimise the bad side of things and so prevent discontent from spreading; and by preventing in the very early stages any such concerted action as that which unfortunately took place.

On 26 September the convoy entered the Red Sea and there the naval escort left it to continue on alone to Suez, which it reached during the morning of the 29th—a month and a day after leaving Wellington.

With the Third Echelon in Egypt and the Second in the final stages of its training in the United Kingdom, General Freyberg was now within sight of having his Division concentrated and ready for field training. There was, however, one serious defect in the contemplation of the Division's future activities. Since the entry of Italy into the war in June a number of New Zealand detachments had been lent to Headquarters British Troops in Egypt in response to urgent appeals for assistance. These detachments included the greater part of No. 1 Company of the Divisional Signals, which was still with Western Desert Force in October. Early that month the GOC began a series of protracted negotiations with Headquarters British Troops in Egypt in which he made strong representations for the return of his outlying detachments. After a time, as a result of BTE's understandable reluctance to release the New Zealand detachments, there appeared in the correspondence a barely perceptible undertone of reproach, which gradually took on a stronger note as the weeks passed without the GOC getting any definite assurance that would enable him to plan the divisional exercises with

which he was anxious to proceed.

So far as Signals was concerned the situation was a difficult one and not easy of immediate solution. The original arrangement, by which No. 1 Company was to be lent for a few weeks to tide over the period until Royal Signals reinforcements were expected to reach the Middle East, was well known. The reinforcements, however, had not arrived, and it must be remembered that the personnel and material situation in the United Kingdom during the latter half of 1940 was particularly difficult. There had been an enormous build-up of units and equipment in the Western Desert, and far from any immediate prospects for the early release of Corps Signals Western Desert Force it appeared that there would have to be a considerable expansion in the detachment if it was to continue to handle the rapidly increasing volume of signal traffic, which by October had reached a daily total of 42,000 groups. It was a difficult problem for Lieutenant-Colonel Allen, who viewed the imminence of divisional exercises with some misgivings. He continued to make representations to Headquarters New Zealand Division, but these were tempered with the restraint imposed by his knowledge of the important task on which Corps Signals was employed.

Throughout October and November, and even into December, the correspondence between Major-General Freyberg and Headquarters British Troops in Egypt continued with its burden of complaint, but no satisfactory results appeared.

Preparations were commenced in December for the move to Helwan, the new camp in which the Division was to be accommodated. The main body of Divisional Signals, headed by Major Grant, marched the 14 miles from Maadi to Helwan. Lieutenant-Colonel Allen brought up the rear and herded the stragglers. Despite the shortness of the march, it was something of an ordeal for men whose feet had grown soft during the months of comparative inactivity in Maadi Camp. In the new camp the men were lodged in tents until the completion of accommodation and messing huts.

Just before the unit left Maadi the signal communications of the camp were taken over by the newly formed Base Signal Company. Maadi Camp had now become the province of Headquarters 2 NZEF Base, which was responsible for the administration of the camp and for the training of reinforcements from New Zealand in a series of depots. After receiving training under Divisional Signals, the Base Signal Company took over control of the Maadi Camp signal office on 12 December. Lieutenant Brown, MC, DCM, ¹⁷ formerly signal officer of 27 (Machine Gun) Battalion, took over the command of Base Signal Company on the 15th. The original establishment provided for forty-eight all ranks; these included one subaltern, one staff-sergeant, one sergeant and two lance-sergeants.

A twenty-four-hour service was provided by the signal office. The system of communications in the camp was originally controlled through three exchanges: Maadi Camp exchange, which was a centralbattery installation, and Duigan and Godley exchanges, which were both of the magneto type and satellites of the Maadi Camp exchange. Later, however, Godley exchange at the eastern end of the camp was closed and all traffic passed through the remaining two exchanges. Lines, telephones and switchboards were all civil-type equipment and belonged to the Egyptian State Telegraphs. There were two line-telegraphy circuits, one to Headquarters British Troops in Egypt in Cairo and one to Helwan Camp, and the instruments used on these circuits were oscillators, or Tingeyphones. ¹⁸ The usual despatch-rider letter service was in operation and its timetable included runs four times daily to General Headquarters Middle East Forces and Headquarters British Troops in Egypt, in Cairo, and twice daily to Helwan Camp, the RAF station at Helwan, 2 NZ General Hospital, and other headquarters. In addition, there was an air letter service for handling despatches of an urgent nature but not sufficiently urgent to warrant their transmission by line telegraphy, wireless telegraphy or special despatch rider. This service was run by the RAF in co-operation with Signals, and was widely used by Headquarters 2 NZEF when the New Zealand Division was in Greece, Crete and the Western Desert.

The majority of the men for Base Signal Company were drawn from volunteers from units of the Third Echelon. Others came from 27 (Machine Gun) Battalion, 7 Anti-Tank Regiment, 19 Army Troops Company, and 2 NZEF Base, and eleven were from Divisional Signals. These eleven included some of the unit's original stalwarts: Corporals Knox, ¹⁹ Baker ²⁰ and Tim Stroud, ²¹ Lance-Corporals 'Old Man' Coleman ²² and Fitton, ²³ and Signalman Towart, ²⁴ to mention a few.

On 12 December, as soon as Divisional Signals was settled into its new quarters and offices at Helwan, another unit reorganisation took place. This was really the first step in restoring Divisional Signals to its original form, and was made possible by the return of three officers and twenty other ranks from Western Desert Force Signals, and by the arrival of G and L Sections with the Third Echelon, together with a number of reinforcements. The new organisation came into force on the 14th. It provided for a unit headquarters and a No. 1 Company, commanded by Major Grant and comprising Company Headquarters, A (wireless) section, B (cable) section, C Section, D (operating) Section, and M (maintenance) Section. G Section marched out on 10 December to join 6 Field Regiment, and L Section on the 14th to join Headquarters 6 Infantry Brigade. J and E Sections were still in the Western Desert with 4 Infantry Brigade.

At the time when this new organisation was brought into effect Lieutenant-Colonel Allen submitted to Divisional Headquarters an appreciation of the signals situation. His proposals included details of the method by which the limited personnel and equipment available might provide the best possible communications system within the Division at that time. He recommended that all signal resources available should be pooled and reallotted to suit the immediate needs of all formations and units. The effect would be to reduce the means of communication available in First Echelon units, but the overall result would be that all units of both the First and Third Echelons would be provided immediately with a skeleton signal service. The limited communications thus envisaged were based upon dangerously slender

resources which comprised only three signal office operating detachments, two cable detachments with a total of only thirty miles of D Mark VIII cable, six wireless sets, of which only four were high powered, and nineteen despatch riders. In addition, of course, there were certain major items of equipment to which the sections attached to units could lay claim under the reallocation proposals. The two infantry brigade signal sections, J and L, for example, would have seven miles of D Mark III cable each, three wireless sets, none of which, however, was high powered, and seven telephone sets and four Fullerphones each. Divisional Signals, despite its pitiful inadequacy in men and equipment, would be required to accompany the Division into the field should the need arise before the supply situation eased.

Although the return of New Zealanders attached to Corps Signals Western Desert Force had been expected by the end of November, only three officers and twenty other ranks had been released. The operations which began on 9 December prevented the return of four officers and 110 other ranks. At the time it appeared that these operations might stabilise and that the remainder of Corps Signals might return fairly soon, but Allen began to fear that the detachment's original equipment in transport and signal stores might be retained by Western Desert Force. He therefore renewed his former urgent representations to Division that his claims to both men and equipment with Corps Signals Western Desert Force should be pressed strongly.

Events during the first year in Egypt had commenced to weld Divisional Signals into a seasoned unit. Although it had become a good unit from a regimental point of view, another eighteen months were to pass before it became a reliable and efficient signals organisation. At the end of 1940 Divisional Signals had attained only a reasonable standard of efficiency, but compared well with United Kingdom and other Dominion signal units. Several initial advantages accounted for this: good Regular Force officers and a small stiffening of Territorial soldiers of all ranks had provided a useful background of elementary training and experience; the rank and file were men of more than average quality,

and the training and experience which most of them had had in civil communications in New Zealand reduced enormously the usual handicaps which confront the civilian soldier at the outbreak of war.

Besides the experiences of No. 1 Company with Western Desert Force during General Wavell's campaign, much of more than ordinary significance had happened in the unit since the arrival of 2 NZEF in the Middle East. Many of the old faces were gone and in their places were those of the newly arrived Third Echelon. The Second Echelon was about to set out from the United Kingdom on the last stage of its devious journey to Egypt.

Of those who were gone, Captain Vincent had left for the Composite Training Depot in Maadi, but his departure had not by any means severed his happy associations with the unit. Divisional Signals, officers and men alike, were to see a lot of 'Major Igree' before his return to New Zealand at the end of 1941. From time to time incoming reinforcements from the depot brought fresh stories of Igree's dynamic energy and hair-raising exhortations. The old hands listened interestedly. In their minds' eye they saw again the roving eyes and the thrust of shoulders and head, the restlessly moving feet and the fleck of foam where a prominent upper tooth caressed Igree's lower lip while he declaimed with borrowed emphasis and alliteration the precepts of another old and honoured war horse: 'We shall not fail nor falter. In other words, soldier, we will not get browned off!

The appointment of RSM was now held by Fred Waters with the rank of WO I. Noel Barrett, ²⁵ with the rank of WO II, was appointed RQMS and retired to the inner defences of the quartermaster's store, where Captain Marshall ²⁶ and Signalman'Shorty' Jackson ²⁷ continued to conduct their quarter-mongering business on the 'Yes, we have no bananas' basis.

Christmas Day, 1940, was marked by a minor tragedy for the Signals football team, which played off the final of the divisional seven-a-side Rugby tournament with 25 Battalion. At full time both sides had scored

five points, so it was decided to continue the game until one of them secured a decision. Some time later 25 Battalion scored again and won by eight points to five. Corporal 'Viv' Missen ²⁸ then led his men back to their lines, where they discovered to their dismay that Christmas dinner—an event of considerable importance in any unit overseas—had already commenced, and that none of it remained for them.

On 11 January the first of the sections stationed in the Western Desert began to move back to Helwan. E Section, attached to 4 Field Regiment, was followed next day by C Section, and on the 14th J Section arrived in Helwan from Baggush. On the same day Lieutenant Pryor, OC J Section, was appointed to command No. 3 Company, a position which had not previously been filled. Lieutenant Fletcher was appointed OC No. 2 Company, until then another vacant command. With the filling of these two positions, Divisional Signals' organisation was almost complete, lacking only F, H, and K Sections, which were then on their way to Egypt with the Second Echelon.

Towards the end of January the hopes which Lieutenant-Colonel Allen entertained of restoring his unit to its original strength were revived by an order issued by General Headquarters Middle East Forces to Headquarters British Troops in Egypt, directing that all New Zealand Troops other than railway units and the Long Range Patrol ²⁹ were to be returned to the Division not later than 22 February, to enable the Division to concentrate for training. Actually, the greater part of New Zealand Signals still serving with Western Desert Force returned on the 4th, this party consisting of one warrant officer, four sergeants and sixty-three other ranks under Captain Feeney. One week later another seven men returned, and these were followed on the 17th by Major Agar, Captain Smith, Lieutenant Ambury, and seventeen other ranks. When this piecc- meal return of No. 1 Company from the Western Desert was completed, thirty-one of the original forty-four regimental signallers who had been attached to Divisional Signals since July 1940 rejoined their own units. Some regimental signallers had transferred to Divisional Signals.

F and H Sections and an advance party of K Section arrived at Suez from the United Kingdom on 16 February. All were disembarked immediately and taken by train to Helwan. F Section, consisting of Lieutenant Robins and twenty-five other ranks, and H Section, under Lieutenant Paterson, remained with their respective units, 5 Field Regiment and 7 Anti-Tank Regiment.

Towards the end of February a directive issued by the GOC announced that full-scale divisional training would commence early in March. The General directed that the exercises were to be carried out with as much realism as possible, and that all the security measures employed in a real operation were to be brought into use at once. For example, orders for the move



out to divisional training areas were to be delayed until the last possible minute. Existing camp areas were to be completely evacuated and base kits were to be left behind. In short, the projected divisional training was to be regarded as a full-dress rehearsal for active operations. Although these directions, naturally, were not communicated below a certain level of command, many signs and portents of some new developments were apparent to the troops.

Divisional Signals was being brought quickly up to its full field scale

in transport and equipment, and the Quartermaster daily received large quantities of signal stores from ordnance. As fast as these stores flowed in they were reissued to sections, and in a very short time the unit was complete in war equipment.

Very quickly the word was passed around that according to all the available evidence the Division would be moving into the field within a few days—'probably about Tuesday'. The persistent voice of rumour, which curiously enough had been still for so many months, was again raised in speculation and conjecture. Many strange destinations for the Division were foretold, mostly tropical ones, among which the Sudan and Abyssinia vied for pride of place. Divisional Signals received orders on 26 February to be ready to move on 4 March. At the same time an advance party of one staff-sergeant and two men was put under twelve hours' notice to move. Already the cat was half out of the bag.

¹ Lt-Gen Sir Edward Puttick, KCB, DSO and bar, m.i.d., MC (Gk), Legion of Merit (US); Wellington; born Timaru, 26 Jun 1890; Regular soldier; NZ Rifle Bde 1914-19 (CO 3 Bn); commanded 4 Bde Jan 194 0- Aug 1941; 2 NZ Div (Crete) 29 Apr-27 May 1941; CGS and GOC NZ Military Forces, Aug 1941-Dec 1945.

² 2 Lt A. G. M. Holms; Waipukurau; born NZ 18 Feb 1911; telegraphist.

³ Sgt A. S. Helm, m.i.d.; Eastbourne; born Riverton, 25 Feb 1914; clerk.

⁴ Maj C. A. Borman, MBE, ED, m.i.d.; Upper Hutt; born Rangiora, 25 Jun 1906; public servant; OC J Sec Jan-Jul 1941, A Sec Jul 1941-May 1942, 2 Coy Jul-Dec 1942, I Coy Feb-Jun 1943; HQ, Coy Jul-Dec 1943; G2 Sigs Army HQ May 1944-Jul 1945; OC Army Sigs Jul-Oct 1945.

⁵ Sgt H. L. Smith, BEM, m.i.d.; Plimmerton; born Lower Hutt, 14 Oct 1914; P and T lineman; twice wounded.

- ⁶ Maj-Gen K. L. Stewart, CB, CBE, DSO, m.i.d., MC (Gk), Legion of Merit (US); Kerikeri; born Timaru, 30 Dec 1896; Regular soldier; I NZEF 1917-19; GSO I 2 NZ Div 1940-41; DCGS Dec 1941-Jul 1943; commanded 5 Bde Aug-Nov 1943, 4 Armd Bde Nov 1943-Mar 1944, 5 Bde Mar-Aug 1944; p.w. I Aug 1944-Apr 1945; commanded 9 Bde (2 NZEF, Japan) Nov 1945-Jul 1946; AG, Army HO, Aug 1946-Mar 1949; CGS Apr 1949-Mar 1952.
- ⁷ Sgt L. G. Bennett; Greytown; born England, 21 Sep 1909; postman.
- ⁸ Igree (or iggri), colloquial Arabic for 'Hurry up'.
- ⁹ Maj G. H. Heal; Tauranga; born NZ 29 Dec 1906; Regular soldier; BM 5 Bde Feb-May 1941; DAAG and DAQMG HQ. 2 NZEF Jun-Oct 1941.
- ¹⁰ Maj E. J. Horwood, m.i.d.; Dunedin; born Wellington, 30 Oct 1907; Regular soldier; OC L Sec Jul-Dec 1941; SC 6 Bde and 5 Bde 1943; OC HQ.Coy Div Sigs Nov 1943-Apr 1944, 2 Coy Apr-Oct 1944; 2 i/c Div Sigs May-Jun, Sep Oct 1944.
- ¹¹ Capt T. H. Jory, ED; Dunedin; born Dunedin, 21 Nov 1911; railway officer; OC L Sec Sigs Aug 1940-Jul 1941, F Sec Jul-Oct 1941, K Sec Jan-Feb 1942, Base Sigs Coy (later 6 NZ Div Sigs) Feb 1942-Jan 1944.
- ¹² Capt N. W. Laugesen; Christchurch; born NZ 4 Dec 1903; realestate agent; killed in action 22 Jul 1942.
- ¹³ Maj A. S. D. Rose; Wellington; born Wellington, 4 Mar 1905; P and T clerk; OC G Sec Sigs Aug 1940-Dec 1941, D Sec Mar-Jun and Jul-Sep 1942, 2 Coy Jun-Jul 1942, 3 Coy Jan-Jun 1943; Army Sigs (in NZ) Oct 1943-Jul 1945.
- ¹⁴ Capt L. J. Froude, Order of Phoenix (Greek); Dunedin; born NZ

- 4 Mar 1912; clerk telegraphist.
- ¹⁵ Lt A. G. Hultquist; born Western Australia, 22 Jan 1904; electrical engineer; MP for Bay of Plenty 1935-41; died on active service 1 Nov 1941.
- ¹⁶ Lt-Col R. W. Foubister, OBE, m.i.d.; Auckland; born Palmerston North, 20 Mar 1910; Regular soldier; OC T Air Support Control Sec Sigs Oct 1941Jul 1942, D Sec Jan-Apr 1943; Sig School Base Dec 1943-Aug 1944; I Coy Sep-Dec 1944; OC 3 Coy and 2 i/c Div Sigs Dec 1944-Jan 1945; CO Div Sigs and OC NZ Corps of Sigs 17 Jan 1945-23 Feb 1946.
- ¹⁷ Lt A. W. Brown, MC, DCM; Lower Hutt; born NZ 11Jun 1889; NZMG Corps 1914-19.
- 18 Named after their designer, an officer in Royal Signals.
- ¹⁹ S-Sgt L. J. Knox, EM, DSM (Greek); Lower Hutt; born Wellington, 27 Aug 1901; postman.
- ²⁰ Cpl J. S. Baker; Auckland; born Birmingham, England, 20 Sep 1911; sorter.
- ²¹ WO I F. Stroud; Upper Hutt; born England, 14 May 1905; telephone exchange clerk; RSM Prisoner-of -War Reception Depot, England, 1945-46.
- ²² L-Sgt O. T. Coleman; born Stratford, 18 Aug 1901; lineman; died 20 Sep 1952.
- ²³ Cpl E. L. Fitton; Pukekohe; born Feilding, 18 Oct 1905; radio electrician.
- ²⁴ L-Cpl H. L. Towart; Christchurch; born Greenpark, Canterbury, 20 Feb 1909; civil servant.

- ²⁵ WO I N. H. Barrett, EM and bar; Hamilton; born Annat, 25 Dec 1905; postman; RQMS 2 NZ Div Sigs Nov 1940-Jul 1941; RSM Jul 1941-Jul 1943.
- ²⁶ Maj E. L. J. Marshall, MC, ED, m.i.d.; Lower Hutt; born Coromandel, 16 May 1908; clerk; QM 2 NZ Div Sigs Sep 1939–Oct 1941; OC J Sec Oct-Dec 1941, 3 Coy Dec 1941-Jun 1942, 1 Coy Jun-Nov 1942; OC Sig School, Base, Dec 1942-Jun 1943; CSO NMD and CO NMD Sigs Nov 1943-Dec 1944; SSO Sigs Army HQJun-Dec 1945.
- ²⁷ Sigmn.G. F.Jackson; Auckland; born Dunedin, 23 Jul 1916; P and Tstoreman.
- ²⁸ Maj V. P. Missen, m.i.d.; Wellington; born Palmerston North, 28 Dec 1915; telegraphist; OC A Sec Sigs Feb-Apr 1944, D Sec Apr 1944; QM 2 NZ Div Sigs May-Jun 1944; OC Sigs Jayforce Nov 1945-Dec 1946.
- ²⁹ Subsequently known as the Long Range Desert Group.

DIVISIONAL SIGNALS

CHAPTER 5 — TO THE DEFENCE OF GREECE

CHAPTER 5 To the Defence of Greece

Meanwhile, in Cyrenaica, preparations were going ahead for the capture of Tobruk and Benghazi, while at General Headquarters Middle East Forces plans were being prepared for a rapid advance to Tripoli. There was negligible Italian opposition and Germany had not yet advanced across the Mediterranean. In Tripoli the precarious position in which the Italian garrison was likely to find itself was causing consternation and alarm.

Suddenly, however, the strategic situation took on a totally different appearance. North Africa was to be spared a minimum of men and equipment, and the main Allied effort switched to Greece. Because of their lack of resources, the Allies were not in a position to commence any extensive operations in the Balkans and, therefore, would not be in a favourable position to exploit any successes based upon a firm lodgment in Greece. The Treaty of Alliance with Greece, however, was a compelling factor and when the Greeks accepted the offer of British aid, albeit with some hesitation and trepidation as to the storm that acceptance might bring about their own ears, the die was cast and Lustre Force was born.

Lustre Force was the designation derived from the code-name by which the preliminary negotiations between the British and Greek Governments were known, and under which 1 British Armoured Brigade and the New Zealand Division moved to Greece as the advanced guard of an Imperial force. Major-General Freyberg was informed on 17 February that his Division had been given this task. The New Zealanders were to disembark at Piraeus or Volos and move by road and rail to take up a line along the mountains in Macedonia.

General Freyberg and his staff embarked at Alexandria on 6 March in HM Ships York and Bonaventure and arrived in Athens at midday the following day. Shortly before his departure for Greece the GOC published

a special order in which he made some brief but incisive observations on the forthcoming operations. This order, which was not communicated to the troops until after they had sailed from Alexandria, said:

SPECIAL ORDER UPON SAILING FOR GREECE

Before leaving Egypt for the battlefront I had planned to say a last word to you. I find that events have moved quickly and I am prevented from doing so. I therefore send this message to you in a sealed envelope to be opened on the transport after you have started on your journey.

In the course of the next few days we may be fighting in defence of Greece, the birthplace of culture and of learning. We shall be meeting our real enemy, the Germans, who have set out with the avowed object of smashing the British Empire. It is clear, therefore, that wherever we fight we shall be fighting not only for Greece but also in defence of our own homes.

A word to you about your enemy. The German fighter is a brave fighter so do not underestimate the difficulties that face us. On the other hand, remember that this time he is fighting with difficult communications in country where he cannot use his strong armoured forces to their full advantage. Further, you should remember that your fathers of the First New Zealand Expeditionary Force defeated the Germans during the last war wherever they met them. I am certain that in this campaign in Greece the Germans will be meeting men who are fitter, stronger and better trained than they are. I have never seen troops that have impressed me more. You can shoot and you can march long distances without fatigue. By your resolute shooting and sniping and by fierce patrolling by night you can tame any enemy you may encounter.

A further word to you, many of whom I realize will be facing the ordeal of battle for the first time. Do not be caught unprepared. In war, conditions will always be difficult, especially in the encounter battle; time will be against you, there will always be noise and confusion, orders

may arrive late, nerves will be strained and you will be attacked from the air. All these factors and others must be expected on the field of battle. But you have been trained physically to endure long marches and fatigue and you must steel yourselves to overcome the ordeal of the modern battlefield.

One last word. You will be fighting in a foreign land and the eyes of many nations will be upon you. The honour of the New Zealand Division is in your keeping. It could not be in better hands.

On 3 March J Section moved with Headquarters 4 Infantry Brigade to Amiriya, and on the same day Headquarters Divisional Signals received orders to move to Amiriya on the 5th. Most arrangements for the projected move were complete, but attention to last-minute preparations and detailed inspections of all section personnel, transport, and equipment occupied what might have been a lull in the frenzied pace of the last few weeks.

Some of the incidents that occurred during Lieutenant-Colonel Allen's inspection of the transport on the day before the move provided some light relief for the men, but on most of these occasions the Colonel was not amused. During his inspection of an A Section wireless truck manned by Signalmen Tweeddale 1 and Bradley 2 he found a camp stretcher stowed away in an inconspicuous cranny under the canopy. In the Colonel's eyes, that camp stretcher hidden away for the surreptitious comfort of an other rank was a shocking sight, and, if not evidence of downright indiscipline, at least it could be a hint of incipient insubordination. He demanded of Tweeddale what the thing was. Tweeddale, a quiet-mannered soldier who habitually wore a lazy, goodnatured smile and a permanent expression of surprise caused by his sandy and almost invisible eyebrows, stammered for a few seconds in speechless confusion. Finally he burst out: 'It's a camp bed, sir.' At this remarkable disclosure the Colonel, still stamping about furiously and delivering heavily caustic remarks, roared: 'Get rid of it!'

On 4 March a reinforcement party consisting of Lieutenant

Wilkinson, Second-Lieutenant Hill, ³ and twenty-two other ranks marched in from Composite Training Depot. Hill had just passed out from Middle East Officer Cadet Training Unit. He and Wilkinson and a number of the new arrivals were posted as first reinforcements to accompany the unit to Greece.

Signals moved on the morning of the 5th and, after a night's bivouac near Halfway House on the Cairo- Alexandria desert road, arrived and settled in at Amiriya on the evening of the 6th. E Section, with 4 Field Regiment, and L Section, with Headquarters 6 Infantry Brigade, arrived at Amiriya the same day.

While Signals was at Amiriya awaiting embarkation there was very little for the troops to do as all equipment was stored away in the vehicles. There was some route-marching and, to vary the monotony, most men attended lectures on the Bren light machine gun and Thompson machine carbine, both of which at that time were more or less novelties to Signals.

One evening Lieutenant-Colonel Allen arranged an informal singsong for the men, assembled on a small sand dune. The moonlight lent enchantment to the scene by dispelling the grey drabness which the dreary wastes of Amiriya displayed to such disadvantage in daylight. The Colonel's pleasant personality emerged at this type of informal gathering. He was a great hand at parties and always enjoyed himself with the spontaneous enthusiasm of a schoolboy. One or two of the men who were accustomed to singing at gatherings of this kind were quickly persuaded to lead the show off. Another man had a guitar. Later the Colonel announced that he and his batman, Signalman Charlie Clark, 4 would sing a duet. After some demurring on Charlie's part, he and the Colonel had a whispered conference and the latter announced that they would sing 'I Can't Give You Anything But Love, Baby.' The men roared with delight. It was a song with which most of them were familiar. Many a time in Maadi Camp its strains had floated unmelodiously across to the men's lines as the Colonel greeted the morning during his ablutions.

Although there was little for the men to do during the wait at Amiriya, owing to the virtual immobility of transport which was rapidly being prepared for shipment, the tide of expectaion ran high and all ranks lived from rumour to rumour with a zest which on less exciting occasions might have been put to more profitable use. There was no telling what new speculation might arise from day to day. Among the men the possible destination of Tripoli, where (it was said) the Division was to make a landing behind the enemy's lines, became overnight a probability which was earnestly debated for two days—a long time for even the most robust of rumours in early 1941. Suddenly, however, the troops' imagination veered sharply to Greece which, according to the 'best authorities', the Germans had already invaded.

The next phase, in which rumour was completely forgotten for the time being, consisted of the laying-out of kits in readiness for the expected move to the docks. On two successive days the men were instructed to assemble their 'marching order' kits, and each time were told to return them to their tents as the move would not take place until the following day. 'Everything is SABU', ⁵ complained the men, among whom a few of the less complacent came to believe that these things were done specially to test their temperamental endurance.

In the meantime Signalmen W. T. Johnson ⁶ and Jackson had discovered a decrepit 30-cwt truck abandoned in the unit's lines and, by stripping working parts from other wrecks on a nearby salvage dump, had contrived to make it run after a fashion. Old Boanerges—the name given it by the Colonel because of the dreadful noise it made as it lurched drunkenly about the lines on various errands—was a useful acquisition. No task, however menial, was spurned by Boanerges and its proprietors. No one quite knew where the petrol came from, and the Colonel was curiously oblivious to the proprieties—or the lack of them—which permitted an unauthorised vehicle to roam at will within his unit lines. Doubtless his reflections in the matter were tempered by the knowledge that Boanerges could not accompany the unit, which would hand the relic over to the 'proper authority' when it embarked.

J. Section embarked with Headquarters 4 Infantry Brigade on the SS Corinthia at Alexandria on 10 March and sailed for Greece.

On the same day a skeleton Divisional Headquarters had been opened alongside Lustre (or W) Force Headquarters in the Acropole Hotel in Athens in readiness for the arrival of the New Zealand troops. The 18th Battalion was already in Greece and moving northwards towards the area north of Katerini, where the Division was to take up its first positions. Divisional Signals' transport moved out from Amiriya to the docks on 11 March in preparation for shipment, and E and H Sections' transport moved to the docks the same day. Divisional Signals' vehicles were in the charge of Captain Smith, who was senior officer on the ship which took them to Greece. This ship, the Bratdal, was a Norwegian vessel and carried the transport of a number of other units. The drivers, who had to sleep with their vehicles in the hold, had an uncomfortable trip, and some were seasick when the ship encountered a heavy swell one day out from Alexandria. Piraeus was reached late in the evening of the 17th. The vehicles were unloaded next morning and moved to Hymettus Camp, on the pine-clad slopes above Athens.

Just before midday on 20 March the main body of Divisional Signals arrived at Piraeus, where the men were disembarked immediately and taken in British transport to Hymettus. A more complete and delightful change of scene could not be imagined. Three days ago they had huddled in their tents at Amiriya to escape the stinging fury of a raging sandstorm which had filled their eyes, ears and noses with fine dust and their souls with blasphemy. Here the fragrance of the pines caressed their nostrils and breathed reminders of New Zealand's green-clad hills and river valleys. Below them, Athens, the birthplace of beauty and culture, nestled beneath the ageless crags of the Acropolis. It was not long before groups of soldiers were hurrying down the steep tracks of Mount Hymettus to see for themselves some of the beauty which, they had noticed, still graced the streets of the city. From the inner fastnesses of the pine groves the untuneful voice of a hidden soldier smote stridently on the evening air, a blithe spirit freed for a few short

weeks from the tyranny of Egypt's sands, raising his voice in song.

'Twas as fine a war as I recall—Parley Vous!

'Twas as fine a war as I recall—Parley Vous!

'Twas as fine a war as I recall

Still it was better than none at all

Inkey Pinkey Parley Vous!

On 15 March an advance party of L Section sailed from Alexandria with Headquarters 6 Infantry Brigade and arrived at Piraeus four days later. L Section's rear party disembarked at Piraeus on the 22nd after having been attacked at sea by enemy aircraft. There were no casualties in the section. E and C Sections both embarked on the 18th and arrived at Piraeus on the 21st without incident. By the 18th G and H Sections were at Amiriya awaiting embarkation, but F and K Sections had not yet left Helwan.

Signals' stay at Hymettus was very brief. Hardly had the men settled down in their new and pleasant surroundings when orders were received for a move. The main party left by road on 23 March and bivouacked that night near Cape Knimis, opposite the north-western extremity of historic Euboea Island. On the next night a bivouac was made south of Larisa. The unit arrived in its new camp area at Kalokhori, a couple of miles west of the town of Katerini, on the afternoon of the 25th. Meanwhile, a rail party consisting of all the unit's motor-cyclists and their machines had arrived at Katerini, where they were billeted in a large building in the town until the arrival of the main body.

Advanced Headquarters New Zealand Division was established at Kalokhori on the 25th and a signal office was opened there that afternoon. A party of W Force Signals, from a Royal Signals line-of-communication unit at Larisa, had for some days been bringing a D Mark VIII cable from Larisa through the precipitous mountain pass

south-west of Katerini, and their arrival at Kalokhori coincided with that of Advanced Headquarters. A party from B (cable) Section assisted this line detachment to carry the cable through to Headquarters 4 Brigade, which had been established in the small village of Palionellini, some seven miles to the north of Katerini, since 21 March.

J Section had already established communication with Headquarters W Force in Athens in accordance with orders issued by the Chief Signals Officer W Force immediately the section had arrived in Greece with Headquarters 4 Brigade on the 15th. These orders were that, as soon as the brigade arrived in the Katerini area, OC J Section was to run a cable to the Katerini post office and join it to a civil circuit to be provided by the postal authorities. Captain Borman found that the distance from Brigade Headquarters at Palionellini to Katerini would expend most of the ten miles of cable which his section carried, and would leave insufficient to take lines forward to the three battalions of the brigade. The problem was solved by taking the village telephonist's line to Katerini to connect the brigade exchange to the post office there. The local telephonist, bewildered and dismayed, found himself willynilly a subscriber on the brigade exchange. Unfortunately Nikolaus, the postmaster at Katerini, had no knowledge of any arrangement to provide a circuit to Larisa for military purposes, and some time elapsed before his official reluctance was overcome sufficiently to accept not only the requisitioning of his Palionellini line but the immediate need for surrendering one of his precious circuits to Larisa.

The next problem to be solved was that of security. All the traffic between Headquarters 4 Brigade and Headquarters Line of Communication at Larisa was being handled by civilian operators at the Katerini exchange, so Borman, in the interests of security, decided to install there two of his men, Signalmen Helm and Gaze, 7 to handle military traffic. Poor Nikolaus was a little startled by this fresh impertinence, but by this time his resistance had melted considerably and his attitude suggested pathetically that it would probably pass unnoticed in the enormity of the irregularities which he had already

condoned. With this encouragement, Borman then proceeded to install coils in his newly acquired circuits at the Katerini post office to provide a more secure means of communication to Larisa without the need for switching. By the time these arrangements had been successfully engineered, Divisional Signals had arrived at Kalokhori. The unit opened the circuit to Larisa and so provided itself with a line to Headquarters Line of Communication, and one to Headquarters 4 Brigade. Everyone was happy, except Nikolaus, while Borman wondered what would have been the reactions of a New Zealand post office engineer whose circuits and equipment had been flagrantly seized by a foreigner.

E Section arrived on 26 March and bivouacked with 4 Field Regiment in a dispersal area near Kato Melia, about seven miles from Katerini. On the following day L Section, with Headquarters 6 Infantry Brigade, arrived at Sfendhami, and C Section was in bivouac with Headquarters Divisional Cavalry at Gannokhora, a few miles north of Katerini. Until the establishment of Headquarters 6 Brigade at Sfendhami, where it was to take over a defensive position held by 19 Greek Motorised Division, the principal divisional communications lay between Advanced Headquarters New Zealand Division at Kalokhori and Headquarters 4 Brigade at Palionellini. So far line and despatch-rider services comprised the only means of communication, a rigid wireless silence having been imposed over the whole area. An improvised service was provided by the civil telephone system, the use of which demanded the most stringent security precautions because of enemy agents in the neighbourhood. A place-name code for use on civil telephone circuits was brought into use to conceal movements and locations of units as much as possible. Athens, for example, became Aldershot, and Katerini became Kent.

With all wireless unusable for obvious reasons of security, and with only one or two lines to 4 and 6 Brigades, the despatch riders at Divisional Headquarters had few idle moments. The country in which they had to manoeuvre their motor-cycles was vastly different from the open stretches of sand and gravel desert on which they had trained in

Egypt. It was most unusual for a despatch rider to complete a run without having to ford at least two streams, and it was not long before the first casualty occurred. Signalman Marriott ⁸ fractured a knee cap on 29 March.

Road conditions in Greece were very bad. There were few main roads, and most of these passed through mountainous country. There were often sheer drops on the outside of hairpin bends and deep ditches on the inside, leaving only the crown on which it was safe to ride. The surface of most roads was generally poor, especially away from the main towns, and the verges were often built up of soft, lightly rammed earth. Even main roads varied in width from as little as ten feet to as much as thirty, and approaches to culverts and bridges usually narrowed dangerously. In the area around Katerini, where despatch riders did most of their riding, the roads were often merely clay tracks which followed the easier contours of the rolling country between Divisional Headquarters at Kalokhori and 4 Brigade at Palionellini, and 6 Brigade at Sfendhami, farther away to the north-east.

In the area forward of Palionellini, where slopes densely wooded with slender oak saplings rose to a sharp ridge across 4 Brigade's front, J Section was intent on running down enemy agents suspected of tampering with the lines to 18, 19 and 20 Battalions. A number of interruptions to line communications had led to the discovery of several breaks plainly made by pounding the wire between two heavy stones. On two occasions the stones were found beside the break with the stains of bruised cable insulation still adhering to their surfaces. The Field Security Section was entrusted with the task of laying the saboteurs by the heels. With tremendous zest it organised a system of line patrols, and in two days brought the culprit to book, although not altogether in the way expected. The exchange operator reported that 19 Battalion's line was 'out', and in a short time away went two field security men, one with a D Mark V telephone slung over his shoulder, followed by the other, who nursed in his right hand an enormous pistol which looked like a young 18-pounder without wheels—a Webley. 455 service revolver.

In due course a report came back from the man with the telephone. The break and its cause had been found. The culprit was a Greek shepherd who had cut out a section of cable from the line and used it to tether a bell-wether to keep the rest of his flock from straying while he slept in the sun.

By 27 March the Division, less 5 Brigade, was deployed in its positions to the north of Katerini. The general defence line, of which the coastal sector was held by 19 Greek Motorised Division, extended from Skala Elevtherokhorion, on the coast near the head of the Gulf of Salonika, through Paliostani, in 6 Brigade's area, through Mikri Milia and Radhani, where 4 Brigade lay in prepared positions, to Elafina, where the sector held by 12 Greek Division on the left nominally commenced. From there the Aliakmon line, which was the name by which the system was known, passed through Polidhendri and then north-west towards the Yugoslav frontier. Sixth Brigade was preparing to take over the coastal sector on the right from 19 Greek Motorised Division, which was to move to the north-east, where it was urgently required to reinforce the Greek garrisons in eastern Macedonia.

The New Zealand Division's front from Radhani to Paliostani consisted of 16,000 yards of rough spurs and re-entrants, on which the laying of line communications presented tremendous difficulties. By 30 March there were two good line circuits between Divisional Headquarters and 4 Brigade, and both had been strengthened and secured throughout their length. In addition there was the civil-line route between Katerini and Palionellini, but this circuit was not expected to survive long under air and artillery bombardment.

The country between Divisional Headquarters and Headquarters 6 Brigade, at Sfendhami to the north-east, was unsuitable for building a good field-cable route in the limited time available, so a line was started immediately from 4 Brigade to 6 Brigade and made as secure as possible. The country through which it passed was still very steep and difficult, but the length of circuit was reduced to less than half. Later, when this cable had been made reasonably secure, the long field-cable route from

Kalokhori to Sfendhami was commenced. The coastal sector on the right held by 19 Greek Motorised Division, however, was open country, and as it was expected to be taken over by 6 Brigade, the difficulties of carrying lines forward would be eased considerably.

On 30 March E Section opened a signal office at Headquarters 4 Field Regiment, at Sfendhami. The regiment's role was to cover the divisional front until the arrival of 5 and 6 Field Regiments. Lines were immediately laid out to batteries and communications established. The country was extremely difficult and E Section's linemen had to take all cable out by hand.

At this time only two units of 5 Brigade had arrived in the Katerini area—23 Battalion and 28 (Maori) Battalion, both of which were quartered in Katerini Park. Two days later Brigade Headquarters and 5 Field Regiment arrived by rail and road in the divisional area, and the former was established at Kalokhori. Next day, however, the brigade moved into its battle positions on the pass road 12 miles from Katerini, where F and K Sections commenced immediately to lay out regimental and brigade communications.

Meanwhile G and H Sections had embarked at Alexandria, G with 6 Field Regiment on SS Cameronia on 25 March, and H with 7 Anti-Tank Regiment on SS Corinthia the following day. On their arrival in Greece both sections went to Kifisia, from which G Section moved with 6 Field Regiment on the 29th to join the Division at Katerini. H Section followed on the 31st. On its arrival in the forward area 6 Field Regiment took up positions near Palionellini in support of 4 Brigade, and within a short time G Section had laid out cable and established communication with batteries.

On the arrival of 7 Anti-Tank Regiment in the divisional area, H Section immediately established a signal office, but the regiment moved the same day to Ay Ioannis, five miles north of Katerini. H Section again set up its signal office, and communication with Divisional Headquarters was established. The regiment remained at Ay Ioannis until 10 April,

when it moved back into the pass area in the vicinity of Ay Dhimitrios. In the meantime, however, the three batteries of the regiment had been dispersed to brigades, and with each went an H Section wireless detachment.

In the days that followed these wireless detachments were to have a particularly trying time endeavouring to maintain communication with the regimental headquarters at Ay Dhimitrios. None of H Section's sets was provided with high-power units, and the abnormally long ranges over which the low-power No. 11 sets attempted communication during the April battles for the northern passes considerably exceeded the equipment's rated performance. In an anti-tank regiment wireless was the only means of communication; the half mile of D Mark III cable which the signal section carried on its war equipment scale was provided for the installation of short internal lines at regimental headquarters.

In April 1941 the strategic situation in the Balkans was not promising for the Allies. In the north-west the Greek Army was waging a heroic fight against the Italians in Albania. Conditions on that front were appalling. The Greeks were dreadfully handicapped by lack of equipment, but were making a magnificent effort and achieving great successes. These advantages on the Albanian front, however, were overshadowed by the darkening outlook in the east, where Thrace stretched narrowly between the sea and the ever-increasing threat of attack from the north, where German infiltration was already complete in Bulgaria. The signs of preparation for a rapid German thrust into Thrace and eastern Macedonia were unmistakable. Although the Greek Army had sustained enormous losses in the long winter campaign in the north-west, its morale remained high. The Greek garrisons at the Rupel Pass, in eastern Macedonia, and at other places in Thrace, were also in good heart, and when the storm broke they gave a good account of themselves. German gains there were not won cheaply.

The Allied forces mustered to aid the Greeks in northern Greece were woefully thin on the ground; nor were they equipped with modern

implements of war, the most disquieting shortages being in tanks, aircraft, and anti-aircraft guns. The weather and the reports of Intelligence on the stage to which German preparations in Bulgaria had progressed brought the probable trend of events in April into closer perspective. There was a tremendous amount of defensive preparation still to be achieved, and so little time in which it might be done. The limitations imposed on the supply of men and war material by the dangerously vulnerable lines of communication passing close to enemy bases in the Dodecanese Islands were intensified by insufficient shipping and the limited capacity of Greek ports, of which Salonika, the principal and certainly the most useful, was now eliminated because of its accessibility to the expected German drive from Bulgaria and Yugoslavia. In no circumstances was Salonika considered to be a secure base into which to bring men and equipment.

By the end of the first week of April the New Zealand Division's line extended from Skala Elevtherokhorion on the coast to Elafina, a front of 28,000 yards. To the south, covering the passes east of Mount Olympus, was 5 Brigade. Forward of 4 and 6 Brigades' defensive positions north of Katerini, the Divisional Cavalry maintained a covering position by active patrolling just south of where the Aliakmon River took a wide, semi-circular sweep to the north. Strict limitations on the use of wireless were still in force, so that all communications continued to be provided by line circuits and despatch riders.

On 2 April Divisional Signals went forward to Ay Ioannis, where Advanced Headquarters New Zealand Division had opened and set up a forward signal office. The original office at Kalokhori became Rear Signals. This signal office was closed when Rear Headquarters joined Advanced Headquarters four days later, but the majority of Rear Signals remained at Kalokhori owing to the lack of suitable space for dispersion at Ay Ioannis, and also because of the usefulness of the buildings occupied by M (technical maintenance) Section and 14 LAD at Kalokhori.

By this time about 65 miles of ground cable were laid between

Advanced Divisional Headquarters and 4 and 6 Brigades. Numerous interruptions to these circuits were caused by the heavy volume of tracked and wheeled traffic which passed along the narrow and tortuous roads beside which the lines lay in several places. Owing to the ease with which these lines could be tapped by enemy agents, they were regarded as non-secret from the security point of view. Accordingly, a system of unit and place-name codes similar to that introduced at the time the Division first arrived in the area was employed in all telephone conversations. There were also special codes for appointments, guns, ammunition and vehicles. The telegraph components of the line circuits in most cases were superposed channels provided through coils in the universal call ten-line switchboards at terminals, and were operated by Fullerphones Mark IV, thus enabling a considerable amount of traffic to be transmitted in Morse in clear. The strictly enforced wireless silence was broken for brief and infrequent test calls between the control station at Advanced Divisional Headquarters and the terminals at brigades.

Germany declared war on Greece and Yugoslavia on 6 April 1941. German troops attacked the Greek line in eastern Macedonia, but the fortifications withstood the initial assaults and the enemy sustained serious losses and was obliged to slacken his frontal attacks. Unfortunately, however, owing to the political seesawing which had engrossed Yugoslavia in the tense period just before Germany's declaration of war, the Yugoslav forces were in a state of almost complete unpreparedness and in no shape to withstand the German attacks which engulfed them in the first day's fighting. The Germans very soon swept down into Greece east of the Axios River, and so outflanked the Greeks' eastern Macedonian defences. This penetration also constituted a serious threat to the strong defensive line running in a semi-circular pattern from Neon Elevtherokhorion, near the coast above Katerini, to the Yugslav frontier. This defensive system—the Aliakmon line—utilising as it did the precipitous mountain country of the Vermion and Olympus ranges, was a natural fortress barring the way to a German drive from Bulgaria through eastern Macedonia and the

narrow way between Salonika and the Yugoslav frontier. Along this line the road passed through Edhessa and Veroia, the only points of entry by which the enemy armour could move onto the Aliakmon defences, of which the right flank covered the road pass skirting the northern slopes of Mount Olympus from Katerini to the northern threshold of the plain of Thessaly.

Meanwhile renewed German attacks had overwhelmed Greek resistance along the Bulgarian frontier, and by 9 April all of western Thrace and Salonika were in enemy hands. Farther west German penetration had opened the way for their armour to pass down the main highway from Yugoslavia to Florina and Kozani, threatening the Aliakmon line from the rear. Immediate adjustments were made to the Allied positions. The Aliakmon line was abandoned and temporary positions occupied while an effort was made to regroup all Greek and British forces on new permanent defensive positions. Fourth New Zealand Brigade was sent to Servia to hold the pass there and to act as a pivot for the move from the temporary to the permanent positions. The left flank of the Aliakmon line was withdrawn from the Yugoslav border to link up with the hastily formed force south of Florina, while 6 Brigade was withdrawn behind 5 Brigade's positions on the Olympus Pass for use there or elsewhere as circumstances demanded. Only Divisional Cavalry remained in the New Zealand Division's sector of the Aliakmon line, patrolling and preparing to offer sufficient resistance to allow the temporary positions time to settle down. First Australian Corps, redesignated Anzac Corps on 12 April, now commanded all British troops on the new temporary line, the Olympus- Aliakmon River line, which ran from the coast at Platamon through the Olympus and Servia passes, along the Vermion range, and astride the pass at Vevi to the south of Florina.

The afternoon of 9 April brought to an abrupt end the pleasant activities in which the men of Divisional Signals had spent their brief hours of leisure during the preceding fortnight. There had been much work to do, but most of the men had found a little time in which to

move around the town of Katerini and the surrounding villages. They watched the Greek peasant folk going about their daily occasions, and spent many a pleasant half hour drawing water from village wells for the Greek women. They wandered through the narrow cobbled streets, inspecting the quaint dwellings and accepting shyly the wine and oat cakes which the peasant women brought forth from their cottages for the 'English'. Here and there in the cobbled lanes groups of soldiers and children stood deep in study of the English-Greek phrase books which the men had eagerly sought on their arrival in Athens.

There were many incidents which brought home to the New Zealanders the quality of the Greeks' war effort. There was no highly organised publicity machine to tell these people of their country's prodigious efforts against the invader, but they were content that this was so because few of them were even dimly aware that the noble art of self-glorification had become such an important ingredient of martial ardour. In 1941 that other great invader, ballyhoo, had not yet reached the shores of Greece. In the fields and in the towns and villages women and young boys were doing the work of men, while in the homes young girls had become the nation's 'little housewives'. It was all a wonderful example of national fortitude and a source of sober reflection to many thoughtful New Zealanders who watched these women, ranging in age from sixteen to the middle forties, bent in toil over their roadmaking implements from dawn to dusk.

From 9 April pleasant excursions were lost in the hurry and tumble of preparations for sudden moves to take up new positions to meet the enemy threat approaching from the north. At 8 p.m. that day a Divisional Battle Headquarters was established at Sfendhami and connected to 6 Brigade's exchange. In the afternoon OC A Section, Captain Smith, had gone forward to Sfendhami to spy out suitable sites for wireless detachments and the signal office, and to find a house to serve as headquarters' office and quarters for the GOC and his staff. He was joined later in the day by two wireless detachments and a number of despatch riders, and in the evening by Lieutenant-Colonel Allen, who

had moved up from Ay Ioannis with G staff. The next day, however, 6 Brigade was withdrawn from its positions in the Aliakmon line to divisional reserve at Dholikhi. Battle Headquarters closed at Sfendhami and withdrew to Dholikhi, where Advanced Divisional Headquarters had moved the night before from Ay Ioannis.

Shortly before midnight on the 9th Advanced Signals moved back with Advanced Divisional Headquarters over the pass road to Dholikhi. Rear Signals joined the convoy on the road at Kalokhori. It was atrocious weather for a night move in which the darkened convoy had to negotiate the tricky hairpin bends and slippery road surfaces up to Ay Dhimitrios near the summit of the pass and then down to Dholikhi.

Immediately on arrival at the new area Signals set up Advanced and Rear Signals camps about half a mile apart. Only one signal office, that at Advanced Divisional Headquarters, was established, and from there a network of lines soon spread out to the Division's battle positions where 5 Brigade was firmly ensconced across the northern end of the pass, where the road began to reach steeply towards the summit at Ay Dhimitrios, the 'Christmas Card' village of grey slate roofs, cobbles, and storks. The brigade's position faced east, with 23 Battalion on the right of the road at Yabadi, on the north-western slopes of Olympus, 22 Battalion in the centre astride the road, and 28 (Maori) Battalion on the left in the Mavroneri valley. K Section had run out cable from Brigade Headquarters to 22 Battalion and established there a forward exchange or signal centre, from which lines extended to 23 and 28 Battalions and to 4 and 5 Field Regiments. This signal centre, manned by K Section men under Lance-Corporal Davis, 9 continued to hold the brigade's forward communications in the sharp fighting that later raged in the pass. At each battalion headquarters there was a No. 11 wireless set detachment, but these sets had little use during the battle.

Meanwhile 6 Brigade had come into its reserve positions above Dholikhi and about two miles south of Ay Dhimitrios. From this position a civil permanent line ran westwards along a secondary road for about a mile and a half and continued around a steep mountain spur to the

village of Livadhion, from which L Section took a field cable down the valley of the Smixi River northwards for about five miles to Headquarters 24 Battalion, in the rear of 28 (Maori) Battalion's positions in the Mavroneri valley. It was 24 Battalion's intention to run a line along the road, on which its foremost defended localities were sited, to the Maori Battalion. This arrangement would have given lateral communication between the two brigades, but was never completed because of the probability of 6 Brigade moving from its reserve positions within a few days to prepare for a new task.

Advanced Signals established a signal centre at the summit of the pass on 12 April to strengthen the communications forward to 5 Brigade. Meanwhile 4 Brigade Group had moved to 1 Australian Corps' command, first to corps reserve at Kato Filippaioi and then to a defensive position on the general line Kastania- Servia- Prosilion to prevent enemy penetration from the north and west. Actually, the brigade did not pause at Kato Filippaioi, but passed straight through to the Servia positions, so rapid were the changes in tactical deployment at that time. As the brigade had passed from the command of New Zealand Division, Advanced Signals had no communication with it except by line through Headquarters 1 Australian Corps at Yerania, in the low-lying country near the main highway running north from Elasson, through the road junction at Elevtherokhorion to Servia.

An extensive system of permanent civil lines radiating out from Advanced Divisional Headquarters served as alternative means of communication to the cable circuits. Two of these poled lines went to Katerini and Neon Elevtherokhorion, and from the latter place another permanent circuit ran on to the village of Kolindros, from which C Section had put out cable to Headquarters Divisional Cavalry at Kitros, above Katerini. From Katerini another civil route ran south on the railway along the coastal plain to the east of Olympus and then on to Larisa.

On 12 April a direction went out from Advanced Divisional

Headquarters to 5 Brigade, Divisional Cavalry, and Headquarters New Zealand Engineers that all civil-line installations forward of the Division's battle positions were to be destroyed. The demolition of aerial circuits was to be the primary task. Later, if time and circumstances permitted, poles were to be felled or damaged so as to deny the use of the circuits to the enemy. On the morning of 13 April Lance-Sergeant Pierce, ¹⁰ Lance-Corporal Hanrahan, ¹¹ and Signalmen McIvor ¹² and Pemberton, ¹³ under orders from Advanced Signals, reported to Headquarters 5 Brigade in the pass, where they were given detailed instructions for destroying the poled lines forward to Katerini, Palionellini and Sfendhami, and from Katerini for a distance along the railway towards 21 Battalion's positions at Platamon.

Pierce, McIvor and Pemberton, in their 15-cwt cable truck and accompanied by a Bren carrier from 5 Brigade, worked along the road towards Katerini, destroying the lines as they went. Hanrahan, with Sergeant Jay, ¹⁴ a sapper from 5 Brigade, worked along a secondary civil circuit to Katerini and joined up with Pierce and his party there. At Katerini they created havoc and destruction by hooking the carrier to the overhead circuits at junction poles and wrenching them to the ground. Hanrahan was then sent off to destroy the line running south along the railway. For a distance of about six miles towards Headquarters 5 Brigade Pierce and Jay set charges at the feet of selected poles and brought them down.

While Jay was still busy on this exhilarating task, Pierce, McIvor and Pemberton pushed on towards Palionellini, wrecking the lines as they went. Two days later they arrived at Headquarters Divisional Cavalry, near Kitros, after destroying circuits at Sfendhami, Aliki, Stavros, and Koukos.

At Kitros, in circumstances best known to themselves, they encountered some good cheer in the shape of three bottles of champagne and a quantity of fresh eggs, which fortified them sufficiently to send them back hot-foot to Stavros to see if by some mischance any portion of the civil lines there had escaped destruction. During their

depredations at Stavros a despatch rider sent from Divisional Cavalry came to tell them to clear out quickly as enemy armour had penetrated to within a mile of the village. They moved back to Katerini and spent some time there with Captain Pryor and Second-Lieutenant Stevenson, who were busy smashing the telegraph and exchange installations at the post office. That night they bivouacked near Kalokhori with some Maoris from a carrier platoon of 5 Brigade. Next morning they picked up Sergeant Jay again and some sappers who had been sent down from 5 Brigade to mine culverts and bridges in the approaches to the pass.

Near Neokaisaria the party halted while Jay and his sappers prepared to blow the bridge. Jay told Pierce to wait five minutes for him but no longer. After the five minutes had elapsed there was still no sound of Jay's demolition, but German armour and infantry were clearly visible pushing up the road from the direction of Kalokhori. The last of the Divisional Cavalry was then passing through to withdraw behind 5 Brigade's positions farther up the pass, and one of its officers instructed Pierce to move back. They did not see Jay and his sappers again.

Fighting commenced early on 15 April, when advanced elements of the enemy penetrated right up the pass and attacked 22 Battalion's positions astride the road. A few hours later 28 (Maori) Battalion on the left and 23 Battalion on the right were in contact with enemy armoured fighting vehicles and infantry. The 5th Field Regiment was putting down a steady, accurate fire on the German concentrations. Enemy transport continued to move up during the night, and next morning (16 April) dawn revealed a large force deploying for an attack along the road and across the flat country at the entrance to the pass. The guns of 5 Field Regiment opened a fierce bombardment, which continued throughout the day as the fighting intensified. During the afternoon a light drizzle and mist enabled the enemy to achieve some penetrations of 23 and 28 Battalions' positions on both sides of the road, but by evening the area had been cleared by fierce bayonet fighting and smallarms fire. Throughout the heavy fighting on the road, where 22 Battalion beat off a number of determined attacks, Lance-Corporal

Davis, with his two exchange operators and two linemen, continued to man the forward exchange near Headquarters 22 Battalion, in a gully about fifty yards off the road. This small party laid the ground cable to both 23 and 28 Battalions by hand, and made it as secure as possible from damage by shellfire and bombing. Fortunately there were few interruptions to the circuits, probably because of the limited wheeled and tracked vehicle movement in the area where the lines were laid. From the forward exchange two lines ran back two and a half miles to Brigade Headquarters, where the remainder of K Section's linemen kept them in operation throughout the battle.

By this time fighting had broken out at Platamon tunnel, where German armour and infantry were attempting to force a passage through the narrow gap between Olympus and the sea. On 9 April an A Section wireless detachment, consisting of Signalmen Laurie 15 and Leary 16 and equipped with a No. 11 wireless set and a spare set of batteries, had been sent to Platamon by train from Katerini to provide communication between 21 Battalion and Advanced Headquarters New Zealand Division. With them went Signalman 'Bully' Hayes, ¹⁷ equipped with a wireless set No. 9 remote control unit, with which he was to attempt to establish communication with Advanced Divisional Headquarters by ringing on the permanent line running along the railway at Platamon. 18 The small party made an inauspicious start to its journey. After the men had settled themselves and their gear in the train they sat down to await its departure. When nothing had happened after a longish spell, Laurie made some investigations, only to find to his consternation that the carriage in which they had installed themselves had not been coupled to the rest of the train, which had moved off without it. The party left in the next day's train.

A reconnaissance for a possible road route to the Platamon tunnel had previously been made by Captain Pryor, but he had been unable to find a vehicle approach to 21 Battalion's positions. Although the tracks in this area—there were no formed roads—were fit only for horse-drawn vehicles, it was possible with care to take an 8-cwt truck over the route

from Katerini down the coast to the Pinios Gorge beyond Platamon. From Katerini to the tunnel the track followed the flat coastal strip, there being no large natural obstacles until the Platamon ridge itself was reached. In wet weather, however, the muddy surface of the track was quite impassable to wheeled traffic. Even in dry weather it was impossible to take a vehicle on the seaward side of the Platamon tunnel, but some little distance to the west a low saddle offered difficult but negotiable access to the Pinios Gorge, from which a road traversed undulating country down to Larisa. Thus the Platamon railway tunnel provided a difficult obstacle to any attempt by enemy columns to reach the vitally important communications centre of Larisa and so outflank the Olympus defences from the east.

After two days had passed without communication of any sort being established with 21 Battalion at Platamon, Second-Lieutenant Foubister, now temporarily in command of A Section, was instructed by OC No. 1 Company to attempt to reach Platamon tunnel with a wavemeter and ascertain why nothing had been heard from the wireless detachment there. He set out, accompanied by his driver, Signalman Silvester, 19 and managed to get his 8-cwt truck to within a quarter of a mile of 21 Battalion's headquarters. He found Laurie and Leary installed there with their set, but the CO 21 Battalion (Lieutenant-Colonel Macky 20) had interpreted literally the order concerning wireless silence and had not permitted the detachment to maintain even a listening watch on the divisional forward control wireless set. When Foubister had convinced Macky that contact had already been made with the enemy on the Aliakmon and that wireless silence could therefore be broken, communication was soon established with Advanced Headquarters New Zealand Division.

Foubister decided that before he began his return journey he should try to raise Line of Communication Signals at Larisa on the poled-line civil circuit which ran alongside the railway, and so get through to Advanced Divisional Headquarters. He took 'Bully' Hayes' remote-control unit and rang vigorously on the line. For some time he listened to a medley of answers from Greek voices, but there was no response from L of C Signals. Suddenly an English voice came on the line. It was Signalman Norwood, ²¹ a D Section despatch rider, speaking from the Katerini post office, which he reported was deserted. He said that he had found a cipher message lying on the counter there; it was from Cairo and was addressed to New Zealand Division. Foubister took it down over the tele- phone and then instructed Norwood to deliver the original as quickly as possible to Advanced Divisional Headquarters.

At 6.30 p.m. on 14 April advanced elements of the enemy were first sighted at Platamon. Small armoured fighting vehicles and troops mounted on motor-cycles advanced right up to 21 Battalion's positions, but were turned back by artillery fire. The tunnel and road demolitions were blown immediately.

At dawn the guns on both sides commenced a duel which lasted all day. A number of tank and infantry attacks were beaten off, but early on the morning of the 16th the enemy mounted a full-scale attack with infantry and armour along the whole front. At nine o'clock messages began to come in to Advanced Divisional Headquarters from 21 Battalion, curiously enough by telephone from Headquarters 5 Brigade, which had no direct means of communication with Platamon. The first of these messages described 21 Battalion's ammunition position as serious; twenty minutes later a second reported that the battalion's left was threatened and in a precarious position where a full battalion of enemy infantry had engaged and surrounded one of its companies. Subsequent messages continued to describe the battalion's difficult situation until at 10.15 a.m. one stated: 'Inf attack left flank. Situation serious. Am standing by WT set for your reply.' Then, almost immediately, came another: 'WT station 21 Bn closing down. Getting out.'

That afternoon 21 Battalion, which since the previous day had been under direct command of Anzac Corps, withdrew from the Platamon positions to the vicinity of Tempe village in the Pinios Gorge. Despite the fighting on the 15th and the morning of the 16th, it disengaged

with only slight casualties and was able to withdraw to Tempe in good order. With it went Laurie, Leary and Hayes, but the No. 11 set and its batteries and accessories were destroyed because of the absence of transport to carry them and the haste of the withdrawal.

The unusual routing by which 21 Battalion's wireless messages reached Advanced Divisional Headquarters by telephone on the 16th needs some explanation. There were two faults. The first lay with the originator of the messages who addressed them to Headquarters 5 Brigade, although the battalion had been until the previous day under the direct command of New Zealand Division. None of the messages was 'repeated' to Headquarters New Zealand Division in the address space on the message form. They were transmitted by the only means of communication available, the wireless link to Advanced Divisional Headquarters, and from there routed by the signal office by Fullerphone to Headquarters 5 Brigade. The brigade staff, unaware of the means by which the messages had left 21 Battalion, promptly telephoned them to Advanced Divisional Headquarters' staff. The second fault occurred in the signal office at Advanced Divisional Headquarters, where the Signalmaster should have noted the contents of the messages as they passed from the wireless terminal to 5 Brigade's Fullerphone circuit and should have made a copy of them for immediate delivery to the G staff at Advanced Headquarters. In the event, little time was lost because of 5 Brigade's prompt telephoning of the messages to Division, and in due course the information reached Anzac Corps, which had left Yerania a few days previously and was then at Elasson en route to Larisa, where it arrived on the 17th.

Thus Foubister's visit to 21 Battalion at Platamon and his action in establishing wireless communication with Advanced Divisional Headquarters accomplished the transmission of vital information to Anzac Corps and enabled it to reinforce the Tempe positions to which 21 Battalion had withdrawn. Corps immediately sent 16 Australian Brigade from Larisa to the Pinios Gorge to hold the German advance, which otherwise would have reached Larisa and cut across the line of

withdrawal of those formations still in the Olympus area to the north.

Laurie, Leary and Hayes were picked up on the 17th by Lieutenant-Colonel Allen, who unexpectedly turned up in an 8-cwt truck at 21 Battalion at Tempe. He listened to their story and then took them aboard his truck, and they made their way out along the Larisa road. They halted that evening a few miles from Tempe at Headquarters 16 Australian Brigade which, with 26 New Zealand Field Battery and C Squadron of Divisional Cavalry, was designated Allen Force (from the name of the brigade commander) for the Pinios Gorge task. It was here that Lieutenant-Colonel Allen received a message addressed to 21 Battalion, and sent Laurie and Leary back to Tempe to deliver it. After a long search at 21 Battalion, Laurie found the Adjutant and delivered the message. He then returned with Leary in the 8-cwt truck to Headquarters 16 Australian Brigade. They later joined up with a New Zealand convoy on the Larisa road and eventually reached Molos, where they rejoined A (wireless) Section at Headquarters New Zealand Division.

Meanwhile, on 9 April, 4 Brigade Group had moved under the command of 1 Australian Corps to a defensive position on the general line from Kastania through Servia to Prosilion, on the left near the Aliakmon. The country was very steep and mountainous. Kastania was 3000 feet above sea level and 2100 feet above the valley of the Aliakmon, which lay four miles to the north beyond Servia. J Section's linemen, under Signalman Sinton, ²² carried a line through to 18 Battalion's positions near Kastania under almost impossible conditions. The route lay across a mile and a half of undulating country from Brigade Headquarters on the road to the small village of Lava, from which it rose steeply along muddy goat tracks and steep, slippery hillsides quite impassable to wheeled traffic. From Lava onwards the heavy drums, each holding one mile of cable, had to be manhandled up the slopes. By 8 p.m. on the 10th Sinton and his men had pushed to within a little over a mile from 18 Battalion's headquarters when their cable ran out. None of the men was in a fit state to return for more, so a lineman went forward and laid some of the battalion's cable back to join up with the brigade circuit.

The line to 19 Battalion on the left of the brigade position was considerably easier to put out, although it was necessary to build it back securely into the wooded slopes on the left of the road to give it some protection from shellfire and bombing.

About two miles to the rear of Brigade Headquarters 64 Battery of 7 Medium Regiment, Royal Artillery, with an additional troop of six-inch howitzers, was in position on a river flat north of the narrow slit in the mountain wall where the road wound tortuously through on the way south to Elasson. All J Section's cable had been used to take 18 and 19 Battalions' lines forward, and there was none available to provide a circuit to the medium guns or even to the regimental headquarters of 6 Field Regiment, which lay on the left of the main road about a mile to the rear of Brigade Headquarters. OC J Section paid a hurried visit to Headquarters 6 Australian Division, where he begged for five miles of D VIII cable. By this time G Section had brought a line into Brigade Headquarters from 6 Field Regiment. OC J Section rallied one or two of the least exhausted of his linemen and, with the aid of a small party of drivers and some battalion orderlies, loaded up a drum barrow and started the line over the difficult route along the wooded hillsides, down over the road to the rear of 6 Field Regiment, and across the river flat towards the medium guns.

By midnight on the 10th all lines were working except that to 6 Australian Division. This was a D VIII cable laid in a ditch alongside the road and it was seldom in working order, although an Australian line detachment stationed at a test point about half-way back along its length was nominally responsible for its maintenance. J Section linemen frequently raised this test point when they rang on the line in optimistic hopes of establishing communication with 6 Australian Division, but the linemen there seemed to be quite unconcerned whether the line worked or not. One morning George Sinton was patiently calling on the line when suddenly, for the unbelievable space of two minutes, he actually spoke to the operator at 6 Australian Division. Just as suddenly,

however, the line went dead again. George slowly put the handset of the telephone down and remarked to Sergeant Snow, ²³ 'Something went wrong there somehow. I got through to Aust Div.'

Very much the same sort of airy detachment which prevailed at the test point possessed the Australians manning the WT set No. 109, which was attached to Headquarters 4 Brigade to provide communication back to 6 Australian Division. This set never worked satisfactorily. On the morning of the 15th an enemy aircraft flew unmolested over the Brigade Headquarters' area for about two hours spotting for German artillery, which was putting down a continuous fire on the area. The Brigade Commander was worried about this spotter and decided to break wireless silence in order to send a message to the rear for aircraft to be sent up to chase the intruder away. OC J Section took the message to the Australian set, where he was informed by the corporal in charge of the detachment that the message could not be sent because the set 'had water in it'. The Brigadier's comments were very terse.

The first concerted enemy action against the brigade's positions was launched on 13 April, when a large formation of dive-bombers attacked the forward positions and the area in the rear where Brigade Headquarters and battery positions were sited. Fierce bomber and fighter attacks were continued on the 14th, and persistent attempts made to crater the main road. By this time enemy artillery was putting down harassing fire all over the area, and lines began to suffer. The first leg of the line to 18 Battalion sustained constant and severe damage between Brigade Headquarters and Lava village, and a party of linemen was kept at work on it continuously. Finally, in order to lessen its vulnerability, a loop was laid and joined into the line at Lava.

A formation of about thirty dive-bombers, accompanied by hordes of fighters, delivered a heavy attack on Brigade Headquarters on 15 April. After the bombers had dropped their loads the fighters raced back and forth at a low level strafing the ground viciously at any sign of movement. As the last of the planes flew away, OC J Section carefully

withdrew his head and shoulders from under George Sinton's boots in the shelter of a narrow crevice where he and George had hastily joined a small party of signalmen, and stood up to survey his losses. Down on the slope on the far side of the road one of his 15-cwt trucks burned furiously, and the cable truck was leaning drunkenly forward, a large bomb splinter having torn through its forepart. At the entrance to Brigade Headquarters' area four motor-cycles lay in shattered ruins among the bomb craters, while up on the hillside Signalman 'Gaffer' Garrett, ²⁴ who had been wounded in the right elbow, roared his head off in pain and anger. In the signal office, which was installed in a small RD tent beautifully camouflaged against the irregular patches of snow which still lay on the ground, Sergeant Snow counted heads and the number of bullet holes in a four-gallon tin of petrol from which jets spurted out all over the interior of the tent. In a corner of the tent a lineman had already resumed his patient efforts to raise someone on the 6 Australian Division line.

¹ Sgt R. R. Tweeddale; Christchurch; born Scotland, 12 Dec 1907; senior telegraphist.

² Sigmn R. M. Bradley; born Auckland, 13 Jul 1911; clerk; killed in action 27 Apr 1941.

³ Capt J. Hill; Wellington; born Birmingham, England, 26 Aug 1911; Government valuer; p.w. 4 May 1941.

⁴ Sgt C. Clark; Stenhousemuir, Scotland; born Stenhousemuir, 14 Apr 1916; grate fitter.

⁵ An abbreviation not readily translatable into formal English, denoting a chaotic state of disorganisation.

⁶ L-Cpl W. T. Johnson, m.i.d.; Pipiroa, Hauraki Plains; born NZ 27 Aug 1917; truck driver.

- ⁷ Cpl J. A. Gaze, MM; Johnsonville; born Wellington, 7 Sep 1918; French polisher and upholsterer; p.w. 15 Jul 1942; escaped Oct 1943.
- ⁸ Sigmn S. O'D. Marriott; Helensville; born Wellington, 25 Oct 1911; motor driver and butcher.
- ⁹ L-Sgt G. M. Davis; Dunedin; born Mititai, Northern Wairoa, 12 Aug 1912; p.w. 1 Jun 1941; escaped Jun 1941; recaptured 5 Apr 1943 (on Crete).
- ¹⁰ Sgt C. S. Pierce; Oamaru; born Eltham, 11 Jun 1906; senior P and T lineman.
- ¹¹ L-Cpl J. S. Hanrahan; Ranfurly; born Naseby, 12 Jul 1917; P and T lineman; p.w. 30 Apr 1941.
- ¹² L-Sgt F. J. McIvor, MM; born NZ 5 Apr 1918; labourer; accidentally killed 14 May 1943.
- 13 L-Cpl D. M. Pemberton; Matamata; born NZ 7 Sep 1916; P and T lineman
- ¹⁴ Sgt J. I. Jay; Reporoa; born Petone, 12 Sep 1911; clerk; p.w. Apr 1941.
- ¹⁵ L-Sgt G. Laurie; Tawa Flat; born Newcastle-on-Tyne, England, 16 Oct 1908; radio technician.
- ¹⁶ S-Sgt H. S. Leary; Invercargill; born NZ 11 Jul 1913; telegraphist.
- ¹⁷ L-Cpl K. J. Hayes; Greymouth; born Takaka, 6 Jan 1911; lineman.

- ¹⁸ The telephone set D Mark V, the only type of telephone instrument that the unit was equipped with at this time, had no magneto generator and, therefore, could not be used on circuits terminated with switchboards fitted with drop-shutter type indicators. A wireless set No. 9 remote control unit which had a magneto generator was taken instead.
- ¹⁹ Sigmn L. G. Silvester; Bluff; born Bluff, 28 Dec 1911; labourer.
- ²⁰ Lt-Col N. L. Macky, MC, m.i.d.; Auckland; born Auckland, 20 Feb 1891; barrister and solicitor; NZ Rifle Bde 1915-19 (Capt 1918); CO 21 Bn 12 Jan 1940-17 May 1941.
- ²¹ Sigmn R. D. Norwood; Auckland; born England, 22 Jul 1918; draughtsman.
- ²² Cpl A. G. Sinton, m.i.d.; Whangarei; born NZ 10 Dec 1913; lineman; p.w. 15 Jul 1942.
- ²³ Capt J. D. Snow, m.i.d.; Christchurch; born Auckland, 29 Dec 1941; telegraphist; Adjt Div Sigs Mar-Aug 1944; OC D Sec Sep-Oct 1944, HQ Coy Nov-Dec 1944.
- ²⁴ Sigmn E. M. Garrett; Christchurch; born Christchurch, 20 Jun 1910; clerk; wounded 15 Apr 1941.

DIVISIONAL SIGNALS

CHAPTER 6 — WITHDRAWAL FROM GREECE

CHAPTER 6 Withdrawal from Greece

The decision to shorten the Allied line by a withdrawal to Thermopylae in the south was dictated by enemy penetration in the Florina area and a subsequent push towards Grevena. It had not been possible to build a permanent defensive line in contact with the Greeks. On 15 April Anzac Corps ordered a withdrawal to a line covering the passes at Thermopylae and Brallos. It was hoped that this line would be short enough for British troops alone to delay the enemy. The withdrawal was to be in two phases: in the first 6 New Zealand Infantry Brigade was to move on the night of 15-16 April from its reserve positions behind the Olympus Pass to positions covering the two main roads between Elasson and Tirnavos; in the second 6 Brigade was to cover the withdrawal of 4 and 5 New Zealand Brigades from Servia and Olympus.

Headquarters 6 Brigade and 24 Battalion were established on the 16th on the eastern of the two roads a few miles south of Elasson and below a steep pass above the plains of Thessaly, and 25 Battalion was in position on a commanding ridge on the western road. Immediately Brigade Headquarters was in position L Section began work on the difficult task of taking a cable to 25 Battalion across the precipitous mountain country which lay between the two roads. Owing to the immense difficulties encountered in negotiating the steep country, the line was not completed until the morning of the 18th. It proved of inestimable value during the fighting and disengagement that evening. The commander of 6 Brigade, Brigadier Barrowclough, ¹ has recorded his appreciation of its usefulness:

The brigade signal section set about the very difficult task of running a wire across the mountainous country through Skompa to HQ 25 Battalion on the west road. This difficult task took several days to fulfil but the value of it during the subsequent battle was difficult to overestimate.

.... the long telephone line laid by the brigade signal section to HQ 25 Battalion proved of immense value during the tank action and in the giving of orders for the final withdrawal of the brigade that evening (the 18th April).

Meanwhile, at Advanced Headquarters New Zealand Division at Dholikhi, preparations were afoot on the 15th for the move to the rear. Much had happened since Signals had settled in at Dholikhi five days previously. Despatch riders had worked tirelessly day and night without rest and, it seemed, without any flagging of their energies. It was an arduous and nerve-straining business, this constant traversing of the pass road, especially at night when there were no lights to signal the approach of vehicles on the treacherous and muddy slopes and hairpin bends. The linemen of B (cable) Section had worked ceaselessly on the cable which led over the pass to 5 Brigade and on the poled-line routes which served as alternative circuits between Advanced Divisional Headquarters and the signal centre that had been established at the summit near Ay Dhimitrios.

On 11 April the unit's second-in-command, Major Agar, had gone to 1 Australian Corps at Yerania as Assistant Chief Signal Officer. His duties were taken over by Major Grant, and Captain Smith moved up to command No. 1 Company, leaving the command of A (wireless) Section to Second-Lieutenant Foubister. OC No. 3 Company, Captain Pryor, was at Headquarters 5 Brigade in control of signal communications there during the battle in the pass. Indefatigably, Lieutenant- Colonel Allen moved about on his motor-cycle between Advanced Division and the brigades and field regiments, returning at irregular intervals to look in briefly at his own headquarters, and then setting off again to see, as he put it, 'how so-and-so was getting on'.

On 16 April Divisional Battle Headquarters was at Elevtherokhorion, near the junction of the Servia and Katerini roads. Allen, with a number of wireless detachments and a few despatch riders, remained there while the rest of Advanced and Rear Headquarters Signals moved back with

the main Divisional Headquarters to a new position near Tirnavos, a little to the north of Larisa. Here Advanced and Rear Signals were combined in one area near a monastery in a grove of trees. Meanwhile Battle Headquarters had closed at Elevtherokhorion and was moving south to rejoin Main Divisional Headquarters, which moved out from Tirnavos on the morning of the 18th to continue the withdrawal to Thermopylae. The roads were dense with transport packed nose to tail. There was abundant evidence of bombing all along the road, particularly at Larisa, where a number of burning vehicles stood abandoned in the rubble-strewn streets.

About noon that day Divisional Headquarters halted near the village of Nikaia, about six miles south of Larisa, and dispersed in the open fields to the east of the road. Almost continuous high and low-level bombing, dive-bombing, and ground strafing tended to keep the men in their hastily dug slit trenches, but Lieutenant-Colonel Allen moved about ceaselessly in the open exhorting them to return the enemy's fire with their rifles. It was a grand example and one that few of the men who were at Nikaia that day will readily forget. They came out of their trenches without a second bidding and blazed away at the low-flying aircraft with tremendous zest.

That afternoon Divisional Headquarters despatched all the unit's transport, except signal office vehicles, two wireless detachments and a number of despatch riders, on their way south. Rough route maps were quickly prepared, and the signals vehicles moved out independently with orders to rendezvous at Molos, approximately 70 miles to the south. They were quickly absorbed into the slowly moving mass of transport on the road.

Later in the afternoon, during a particularly heavy air attack, one of the wireless trucks that had remained at Nikaia was hit and destroyed, but its crew was able to leap to safety in time. By seven o'clock that evening Battle Headquarters had closed at Nikaia and was on the road again. The density of the traffic had increased enormously since the early afternoon and now two closely packed lines of vehicles stretched

as far as the eye could see. To make things more uncomfortable still, the enemy had stepped up the scale of his attack and repeatedly bombed and machine-gunned the mass of transport. Here and there along the road at frequent intervals blazing and smouldering wrecks showed where disabled vehicles had been hastily pushed to the side of the road. With the fall of darkness the attacks ceased, leaving the air strangely quiet, except for the low growling of gears as the lines of vehicles crept slowly and painfully towards Lamia.

Meanwhile, in the Olympus area, 5 Brigade had withdrawn from the pass on the night of 17-18 April and moved quickly to the rear. At Servia 4 Brigade had disengaged on the 17th in readiness to withdraw. Light rain and mist obscured movement in the forward areas, with the result that the brigade was able to get its artillery out unobserved before darkness fell. A rearguard remained in the Servia Pass area that night to fire demolitions after 4 Brigade had passed through to the south, but early next morning it was cut off near Elevtherokhorion and had to fight its way clear after sustaining heavy casualties.

Throughout the evening and night of 17-18 April two streams of fast-moving transport converged on Elevtherokhorion, where the Servia and Katerini roads met. There they merged into one and flowed south, protected for a time from enemy air observation and attack by low cloud and drizzle. By dawn most of the convoys had reached Larisa. The morning of the 18th broke fine and sunny, and shortly after first light the first of the enemy's reconnaissance aircraft appeared in the northern sky. Less than an hour later the congested road was being subjected to savage attacks by German aircraft, which appeared in small formations at intervals of a few minutes throughout the day.

Below Larisa the dense mass of transport was slowed almost to a walking pace as the congestion grew, but, surprisingly, casualties in vehicles and men were remarkably slight. In the darkening twilight of the 18th 4 and 5 Brigades moved on through Lamia, which was burning fiercely after a dive-bombing attack by thirty Stukas, and down towards

the divisional rendezvous at Molos. The last stage of the journey was quiet



and peaceful as the convoys moved along the coastal plain between Thermopylae and the sea. Darkness had now fallen and the German aircraft had gone, leaving the sky free of their raucous din. By late evening the traffic had thinned considerably as units reached their dispersal areas and were directed off the road by guides.

Soon after the last of the 4 and 5 Brigade units had passed through 6 Brigade's positions below Elasson on the morning of the 18th, the Divisional Cavalry rearguard withdrew. Shortly before noon the first enemy armour appeared, and from then until the evening New Zealand and Australian artillery kept up a continuous fire against the steadily growing force deploying in front of 6 Brigade's defences.

Fortunately the long line laid by L Section across to 25 Battalion on the western road remained intact throughout the day, but just before darkness fell it suddenly failed. Orders for the withdrawal of the battalion had already been transmitted, however, so no time or energies were wasted in attempting to restore the circuit. The line to 24 Battalion, on the eastern road, remained intact throughout the action.

Sixth Brigade disengaged at Elasson and moved back through Larisa, now in untidy ruin, and pressed on down the Volos road towards Molos. Behind it elements of Divisional Cavalry and 7 Anti-Tank Regiment staged an orderly withdrawal, and by dawn on the 20th the Division,

with the exception of anxiously awaited remnants of 21 Battalion from the Pinios Gorge, was safely behind the Thermopylae positions.

Orders for the defence of the Molos area were issued by Anzac Corps on 19 April. The defence of the Thermopylae Pass—near the historic battleground where, about 2400 years ago, Leonidas and his three hundred Spartans had defied the might of Xerxes' Persian host—became the responsibility of the New Zealand Division, whose line extended from the village of Ay Trias, almost opposite the western extremity of Euboea Island, to a bend in the Lamia- Molos road five miles to the west, and thence south-westwards to join the right of 6 Australian Division, to whom was given the task of holding the Brallos Pass on the main road running south and south-east to Thebes.

Divisional Headquarters was established about eight miles east of Cape Knimis. A signal office was opened immediately and lines put out to 4 and 6 Brigades at Ay Trias and Molos, and to Anzac Corps, which was now established at Levadhia, 22 miles to the south on the main Lamia- Thebes road. All circuits, including the poled-line section of the Corps' line, sustained considerable damage from air bombardment, and B (cable) Section's detachments were hard put to it to keep communications open. A tremendous amount of hard work was done by these B Section men: Lance-Sergeants Pierce and Jones, Signalmen McIvor, Mutch ² and Munro, ³ to name only a few.

After darkness fell on 21 April Divisional Headquarters moved to a new location near Cape Knimis. This position was well concealed in thick bush from air observation, and here the men enjoyed a welcome respite from the nerve-straining trials of the preceding four days. There was time now to count heads and lick wounds. During the move from Nikaia to Molos the unit had lost ten vehicles and six motor-cycles. Casualties were astonishingly light. One Australian lineman attached from Anzac Corps had been killed, and two Divisional Signals men wounded, one of whom, Signalman Martin, ⁴ died on 19 April from his injuries. Two days later a despatch rider, Signalman Knight, ⁵ died from injuries received in a traffic accident during the move to Molos.

In their brief off-duty periods the men gathered in their improvised bivouacs and shelters to discuss the exhilarating experiences of the last week. Their many stories showed that the average soldier's sense of humour had never entirely deserted him, even during the gruelling punishment he had suffered from enemy aircraft. Men recalled again the anxious moments when enemy fighters, swooping low along the crowded road, had brought their trucks to a sudden halt while they had piled out and hurled themselves into roadside ditches, often inches deep in foul and stinking ooze. Others had taken cover in the roadside fields, where aircraft had played hide- and seek with them among the scarlet poppies.

In one such incident a signals truck had been brought to a screeching halt by the appearance of two fighters viciously strafing the road ahead of it. The truck crew had tumbled out and rushed pell-mell for a deep ditch. Hard on their flying heels had come OC No. 1 Company and his driver, Signalman 'Shucks' Bailey, ⁶ who had tumbled in on top of the inert heap of bodies, pressing down instinctively to gain every possible inch of cover. Arms and legs had protruded in all directions from the tangled heap of bodies, but no one had spoken. Suddenly, from underneath—a long way underneath—a muffled voice, shaking with laughter, had called out to those on top, 'Keep your battle dress clean and tidy, Divisional Signals'. Even the vicious stutter of cannon and machine-gun fire from the two fighters still lacing the sides of the road could not restrain the laughter which had risen at this sally. Suddenly, a deafening crump from a bomb exploding nearby had changed their mirth to picturesque profanity.

Orders were received at Anzac Corps on 21 April that the British forces were to be withdrawn from Greece. Actually, the decision to abandon the Allies' precarious lodgment in the Balkans had already been taken, but unforeseen events hastened its execution. The complete collapse of the Greek Army of the Epirus in the west, where the Germans, after occupying Grevena on 16 April, had continued in contact with the Greeks until the 20th, when the Epirus forces had surrendered,

put evacuation plans in a more urgent light. The way now lay open for a rapid German advance down through Aitolia to Patras in the Peloponnese, and eastwards to the slender defences of Brallos and Thermopylae.

Early on 22 April 4 Brigade received orders to move that night to occupy a defensive position in the vicinity of Kriekouki, south of Thebes, to cover the withdrawal of New Zealand Division and 6 Australian Division. Next day the brigade was in position on a ridge which rose abruptly to between 2000 and 3000 feet above the Kriekouki-Thebes plain to the north. The main road from Thebes to Elevsis, at the north-western approaches to Athens, penetrated this ridge through a deep gorge at a height of 1800 feet. The road was tortuous but in good order.

Fourth Brigade's signal communications in this position consisted of wireless to units and to Force Headquarters in Athens. There was also a line to Force Headquarters—laid by an Australian cable detachment—but it followed a shallow ditch flanking the main road and was rendered almost useless by severe damage from bomb blast. J Section, at this time, had almost no cable. Its cable truck, which had been so extensively damaged at Servia, had been taken in tow by 11 LAD, but near Lamia, during the withdrawal across Thessaly, was completely destroyed, together with its cable-laying apparatus No. 3 and cable, by a direct bomb hit. Late on the afternoon of the 23rd, however, Brigadier Puttick, on his return to Brigade Headquarters from a reconnaissance of battalion positions on the ridge, directed OC J Section to a spot half-way up the pass, where a 3-ton lorry had plunged over the bank into a ravine and spilt its load of brand new D Mark III cable. Captain Borman and Sergeant Snow set off immediately and arrived on the scene in time to share the spoils with an Australian artillery officer and three of his men. For two hours the six of them manhandled the heavy drums up the steep slope to the road until they had sufficient for their needs. Lines were run out that night from Headquarters 4 Brigade to both forward battalions, 18 Battalion on the right of the pass road near the summit, and 20

Battalion on the left. Towards dawn a line was completed to 19 Battalion, in the reserve position on the right of the road on the southern side of the pass.

Meanwhile 5 Brigade had commenced its move from Thermopylae to the embarkation beaches near Athens, from which cruisers and destroyers of the Royal Navy took it off on the night of 24-25 April. At Cape Knimis preparations were going forward swiftly for the move back to the beaches. Lieutenant- Colonel Allen's main preoccupation was the fate of his valuable signal equipment, a large part of which had been brought back safely from the Olympus area, together with a considerable quantity of major items of equipment salvaged during the withdrawal to Thermopylae. The instructions received from Divisional Headquarters were that all surplus equipment other than certain items such as wireless sets was to be destroyed before units left the Molos area. But Allen hoped to save more than wireless sets. Second-Lieutenant Stevenson was hastily despatched to Athens to endeavour to make arrangements with Force Headquarters for the shipment to Egypt of a considerable quantity and variety of signal stores which he had stowed in a 14 LAD 3-ton truck. Unfortunately he failed to convince the naval authorities of the importance of his charge and the equipment was ultimately destroyed and abandoned.

At Cape Knimis, after Stevenson's departure with his load of wireless sets, telephones, testing instruments and instrument mechanics' tools, an orgy of destruction set in in Signals' area. Linemen of B Section chopped their precious cable into short lengths and piled it in a heap until it resembled a huge stack of vermicelli. The orderly-room sergeant and his henchmen at unit headquarters gleefully destroyed maps and papers while in a secluded corner of the area the Adjutant, Captain Burns, hacked his prized air mattress into small pieces. At the quartermaster's store trucks a remarkable transformation was taking place. The Quartermaster, normally a man from whom no article, however insignificant, was ever extracted without protracted debate in which certain expressions such as 'Stores 108' and 'Come back in half

an hour' occurred frequently, was suddenly seized with a mood of lighthearted generosity. Men came and went loaded down with new suits of battle dress, brand-new singlets and shirts, and socks that were still joined together at their tops with the makers' threads. Night fell on this unnatural scene, with groups of men standing about waiting patiently for the 'spread' that was to be provided from the reserve stocks of rations in the stores trucks and the tinned delicacies obtained from a nearby detail issue depot.

The greater part of Divisional Signals was to move out that night with Divisional Headquarters to the evacuation beach at Porto Rafti, near Athens. Lieutenant-Colonel Allen, Captain Smith, a B (cable) Section detachment, nine despatch riders, a signal clerk and a number of No. 9 wireless set detachments remained at Divisional Battle Headquarters. In the splitting up of Divisional Headquarters and its signals component, however, a serious defect occurred. With the main part of Divisional Headquarters went the whole of the Cipher Section—at that time not a part of Divisional Signals organisation but a small and highly trained section of the G Branch of the headquarters. This separation of Ciphers from Signals at Battle Headquarters meant, of course, that all cipher messages reaching the headquarters remained indecipherable.

Before the departure of the main body of Signals all lines were disconnected from the exchange, taken into the G operations office, and each connected to a telephone there.

The main party moved out that night (24 April) under the second-incommand, Major Grant, and arrived at Porto Rafti at dawn next day. Vehicles were dispersed in the olive groves above the beach, and the men lay under cover all that day. At dusk they marched to the water's edge and were taken off in assault landing craft to HM ships Glengyle and Calcutta. The two ships lay off the beaches until embarkation was completed about three o'clock next morning, and then put to sea and joined their convoy, which was attacked by enemy aircraft at eleven o'clock. No ships were hit, however, and the troops disembarked at Suda

Bay in Crete that afternoon.

Meanwhile 6 Brigade, supported by a very considerable fire power of various calibres under the command of the CRA New Zealand Division (Brigadier Miles ⁷), was fully deployed in the Thermopylae line by the evening of 23 April to meet the enemy force gathered below Lamia. All artillery units' lines came into the brigade's exchange, but later, as the fire plan developed, communications were adjusted to meet the needs of the moment. As in the Olympus and Elasson battles, lines formed the mainstay of communications, although continuous watches were maintained on RT throughout the battle.

Early on the 23rd enemy artillery had begun to shell the brigade positions. The enemy kept up an intermittent fire all that day while he brought up large concentrations of armour and infantry in readiness for an attack across the coastal river flat. By this time enemy air activity was intense and large formations of dive-bombers were almost continuously over the brigade's positions. At 3 p.m. next day a major attack, preceded by a heavy air bombardment, was launched by enemy armour and infantry on the brigade's forward defensive areas. Although artillery battery lines were severely disrupted by the savage bombing and machine-gunning, E, F and G Sections' lines forward to battery command posts and to Brigade Headquarters suffered only slight damage. The line from Brigade Headquarters back to Divisional Battle Headquarters, however, was frequently interrupted. During the afternoon the CRA moved his headquarters forward to the vicinity of Brigade Headquarters, to shorten communications and make his control of the guns easier.

Thermopylae was essentially a gunners' battle. Throughout the day the guns put down an accurate and devastating fire wherever enemy concentrations appeared. During the afternoon, however, infantry and some armour gained a lodgment on the brigade's left flank and immediately engaged 25 Battalion. Anti-tank and field-gun fire was directed on to this sector, and an infantry and artillery brawl raged

fiercely until about 9.30 p.m., when contact with the enemy was broken off in preparation for the brigade's withdrawal. All E, F, G and L Sections' lines continued in operation right up to the time of withdrawal, and as the brigade moved out were abandoned on the ground.

Sixth Brigade's withdrawal was carried out according to plan, and by dawn on the 25th the brigade was safely under cover in its dispersal area south of Oinoi (Mazi), near Headquarters 4 Brigade.

Divisional Battle Headquarters arrived at Oinoi in the early hours of the 25th after a difficult withdrawal in the afternoon and evening of the preceding day. Throughout the move the convoy had been repeatedly attacked by aircraft and a large number of vehicles, mostly those used by liaison officers and despatch riders, had been disabled and destroyed.

Sixth New Zealand Brigade and 19 Australian Brigade had passed through 4 Brigade early on the morning of the 25th. That afternoon 4 Brigade received orders to postpone its withdrawal twenty-four hours until the night of 26-27 April, when it was to retire across the Corinth Canal to the Peloponnese.

Shortly after midday on the 26th ominous reports began to come in to Headquarters 4 Brigade from various sources of exceptionally severe and continuous bombing of the area near the Corinth Canal bridge and of the presence of enemy parachute troops between Megara, 11 miles west of the Athens- Corinth road junction, and the Corinth Canal. This was an awkward situation for the brigade. Brigadier Puttick immediately prepared a plan for the occupation of defensive positions east of the canal and near the embarkation beaches. The brigade was still fully armed and equipped and had almost its full scale of signal equipment, which had been built up again during the last few days by devious ways, into which the Brigadier did not trouble to inquire too closely.

Each night relays of J Section men had stood at intervals along the road below Brigade Headquarters and scanned the transport passing

through to the south. Any vehicle which had displayed any semblance of the blue and white signals emblem had been stopped and its crew questioned closely concerning their load and what they intended doing with any signal equipment they might have. These inquiries had been purely conventional, because as OC J Section plied his questions—to which he had already decided the answers himself—his henchmen were investigating the contents in the back of the truck. Not every dip in the bran tub was a lucky one, but by the end of the second night OC J Section decided that he had enough signal equipment and to spare.

On the evening of the 26th confirmation of the enemy's presence in the Corinth Canal area was brought to Brigade Headquarters by a British officer from 1 Armoured Brigade, who arrived with a signal from Battle Headquarters New Zealand Division ordering 4 Brigade to withdraw that night through Athens to Porto Rafti, where it probably would be embarked the same night by the Royal Navy. By this time 4 Brigade had lost wireless communication with Battle Headquarters, which had now reached Tripolis in the Peloponnese. Battle Headquarters, therefore, had passed the message to 1 Armoured Brigade for retransmission, but that brigade now had no communication with New Zealand formations or units except Divisional Cavalry, with whom it was operating in the coastal area to the east below Khalkis. The officer from the armoured brigade brought with him details of wireless frequencies and call signs to enable 4 Brigade to break in on his brigade's WT net and acknowledge receipt of the message. Until 1 Armoured Brigade received this acknowledgment, it would not retire from its positions covering the beaches east of Athens. A set was immediately put on the armoured brigade's frequency, but the operator could not break into the traffic passing between the brigade and Force Headquarters in the Peloponnese. At last, after an hour's persistent calling, he received a curt request to pass his message. The acknowledgment was sent, but the armoured brigade operator immediately resumed his traffic with Force Headquarters without giving any indication whatever that he had received 4 Brigade's message. Another half-hour's feverish calling, then suddenly, 'Pass your message'.

'Did you receive acknowledgment to message brought by your LO?'

The armoured brigade operator replied, 'Received your message', and returned instantly to his Force Headquarters traffic. OC J Section decided to leave it at that and reported to the Brigadier. Preparations then went forward swiftly for that night's withdrawal.

In their positions cunningly hidden in the wooded slopes south of the pass, where incessant enemy air searches had failed to find them during the day, the guns still barked viciously at the enemy concentrations forming south of Thebes. The withdrawal commenced at 9 p.m. and was carried out without incident and at great speed through Athens to the beaches at Porto Rafti where, by dawn next morning, the brigade lay up in its dispersal area complete with equipment, vehicles and guns.

Owing to the quick switch of embarkation points only a few hours before the actual withdrawal, no plan had been made for the tactical deployment of the brigade behind Porto Rafti. Thus, on the morning of 27 April, it was dispersed over a wide area suitable for concealment but with no regard for tactical considerations. It was expected that the enemy could appear in the actual embarkation area from the north-west by noon that day or from the north at any moment. At 9 a.m. the Brigadier ordered the occupation of a defensive position. During the day the brigade position and the beach area were subjected to several heavy air attacks. About 4 p.m. an enemy force of sixty to a hundred vehicles, of which many were armoured fighting vehicles, had approached the village of Markopoulon, only a few miles to the west of the beaches. They were engaged steadily throughout the afternoon by mortar and artillery fire.

The withdrawal to the beaches was commenced at 9 p.m. and by 2 a.m. 4 Brigade was embarked on HMS *Kimberley*. As the men moved out from the olive groves and made their way down to Porto Rafti's tiny jetty, where caiques waited to take them to the ship lying offshore in the darkness, light- hearted jests came easily to their lips after the strain of

the day's savage bombing and machine-gunning. They were all stripped down to personal weapons, battle dress, steel helmets, and one small haversack each. Everything else from vehicles to wireless sets and smaller items of equipment had been ruthlessly destroyed under the trees before they left, and nothing remained of which the enemy could make much use.

In the midst of a group of men making its way in the dusk towards the beach could be seen a curiously burdened figure. It was Second-Lieutenant Hultquist lurching along with his valise and bedroll perched precariously on top of his head. As he approached the jetty a naval officer stepped forward and asked, 'What have you got there?' Without waiting for a reply he continued, 'Throw the bloody thing into the water. You can't take it aboard.' 'Tiger' obeyed sullenly, letting the bundle fall to the jetty and toeing it gently and regretfully over the side.

By 3 a.m. on the 28th embarkation was complete and HMS *Kimberley* sailed for Suda Bay, where the brigade disembarked at ten o'clock.

By dawn on the 26th Divisional Battle Headquarters had reached Argos, where troops and vehicles were dispersed under cover from air attacks, which commenced as soon as the first light of day appeared. It was here that Second-Lieutenant Stevenson rejoined Signals after his unsuccessful attempts at Athens to ship the unit's equipment to Egypt. He had travelled from Athens with Brigadier Mathew and Colonel C. D. Clapp, of Royal Signals, who moved on later in the day, leaving behind them at Argos a considerable quantity of signal equipment and vehicles. Lieutenant-Colonel Allen and Stevenson remained at Argos for a spell collecting some of this equipment, while Captain Smith, with some of his wireless detachments, moved on that night to Tripolis, where the main road south branched off to Monemvasia and Kalamata.

Smith and his detachments hoped to find Divisional Battle Headquarters at Tripolis, but there was no sign of it there, so they lay under the cover of some trees. Later in the morning the GOC and his party passed through. General Freyberg told Smith that Battle Headquarters was on its way to Monemvasia and instructed him to make his way there. A short time later Allen and his party came up, and the Signals group moved off towards the south, with the Colonel leading the small convoy and Smith bringing up the rear. It was a warm pleasant day and, strangely enough, the air was free for a time from the sinister roar of aircraft, but south of Sparta a heavy raid forced the party into the cover of the olive trees. Here Allen gave his orders for the destruction of all signal equipment except wireless sets, telephones, and other portable instruments. Trucks not required for the transport of men to the beaches were also destroyed.

A little later Allen left the party and pushed on to Monemvasia alone to make contact with Battle Headquarters and learn the embarkation arrangements. Just after he left enemy aircraft delivered a heavy raid on the grove where Signals was sheltering, and Signalman Bradley received wounds from which he died about an hour later. The only other casualty was Signalman Fearon, ⁸ who was wounded by the bomb which killed Bradley. Ten Greek civilians in the area were killed instantly.

Shortly after dusk the party left for Monemvasia in the few vehicles which had not yet been destroyed, and arrived at 4 a.m. next morning, the 28th. The sole remaining means of communication with Divisional Battle Headquarters was the No. 9 wireless set mounted in its vehicle. This was immediately put on the air and communication established with 6 Brigade, which until the evening before had been occupying a holding position about ten miles west of Miloi, in the north. The brigade was now making its way as quickly as possible to Monemvasia, where it arrived at 7 a.m.

The GOC expected that the Germans would follow up quickly and that his small force, now entirely without artillery, would have an unpleasant time trying to hold them off until the ships arrived. During the afternoon it was learned that there would probably not be enough space on the ships to take off the whole brigade that night, and that 24 Battalion would have to remain on the beach to be taken off next night.

Signalmen Tweeddale and Pye-Smith ⁹ were detailed to remain behind with the battalion to man the wireless set, which would provide communication between the battalion and, presumably, Crete.

About 10.30 p.m. the Signals party was assembled about two miles from the beach. The remaining vehicles were wrecked by pushing them over a steep cliff above the sea. Each man was given some article of signal equipment to carry to the beach—a telephone, a Fullerphone, or some portable part of a wireless set. Here and there pairs of men stumbled along with the wireless sets No. 9 which Lieutenant-Colonel Allen had salvaged from the equipment abandoned by Force Signals at Argos. These sets were actually of a later mark than those the unit had taken to Greece, and the Colonel considered them valuable prizes which he was determined to get back to Egypt by hook or by crook. One of the last sights the men had of Greece that night, as the assault landing craft took them off to the ships lying in the darkness, was that of the Colonel on the beach setting fire to the equipment which he had been unable to load on the crowded craft.

Towards evening the naval embarkation staff informed the Commander 6 Brigade that there would be ample room on the expected cruisers and destroyers to take the whole brigade off, but that the small craft available for taking the troops off the beaches were too few to enable the embarkation to be completed before dawn. This was a bitter prospect for 24 Battalion, which had to face the task of defending itself for twenty-four hours with only small-arms fire against a vastly superior force. Later, however, a reconnaissance of the beaches disclosed a number of small boats which could be used to supplement the troop-carrying capacity of the Navy's assault landing craft. From each battalion of the brigade men accustomed to handling small craft were organised into small parties and placed under the command of Second-Lieutenant Andrews, of L Section, who was an experienced oarsman. With these boats and men Andrews organised a supplementary ferry service which took no fewer than 800 men to the ships.

Shortly before midnight on the 28th HMS Ajax and three destroyers arrived off Monemvasia and the embarkation commenced. By 3.30 a.m. it was complete, and the ships sailed half an hour later, arriving at Suda Bay about midday. There the troops were transhipped to the Comliebank and taken on immediately to Alexandria. On the voyage from Suda Bay the ship was crammed with men—men who were nearly exhausted but in good heart despite the hazards of the last three weeks. A diary entry by a Signals officer on 29 April says: 'All dead tired and sleep on decks. Not enough room to lie on our backs so lean on the next bloke.'

During the time that the men of A, B and D Sections had been living these anxious moments in their travels with Divisional Battle Headquarters in the Peloponnese, other groups of Divisional Signals were undergoing no less exciting experiences near the embarkation beaches around Athens. One of these groups was H Section, some of whose men had a curious adventure with a suspected enemy agent who later had turned out to be a senior officer of Royal Signals. This officer probably owes his life to Lieutenant Paterson, whose timely intervention restrained two enthusiastic NCOs from despatching their 'fifth columnist' on the spot.

H Section, with Headquarters 7 Anti-Tank Regiment, had arrived in a dispersal area near C Beach at Rafina on the 26th. There they destroyed all their transport except one vehicle by pouring sulphuric acid from wireless batteries into the vehicle engines. All their signal equipment was also destroyed, except six No. 11 wireless sets which Paterson was determined to hold until the last possible moment in the hope that he might be able to take them aboard the ship. The regiment had a quantity of valuable equipment, including gun dial sights and directors, which they also hoped to take off with them. The task of caring for all this precious equipment was entrusted to a rear party which included seven men from H Section. This party was under the command of the regiment's second-in-command, Major Oakes. ¹⁰ Needless to say, Paterson stayed behind too; no one who knew Tom Paterson could imagine that he would do otherwise.

At 9 p.m. H Section and the main party of the regiment left the dispersal area for the beach. The rear party followed two hours later, but Paterson learned when he reached the beach that no equipment could be embarked; only men and their personal weapons were to be taken off. He returned to his men and the one remaining truck in which the wireless sets were stowed, and was instructed by Oakes to dispose of the equipment quickly and get his men aboard. The truck was manoeuvred on to some rising ground and faced down a steep slope which ran to the water's edge. The driver started it off down hill, accelerated and jumped out nimbly, leaving the vehicle to plunge down the hill into the sea. Unfortunately it did not enter the water far enough to submerge, but came to a halt with the top of its radiator and bonnet showing above the surface. This was not good enough for Paterson, who had the six wireless sets brought ashore again. The party then made its way to the embarkation point, assuming—but without conviction—that the destruction of the truck would be completed by the tide, which they hoped was making and not ebbing.

When they reached the embarkation point they found that the ship had sailed. They were weary and irritable and cursed Paterson and his wireless sets in subdued undertones. Major Oakes instructed the party to take cover in the trees above the beach and get some rest. With the wireless sets on their backs, the men stumbled through the trees in the darkness, casting about for a suitable resting place.

Sergeant Forrester ¹¹ and Corporal Fitzgibbon ¹² set off to look for a more comfortable bivouac than the sparse cover of the trees. After a time they came upon a church which appeared to offer good shelter for the night, but as they approached a man dressed in a British officer's uniform emerged and asked what they were seeking. They told him of their search for shelter, whereupon he advised them to look elsewhere, but Forrester and Fitzgibbon had decided that the church would be a good roosting place and were not to be put off lightly. Moreover, Fitzgibbon's suspicions as to the identity of this officer had been aroused. The officer claimed that he was a Royal Signals officer

operating a wireless link to Force Headquarters in Athens. Neither Forrester nor Fitzgibbon had disclosed that they were Signals personnel, so they immediately commenced to ply him with questions on the tactical employment of signals, hoping to catch him out. The answers which they received were disappointingly satisfactory, so Forrester asked to see the officer's British Forces identity card, but he claimed that he had lost it. This was enough for the two NCOs. The corporal poked his revolver into the officer's midriff, while Forrester cocked his rifle and skirmished menacingly in close order in the rear.

At that moment another H Section soldier happened to pass by and he was despatched post-haste to bring Lieutenant Paterson, who would give the formal order to shoot. Paterson arrived in due course and interrogated the prisoner closely. After a time he was satisfied that his identity was clearly established as a Royal Signals officer, so he ordered the NCOs to lower their arms.

Several hours later Paterson and his men, refreshed by a brief rest, returned to the beach. Daylight had brought hordes of enemy aircraft, which bombed and machine-gunned the trees and other places where troops might lie in shelter. Towards evening the men discovered a small two-masted schooner or caique riding at anchor in a small bay. This aroused the adventurous instincts of Paterson, who immediately saw a means of getting his beloved wireless sets away to Egypt. With two signalmen, he donned civilian clothes borrowed from some Greeks in a nearby village and the three set out to find the owner of the craft. The owner appeared willing to take them off, but unfortunately the auxiliary engine of the caique was not working. A soldier was quickly found who knew a little about diesel engines and the party rowed out to the craft to investigate. They found that little was needed to put the engine in running order apart from what could be done by a Greek engineer who was brought off protestingly from the shore. The men immediately set about making preparations for their voyage.

Meanwhile Major Oakes, in a wide reconnaissance of the area, had been to another embarkation beach many miles away to see if any ships were expected there that night. He returned with the news that the troops dispersed at the other beach were being taken off that night in cruisers. If time and space permitted the ships would call at C Beach to pick up the regiment's rear party and signals. At this news Paterson abandoned his preparations for escape in the caique and reluctantly gave orders for the destruction of the six wireless sets, apparently convinced at last that his efforts to evacuate them were doomed to failure. The men agreed heartily.

Twilight faded and darkness closed over the beach. A picket was posted to watch for the arrival of the ships while the rest of the men lay down to snatch some sleep. Some hours later a motor launch was heard out to sea and as it came nearer the men gave a shout. Faintly an answering hail came out of the darkness across the water. In a short time the men were wading through the shallows to the launch, which took them off to the ship in several lots. At 3 a.m. on the 28th HMS Havock sailed out of the bay and headed for Crete, where the men went ashore at Suda Bay at eleven o'clock.

All that remains to be told of the adventures of New Zealand Divisional Signals in Greece is the story of what befell the unit's first reinforcements. On the day that Divisional Signals left Athens for Katerini the reinforcements were moved to Voula, about 12 miles from Piraeus, where the New Zealand Reinforcement Depot was established. At first Signals' reinforcements consisted of two officers and four signalmen only, but during April a number of the unit's men who had been evacuated sick and wounded to field ambulances and casualty clearing stations found their way through the British general hospital in Athens to the depot.

During April the port of Piraeus came in for much attention from enemy aircraft, and the men in the Reinforcement Depot were employed on various internal security duties. Some were stationed at Piraeus on mine-spotting duties and others manned ack-ack machine-gun posts on ships lying in the port and in Faliron Bay, below Piraeus. In the dock

area of Piraeus, where 21 Battalion was employed on anti-sabotage duties, the wharves were dotted with large dumps of artillery ammunition, aerial bombs, and other highly explosive material unloaded from several ships in the harbour. On the evening of 6 April aircraft raided the port and dropped a number of mines which, besides causing a large number of civilian casualties outside the dock area, blew up a shed packed with artillery shells. Close by an ammunition ship tied at the wharf was set alight by a flying fragment of red-hot metal and began to burn at the stern. Many other ships were saved from immediate destruction by men of 21 Battalion, who ran around the decks and scooped up red-hot splinters with their steel helmets and threw them overboard. But the ammunition ship was well alight and in the early hours of next morning blew up and turned the ammunition-laden wharf into a vast conflagration. Other craft in the harbour were set afire by falling debris, and altogether the shipping losses from this one raid were very heavy.

In one of the salvage parties which were hurriedly sent from the New Zealand Reinforcement Depot at Voula to assist at the port was Signalman Hayward, ¹³ who during the rescue operations dived into the harbour fully clothed and saved several members of the crew of one of the ships. In a report which Lieutenant Wilkinson, the officer in command of Signals' reinforcements at the depot, prepared at the time from eye- witnesses' accounts, the incident was described as an act of outstanding gallantry.

Some time later Wilkinson, with some sick and walking wounded, left Voula to go to one of the embarkation beaches near Megara. At Daphni, a few miles from Athens, his small convoy was taken off the road by some Australian military police for some obscure reason—the MPs made some vague references to a Force Headquarters order which restricted travel on the roads after nightfall. The party remained at Daphni for some days, anxiously watching the road for some New Zealand transport in which it could continue its journey. At last some New Zealand Divisional Postal Unit and ASC vehicles appeared. Quickly

Wilkinson arranged with the officer in charge of the postal unit vehicles to carry his men. The party reached Navplion, in the Peloponnese, in safety and was taken off by naval vessels.

The party which remained at Voula, and which consisted of Second-Lieutenant Hill and about fifteen men, was not so fortunate. It left Voula on the 23rd and arrived finally at Kalamata—or 'Calamity Bay', as it was known to most of the men taken prisoner there—in the south-west of the Peloponnese. Hill then had twenty men. They included Signalman Wrathall, Major Agar's driver, recently discharged from a British general hospital in Athens; and Signalmen Butterworth, Pritchard, ¹⁴ Atkin ¹⁵ and Hartigan from A Section. It is not clear from which place Pritchard, Atkin and Hartigan had reached Kalamata, but they arrived with their wireless truck and set still in perfectly good working order. From D Section were Signalman Drake, ¹⁶ a despatch rider who had been evacuated with a broken wrist, and Signalman Sullivan, 17 who had earned high praise while driving for an artillery officer of the Reinforcement Depot during the rescue operations at Piraeus a few days previously. From J Section was Signalman Miller, 18 the housie magnate, still with his 'Joey Ward' moustache carefully waxed to two slender points, and happily oblivious of the four charges of 'conduct to the prejudice of good order and military discipline' pending against him at Headquarters 4 Brigade.

Of these twenty men with Hill, only two, 'Steamboat' Brown ¹⁹ and Tubby Atkin, were successful in getting aboard the last boat to leave that night for the cruiser lying off shore. This was about half an hour after midnight on the 28th, after German columns had already closed in on the town. The surrender of the troops left in the town and on the beaches took place five hours later, but most of Signals, together with men from other units, took to the hills. Some gave themselves up after a few days to avoid reprisals against Greek civilians who had been warned by the Germans that they would be shot if found 'in the vicinity of enemy troops'. Others held out in the hills for weeks, but ultimately most of them were assembled under German guards at Corinth. On 4

June Second- Lieutenant Hill, together with other New Zealand officers, was taken away from his men and sent to Salonika and thence to Germany.

And so, with the surrender at Kalamata, the Greek campaign came to an end, a campaign which had lasted only three short weeks and in which a small British force with slender resources in equipment had stood against a vastly superior enemy, retiring to stand and fight again and again, until at last it had withdrawn in good order from open and unprotected beaches to the island of Crete.

Against the German formations employed in Greece—three panzer divisions, four infantry divisions, two mountain divisions and an independent brigade—W Force had arrayed only two complete infantry divisions, one British armoured brigade, and a handful of artillery and supply services. The RAF in Greece had been greatly inferior in numbers to the German Air Force, had operated on two fronts, and had also to provide air defence for Piraeus, W Force's only major supply port. In addition, aircraft had been required for the defence of lines of communication and for co-operation with the Royal Navy. The Germans had maintained air superiority throughout the campaign, but there is no doubt whatever that the RAF had done all that it humanly could against crushing odds.

This German superiority in the air had had its effects on morale. In very many cases the effects of bombing and low-flying cannon and machine-gun attacks are moral rather than material, and this is especially the case when ill-disciplined troops come under such attacks. Those units in which discipline is lax cannot stand the acid test of violent and unopposed air attacks. In the greater dispersion required of troops and transport in modern warfare, a greater responsibility falls not only upon junior leaders but also on each individual soldier. Unfortunately many of the lessons inflicted by enemy air attacks in Greece were not absorbed by many of the troops; these lessons were to be learned again, more bitterly and more painfully, in the battle for Crete which was to follow.

Apart from the effect of air attacks on morale, the principal lessons learned by Signals in Greece were chastening. The general standard of army communications was inferior to that of other services, and also, it was suspected, to that of the German Army. One of the main reasons for this may have been that Royal Navy and RAF communications were designed and based of necessity on the use of wireless. The Army, on the other hand, relied primarily on line communications backed up by a comparatively weak wireless organisation, and so ran the risk of almost complete breakdown of communications when lines were damaged by air bombardment and other causes, and also when frequent and unexpected changes occurred in the locations of formations and units. Although wireless provided greater flexibility than line communication, it was found that a greater degree of mobility was essential, especially in operations in mountainous country such as that of Greece. Wireless sets -and wireless vehicles-in most cases were unnecessarily cumbersome and heavy. Even the wireless set No. 11, with its spare batteries and impedimenta, was more than a pack load for three men.

Overhead telephone lines are especially vulnerable to damage by bombing and machine-gun fire from the air. They are also easily visible from the air. On the other hand, ground cables are frequently cut by shellfire and tracked vehicles. If they cannot be buried, or laid and built well away from main routes, they cannot be regarded as reliable means of communication. Alternative means of communication must therefore be provided.

A critical examination of the working of communications in the New Zealand Division during the Greek campaign revealed many weaknesses. While some of these defects were more or less omissions in routine training, or even, in some cases, failure to exercise common sense, others sprang from deeper causes. In the divisional concentration area at Katerini, where 65 miles of cable were laid out on the ground, there was only one case where cable was laid really badly—a hastily laid line in 4 Brigade's area which sustained very severe damage indeed from

passing transport before it was built back from the track along which it lay. In most cases line detachments did not leave their emptied drums on the lines as they proceeded, with the result that when cable had to be taken in quickly no drums were readily available. The practice of recovering empty drums as lines were laid originated in training exercises in the Desert, where bedouin often removed drums, probably under the mistaken impression that they had been abandoned.

In Greece no serious interruptions to communications were caused by the cutting of lines by fifth columnists, although there were several cases in which definite evidence was disclosed that lines had been tampered with.

Some linemen adopted unorthodox methods of building lines and making cable fast. Building lines through villages was often a difficult task. Although villages were avoided as much as possible on a cable route, it was not always possible to do so, and in many cases the use of tracked vehicles to lay cable away from villages would have been necessary.

War equipment scales in cable were not sufficiently elastic. Brigade signal sections, for example, held only ten miles of D Mark III cable, a quantity which in very few cases might have been sufficient in desert operations, but which was quite inadequate to provide lines to all units of a brigade in operations in close country, where the amount of cable laid often represented nearly twice the total air-line distance between brigade headquarters and units. Sections attached to field regiments, with only six miles of D Mark III cable each, had an equally difficult problem. In some locations in Greece field regiments had batteries sited both forward and behind regimental headquarters, with the result that the link line between batteries alone would absorb all the section's cable.

The despised cable-laying apparatus No. 2 found an unexpected popularity in some locations in Greece because of the ease with which it could be used to lay short lines over broken country. It was designed to take No. 1 cable reels, which held only a third of a mile of D Mark III

cable. There was no way in which No. 5 drums, which held one mile of D Mark III cable, could be fitted to this apparatus, so that it was often necessary to transfer cable from drums to the smaller reels.

Drum barrows came in usefully for laying longer lines over country that could not be traversed by cable-laying vehicles. This apparatus consisted of a light, strong, metal frame on which was fitted a mounting to take a square spindle for carrying drums No. 5 or No. 7, the capacity of the latter being two miles of single D Mark VIII cable. The barrow was carried on two light wheels fitted with pneumatic tires, and two men could easily propel it over semi-broken country. There was a number of uses to which the barrow could be put. L Section made a simple modification to one of its barrows to enable spare drums of cable to be carried. J Section fitted a light wooden deck, which enabled a No. 11 wireless set and a spare set of batteries to be carried by two men.

Maintenance of lines in 1941 had not yet been reduced to the art it became during the desert campaigns of 1942. The principal failure in maintenance procedure in Greece lay usually with section commanders and signal office superintendents, who failed to ensure that line parties were despatched promptly from both terminals when faults occurred. Sometimes the delay in the despatch of fault parties was caused by the difficulty which superintendents often had in deciding whether the fault was on the line or in the universal call switchboard. This type of switchboard had many shortcomings, of which the most trying was its instability. If it was adjusted finely for buzzer calling it responded well to all ringing impulses, but it was prone to fall out of adjustment very easily, especially if bombs fell nearby. At battalion terminals, where six-line universal call switchboards were invariably used, a telephone connected across the line side of the board enabled any failure in its adjustment to be detected more easily.

In Greece most formation and unit commanders enjoyed odd moments of optimism, but none of these, it is feared, sprang from their experiences with wireless as a means of communication. In most cases wireless communication was disappointing; in some it was non-existent. This failure was attributed to two main causes: incorrect calibration of sets and the inexperience of operators. Perhaps the latter was the greater cause. Operators did not seem to be able to get the best out of their sets. For one thing, few of them understood the correct adjustment of 'anode tapping' and aerial tuning controls. Others—and this was a graver fault—could not master that nicety of adjustment in the beat frequency oscillator pitch control, which caused a weak signal to penetrate atmospheric and other interference which assailed their receivers. In most cases the calibration of sets supplied from Ordnance was incorrect and, as there was no sub-standard wavemeter on the equipment scale of a divisional signals, little could be done to overcome this difficulty. The rod aerial supplied with the No. 11 wireless set limited its performance considerably; it was found that the use of a halfwave horizontal aerial brought better results. The circuit arrangement which accommodated the output meter of the set, however, was not suitable for use with a half-wave aerial and here again the operator fell into difficulties.

In contrast to these criticisms the general deportment of the men during the campaign deserves more than passing notice. These men, particularly those of B (cable) Section and the despatch riders of D Section, displayed a remarkable appetite for endurance and fortitude. In the brigade and field regiment sections, too, the men bent their energies to the immediate tasks in hand without thought for their own safety or comfort. That is not to say that the men in other but less arduous employment did not measure up to the standards of soldierly demeanour. In Greece there were no recorded instances of any indiscipline among the other ranks of the unit in the presence of the enemy.

¹ Maj-Gen Rt Hon Sir Harold Barrowclough, PC KCMG, CB, DSO and bar, MC, ED, m.i.d., MC (Gk), Legion of Merit (US), Croix de Guerre (Fr); Wellington; born Masterton, 23 Jun 1894; barrister and solicitor; NZ Rifle Bde 1915-19 (CO 4 Bn); wounded 1917; comd 7 NZ Inf Bde in UK, 1940, 6 Bde May 1940-Feb 1942; GOC 2 NZEF in Pacific and GOC 3 NZ Div Aug 1942-Oct 1944; Chief Justice of New Zealand.

- ² L-Cpl L. A. Mutch; born NZ 7 Oct 1907; cable jointer; died 20 May 1946.
- ³ WO II W. J. R. Munro, m.i.d.; Greymouth; born Auckland, 25 Apr 1899; P and T cable jointer.
- ⁴ Sigmn A. C. Martin; born NZ 27 May 1914; lorry driver; died of wounds 19 Apr 1941.
- ⁵ Sigmn C. L. Knight; born NZ 19 Nov 1914; tram conductor; accidentally killed 21 Apr 1941.
- ⁶ Sigmn W. E. Bailey; Awarua; born Onehunga, 28 Nov 1912; taxi driver and farmer.
- ⁷ Brig R. Miles, CBE, DSO and bar, MC, ED, m.i.d.; born Springston, 10 Dec 1892; Regular soldier; NZ Fd Arty 1914-19; CRA 2 NZ Div 1940-41; wounded and p.w. 1 Dec 1941; escaped 29 Mar 1943; died in SpainOct 1943.
- ⁸ Sigmn J. H. G. Fearon; Auckland; born NZ 25 Oct 1915; seaman; wounded 27 Apr 1941.
- ⁹ 2 Lt J. Pye-Smith; Waiouru; born Wellington, 10 Apr 1916; motor mechanic; now with School of Signals, Army Schools.
- ¹⁰ Lt-Col T. H. E. Oakes, MC and bar, m.i.d.; born England, 24 Mar 1895; Royal Artillery (retd); CO 7 Anti-Tank Regt May-Nov 1941; killed in action 30 Nov 1941.
- ¹¹ WO I T. C. Forrester, m.i.d.; Wellington; born Scotland, 18 May 1908; mechanician.
- Sgt B. E. Fitzgibbon; Lower Hutt; born Wellington, 27 Jan1911; NZ Railways employee.

- ¹³ Sigmn D. C. Hayward; Auckland; born NZ 19 Jun 1919; civil servant; P and T employee.
- ¹⁴ Sigmn S. D. Pritchard; Napier; born Gisborne, 26 Apr 1918; plate layer; p.w. 13 Sep 1941 (on Crete).
- ¹⁵ L-Sgt R. M. Atkin; Wellington; born Westport, 6 Oct 1918; telegraphist; wounded 27 Jun 1942.
- ¹⁶ Sigmn M. D. Drake; Auckland; born NZ 10 Jan 1917; lineman; p.w. Apr 1941.
- ¹⁷ Sigmn T. D. Sullivan; Auckland; born Auckland, 17 May 1911; motor mechanic and driver; wounded and p.w. Apr 1941.
- ¹⁸ Sigmn A. W. Miller; Stoke; born Belfast, 30 Jun 1911; clerk; p.w. 29 Apr 1941
- ¹⁹ L-Sgt H. W. Brown; Auckland; born England, 25 Sep 1915; telegraphist.

DIVISIONAL SIGNALS

CHAPTER 7 — BATTLE FOR CRETE

CHAPTER 7 Battle for Crete

As early as October 1940, on the provocation of Italy's sudden attack on Greece, Crete was occupied by a British garrison sent there to secure Suda Bay as a naval refuelling station in the eastern Mediterranean. Unfortunately for the Allies, however, Crete faced the wrong way, with its three airfields, two harbours and roads all situated on the northern coastal strip. Behind these northern lowlands the country rose gradually into the rugged backbone of the White Mountains, and then fell sharply to the inhospitable south coast, where there were no ports and only primitive tracks and roads.

Crete is a mountainous island about 160 miles long and about 35 miles across at its widest part; it is about 60 miles from the nearest point of Greece, Cape Malea. The capital, Candia (Heraklion), lies about half-way along the northern coast. Forty miles to the west is the town of Retimo, and 25 miles farther west the port of Suda lies snugly in its bay, protected on the north and west by the Akrotiri Peninsula. Of the three small airfields, the nearest to Suda Bay is about 14 miles to the west, near the small village of Maleme. The other two are close to the towns of Heraklion and Retimo, much closer to those places than Maleme is to Suda. Between Maleme and Suda is the small town of Canea, a charming old-world place of narrow cobblestoned streets which wind down to the picturesque harbour, where ancient and massive Venetian buildings line the sea front.

The original garrison of Crete consisted of 14 British Infantry Brigade, fully armed and equipped. The MNBDO (Mobile Naval Base Defence Organisation), with anti-aircraft and coast defence units and a battalion of Royal Marines, did not arrive until mid-May 1941.

The troops who reached Crete from Greece at the end of April were in two main categories: British, New Zealand and Australian troops, numbering in all about 14,000; and Palestinians, Cypriots, and Force and headquarters personnel, numbering about 10,000. Most of this second group were without equipment.

Major-General Freyberg assumed command of Crete on 30 April and set up his headquarters in a quarry on the hillside above Canea.

Of the whole garrison of the island at this time, only 14 Infantry Brigade and the MNBDO were fully equipped; of the remainder only the infantry of the British, New Zealand, and Australian formations were really fit to take part in the island's defence. All other units—artillery, engineers and signals—had lost their weapons and equipment in Greece and were mostly untrained in infantry tactics.

Together with three Greek regiments which had been placed under its command, the Division was entrusted with the defence of Maleme airfield and the vulnerable coastal area from Canea to the west. The defence of the airfields at Heraklion and Retimo fell to British and Australian troops, and the defence of Canea and Suda Bay was allotted to the MNBDO, Rangers, and Northumberland Hussars.

The New Zealand Division's sector stretched from the western limits of Canea along the coast to Maleme. Its depth varied from one and a half miles below Canea to about three miles south-west of Maleme. The southern boundary followed a valley which ran south-west from Canea. It was a pleasant, verdant, rolling countryside that rose gently from the coast to the mountain range which screened the rugged south coast. Road communications throughout the area were poor. There were only three good roads—that which followed the coast from Canea to Maleme, the valley road from Canea south-west to Alikianou, and the road which ran from a rural prison in the valley northwards through Galatas to join the coastal road. Other roads were little better than tracks.

The Division's task was the defence of Maleme airfield and the north coast to the west of Canea against invasion by air or sea. Fifth Brigade, with its headquarters a little less than a mile from Platanias, was deployed for the defence of the area between Ay Marina and the

Tavronitis River just west of Maleme. Fourth Brigade, with the exception of 20 Battalion in divisional reserve, was held in force reserve.

The enemy attack was expected to be a simultaneous airborne and seaborne expedition. Intelligence sources estimated that 3000 to 4000 parachutists or airborne troops would make the first assault, preceded by a heavy bombing attack.

Early in May New Zealand Divisional Signals found itself split into two main groups: one party of seven officers and about 180 other ranks in Crete, and the remainder of the unit with Lieutenant-Colonel Allen in Egypt, where they had been taken direct from Monemvasia in the Peloponnese. Shortly after the first party's arrival in Crete, Major Agar was evacuated to Egypt after injuring an ankle in a fall over a steep bank near Galatas, and the command of New Zealand Signals on the island then fell to Major Grant.

Grant thought that he should press for the return to Egypt of those men of the unit not actually required for communication duties. Signal equipment was very limited and all the signalmen on the island could not be usefully employed on signal duties. Moreover, there was at this time a possibility that a portion of the unit would be used as infantry, which appeared to the Major to be an unsound policy from the point of view of signals organisation as a whole and, because of the possibility of heavy casualties, likely to impair the unit's efficiency for a considerable time. Later, as a result of Grant's representations to Headquarters New Zealand Division, five officers and eighty-five other ranks returned to Egypt.

Late in April, very soon after the unit's arrival in Crete, Grant was asked by Chief Signals Officer of Creforce if he could supply men for Creforce Signals, and also if he would take over the appointment of OC Creforce Signals. After some discussion between the GSO 1 Headquarters New Zealand Division and the BGS Creforce, these requests were agreed to.

Early in March, when the bulk of the island's garrison was in the Suda- Canea area, difficulties were already apparent in the signal situation. The civil telephone system was limited to official use and was mainly taken up by the air observer organisation. Minor lines were used for local administration. The condition of the system was fair, but large numbers of telephone poles required renewal. Lines from Canea to Maleme and from Canea to Heraklion were taken over for military use, as was a submarine cable between Canea and Heraklion. From Heraklion this submarine cable continued around the eastern end of the island and thence to Alexandria, thus providing a secure means of communication to General Headquarters Middle East Forces in Egypt.

Technical stores, however, were almost non-existent, although the telephone line system had been adequately supplemented by field cables. Wireless worked well by day, but communication could not be maintained after 9 p.m. The signals system was, in fact, barely adequate for a static garrison and could not be improved without additional men and material.

With the arrival of an MNBDO signal section early in May some improvement was possible. Canea Area Signals became Force Signals and was formed from men of New Zealand Divisional Signals. As a result 14 Infantry Brigade signals was moved to Heraklion, where the brigade had to provide sector troops. When General Freyberg took over command of the island and New Zealand Signals assumed the responsibilities of Force Signals, the MNBDO took over Suda sector and began work immediately maintaining and repairing the lines in that area. The effect of all this reshuffling was felt in many places and found a faint echo in a plaintive report by CSO Creforce to the Signals Officer-in-Chief at General Headquarters Middle East Forces: 'In the six days that I have been here they have moved headquarters, changed the staff, altered the plan twice, and the resultant chaos is beyond description.'

Two signal units, apart from those sections with 4 and 5 New Zealand Infantry Brigades, were formed on 3 May from New Zealand

Divisional Signals personnel: these were Force Signals and New Zealand Division Signals. Force Signals consisted of fifty men from Divisional Signals under the command of Major Grant, with Lieutenant Ambury as second-in-command, and one officer, six despatch riders, five linemen and twenty-six operators attached from Royal Signals units on the island. Ambury commanded a composite operating, line-maintenance and despatch-rider section. The wireless-telegraphy section was commanded by Lieutenant G. F. B. Grant, of Royal Signals.

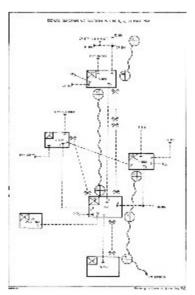
Although Force Signals' transport was very limited—five 8-cwt and 30-cwt trucks and eight motor-cycles—there was a fairly wide variety of signal stores. This equipment included one 10-line universal call switchboard, one 20-line field and fortress switchboard, a quantity of telephones and Fullerphones, one single-current Simplex Morse set, one drum barrow together with a satisfying quantity of D Mark III cable, two 1260-watt charging sets, two Marconi No. 36 wireless transmitters, four wireless sets No. 9, and two wireless sets No. 11. This equipment gave excellent service, particularly the field and fortress switchboard which, because of its rugged construction and design, required very little maintenance. The lack of adequate transport, however, was a severe handicap, especially for the line-maintenance detachment. The wireless set No. 9 detachments were operated by men of the Middlesex Yeomanry, a cavalry regiment recently converted to Royal Signals.

The formations and units served by Creforce Signals were New Zealand Division, 5 New Zealand Infantry Brigade at Platanias, 14 British Infantry Brigade at Heraklion, 52 Anti- Aircraft Regiment, Royal Artillery, at Suda Bay, 19 Australian Infantry Brigade in the Retimo sector, 1 Welch Regiment in Force Reserve, and the MNBDO at Suda.

New Zealand Division Signals consisted of forty-two men under the command of Captain Pryor, with Second-Lieutenant Foubister as his second-in-command. Later, however, Foubister became sick and was evacuated to Egypt, his place being taken by Lieutenant Froude.

There was a grave shortage of signal equipment in the Division,

despite the considerable quantities of telephones and other signal stores which some units had contrived to bring out of Greece. The 28th (Maori) Battalion brought out three No. 18 wireless sets, and these were used within 5 Brigade during the battle for Maleme airfield. Other valuable signal stores, which included telephone sets and instrument mechanics' tool kits, were brought out by Sergeant Miller, ¹ of K Section, who was later awarded the BEM for this salvage work.



SIGNAL DIAGRAM NZ DIVISION IN CRETE, c. 22 MAY 1941

CSO Creforce provided some cable, a few drum barrows, and some telephones and switchboards. Great difficulty was experienced in laying cable with the one truck lent occasionally by Headquarters New Zealand Division. The permanent allocation of one truck to Divisional Signals was not approved by Divisional Headquarters, despite a strong recommendation by CSO Creforce that this should be done. Later, however, little difficulty was found in obtaining the loan of sufficient transport for cable laying and maintenance.

To supplement the sketchy communications provided by the limited cable and wireless stores available, visual signalling posts were established at Headquarters New Zealand Division, Headquarters 5 Brigade, and at Russell Force, which was a small unit made up from detachments of Divisional Cavalry and NZASC. Because of the broken nature of the country in some parts of the divisional sector, particularly

in the area west of Galatas, relay visual posts were set up between Headquarters New Zealand Division and Headquarters 5 Brigade at Platanias. There was also a visual link between Divisional Headquarters and Creforce Headquarters at Canea. On all visual links except that to Creforce daylight signalling lamps were used, but communication could hardly be described as satisfactory. Test messages took an inordinately long time to pass between terminals during daylight, and this delay was ascribed to the lack of suitable backgrounds for the visual sites, and during operations to the fear that the flash of the heliographs or lamps would be detected by low-flying enemy aircraft. The real cause, however, might have been an almost complete lack of training in visual signalling, which was regarded by some as a primitive means of communication, despite the conspicuous success with which it was used by the Royal Navy. On the heliograph link to Headquarters Creforce test calls were exchanged satisfactorily, but this means of communication was later rendered quite useless by the pall of smoke which drifted over the area from burning ships in Suda Bay.

Gradually, as the days passed into mid-May, the communications system in the divisional sector was built up as small quantities of equipment became available and were carefully apportioned out to brigade signal sections according to their more urgent needs. There were two lines to Headquarters 5 Brigade at Platanias and two to Headquarters 4 Brigade in its Force Reserve position two miles west of Canea. There was, however, only one line to Headquarters Creforce at Canea, but Force Signals operated the control station of a wireless net with terminals at Headquarters New Zealand Division, Headquarters 4 Brigade, and Headquarters 19 Australian Brigade at Retimo. Wireless communications between Divisional Headquarters and Headquarters 5 Brigade at Platanias consisted of two No. 11 wireless sets on a 'one-to-one' link. There was also a line from Divisional Headquarters to Russell Force.

In 4 Brigade communications were very slender, there being no equipment except one six-line universal call switchboard, fewer than

half a dozen telephones, two Fullerphones and a few miles of D Mark III cable. The only wireless was the No. 9 set working on the Creforce net. This set, which had been transferred to 4 Brigade from 5 Brigade on 13 May, was operated by a detachment of Middlesex Yeomanry, whose quietly efficient methods of station discipline and procedure excited the grudging admiration of the J Section men. Before J Section received its six-line switchboard all lines coming in to Headquarters 4 Brigade were connected through by means of empty cartridge cases, one of which was secured to the end of each cable. At the 'exchange' all lines were joined together and connected to a telephone. When the operator received a call he identified the caller and joined him through to the wanted line by jamming the two cartridge cases tightly together.

Besides the operation of their slender communications to 18 and 19 Battalions and to 6 Field Ambulance, which was established in the brigade area, J Section had a number of general duties in Brigade Headquarters. Part of the section was organised into a sub-section which was employed with men of the brigade transport section and 11 LAD on infantry duties for the protection of the headquarters' area.

On 13 May 20 Battalion moved from its position near Galatas to the junction of the main coast road and the valley road just west of Canea, where it came into divisional reserve. The 19th Battalion remained in the Galatas- Karatsos area and was then the only battalion of the brigade west of Brigade Headquarters. Next day Divisional Headquarters moved from Galatas to a new position on the valley road near its junction with the main coast road. J Section readjusted the battalion lines and, to conserve cable, placed Divisional Headquarters and 20 Battalion on one circuit.

A few days later Second-Lieutenant Hultquist and five men marched out from J Section to form the nucleus of a brigade signal section for the newly formed 10 Composite Infantry Brigade. The remainder of the men for this section came from the signallers of 1 Platoon of Headquarters Company, 20 Battalion. This new signal section had enough cable to reach all battalions of the brigade, but had no wireless

sets and no reserves of signal stores.

At Headquarters 5 Brigade, in the Maleme area, K Section was trying to provide some sort of communications system. Fifth Brigade had been established in this area since the end of April with the task of defending Maleme airfield. The 22nd Battalion was in position on and south of the airfield, with its headquarters at Pirgos, on the main road just east of the airfield. Two lines ran back to Headquarters 5 Brigade and formed the principal means of communication. There was also a wireless link provided by two No. 18 sets, two of those brought from Greece by the Maori Battalion. Two lines were run to the Maori Battalion at Platanias, a short distance south of Brigade Headquarters. From 21 Battalion and 27 Battery of 5 Field Regiment, near Kondomari, single lines were teedin to one of the 5 Brigade- 22 Battalion circuits. The 23rd Battalion, at Dhaskaliana, was also teed-in to this circuit and to the second 5 Brigade- 22 Battalion line. This arrangement of five terminals on one of the circuits running forward to 22 Battalion and two on the other was an unusual set-up for a brigade's line-communication system, but it was the best that could be accomplished with the severely limited equipment available. From Headquarters 5 Brigade there was also a line running forward to Modhion, where a detachment of New Zealand Engineers was deployed in an infantry role. Two field cables ran back to Headquarters New Zealand Division near Canea. A No. 9 wireless set detachment manned by Royal Signals of Middlesex Yeomanry provided communication to Headquarters Creforce. This detachment was transferred to Headquarters 4 Brigade on 13 May. It was replaced at Headquarters 5 Brigade by a No. 11 set operated by K Section operators working back on a 'one-to-one' link to Headquarters New Zealand Division.

The German attack was expected at first to come between 14 and 17 May, but Intelligence reports later fixed the day as the 19th. That day, however, passed without incident, except for the constant air attacks which had almost come to be accepted as part of the day's normal occasions.

The morning of 20 May broke fine and mild, and shortly after dawn the usual enemy attacks on the Maleme area brought the now familiar uproar from the airfield's anti-aircraft defences—the frantic jig of the multiple pom-poms, punctuated by the angry barks of the heavier guns and the stutter of aircraft cannon and machine-gun fire. At frequent intervals shattering 'crumps' tore the air as bombers roared in and discharged their loads. At 8 a.m. there was a sudden increase in enemy air activity over the whole of the divisional sector. Fighters swept in low over the olive groves, lashing the ground in criss-cross patterns with vicious machine-gun fire, and bombers appeared in greatly increased numbers. The ground shook to the blast of heavy bombs, which erupted all over the area, flinging earth and dust high in the air.

The defenders seized their arms and crouched in their trenches, alert to catch the first sight of the expected German transport armada, the unmistakable Ju52s. For thirty-five minutes the fury crashed and resounded about their ears. Suddenly, a new sound superimposed itself on the awful din —a low droning which gradually increased in volume as a vast fleet of aircraft approached the coast. The big transports in their hundreds lumbered in, tier on tier, presenting a magnificent spectacle. Presently, in a wide turn over the coastal area, they discharged their human loads. Each Ju52 appeared to drop eight to ten men. First the little black dots dropped, one by one, from beneath the aircraft. Then there were little flutters as the parachutes opened slowly and suddenly blossomed into monstrous mushrooms in the morning sky. The little black dots swinging at the end of the tracery suspended

Capt C. A. Borman and Lt A. G. Hultquist on Servia Pass



Capt C. A. Borman and Lt A. G. Hultquist on Servia Pass

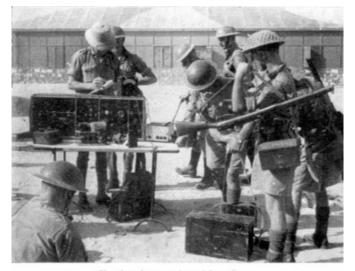


Bivouac near Olympus pass



M Section battery-charging truck near Tirnavos

M Section battery-charging truck near Tirnavos



Signal equipment salvaged from Greece

Signal equipment salvaged from Greece



Mess queue at Galatas

Mess queue at Galatas



At the Church, Galatas

At the Church, Galatas



At Galatas: Lt H. W. Wilkinson, Capt J. Feeney, 2 Lt R. W. Foubister, Capt E. L. J. Marshall

At Galatas: Lt H. W. Wilkinson, Capt J. Feeney, 2 Lt R. W. Foubister, Capt E. L. J. Marshall



Suda Bay after an air raid Suda Bay after an air raid

from the huge canopies developed legs which kicked and thrashed about as the parachutes descended. There was now another sound, a sound nearer at hand. Bren and Vickers guns chattered viciously and rifles cracked sharply as the defenders came into action.

The empty transports were now heading back across the sea away from the island, but other aircraft were above the defenders. These huge shapes glided in noiselessly from where they had been cast off by their towing transports somewhere over the sea. Fifty to a hundred gliders, each carrying ten to twelve men, landed on the river flat west of the Maleme airfield. Three landed on the Akrotiri Peninsula above Force

Headquarters, and four in the prison valley.

Paratroops landed on Maleme airfield and to the east of it, in and about 21 and 23 Battalions' positions. Others came down in the valley near the prison and Lake Aghya and in the area between Galatas and 7 General Hospital, below Headquarters 4 Brigade. Paratroops and glider-borne troops landed at various other points in the Divisional sector, but most of these were quickly mopped up.

The initial effects of the attack on signal communications were very severe. Within a short time of the enemy's landing interruptions occurred on most line circuits. Damage to lines had already been inflicted by bombing, the main circuits being particularly susceptible to disruption from bomb blast, erected as they were in ropes of cable on trees, telephone poles and other supports. The cable circuits laid out on the ground by New Zealand Signals, being in ditches and generally well away from roads, had more protection and suffered little damage from enemy fire. As soon as the paratroops landed, however, all lines attracted attention. The enemy had made a careful study of the island's telephone system by air photographic reconnaissance before the battle. He methodically cut lengths of cable from the lines, coiled them up, and placed them in trees. These methods were part of his plan to put communications out of order temporarily, so that he could restore them quickly when he required to put them to his own use. Orders issued for operation MERCURY, the code-name by which the air assault on Crete was known, directed that telephone lines on all roads and paths were to be cut in such a manner that they could easily be restored, Under no circumstances, stated these orders, was the cutting of lines to be neglected. Other orders, issued by 5 Mountain Division to 1 Parachute Rifle Regiment, indicated the importance the enemy attached to the dislocation of communications. Among five important points to be seized were the terminal of the Canea- Heraklion submarine cable and two wireless stations.

The widespread disruption of signal communications so early in the battle and the incessant attacks by enemy fighter aircraft on any

formations and units, with the result that for some hours Divisional Headquarters' picture of operations was extremely sketchy. Very shortly after the commencement of the heavy bombing attack which heralded the airborne assault, continual interruptions occurred on the line from Divisional Headquarters to Force Headquarters. Sergeant Bateman and his line maintenance party from Force Signals contrived by prodigious efforts to keep the line in working order for several days, but later when Canea (through which the circuit passed) was bombed almost to complete destruction, the line became useless. During the early stages of the battle, when the paratroops and the assault troops landed from gliders in the Canea area had not been completely disposed of, Bateman and his party were caught up in a vicious little brawl between a small party of British soldiers and some paratroops in the spacious gardens of a house east of the town. This line party also found odd opportunities for musketry practice against small groups of paratroops still at large in the olive groves and vineyards in the area through which the forward lines passed. For his work on maintenance of lines in Crete Bateman was awarded the MM.

movement on the roads hampered the despatch of information from

The civil telephone circuits from Force Headquarters to Retimo and Heraklion sustained almost continuous damage, which the Royal Signals detachment responsible for their maintenance could repair for only short intervals. Consequently much of the traffic for these places was passed by wireless and special despatch rider.

Because of the serious dislocations to line circuits over practically the whole of the battle area, the burden of communications fell on wireless. Communication by this means to all formations and units was very reliable. Nets, or groups, were simple, and the ranges over which the sets were required to work were well within the equipment's rated performances. Radio telephony was used extensively, especially between Force Headquarters and New Zealand Divisional Headquarters and Headquarters 5 Brigade. The only difficulty experienced with wireless was caused by the lack of reserve equipment which would have enabled

communication to be maintained without interruption during moves of headquarters.

Wireless communication with General Headquarters Middle East Forces in Cairo was maintained with a Marconi transmitter which had a power output of approximately 100 watts. This set was installed in a small cave hewn from the rock at the top of a 200-foot-high hill overlooking Canea, and was operated by a small section of Divisional Signals serving with Force Signals. It required four 6-volt 125 ampere-hour batteries, each of which weighed about 60 lb. The battery-charging plant, which delivered 50 amperes at 32 volts, was a massive piece of machinery and had to be dismantled before it could be carried up the hill to the station. Most of the batteries supplied for operating the set were new and required initial charges before they could be used. Signalman Cross ² took care of this task, watching over the precious plant for over two days and nights with only brief snatches of sleep.

From an early stage in the battle the proportion of priority traffic handled by all means of communication reached 50 per cent of the total. This was an old problem, with which Signals was now thoroughly familiar, and one which nullified to a very large extent the very object of the priority system. In battle it is impossible to afford high priority to a large proportion of traffic, and as the saturation point is reached the system becomes completely ineffective.

At New Zealand Divisional Headquarters Captain Pryor and his small band battled with the difficulties which confronted them when all line communications began to fail soon after the attack commenced. There was no transport for the linemen except the very occasional use of a truck, motor-cycle or bicycle. During daylight hours long delays occurred in the repair of damaged lines as a result of the constant strafing of roads by fighters.

The despatch riders at Divisional Headquarters were a scratch lot, all having had little or no experience of this work. The despatch-rider letter service was abandoned shortly after the battle began owing to the

difficulty of keeping it running to a timetable, but as most of the traffic to be carried by despatch rider had high priority, the system developed almost automatically and unnoticed into a special despatch-rider service. On several occasions despatch riders were prevented from reaching their destinations by small parties of paratroops who still infested the olive groves in the rear of the main infantry battle east of Maleme and below Galatas. Some despatch riders left their cycles at the roadside and attempted to make their way forward through the olive groves on foot. Some were stopped by enemy troops, and others were forbidden by infantry officers to go further forward. On a number of occasions liaison officers were employed to complete the delivery of messages delayed in this manner.

There was a grave shortage of picks and shovels in the Division, and at Divisional Headquarters the number of tools available was quite inadequate to dig in the signal office, WT sets and battery-charging sets.

It was noticeable that liaison and other officers visiting Divisional Headquarters seldom called at the signals office to pick up messages for their headquarters. On a number of occasions these visitors could have greatly assisted Signals in the delivery of messages. The expeditious delivery of operation orders presented immense difficulties.

From Headquarters 4 Brigade, in its position near 7 General Hospital about two miles west of Canea, paratroops were observed soon after 8.30 a.m. on the first day of the battle descending on the ridge near Karatsos. About half an hour later more paratroops came down in 7 General Hospital's area just below Brigade Headquarters. All available men in the headquarters, including a number from J Section who were not required immediately for signals duties, were disposed for the defence of the headquarters. Very soon afterwards Brigade Headquarters withdrew eastwards about half a mile to a position just south of the main coast road, where Headquarters 18 Battalion was established. Lieutenant-Colonel Gray, ³ dishevelled and grimy but with eager eyes, and still grasping the rifle with which he had personally accounted for eight paratroops, assisted the brigade staff to settle in in his battalion

headquarters' area.

Meanwhile J Section linemen were quickly extending 19 Battalion's line to the new Brigade Headquarters' position and reeling in the now unwanted 18 Battalion line. Very shortly after the attack began communication on 19 Battalion's line was interrupted. It was not restored until the evening, although Signalmen Sinton and Sarjeant 4 spent most of the day repairing breaks caused by bomb blast, machinegun fire, and the attentions of the paratroops.

At the end of the day George Sinton came in to Brigade Headquarters weary to the point of exhaustion, but quietly happy. He and Sarjeant had had a hazardous day working on the line. Every few minutes they had been forced into the cover of olive trees or under road culverts to escape attacks from low-flying aircraft, but from all appearances this was the sort of situation in which George forebore to growl. His usual preoccupation was one of dejected and comical meditation, punctuated by exclamations of foreboding about the unhappy lot of signalmen in general and those in particular who were unfortunately marooned on the island of Crete. Most things fell under George's disapproval—rations, the unpredictable ways of the brigade staff, shortage of equipment, and the lack of something to do. 'You mark my words, Cappy,' George had said to OC J Section a few days before the German attack, 'when the bastards do come we'll be caught with our pants down. Five bloody miles of cable! And nothing to lay it with.' But when the 'bastards' came George was happily content to tramp back and forth along the lines, dodging death by a hair's breadth a dozen times a day. Nor was he tempted to grumble when roused from sleep during the night to go out into the darkness in search of a line fault.

A few parachutists landed in the 7 British General Hospital and 6 New Zealand Field Ambulance areas but before long had been disposed of by parties from 18 and 19 Battalions. Others landed near Galatas and occupied buildings, but the town was cleared shortly after midday. An attack on Galatas from the prison area was repulsed. By now the

divisional area behind Galatas was free of the enemy, except for one or two persistent snipers in the peninsula area above Force Headquarters. Enemy aircraft, however, continued to swarm over the sector, and all line circuits still suffered heavily.

The first day of the battle began in 5 Brigade's area shortly after 6 a.m. with a savage attack by bombers, which dropped about one hundred bombs around the perimeter of Maleme airfield and on the ridge occupied by 22 Battalion. From shortly after eight o'clock hordes of bombers and fighters lashed the ground surrounding the airfield with bombs and intense machine-gun fire. Dense clouds of dust rose into the sky, and under this cover paratroops dropped on to the airfield's defences. A little earlier gliders and transport filled with assault troops had crash-landed in the bed of the Tavronitis River, just west of the airfield, and along the beach to the north of it. Communications failed early in the battle. As soon as the paratroops landed they followed their practice of cutting lengths from cable on the ground, and by nine o'clock there was no telephone communication from Headquarters 5 Brigade to 22 Battalion. The line to 28 (Maori) Battalion, however, which was close to Brigade Headquarters, remained intact for some time. The only means of communication between Brigade Headquarters and 22 Battalion was by No. 18 wireless sets, which opened up at 10.9 a.m., but from 2 p.m., when the sets failed through defective or exhausted batteries, the brigade was almost completely out of touch with events at Maleme, where 22 Battalion fought desperately as the enemy forced it slowly from its positions.

Although the rear line to Divisional Headquarters had failed earlier in the day and had not been restored, Headquarters 5 Brigade continued in communication with the Division by means of the No. 11 wireless set link, but no clear picture of developments at Maleme could be given by the brigade staff owing to the almost complete breakdown of communications forward of Brigade Headquarters. It was not until early next morning, therefore, that Divisional Headquarters learned that 22 Battalion had been forced off the airfield. By this time, too, visual

communications between Headquarters 5 Brigade and Divisional Headquarters had been rendered completely useless by the smoke and dust raised in the sector by continuous air attacks.

During the afternoon the line to 23 Battalion was interrupted, and the Brigade Major (Captain Dawson 5) took a No. 18 set forward in a Bren carrier to restore communications. At this stage the only line still in operation forward of Brigade Headquarters was a portion of the omnibus circuit on which originally Brigade Headquarters, 21, 22 and 23 Battalions, and 27 Battery of 5 Field Regiment were all connected. On what was left of this circuit only 21 and 23 Battalions and 27 Battery were still in communication with each other. The line had been cut just in front of Brigade Headquarters and immediately forward of 23 Battalion, where it continued on to 22 Battalion's former positions at Maleme. The two individual circuits to the New Zealand Engineers' detachment and to the Maori Battalion were still intact. Late that afternoon the No. 18 wireless set which the Brigade Major had earlier taken to 23 Battalion was destroyed by a bomb. That night the Brigade Major went again to 23 Battalion, and because of the absence of any sort of communication from there to the rear, had to make his way over the hills to the Engineers' detachment at Modhion to report to Brigade Headquarters.

A counter-attack on the night of 21-22 May failed to regain possession of the airfield. Details of the plan for this operation could not be passed forward to 21, 22 and 23 Battalions, so were telephoned to the Engineers at Modhion, who were told to make every effort to pass on the information. It was at this stage that the Brigade Major reached the Engineers from 23 Battalion and learned for the first time of the counter-attack. By a curious set of circumstances he had been quite unaware of this important operation, which illustrates what serious consequences can follow a general disruption of signal communications at a critical stage of a battle.

Shortly before midnight on 21 May heavy gunfire was heard out to sea, where the Royal Navy had intercepted an enemy seaborne force. The

detonation of the heavy guns reverberated loudly in the night air, and flares shot aloft to shed a ghostly light over the scene several miles off shore. Very soon fires sprang up far out on the horizon, where transports carrying the enemy troops burned furiously under the Navy's guns. As the action proceeded frantic signals in coloured flares went up from the German troops on the island but theirs was a vain hope; not one of the enemy craft reached the beaches. Next morning there was a noticeable lull in enemy air activity over the divisional sector. The reason was not far to seek. The sound of heavy bombs and naval gunfire told of the savage attack which enemy aircraft were making on ships of the Royal Navy off Cape Spatha.

At 5 p.m. on 22 May Force Headquarters gave orders for another counter-attack at Maleme to wrest possession of the airfield from the enemy. But the Divisional Commander, Brigadier Puttick, apprehensive for the success of this move in view of 5 Brigade's exhaustion and diminishing battle-worthiness after three days' hard fighting without pause, cancelled the plan. Now facing an enemy growing in strength from hour to hour, 5 Brigade was ordered back behind 4 and 10 Brigades' positions around Galatas. A warning order to 5 Brigade from Divisional Headquarters to prepare to withdraw eastwards was transmitted by wireless in clear, but in terms which the enemy could not possibly have understood should he have been listening to the transmissions. Because groups of enemy troops had penetrated north-eastwards towards Galatas from the prison area in the valley and succeeded in reaching the road, the order detailing the various phases by which 5 Brigade was to retire was sent forward by an officer in a Bren carrier. This officer, Captain Pryor, arrived at Headquarters 5 Brigade shortly after midnight on the 22nd. The order came too late, however, to enable the brigade's withdrawal to be completed before daylight on the 23rd.

Meanwhile, in the area around Galatas to the east, south-west and north-west, 10 Composite Brigade continued to hold its positions with only moderate losses. Its communications, however, had been severely disrupted early in the battle. Second-Lieutenant Hultquist and his

composite signal section, made up from J Section men and regimental signallers of 20 Battalion, worked strenuously to restore communications, but the lines were in working order for only brief periods.

The 23rd May was a grey, sunless day. A heavy smoke haze from burning ships in Suda Bay hung over the divisional sector like a sinister pall. By this time Maleme was lost; it became an operational airfield for the enemy within 14 miles of the base installations at Suda Bay.

Moreover, the enemy was now approaching equality in numbers.

The situation at Retimo and Heraklion, where paratroop attacks had also taken place, although on a smaller scale than that at Maleme, was obscure. The Retimo garrison had no cipher, and at Heraklion the high-grade cipher had been destroyed early in the battle to prevent its falling into enemy hands. All despatch-rider and liaison-officer services were interrupted as road communications to both places had been cut by parties of enemy troops. The submarine cable was still undamaged and continued to carry all signal traffic from Force Headquarters to Heraklion, but all signals to Retimo had to be transmitted by WT in clear.

By daylight on 24 May 5 Brigade had completed its withdrawal behind 4 Brigade, which had assimilated 10 Composite Brigade and replaced the Composite Battalion on the right by 18 Battalion. Headquarters 5 Brigade moved into the former position of Headquarters 4 Brigade at 18 Battalion's original battalion headquarters site, a short distance west of the road junction on the western outskirts of Canea. K Section, which was now commanded by Lieutenant McFarlane, who had replaced Lieutenant Frame on 7 May, set up its signal office and exchange and put lines out to the battalions.

As Headquarters 5 Brigade settled in Headquarters 4 Brigade moved forward and was established about half a mile north-east of Karatsos. Lines were adjusted and brought into the new position and the signal office was open for business by 3 p.m. Considerable difficulty was

experienced in taking the No. 9 wireless set forward to the new location. The bulky set, together with its heavy batteries and charging set, was loaded into a 15-cwt truck, which was halted by a huge bomb crater in the middle of the road some distance short of the new headquarters, although the driver made determined efforts to negotiate his vehicle between a deep ditch on the left of the road and the rim of the crater. While this was going on the detachment was machine-gunned by several fighter aircraft. Although the truck was completely disabled, all of the men escaped unscathed into the cover of the ditch. The set, with its equipment, had escaped undamaged and was retrieved from the now useless vehicle and manhandled through the olive groves to the new headquarters, where it was immediately set up and communication quickly re-established with Force Headquarters.

The 19th Battalion was still in position below Karatsos, where it had been since the start of the battle on the 20th. The line to its headquarters was frequently damaged, and it was only through Sinton's tireless patrolling of the circuit that any communication remained at all. Late in the afternoon heavy mortar fire began to fall close to Brigade Headquarters and all circuits sustained additional damage. Sinton, Sarjeant and Fordham 6 worked tirelessly to restore communications, but despite their efforts the breaks became longer and more frequent. These linemen now had another circuit to care for—the line to 18 Battalion, which was in position on the right of the divisional line, about a mile north-west of Galatas. This circuit was that originally put out by Hultquist and his men from Headquarters 10 Brigade to the Composite Battalion, whose position 18 Battalion had taken over.

That night Force Headquarters, less Force Signals, moved back to the Suda Bay area. Considerable difficulty was experienced by Force Signals in handling priority traffic, because all cipher staff had been ordered to move with Force Headquarters, thus separating them entirely from Signals. Force Signals did not move until very early on the 26th, when they rejoined Force Headquarters, which was then at Suda Point. During the move all wireless communications were closed down, but

were immediately reopened when Signals reached Suda Point.

Meanwhile, in the divisional sector, very heavy attacks by low-flying bombers continued. The worst attack, which was directed on Canea and the main road, began shortly after noon on the 25th and continued without pause until 5 p.m. At six o'clock there was another violent divebombing attack, this time on the defences in and around Galatas. This assault was followed by a determined infantry attack against 4 and 10 Brigades, which drove in the right of the divisional line about 400 yards. At 7.15 p.m. there was another heavy air bombardment, followed as before by a strong infantry attack which broke through 18 and Composite Battalions north of Galatas. Fourth Brigade called up 23 Battalion from 5 Brigade's reserve position near Canea to help restore the line.

This arrangement, by which 4 Brigade was able to call on 5 Brigade's units for assistance without reference to Divisional Headquarters, was dictated by the unreliability of signal communications, which in some areas were so badly mauled as to be almost completely useless. In 4 Brigade communications had virtually ceased to exist. The line to 18 Battalion had been damaged beyond repair and that to 19 Battalion, although still in reasonable repair at the Brigade Headquarters end, was torn to shreds where it approached the battalion. The No. 9 wireless set manned by Royal Signals had been put permanently out of action by a mortar-bomb splinter, which whistled between the two operators sitting at the controls and tore a jagged, gaping hole in the front panel.

In 10 Brigade, too, communications were completely disrupted. All lines to units were destroyed and could not be restored despite determined efforts by Hultquist and his men.

In the evening OC J Section (Captain Borman) and about fourteen of his men went forward from Brigade Headquarters with a number of Brigade Headquarters' and other men who were sent up to Galatas to assist in restoring the gap which the enemy attack had torn between 18 and Composite Battalions' positions.

OC J Section and his small party approached the outskirts of Galatas as darkness fell. He was seeking Headquarters 20 Battalion, to which he was to report for instructions. All carried rifles except Corporal Helm, who was armed with a Lewis machine gun and several magazines of ammunition. While they were looking for 20 Battalion they were accosted by an infantry company commander who directed them to a cross-tracks in the olives about a hundred yards or so below the main Galatas road. Here they were to dispose themselves in readiness to meet the next enemy attack which, according to the infantry officer, might carry the eastern outskirts of the village.

At the cross-tracks OC J Section encountered a party of about twelve men led by a harassed-looking subaltern. On seeing these totally unexpected reinforcements OC J Section went up to the subaltern, whose red infantry patches were dimly discernible in the failing light, and said: 'I suppose you are on the same errand as I. What about your taking over and disposing my men too? I'm only a Signals officer and I'm afraid that I don't know much about infantry tactics.'

The subaltern stared for a moment or two and then burst out: 'Only a signals officer! What the hell do you think I am? I'm only a bloody bandmaster!'

The J Section men dissolved into helpless laughter. These men were from the Kiwi Concert Party and 5 Brigade Band, which had arrived from Egypt only ten days before to entertain the troops. When the storm broke they had to put aside their instruments and properties and take rifles in their unaccustomed hands. Nevertheless, for all their inexperience, these entertainers and bandsmen were a welcome addition to the odds and ends of units and headquarters which mustered that night on the outskirts of Galatas to prevent a collapse in the divisional line.

Fortunately for the J Section party, the bandmaster and his men, no enemy came their way that night. A little later the J Section party was recalled to the main road, where it joined a company of 20 Battalion

lining a stone wall on the north- east of the village. During the evening's confusion Corporal Helm, Signalman Tucker, ⁷ one or two others of J Section, and a Brigade Headquarters' despatch rider, Private Press, ⁸ became separated from Borman's party and were caught up in a bayonet attack by 23 Battalion which cleared the enemy out of Galatas. By some means or other these men acquired bayonets for their rifles—normally Signals personnel do not carry bayonets—and joined in the attack which raged through the narrow cobbled streets of the village. In this affray Press, who was armed with a Bren gun, fought a duel single-handed with three Germans in a narrow alleyway. He received severe wounds in the groin and was carried out later by Helm and Tucker to the outskirts of the village, where he was laid on the side of the road to await medical attention. Press became a prisoner that night and was later taken to Greece, where he received attention to his injuries in an Athens hospital.

Later that night Galatas was evacuated in accordance with plans made earlier in the evening; thus the village was not captured by the Germans but merely occupied by them after the New Zealanders withdrew. The J Section party, which had now been joined by Hultquist and his men from 10 Brigade, moved back with the retiring infantry towards Canea. Some time after midnight they reached the old transit camp south of Canea, where OC J Section reported to Lieutenant-Colonel Gray, whom he found there with the remnants of 18 Battalion. At dawn the men moved wearily back towards Suda, in the direction of which Headquarters 4 Brigade had withdrawn during the night. All day on the 26th they marched eastwards, moving from cover to cover under the merciless hammering which enemy aircraft continued to inflict on the roads and olive groves between Canea and Suda. That evening they joined some Royal Marines at an MNBDO camp above Suda, and rested there under the trees for the night. At dawn they continued their march eastwards along the main road, and at midday rejoined Headquarters 4 Brigade at Stilos.

Meanwhile, late on the 25th, 4 Brigade was withdrawn to a line

running north and south along the general line of a stream south-west of Canea. Headquarters 5 Brigade was now established at the old Divisional Headquarters location, one kilometre south-west of the junction of the main coast road and the valley road. Nineteenth Australian Brigade held the left of the line in the vicinity of Perivolia. By this time Divisional Headquarters had moved back to a position about three-quarters of a mile north of the large wireless station in the Canea basin.

At this stage the only communications which existed in the divisional sector were 5 Brigade's lines to its battalions, lines to both 4 and 5 Brigades' headquarters, and to Headquarters 19 Australian Brigade. The wireless link between Headquarters New Zealand Division and Force Headquarters at Suda was still in operation.

By 1 p.m. on 26 May the enemy was exerting strong pressure along the valley road at the junction of the right and left brigades and on the right of 5 Brigade near the coast, and was working around the left of 19 Australian Brigade on the left of the line. The situation continued to deteriorate rapidly and, to avoid the danger of the enemy passing round the left flank and turning north and so effectively cutting off all access to and from the Canea area, Brigadier Puttick made strong representations to Major-General C. E. Weston, commander of the Suda Bay sector, to whose command the Division had now passed, for the withdrawal of both 4 and 5 Brigades to form a new line at the head of Suda Bay. Weston was unable to agree to this plan until he had consulted General Freyberg. As late as 9 p.m. on the 26th, however, nothing had been heard from Weston, so Puttick sent three WT messages to Force Headquarters inquiring if he had arrived and asking for orders. At 10.15 p.m. Force Headquarters replied that the Division was under the command of Major-General Weston, who would issue orders. Weston, however, had been compelled to withdraw from Canea, which was being rapidly destroyed, and the location of his headquarters was unknown. Line communications to 5 Brigade and 19 Australian Brigade were still in operation at this time, and orders continued to be

passed forward from Divisional Headquarters by telephone.

At this stage Puttick decided to withdraw his troops to a new defensive line at the head of Suda Bay. This position was the first in a leapfrog withdrawal in which 5 New Zealand Brigade, 19 Australian Brigade, and the Commandos under Colonel R. E. Laycock took turns in holding the line to cover the retreat of the remainder of General Freyberg's forces to the evacuation beaches on the south coast.

Headquarters 5 Brigade was established about half a mile west of Suda, near a sunken road known as 42nd Street. Here, on the 27th, the headquarters came under heavy mortar fire and K Section sustained a number of casualties. Corporal Melville ⁹ and Signalman Rennie ¹⁰ were killed outright, and Signalmen Wood ¹¹ and Flannery ¹² wounded.

Shortly before midnight on the 26th Divisional Headquarters moved back towards Stilos. Only one vehicle, a 15-cwt truck, was available to carry the equipment of Divisional Headquarters and Signals. On this truck were packed the wireless set No. 9, an assortment of exchanges, telephones and cable, and one or two sick and wounded men who were unable to walk. Unfortunately, owing to the severely limited space available on the truck for signal equipment, the battery-charging set could not be taken.

The lanes and roads were crowded with troops and civilian refugees and, in the darkness of the moonless night, it was impossible for the various groups in Divisional Headquarters to avoid being broken up into small parties. By dawn on the 27th Signals was widely separated, but quickly reassembled as Divisional Headquarters arrived in small parties in the Stilos area. Some men were already showing the effects of insufficient training in route-marching, with the result that there was a considerable increase in the numbers of the lame and the halt. At dusk the headquarters set off on the next stage of the journey to its destination, which all knew by this time was the south coast. All the men's personal equipment except arms was destroyed and abandoned.

The night march was a nightmare for many. The rough metal road wound interminably up through the mountain range; the expected pass through the mountains was always just around the next bend. Overhead enemy planes droned in the darkness, and now and then parachute flares drifted slowly earthwards, shedding an eerie, yellow, flickering light over the column of men struggling painfully towards the south. As the group, exhausted from lack of rest and food, was making heavy work of the journey, each half hour's marching was followed by five minutes' rest. Although a steady pace was maintained during each stage, progress was slow. Men began to straggle behind, and when a well at the roadside was reached, some who had been using their water bottles improvidently joined the throng around it. The well had no bucket or wind- lass and soldiers were lowering into its murky depths empty ration tins, steel helmets, and any sort of receptacle that would hold water. It was some time before all Signals men could be reassembled and the march resumed.

The road grew steeper, and dawn on the 28th, which should have seen the group settled under cover on the southern side of the range, was now approaching. At the next halt some of the Signals group were missing. It was thought that they had fallen asleep by the wayside or dropped out with blistered feet, so the party pushed on, knowing that the route could not be mistaken by any who lagged behind. At 9 a.m. the Divisional Headquarters group reached the outskirts of a village in the Askifou Plain, and the men threw themselves down and fell into an exhausted sleep. After a short rest Captain Pryor went back along the route on a borrowed motor-cycle for some miles to muster the remnants of his party who had been straggling in the rear. In spite of his repeated shouts and calls into the numerous valleys, only one of the stragglers was located. Months later the names of all the others were notified as prisoners of war.

The Divisional Headquarters group lay up under cover all that day and moved on again at sunset, but for only about four miles, which brought it to where 20 Battalion was deployed at the southern exit of the Askifou Plain. The group remained there until late in the afternoon of the 29th, when the Divisional Commander and his GSO 1 (Lieutenant-Colonel Gentry ¹³) left in the Brigadier's staff car for Sfakia, leaving the GSO 2 (Major Davis ¹⁴) in command of the Divisional Headquarters party. About 7 p.m. Davis led his party off on what all believed was the last stage of the march to the beach where they would be taken off in destroyers. But, alas, after many miles the road led abruptly to the edge of a steep, rocky cliff high above the coast. From there a rough mule track wound down for miles. The men hurried, but the track was choked with hundreds of other troops all making their way to the sea.

Soon after the party had commenced its march the previous evening Davis had gone forward on a motor-cycle to a control post at the end of the formed road to make arrangements for the Divisional Headquarters party to proceed straight to the embarkation beach. He was told that unless his party reached the post by 7.30 p.m. it would not be included in that night's lift. He hastened back along the road to meet the party and hurry it along, but it reached the control post long after the stipulated time and was diverted into a large ravine near the village of Komitadhes, which lay about a mile from the coast and two miles east of the embarkation beach at Sfakia. By dawn the party, about 150 all ranks, including Captain Pryor and his Signals, was dispersed under the olives and firs and in the spacious caves which honeycombed the ravine.

Meanwhile, at Force Headquarters, Major Grant and his men continued to maintain what remained of their communications. There were now no line communications of any sort, but wireless was still in use. The Marconi set working to General Headquarters Middle East Forces was in continuous operation, but communication with Divisional Headquarters, whose wireless batteries by this time had failed utterly, was broken. At 8.45 p.m. on the 27th Force Headquarters and Force Signals commenced to move to Sfakia in transport.

By 30 May 4 and 5 Brigades were approaching the beach. Once more the road across the hills to the coast was crowded with troops. Hundreds of stragglers had appeared from rest areas, and officers at the control post above the beach attempted to form them into groups, each of fifty men, and direct them to the ravine at Komitadhes.

Only four destroyers were expected to arrive that night (the 30th) from Alexandria. Two of these ships, however, turned back, the first after a few hours' steaming owing to mechanical trouble, and the second at 3.30 p.m. owing to bomb damage sustained during an attack by aircraft. It had been planned that 3000 to 5000 men would be evacuated that night, but early in the afternoon the Senior Naval Officer at Sfakia informed Force Headquarters that it would be possible to take only 1000. The final arrangements were that 70 from Headquarters 4 Brigade, including J Section Signals, 230 from each battalion of 4 Brigade, and 230 from 28 (Maori) Battalion were to be embarked. At 8.30 p.m. 4 Brigade and the 230 Maoris began to move to the embarkation beach at Sfakia and passed through the check points outside the village. Embarkation commenced a few minutes before midnight.

The marching party of Divisional Headquarters had spent the day of the 30th in the ravine near Komitadhes. There was to be no movement from this area to the beach that night, but Major Davis learned that 1000 troops of 4 Brigade were being taken off from Sfakia, about two miles to the west. He decided to move his party to the barrier there, in the hope that more troops would be taken. He obtained the necessary authority—after some protracted argument—from the movement control officer at Force Headquarters. The latter, however, would grant permission for only 100 officers and men of the party to go. When they reached the control post above the embarkation point they waited for several hours in alternate periods of hope and despair.

Some time after midnight Captain Pryor learned that there was little or no hope of his men being embarked that night, so he took them a little way back along the track to a well, where they drew water with various clumsily fashioned contriv- ances. Pryor was pestered by some of his men for permission to go to another well whose whereabouts they claimed to know. Nursing a faint hope that they might still be taken off

that night, he resisted their importunities for a time and insisted that they remain with him. A little later, however, he relented, and after arranging a rendezvous for the morning, gave them permission to go. Very shortly afterwards he received a message that his party would be embarked if it made haste down to the beach. They set off and clambered onto the landing craft, but Pryor stayed on the beach to make inquiries for those who had gone to the second well. He learned that they had not rejoined the rest of the men, apparently not having heard the summons, so he explained quickly to the beach control officer that he must go and look for them. The beach control officer agreed, but said that unless Pryor had his men back on the beach within a few minutes they would be left behind. Pryor climbed up the track again, but without haste, being resigned to the impossibility of locating his missing men in the darkness among the milling throng that pressed up to the barrier. But by strange good fortune he encountered them at the top of the hill, walking unconcernedly towards the barrier looking for their fellows. Urged on by Pryor, they stumbled blindly down the steep rock-strewn slope, risking their limbs at every bound, and arrived at the beach breathless and almost exhausted by their headlong flight, just as the landing craft was about to shove off.

Shortly before 3 a.m. on the 31st the two destroyers *Napier* and *Nizam* sailed for Alexandria. At 9 a.m. they were attacked by a formation of aircraft, and the *Napier* sustained some damage from a large bomb which exploded close to her quarter and temporarily put one of her engines out of order. Repairs were quickly effected, however, and the voyage was resumed. The two ships reached Alexandria about 7 p.m. and the troops disembarked and were taken to Amiriya transit camp.

Meanwhile, Force Signals, under Major Grant, had embarked on the night of the 29th. Some men were required to remain behind to operate the Marconi wireless set to provide communication to General Headquarters Middle East Forces for the rearguard, which was now under the command of Major- General Weston. Grant had a difficult task in deciding who was to remain. Eventually he directed that it would be a

detachment of Middlesex Yeomanry, augmented by two New Zealanders, Lance-Corporal Browne ¹⁵ and Signalman Cross, to look after the battery-charging equipment and service the installation. The rest of Force Headquarters Signals embarked in the early hours of the 30th and reached Alexandria safely.

Fifth Brigade, consisting of 21, 22 and 23 Battalions, a portion of 28 (Maori) Battalion, and some remnants of 4 Brigade, was the only New Zealand formation remaining on the island after the embarkation of 4 Brigade and Divisional Headquarters on the night of 30-31 May. Small groups of other units, however, were gathered with the stragglers in the ravine and caves at Komitadhes. These were members of small detachments, many of which had fought gallantly alongside infantry units at Maleme and Galatas. When the enemy advance swept eastwards in the closing stages of the battle and engulfed Canea and the base installations at Suda Bay, they had joined in the general retreat to the south coast. Because they belonged to no specific field formation, and often because they had no cohesion and no officer to lead them, they were caught up in the disorderly mass of stragglers which haunted the Komitadhes ravine.

The last lift which the Navy could attempt was on the night of 31 May-1 June. In all, 5 Brigade had 1100 men still to be taken off. Early in the evening of the 31st the outlying pickets which Brigadier Hargest had placed around Sfakia to prevent stragglers breaking through to the embarkation beach were withdrawn, and at 9.15 p.m. the battalions marched to Sfakia. About an hour later the three landing craft which had been hidden along the coast in coves and inlets from the searching eyes of enemy aircraft appeared and took the first men of the brigade to the ships lying off in the darkness. Embarkation was completed about 3 a.m. and the ships sailed for Alexandria, which was reached without incident on the evening of 1 June.

The battle for Crete is the story of a gallant fight against tremendous odds. Men, barely recovered from the blows which a superior enemy had dealt them on the battlefields of Greece scarcely a month before, and without the modern machines of war, fought stubbornly against an enemy aided by the greatest air armada the war had seen at that time. General Freyberg, Commander-in-Chief Crete, ended his report on the battle with these words:

The story I have told is an epic; one that will be told in many ways and will be retold many times. There will be charges of disorganization, shortages of equipment, of warlike stores, of food and, at the last, water itself. It will be said that there was a lack of control and often no orders. These charges are admitted. Despite the difficulties that faced us, I would not for one moment attempt to prove that the order to hold Crete was a wrong one. It was right and we knew it

None knew better than Signals that there was lack of control and often no orders. Nor did any know better than Signals that the island's communication system was built up from nothing into an extensive network of lines and wireless communications in three short weeks. Any impartial examination cannot but reflect credit on those who had the direction of signals communication at Force Headquarters and Divisional Headquarters, and who had the assistance of intrepid men like Bateman, Tweeddale, Laurie, Blair, ¹⁶ Horne, ¹⁷ Sinton, Baker, ¹⁸ Provan, ¹⁹ and many others who would be mentioned in this story if space permitted.

Signals casualties in Crete were heavy. The first was Signalman Davies, ²⁰ who died in 7 British General Hospital near Canea on 30 April from wounds received in Greece. There were two killed, eight wounded (of whom four became prisoners of war), two missing, and twenty-seven prisoners of war. Of those who were taken prisoner, a few escaped and reached Egypt safely months later. Perhaps the most notable of these escapes was that of Signalman Shirley, ²¹ of J Section, who spent several weeks living among the Cretan villagers in the mountains on the frugal fare which the villagers brought to him and his companions from their own scant stores. From time to time, as they moved from village to village in the wild mountain region, they fell in with other parties of

escapers, all bent on reaching the south coast, from the seaside villages of which strange but persistent rumours reached them at times of rescue parties landing and combing the beaches and their neighbourhood at night for Allied fugitives. Eventually they reached the coast, where they lurked under cover above the beach for some time, sallying forth at night to search for a boat in which they might attempt the voyage to the Egyptian coast. After several fruitless weeks spent in this fashion, they were taken one night by some Cretan villagers to a rendezvous with a Royal Naval party, which took them to a submarine lying off the coast in the darkness.

Another determined and successful bid to escape from the island was made by Signalman Fletcher, ²² who was among those taken prisoner at Sfakia on 1 June. During his three weeks' stay in the prison camp near Galatas Fletcher, like his fellow prisoners, received no regular meals from his German captors, so one night, with a companion, Private Whitfield, ²³ he slipped through the wire and sheltered with some civilian friends at Galatas. Some time later they left Galatas and took refuge in a cave near the village of Milonyinah, where they lived on tomatoes, potatoes, and onions given them by the villagers. While they were here, Signalman Black, ²⁴ who had joined them, began to suffer from festered sores on his legs. Fletcher and Whitfield took Black back to the prison camp where, however, he received no attention from the Germans, so might just as well have remained at large. Conditions in the camp were now a little better than when Fletcher had first escaped, but deteriorated again in November. Two months later the prisoners were transferred to a compound at Suda Bay, where conditions were much worse than they had ever been at Galatas. One night Fletcher and Whitfield, together with Driver Fitzsimmons, ²⁵ cut their way through the wire and succeeded in reaching a village called Kondopolis in the hills, where they were fed by the villagers, although not with the same ease as at Milonyinah, as the place was swarming with Germans. They moved on after a time, living for several months on snails, grass and sparrows, and gradually made their way towards the coast, where eventually they were able to steal a small boat in which they set out to

sail to Egypt. The small craft was picked up by a patrol boat off Bardia, and the three men were taken back to Maadi Camp in British transport.

- ² L-Cpl A. E. Cross, m.i.d.; Auckland; born Auckland, 1 Jun 1911; diesel engineer; p.w. 1 Jun 1941; repatriated 1943.
- ³ Brig J. R. Gray, ED, m.i.d.; born Wellington, 7 Aug 1900; barrister and solicitor; CO 18 Bn Sep 1939–Nov 1941, Mar-Jun 1942; commanded 4 Bde 29 Jun-5 Jul 1942; killed in action 5 Jul 1942.
- ⁴ Sigmn R. L. Sarjeant; born NZ 14 Jul 1910; lineman; killed in action 27 Jun 1942.
- ⁵ Lt-Col R. B. Dawson, DSO, m.i.d.; Lower Hutt, born Rotorua, 21 Jul 1916; Regular soldier; BM 5 Bde May-Sep 1941, Jan-Jun 1942; BM 6 Bde 1942-43; Senior Tactics Instructor, Royal Military College, Duntroon, 1943-46; CO 3 Bn, 2 NZEF, Japan 1947-48; Director of Staff Duties, Army HQ, 1949-52.
- ⁶ L-Sgt J. S. Fordham; Tokirima, Taranaki; born Wanganui, 24 Jul 1916; farm labourer.
- ⁷ Sgt A. R. Tucker; Wellington; born Palmerston North, 21 Jun 1915; telegraphist.
- ⁸ Cpl F. G. Press; Upper Hutt; born England, 3 Mar 1918; panel beater; wounded and p.w. 25 May 1941.
- ⁹ Cpl J. D. Melville; projectionist; killed in action 27 May 1941.
- 10 Sigmn J. P. Rennie; born Raurimu, 4 Jun 1907; bridge worker;

¹ Sgt R. E. E. Miller, BEM; Pokeno; born Kurow, 8 Oct 1906; electrical and mechanical engineer; wounded and p.w. May 1941.

killed in action 27 May 1941.

- ¹¹ Sigmn T. R. H. Wood; Dunedin; born Milton, 29 May 1917; telegraph lineman; wounded 27 May 1941; p.w. 28 May 1941; repatriated 1943.
- ¹² Sgt J. W. T. Flannery; Napier; born NZ 9 Apr 1908; clerk; wounded 27 May 1941.
- ¹³ Maj-Gen W. G. Gentry, CB, CBE, DSO and bar, m.i.d., MC (Gk), Bronze Star (US); Lower Hutt; born London, 20 Feb 1899; Regular soldier; commanded 6 Bde Sep 1942-Apr 1943; DCGS (in NZ) 1943-44; commanded NZ Troops in Egypt, 6 NZ Div, and NZ Maadi Camp, Aug 1944-Feb 1945; commanded 9 Bde (Italy) 1945; DCGS 1946-47; AG 1949-52; CGS 1 Apr 1952-.
- ¹⁴ Lt-Col F. L. H. Davis, m.i.d.; Burnham MC; born Feilding, 23 Jan 1909; Regular soldier; CO 29 Bn 3 NZ Div, 1943-44; wounded, Italy, 15 Apr 1945; Camp Commandant, Burnham MC.
- ¹⁵ Cpl F. A. Browne; Wellington; born Litchfield, England, 13 Aug 1910; radio serviceman; p.w. 6 Jun 1941.
- ¹⁶ WO II R. Blair; Lower Hutt; born New Plymouth, 7 Jun 1904; telegraphist.
- ¹⁷ Cpl A. P. Horne, MM; Victoria, British Columbia; born Scotland, 25 Jun 1899; lineman; p.w. Jun 1941.
- ¹⁸ Capt R. A. Baker, MC, EM, m.i.d.; Dunedin; born Dunedin, 31 May 1913; optician; OC F Sec Sigs Sep 1942-Apr 1943, H Sec May-Dec 1943.
- ¹⁹ L-Cpl A. W. Provan, m.i.d.; Wellington; born Port Glasgow, Scotland, 21 Jun 1908; mercery buyer; wounded 27 Jun 1942.

- ²⁰ Sigmn G. T. Davies; born Auckland, 28 Jan 1917; lorry driver; died of wounds 30 Apr 1941.
- ²¹ L-Sgt C. S. Shirley; Whangamomona; born Invercargill, 1 Mar 1914; telegraphist; p.w. 1 Jun 1941; escaped 26 Jun 1941; p.w. 15 Jul 1942.
- ²² Sigmn J. D. H. Fletcher; Upper Hutt; born Milton, 20 Jan 1918; railway cadet clerk; p.w. 1 Jun 1941; escaped 2 Jan 1942.
- ²³ Pte J. W. Whitfield; Dunedin; born England, 12 Feb 1915; labourer; wounded 19 Apr 1941; p.w. 1 Jun 1941; escaped 1942.
- ²⁴ Sigmn T. G. Black; Gore; born Pareora, 1 Mar 1915; exchange clerk; p.w. 1 Jun 1941; escaped 6 Jun 1941; recaptured Dec 1941.
- ²⁵ Dvr R. J. Fitzsimmons; born NZ 28 Mar 1904; labourer; p.w. 1 Jun 1941; escaped 1942; died 6 Jan 1946.

DIVISIONAL SIGNALS

CHAPTER 8 — RETURN TO EGYPT

CHAPTER 8 Return to Egypt

T HOSE men of Divisional Signals who had returned direct to Egypt from Greece occupied the old unit area in Helwan and settled down to await whatever might turn up to relieve their enforced inactivity, denuded as they were of all transport and equipment except what Lieutenant-Colonel Allen had contrived to bring away from Monemvasia. There was some restriction on daily leave because of the unsettled political situation in Egypt and the presence of enemy troops on the Libyan frontier, where Germans, who a short time before had made their first appearance in the Middle East, were now concentrated in Cyrenaica, confronting the slender British garrison which had been shorn of its strength to provide substance for the expedition to Greece. Most units in Helwan Camp, including Divisional Signals, were required to mount pickets of approximately a third of their strength for daily tours of duty of twenty-four hours.

L Section disembarked with Headquarters 6 Brigade at Port Said on 2 May and went immediately to El Tahig Camp. Three days later they entrained for Helwan and reached the camp at midnight on the 5th.

Details of establishments for ancillary units of the newly formed 14 Light Anti-Aircraft Regiment were published on 4 May, and these included figures for the signal section, which was to consist of one subaltern, one sergeant, and thirty-one rank and file. Men for the section were to be drawn from the 5th Reinforcements, which arrived in Egypt on 13 May.

Because of the unsettled political situation in Egypt throughout the month, there was a considerable increase in the number of British troops normally employed on internal security duties. New Zealand troops were used to assist British units in the Cairo Area, in the Delta, and in the Canal Zone.

About the middle of the month a party of three officers and two

other ranks from the remainder of the unit in Crete rejoined Signals in Helwan, and a few days later a second party of two officers and eighty-three other ranks arrived. This second party had become separated from the first during its embarkation at Suda Bay and returned to Egypt in another ship.

The last days of May brought many anxious thoughts for those men of the unit who were with the Division in Crete, but the arrival on 1 June of Major Grant and his party, which had been Force Signals on the island, allayed to some extent the fears fostered by reports of the desperate fighting which had taken place in the closing stages of the battle. The next day Captain Pryor and his party, which had been New Zealand Divisional Signals in Crete, arrived. On the same train from Amiriya was J Section, which marched with Headquarters 4 Brigade into its old area at the eastern end of the camp. Lieutenant-Colonel Allen visited J Section very soon after its arrival and spoke to the men. As they jumped off the trucks and gathered around him, he glanced with approval at the odd assortment of rifles, bayonets and German machinecarbines which they carried, and with faint distaste at their unshaven faces.

A few days before, on 28 May, 6 Brigade had moved to Moascar, in the Suez Canal area, and with it went L Section, which almost immediately on its arrival began to receive a considerable quantity of new signal equipment to provide communications within the brigade. Sixth Brigade was to prepare defensive systems against possible enemy airborne attacks on Kantara, Ismailia and Suez.

On 9 June men of the recently formed 14 Light Anti-Aircraft Regiment Signal Section, who were mainly from the newly arrived 5th Reinforcements, marched into Divisional Signals for training. They were followed on the 14th by F and H Sections, and later by C, J and K Sections. E and G Sections did not join Divisional Signals until after it had moved to Maadi Camp on the 26th. This convergence of sections at the headquarters of the unit was the result of a training directive issued earlier in the month by Headquarters New Zealand Division, which

stated that, because of the shortage of signal equipment and the large number of reinforcements to be absorbed into the unit and trained, the whole of Signals should be concentrated under the Commander Divisional Signals in one camp area for a period of intensive training.

On 29 June the whole of Divisional Signals, except L Section at Moascar, assembled for its first complete muster parade. It was a proud moment for Lieutenant-Colonel Allen. He inspected each section in turn and then addressed the parade, announcing that a comprehensive programme of training was to commence on the morrow and would continue for four weeks. This programme was very thorough. It was midsummer and U Area, at the north-eastern end of the camp, was probably the least pleasant part of the whole camp, so that the training scheme was hardly popular with the men. Each day started at 5.30 a.m. with a period of infantry training. As the season advanced these early morning periods became darker and darker, so that towards the end of July there was considerably more light from the moon than there was daylight.

The men were put through their infantry drill by selected section officers, some of whom had been instructors of the New Zealand Permanent Staff before the war. In another part of the area all officers above the rank of lieutenant were assembled under Lieutenant-Colonel Allen for instruction in the intricacies of company drill. But for the Colonel's determination and the steely glint in his eye that boded ill for any hint of unseemly levity, these company drill parades would have been hilariously funny. Each platoon, or section, was represented by two signalmen who held a piece of string the length of the front rank of a platoon. There were two of these 'string' platoons and the string-holders were manoeuvred to represent a platoon in line or in column of threes. The officers were then given 'appointments' ranging from company commander down to platoon sergeant, and were required, according to the Colonel's directions, to move the two platoons about in the various stages of company drill. Some officers wove the two platoons into unbelievable tangles, whereupon the Colonel expressed his disgust in

brief and well chosen phrases. The signalmen who held the strings barely restrained their eagerness to rush back to their lines and tell their tent mates how the officers had flinched under the Old Man's terse and biting comments.

The programme of training ended on 24 July with a ceremonial parade inspected and reviewed by Major-General Freyberg on the hockey ground at the Maadi Sporting Club. Altogether, seventeen officers and 270 other ranks, including twenty-five from L Section who travelled from Moascar for the occasion, took part. The proceedings opened with a general salute as the GOC and the official party entered the ground. After the GOC had inspected the parade he presented decorations to two officers and one signalman. Major Agar received the OBE, Captain Smith the MBE, and Signalman Mundy the MM. All three awards were for services performed in the Libyan campaign of 1940.

An interesting notice in routine orders on the 26th announced that the sum of £820 Hs sterling had been contributed by units of the New Zealand Division to the Royal Naval Welfare Fund. The money, of which Divisional Signals had subscribed £23, represented the appreciation felt by all ranks of the Division for the work of the Royal Navy during the evacuations from Greece and Crete.

In November 1940, when the Division first moved to Helwan Camp, the responsibility for the administration of Maadi Camp and the training of reinforcements devolved upon Headquarters 2 NZEF Base. The Composite Training Depot was formed on 9 December and was commanded by Major Carruth, ¹ an officer of the Divisional Cavalry, who had for his second-in-command Captain Vincent, Divisional Signals' first adjutant. Although Vincent was second-in-command of the depot, which was responsible for the training of reinforcement drafts from New Zealand, his immediate responsibilities lay with the Signal Training Company of the depot.

From these modest beginnings there grew up gradually a signals training organisation which, in March 1941, became the Signal School

Base. The staff and training equipment of the Signal Training Company were transferred to the new school, whose first commander was Captain Vincent. Its strength at its inception was fifty-four all ranks and it occupied Area G, at the corner of Russell Terrace and Duigan Road.

The school consisted of a school headquarters and two wings. No. 1 Wing was designed to train up to 100 Divisional Signals reinforcements in wireless, line communication, Morse and switchboard operating, despatch rider and signal office duties, and instrument maintenance. No. 2 Wing performed the same functions for up to 250 regimental signallers at one time.

Captain Vincent was commandant and chief instructor. The appointment of second-in-command and adjutant was held by Captain Dasler, who was seconded from Divisional Signals for six months' tour of duty at the school.

Immediately the school was formed it became also the base camp of New Zealand Corps of Signals. All reinforcements and others of the corps who had not accompanied Divisional Signals to Greece were transferred to the school from the Base Reception Depot for instructional and administrative duties. There were sixty-nine of these troops, and they were given the task of fitting out the new classrooms under the direction of the school staff in preparation for the first twelve weeks' course of instruction.

The school area was well equipped with wooden hutments, roomy structures with concrete floors. Most of these huts were subdivided by central partitions into two compartments, each with separate entrances. Seven rooms were allotted for use as classrooms. The first of these was fitted out as a line and instrument room. On the walls were hung large boards on which were fixed the component parts of all line instruments in use at that time. There were also large wall diagrams depicting instrument circuit arrangements and the correct method of adjusting and manipulating the controls of instruments. Four other rooms, where instruction in Morse operating was to be given, were wired to provide

several sets of Morse keys and headphones at each table. A sixth room was allotted for instruction in wireless and signal procedure. The walls of this room, too, were adorned with charts and diagrams, and several types of wireless sets were arranged on tables along the walls for demonstration purposes. The seventh room was used for general lectures, and in it were arranged a number of demonstration models to assist instructors to teach electricity and magnetism, the tactical employment of a divisional signals in battle, and many other subjects which had a special application to signal communications.

By 27 March the school was ready to begin its first two courses of instruction, one for Divisional Signals and the other for regimental signallers of Divisional Cavalry, artillery regiments and infantry battalions. Each course was of twelve weeks and the subjects taught in both groups covered a wide field. In Morse operating Divisional Signals personnel were expected to attain an operating speed of twenty words a minute before they were considered ready to be posted to the Division. The standard required of regimental signallers was sixteen words a minute. Other classes dealt with signal procedure and the modified forms in which it could be used on stable circuits; the operation and manipulation of the various types of wireless sets and visual signalling equipment, such as the daylight signalling lamp, the heliograph, groundto-air signalling apparatus, and even the humble Morse flag; laying and maintaining field cable and the correct use of terminal equipment such as the six and ten-line universal call switchboards, telephone sets, Fullerphones, and superposing units.

At this early stage in the school's activities no provision had been made for the training of electricians and instrument mechanics, but plans for this most important phase of the school's work were already in preparation.

In U Area, Maadi Camp, where Divisional Signals had fretted impatiently through the last stages of a hot summer in uncomfortable, sand-ridden, tented quarters, the boredom of existence in a base camp was quickly being dispelled by the work of re-equipping the unit for

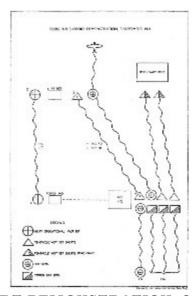
another excursion into the field. By 12 August most sections had received almost their full scale of transport and signal equipment, and a steady flow of reinforcements from Signal School Base had brought most of them up to full strength.

The first section to move out from Divisional Signals was 14 Anti-Aircraft Signal Section which joined the regiment on 5 August. The regiment was then under forty-eight hours' notice to move out from Maadi Camp on internal security duties under the direction of Headquarters British Troops in Egypt. The next move occurred on the 12th, when the OC, one sergeant and twenty-one other ranks of K Section moved out to join Headquarters 5 Brigade at Kabrit, on the Suez Canal, where for several weeks the brigade had been training in combined operations. Three days later Second-Lieutenant Tonge 2 and eight other ranks left to join Lieutenant McFarlane and the rest of the section at Kabrit. On the 15th, too, L Section moved with 6 Brigade from Moascar to Helwan, where the brigade occupied the old 4 Brigade lines. The anti-paratroop defence duties in the Canal Zone, on which 6 Brigade had been employed since late May, were taken over by 5 Brigade the same day. J Section moved out from U Area to Kabrit on the 16th to rejoin 4 Brigade, which was about to commence training in combined operations.

The 27th August was a day of much movement in Divisional Signals, E Section rejoining 4 Field Regiment, F Section 5 Field Regiment, G Section 6 Field Regiment, and H Section 7 Anti- Tank Regiment. The last to leave U Area, C Section, rejoined Divisional Cavalry on the 30th.

Fifth Brigade received orders on 31 August to move to a position about 20 miles south of El Alamein to complete defence works in an area known as Fortress A, which was laid out with battalion defensive positions to the north-west and south. The brigade began the move from Moascar to the Western Desert on 3 September and arrived at Qaret el Abd next day. The signal communications planned for the fortress were very extensive, and all line circuits were to be buried or trenched

throughout their length. Immediately the brigade arrived in the area CSO 10 Corps sent his staff officer, Major Roe, to instruct K Section in the layout of the communications, for which 40 miles of American E cable, two 10-line universal call switchboards, and a number of telephone sets were supplied from Corps Headquarters. The work of preparing the fortress defences and communications continued until 2 October, after which the brigade recommenced training. By this time the work of burying brigade and battalion lines in Fortress A was almost completed, despite the immense difficulty encountered in digging trenches in the rocky ground.



CLOSE AIR SUPPORT DEMONSTRATION, 8 SEPTEMBER 1941

From 4 to 6 September J Section provided communications for 4 Brigade, which was engaged in combined operations training on the Great Bitter Lake. E Section was also employed in these exercises, and in the same period carried out training with 4 Field Regiment in the provision of communications in beach landings. Both E and J Sections arrived in the Western Desert about the middle of the month with 4 Field Regiment and Headquarters 4 Brigade, and occupied positions in the Baggush Box.

Advanced Headquarters New Zealand Division had arrived at Baggush on 13 September. With it was Divisional Signals. The Division's task was to take over the command, care and maintenance of the Baggush Box

from 4 Indian Division and 161 British Infantry Brigade.

On 17 September New Zealand Division, less 5 Brigade, which remained under the operational control of Headquarters British Troops in Egypt, passed from 10 Corps' command to 13 Corps. At midnight on 26-27 September Eighth Army, which officially came into being on 10 September, took over operational command of all troops in the Western Desert. This was announced in an economically worded memorandum from Headquarters British Troops in Egypt, which said: 'HQ WESTERN ARMY is re-designated HQ EIGHTH ARMY. The revised designation will be taken into use as from 27 SEP 41'.

The New Zealand Division came under the direct command of Headquarters Eighth Army on the 28th, but 5 Brigade continued to be under the operational control of Headquarters British Troops in Egypt.

A change of command in Divisional Signals occurred on the 27th, when Lieutenant-Colonel Allen left to command the Central Infantry Training Depot at Maadi Camp, and Major Agar was promoted Lieutenant-Colonel and took command of Divisional Signals. On the eve of his departure from the unit which he had commanded for two years, Colonel Allen published a message in routine orders:

VALEDICTORY

. On relinquishing command of New Zealand Divisional Signals I desire to express my appreciation of the loyal and efficient service of all ranks. The past two years have seen not only the formation of the Unit as part of the New Zealand



Divisional Headquarters' exchange at Galatas

Divisional Headquarters' exchange at Galatas

Outside Creforce Headquarters above Canea, looking west



Outside Creforce Headquarters above Canea, looking west



Leaving Crete

Leaving Crete



Ceremonial parade at Maadi Sporting Club
Ceremonial parade at Maadi Sporting Club



Training and refitting after Crete—a line detachment on exercises

Training and refitting after Crete—a line detachment on exercises

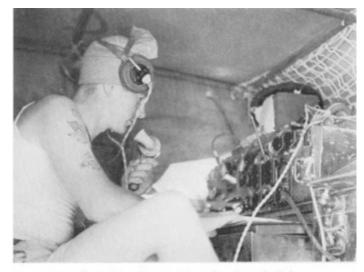


Signal office at a field regiment headquarters in the Second Libyan Campaign

Signal office at a field regiment headquarters in the Second Libyan Campaign



Signal officer's truck destroyed by shellfire, Second Libyan Campaign
Signal officer's truck destroyed by shellfire, Second Libyan Campaign



Operating a No. 19 set inside a signal truck, July 1942

Operating a No. 19 set inside a signal truck, July 1942

Division but also the establishment of its reputation for efficiency and soldierly qualities. This will always be a matter of great pride and satisfaction to me and I express my unqualified thanks to you for this achievement. In handing over command to Lt.-Col. Agar I do so in the certain knowledge that the future of the unit could not be placed in better hands and I know that under his capable leadership and understanding you will maintain and enhance your fine reputation. I will follow your future exploits with a personal interest and pride. In saying good-bye I wish you good luck and God's speed. May you always get through R9s ³ both ways—always.

[Signed] Stanley F. Allen
Lt-Col.
Commanding New Zealand
Divisional Signals.

On 28 September the initial steps, so far as 2 New Zealand Divisional Signals was concerned, were taken in the formation of the air support control signal section which was later to be known as T Air Support Control Section. This section, for which a nucleus of one officer, one sergeant, five corporals and two signalmen-electricians was supplied by Divisional Signals, formed part of an army element which was combined with a somewhat similar RAF organisation. Both operated in unison at the headquarters of the higher army formation fighting the battle.

Second-Lieutenant Foubister, then second-in-command of A (wireless) Section, was appointed to command the new T Air Support Control Section (or T Section, as it was more conveniently known later). With the nucleus of one sergeant—Sergeant Moran, also of A (wireless) Section—and seven other ranks from New Zealand Corps of Signals, the section was built up from regimental signallers undergoing training at Signal School Base.

This new form of signals organisation was introduced because of the need for providing the commanders of forward brigades in battle with a means of calling for air support on targets already selected by tactical reconnaissance aircraft of the RAF.

Direct air support, or defensive support, of troops on the ground employs the principle that all aircraft available for the purpose are used against the most suitable and vulnerable targets during battle. Some of these targets, however, will be outside the range of ground observation and, therefore, will have to be selected by air reconnaissance. The tentacle system used by the army air support control signals organisation was employed as a secondary means by which commanders of formations, usually infantry brigades, could convey quickly to the RAF in the rear their immediate needs in air support. These tentacles

were wireless detachments from air support control sections which the higher commander, usually a corps commander, allotted to those forward brigades he considered most likely to require direct air support. The tentacles worked on a wireless net, of which the control station was sometimes at Army Headquarters but usually at Corps Headquarters.

The method employed by Eighth Army was for a brigade commander in need of immediate air support to pass his request to the rear by a signal written on a special message form designed to reduce transmission time to a minimum. On receipt of the signal at air support control headquarters, the control staff, which included an army representative—usually a GSO 2 delegated by the army or corps commander—accepted or rejected the request according to the suitability of the target, the availability of aircraft, or the urgency of the task. If the request was accepted orders were transmitted direct by the air support control staff by means of RAF rear air support links (RASL) to the landing ground selected to supply aircraft for the task.

Normally, a tentacle on the same group as those operating at brigades was stationed at divisional headquarters to intercept traffic passing between forward brigades and air support control. This enabled the divisional commander to keep a close watch on the extent to which his brigades were being assisted by direct support.

Other wireless sets, netted on a group in the same way as tentacles, were employed at the headquarters of brigades for controlling supporting aircraft in the air and for intercepting wireless reports from tactical reconnaissance aircraft flying over the battlefield. These sets belonged to the RAF component of the air support control organisation and were known as forward air support links (FASL).

The air support control signal section, the army component of the organisation, consisted of seven tentacles and three control sets. The personnel were 1 officer, 1 sergeant and 46 other ranks, who included 2 wireless operators and 1 electrician for each tentacle, and 12 wireless operators, 3 electricians and 3 despatch riders at air support control

headquarters.

The air support control organisation evolved in 1941 was the forerunner of the air support signal units (ASSU) which attained such conspicuous success in the Italian campaign of 1944 and 1945. It is only fair to add, however, that this success was brought about largely by the vastly improved availability of suitable aircraft for direct support purposes. In 1941 RAF resources in aircraft in the Middle East were very slender, and in many cases requests for direct support were declined for the reason that aircraft were not available. But these considerations in no way detract from the very creditable work performed by air support control signals at that time.

Fifth Brigade came under the command of Eighth Army on 5 October. It had recommenced training three days earlier, after its labours on the preparation of the Fortress A defences, and rejoined the Division at Baggush on the 6th.

Early in October Divisional Signals was engrossed with the unfamiliar details of the new call-sign procedure which had recently been introduced in the Middle East, and which was to replace the old system of designating the headquarters of formations and units with four-letter code-names. The new procedure employed combinations of letters arranged in groups of three taken from a call-sign book which contained several thousand of these three-letter groups, each of which was different from any other. The procedure was designed to enable all call signs in use to be changed daily at a prearranged time. The task of studying the new procedure and instructing signal office staff and wireless operators in its use was entrusted to Second-Lieutenant Stevenson, of D (operating) Section, who was also to lecture staff officers at Divisional Headquarters in the use of another recently introduced security measure, the new radio-telephony code. As both procedures were to be brought into use on 16 October, a great deal of intensive study and instruction had to be crammed into two weeks to ensure that all concerned were reasonably proficient in their use.

A new war establishment for an infantry divisional signals made its appearance in October, although General Headquarters Middle East stipulated that it was not to be taken into use immediately. Its most interesting feature was the increase in the number of wireless sets held by A (wireless) Section, infantry brigade signal sections, and field regiment signal sections. In A Section, four of its No. 11 sets were replaced by No. 9 sets, and an additional No. 9 set was provided for use as a rear link to Corps Headquarters. Three of the new No. 9 sets were included in the establishments of infantry brigade sections to provide a more reliable rear link to Divisional Headquarters than the No. 11 HP (high power) sets then in use for that purpose were capable of giving. The new establishment, however, like the quartermaster's ledger, had a debit side too. The number of detachments in B (cable) Section was reduced arbitrarily from three to two and, according to Lieutenant-Colonel Agar's interpretation, lowered the amount of field cable authorised to be carried by the section from 96 miles to 56. The Colonel's reaction to this drastic curtailment of the unit's cable resources was strong and immediate, and when the establishment was brought into use, a satisfactory compromise had been reached with General Headquarters Middle East Forces. Although, at this date, the new establishment was not authorised for immediate use, Headquarters 2 NZEF was able to arrange for the implementation of that part of it which provided the increase in No. 9 wireless sets, and these were drawn from Headquarters Eighth Army on 25 October.

Earlier in the month (on the 3rd) Second-Lieutenant Foubister and Sergeant Moran had marched in to Signal School Base at Maadi to select from the regimental signallers undergoing training there men for the new T Air Support Control Section. By the 8th they had begun training at General Headquarters Troops Royal Signals, at Mena Camp, with each of their ten wireless sets No. 9 fitted into a 15-cwt truck. Six days later Foubister tried out his men on a wireless exercise. Although the new section, with the exception of the sergeant, two other NCOs and an electrician from A (wireless) Section, were drawn from the 5th and 6th Reinforcements and had had little or no experience with wireless, the

results of this first exercise were gratifying.

The section left Mena Camp on the 16th and made its way to the Western Desert, where it was to come under the command of 13 Corps. On the 18th it bivouacked in a position near the main road about three miles east of Qasaba and immediately recommenced training.

Major Vincent, CO Signal School Base, arrived at Baggush on 25 October on a farewell visit to Divisional Signals. He was shortly to return to New Zealand to take up a training appointment, and this was the last that many of his former charges were to see of him for many a long day. Before he left he was specially charged by Lieutenant-Colonel Agar with the task of injecting some imagination and realism into the training which was to be given signals reinforcements before they left New Zealand for the Middle East. Vincent was succeeded in his command of Signal School Base by Major Grant, who returned to Maadi Camp with him on the 27th.

During October a number of exercises held in the desert south of Baggush were designed to test each brigade in turn in set-piece attacks against prepared 'enemy' positions. These exercises provided first-class training for Signals in divisional-brigade communications, both line and wireless. Their most conspicuous features were the sense of realism they imparted and the insight they gave Signals into battle conditions, which no previous communications exercises had done to such a revealing extent. Towards the end of the month an exercise conducted by Headquarters Eighth Army was held to try out the new air support control signals communications, the new call-sign procedure, and the new RT procedure.

November opened with a programme of intensive wireless training, in which all wireless detachments were to have at least three hours' practice in handling traffic. Lieutenant- Colonel Agar attached considerable importance to this training. Still acutely aware of the disquieting inferiority disclosed in the Division's wireless communications in the Greek campaign, he was resolved that his unit

would be adequately prepared for its signals tasks before the Division took the field again. He had discussed this matter with the GOC, to whom he emphasized the urgency of adequate and properly planned wireless training in readiness for the forthcoming operations. The training included the use of dummy aerials and minimum lengths of rod aerials for communication over short ranges, and practice in the use of ground aerials. A rigid drill for station discipline and control of wireless detachments by signal office superintendents was laid down.

The intensive training exercises of October and the thoroughly practised wireless drills of early November were the harbingers of imminent moves which were to carry the Division westwards into the arid wastes of eastern Cyrenaica to meet the enemy again, this time on terms more equal than those which had turned the scales so decisively in the Germans' favour in the Balkan adventure six months before. Rumour had not been idle in the meantime, but the artistry of her wiles had little scope for expression at that time, when almost every soldier in the Division was able to measure with practised eye the preparations for final 'exercises'.

¹ Lt-Col H. G. Carruth, ED, m.i.d.; Whangarei; born Whangarei, 6 Nov 1895; solicitor; CO Div Cav Feb-Jul 1941, Composite Trg Depot Jul 1941-Apr 1942; wounded Apr 1941.

² Capt J. F. W. Tonge, MBE; Napier; born Nelson, 19 Dec 1912; radio engineer; p.w. 27 Nov 1941.

³ R9 is the maximum on the old scale of signal intensities.

DIVISIONAL SIGNALS

CHAPTER 9 — THE CYRENAICAN OFFENSIVE

CHAPTER 9 The Cyrenaican Offensive

Eighth Army had grown quickly and was now ready to carry the war into Libya. The 7th Armoured Division, with three fresh brigades, was to smash the enemy tank forces and, with the other formations of 30 Corps—1 South African Division and 22 Guards Brigade—was to break through to the garrison of Tobruk. While the German and Italian armoured formations were meeting the assaults of the 500-odd cruiser tanks of 7 Armoured Division, the two infantry formations, 4 Indian Division and 2 New Zealand Division, and 1 Army Tank Brigade—all of 13 Corps—were to isolate and subjugate the frontier forts. The garrison of Tobruk, reinforced with heavy infantry tanks, was to break out to meet the advancing 30 Corps. Far to the south, the Oases Group was to trek across lonely wastelands to capture the oases of Gialo and Augila, on the western fringes of Cyrenaica.

The enemy was disposed in Cyrenaica in four main groups. Around Tobruk were the four divisions of the Italian 21 Corps and one German division. The frontier forts, including Bardia, Sollum, Halfaya and the Omars, were garrisoned by the Italian Savoia Division and two or three German battalions; their fortifications were strong. The third group was the German Afrika Korps, which included the Special Afrika Division—forerunner of the famous 90 Light Division—and two armoured divisions, 15 and 21 Panzer Divisions. The fourth force was the Italian mobile corps— Ariete Armoured Division and Trieste Motorised Division.

The first New Zealand formation to leave Baggush was 5 Brigade, which moved along the bypass road south of Matruh on the morning of 11 November and continued south-westwards to the divisional assembly area, 25 miles along the Siwa track. It was followed next day by 4 Brigade and Divisional Headquarters. Sixth Brigade left on the 13th, and by the evening of that day the whole Division was concentrated in the vicinity of Qaret el Kanayis. The move to the frontier was made by a

succession of day and night marches, entirely unmolested by enemy aircraft, and on the night of 18-19 November the Division passed through the frontier wire and bivouacked a few miles inside Libya.

The Libyan Desert, stretching a thousand miles from the River Nile in the east to the high ground of Tripolitania and the Fezzan in the west, and a thousand miles from the shores of the Mediterranean to the Tibesti Mountains in the south, consists of an arid expanse of desolation in which flat, featureless, sandy wastes alternate with undulating stony plains dotted with low rocky hills and plateaux. Vegetation depends upon rainfall, which occurs annually in the narrow coastal strip but very rarely in the southern wastes, and upon artesian water from the underlying sandstone in the inland oases of Siwa, Kharga, Dakhla, Bahariya, Farafra, and Kufra. Seven hundred miles south of Sollum, Gebel Uweinat rises 6200 feet above sea level and is probably the only place in the inner desert where an oasis depends on rainfall and not on artesian water.

It was not in the inner desert of Libya that the armies fought, however, but along the northern coastal fringe, a mere fraction of the vast expanse of desiccated wilderness and solitude. This fringe, loosely referred to as the Western Desert, is an ideal battleground for mobile armoured forces. From the frontier at Sollum it runs westwards beyond Tobruk and ends in the broken ground at the threshold of Gebel Akhdar, a fertile tableland between the sea and the inner desert. In eastern Cyrenaica, where the battles of November 1941 were fought, the country near the coast rises to the south in a series of low escarpments. Over these broad shelves the surface is hard enough to support all types of vehicles, and this led inevitably to developments in the employment of armour that would have been impossible in close country. Visibility extended to between 3000 and 4000 yards, although heat haze and mirage tended to limit this range. During dust-storms visibility closed down and in strong winds was often less than ten yards.

In the New Zealand Division's area just inside Libya Signals was astir early on 19 November—long before the first light of dawn. Lines to

Advanced Headquarters 13 Corps and to brigade positions had already been put out, and while the linemen ate their breakfast at 5 a.m., operators shivered miserably in their wireless trucks, where they sat on listening watch waiting for the code-word PLUTO which would lift wireless silence when the forward troops gained contact with the enemy.

During the morning the sound of distant gunfire from the north and north-west told where the armoured battle was already joined and where 4 Indian Division was investing the three Omars—Sidi Omar, Libyan Omar and Omar Nuovo. All communications were now working, wireless silence having been lifted at 5.30 a.m.

Early in the afternoon an enemy Me 109 fighter dived out of the clouds and made a swift circuit of the divisional area before disappearing at high speed into the west. A little later the Divisional Headquarters group moved north, but only for 11 miles, where it sat down again to await news of what had happened further forward. In the evening gunfire was still sounding away to the north, where enemy flares lit up the sky.

When dawn came Major Smith, the second-in-command, viewed Signals' area in the Divisional Headquarters group with some dismay. It was plain to see that drivers and wireless detachment NCOs had still not learnt the wide dispersion drill that had been hammered into them during the October training. Clusters of vehicles stood in snug little groups all over the area, tempting targets for any marauding aircraft that might happen that way. In a very short time, however, the vehicles were properly dispersed at their correct intervals, and the area settled down again to await the next move. This came shortly after midday when the group commenced to move to Sidi Azeiz.

Late in the afternoon, while the group was still moving, a sudden order came from Divisional Headquarters that the forward signals group was to go ahead and establish communications at the new location. This caused a good deal of confusion. The drill of sending off reconnaissance group and forward signals had been thoroughly practised in the October training, but not from a moving column when the light was beginning to

fail. In the deepening dusk Major Smith rushed about trying to extricate his forward signals vehicles from the press of moving transport. At last he had them assembled in the rear of the rapidly disappearing column — wireless detachments, cable vehicles and all. But by this time there was no sign of the Divisional Headquarters' reconnaissance group, and it was quite dark. So Smith set a course for Sidi Azeiz, and arrived at 7 p.m. at Trig 212, about two miles west of his destination.

Meanwhile the Divisional Headquarters' column had run into trouble in the shape of an extensive area of soft ground caused by recent rain. In every direction vehicles were bogged down and hopelessly lost in the darkness. In Signals there was some concern for the forward signals group which had last been seen standing forlornly in the wake of the divisional column. Shortly afterwards, however, wireless contact was made with the lost group and attempts were made to direct it on to the divisional laager, but as no one knew quite where the headquarters was, the attempt was not very successful, although the strength of the group's signals indicated plainly that it was not very far away. At last Smith sent a message that he was settling down for the night and that he would bring his forward signals group in at first light. When dawn broke it was painfully clear why the lost group's signal strength had been so good the night before—forward signals were sitting in an open piece of desert not 300 yards from the control set at Divisional Headquarters! Major Smith came in with a wide grin on his face, but Sergeant McKenzie, 1 who stepped out of the control set vehicle as the second-in-command came up, wasn't amused. He spat disgustedly at a clump of camel-thorn and described the whole episode as 'a bloody good NABU to start a battle with'.

Wireless was already playing an important part in the Divisional Commander's control of his forward brigades. Throughout the afternoon and night of the 21st the GSO 1, Colonel Gentry, operated from the wireless truck carrying the set which controlled the brigade net. From here he issued the GOC's orders direct to brigade commanders. Except for No. 1 Company's experience with Headquarters 13 Corps Signals in

the first desert campaign earlier in the year, this was the first time that radio telephony had been used by the staff while the headquarters was actually on the move.

Apart from the sound of gunfire from the direction of Capuzzo, on the frontier, 22 November passed quietly at Divisional Headquarters. The next day all three brigades were off on their predetermined tasks. Fifth Brigade Group was left to contain Bardia and take Capuzzo, Musaid and Sollum Barracks, while the rest of the Division moved westwards to join in the drive on Tobruk. Fourth Brigade moved along the escarpment above the Bardia- Tobruk road to Gambut, while 6 Brigade, which had now passed to the command of 30 Corps, moved along Trigh Capuzzo towards Point 175, an important feature about five miles east of Sidi Rezegh, where the enemy was reported to be in some strength. Actually 6 Brigade had commenced its move westwards on the afternoon of the previous day. As the brigade moved farther away it approached the limit of range for the No. 9 set at Divisional Headquarters, so it was only with the greatest difficulty that an important signal from the GOC was successfully transmitted. This message confirmed an earlier order received from Headquarters 30 Corps, ordering the brigade to make all haste to relieve 22 Armoured Brigade, which was in trouble at Sidi Rezegh. For nearly two hours relays of operators, including A Section's Sergeant Smith, 2 strove manfully to get the signal through to 6 Brigade and secure an acknowledgment. At that time Signals had not learnt the trick of selecting day and night frequencies on No. 9 wireless set forward control nets, and on this occasion it was actually a too-high frequency which prevented the signal from being transmitted as easily as a lower one would have done.

The 22nd November became an historic day for T Section at Headquarters 13 Corps, when the very first air support message transmitted by the section reached Headquarters 4 Indian Division. T Section's war diary records the result with the words: 'Bombers over Sidi Omar right on time.' Tentacle sets had been sent to their positions on the 20th, one each going to the headquarters of 4 Indian Division, 7

Indian Brigade and Central India Horse, and one each to the headquarters of New Zealand Division, 4 Brigade, 5 Brigade, and 6 Brigade.

Early in the afternoon of the 23rd the Divisional Headquarters group moved westwards towards Bir el Chleta from Sidi Azeiz. The headquarters was now split into Advanced New Zealand Division and Rear New Zealand Division. The latter remained for the time being at Sidi Azeiz. After going about nine miles along Trigh Capuzzo Advanced New Zealand Division was held up by fire from enemy armoured fighting vehicles and guns, but shortly afterwards 20 Battalion joined the column and the enemy withdrew westwards. Shortly after midnight Advanced New Zealand Division halted and dispersed near Bir el Chleta.

Meanwhile 6 Brigade had launched a battalion attack on Point 175, which was strongly held by enemy infantry and anti-tank guns—the 88-millimetre guns which were to take such a toll of British armour. Fierce fighting continued throughout the 23rd, when 25 Battalion sustained very heavy casualties. During the afternoon the L Section No. 11 set truck at Battalion Headquarters was hit by anti-tank and machine-gun fire and put completely out of action. Both of the L Section operators, Signalmen Gordon ³ and Wells, ⁴ were killed. Later Sergeant Schofield ⁵ and Signalman Montgomery, ⁶ while attempting to salvage the truck, were both wounded.

The heavy fighting continued throughout the 24th, but with the assistance of 4 Brigade, which had moved up from Gambut to a position south-east of Zaafran, 6 Brigade gained possession of Point 175.

Advanced New Zealand Division had also moved westwards and at 9 p.m. was established two miles east of Headquarters 4 Brigade, which was now three miles south of Zaafran. In this move Advanced New Zealand Division proceeded in the desert formation evolved for moves in the open desert. The vast concourse of vehicles was moving majestically along at a moderate pace when suddenly the angry chatter of machine guns sounded somewhere out in front and hundreds of little spurts of dust arose ahead of the column where the fire was striking. Instantly, from

the staff car of the GSO 2 in the centre of the leading rank of vehicles, a blue flag shot up and was waved frantically in a circular motion. This was the transport control signal which meant 'About turn'. The effect was instantaneous: the whole formation turned about as one vehicle and moved briskly back the way it had come. In Lieutenant-Colonel Agar's staff car the driver, Signalman George Roil, ⁷ discussed the sudden move with the Colonel's batman, Signalman Charlie Clark. Neither understood very clearly what had happened; nor did the Colonel, who sat in the back of the car and listened while George and Charlie sorted it out. Each in turn advanced several explanations which were rejected by the other. Suddenly George, with a look of resentment, said: 'I know! The ground up there's too bloody easy for digging slit trenches so we're going back a bit.'

By the evening of the 24th the signal plan had assumed a more normal aspect. For the last two days line communications had been used very little owing to the mobility of the operations, and most of the traffic passing between Advanced New Zealand Division and brigades had been transmitted by wireless. Lines were now laid out to Headquarters 6 Brigade, which was established on the rim of the escarpment about midway between Point 175 and Sidi Rezegh, six miles further to the west. A line had already gone forward to Headquarters 4 Brigade. At this stage Advanced New Zealand Division had no communication with Headquarters 5 Brigade, which was still in the Sollum area under command of 4 Indian Division.

On the 25th orders were given 6 Brigade to attack Sidi Rezegh and, later, Ed Duda, a feature about three and a half miles to the north-west of Sidi Rezegh. The object was to join up with the Tobruk garrison, which on the morning of the 26th was to make a sortie and meet the New Zealanders on Ed Duda and so open a corridor into Tobruk. At the same time that 6 Brigade attacked Sidi Rezegh 4 Brigade was to attack and capture Belhamed, two and a half miles to the north of Sidi Rezegh. The preliminary arrangements to bring the Tobruk garrison on to Headquarters 13 Corps' forward wireless net with 2 NZ Division and 1

South African Division had been completed on the 23rd in readiness for the operation of linking up 13 Corps and the garrison.

Sixth Brigade's attack on the night of the 25th met heavy enemy opposition and its second phase, in which 21 and 26 Battalions were to carry on and take Ed Duda, was abandoned. On the right, however, 4 Brigade was on Belhamed. During 6 Brigade's attack L Section linemen carried the line forward behind 24 Battalion as it moved on Sidi Rezegh under heavy enemy shellfire. One lineman was wounded.

The sortie made from Tobruk had succeeded in reaching Ed Duda on the 26th, so that night Advanced New Zealand Division ordered 4
Brigade to attack with 19 Battalion and effect a junction with Tobforce (the Tobruk garrison). J Section immediately asked Divisional Signals for an additional 16,000 yards of cable to extend a line behind 19 Battalion as it moved through the enemy positions east of Ed Duda and to repair 18 and 20 Battalions' lines on Belhamed. The 19th Battalion led off at 9.30 p.m. with a squadron of I tanks in front, and Second-Lieutenant Brennan 8 and his line party bringing up the rear. At four o'clock next morning the line party rang back and reported that 19 Battalion had reached Ed Duda. Hardly had they reported this than the line went dead. Meanwhile both lines from 4 Brigade Headquarters to 18 and 20 Battalions on Belhamed were being continually damaged by shellfire and tracked vehicles, and considerable difficulty was experienced in keeping communications open.

At Advanced New Zealand Division on the 25th Divisional Signals had lost four men killed and three officers and two men wounded in a heavy raid on the headquarters by a large formation of Ju87 bombers. The planes appeared from the west, flying high, and passed over slightly to the north. Suddenly they wheeled and dived on the area, which in a few minutes was blotted out in a dense cloud of dust and the black smoke which rose from burning vehicles. Lance-Corporals Rush ⁹ (A Section) and Hornsey ¹⁰ (H Section) and Signalmen Clark ¹¹ (D Section) and Pearmine ¹² (D Section) were killed. The wounded were Lieutenants Wilkinson and Hislop, ¹³ Second- Lieutenant Andrews, Lance-Sergeant

Edwards ¹⁴ and Signalman Rodgers. ¹⁵ Edwards died next day from his wounds. Nearly all line communications were disrupted by the raid but were quickly restored.

On the 28th a column of enemy armoured fighting vehicles and lorried infantry appeared from the south-east and was heavily engaged by 22 Armoured Brigade just south of Advanced Divisional Headquarters. An intense battle ensued but moved away to the south. Later in the afternoon, however, enemy lorried infantry attacked the Divisional Headquarters' area. First they attacked a main dressing station about two miles to the east and set free about 900 German and Italian prisoners confined in a temporary cage nearby. Armoured cars then made a quick dash to the rim of the escarpment overlooking the Divisional Headquarters' area and fired bursts of machine-gun fire into the headquarters. Local defences were quickly brought into action. Men were mustered into parties and sent to man the edge of the escarpment, primarily to give infantry support to a troop of anti-tank guns stationed there. About a hundred officers and men from Divisional Signals under Captain Pryor were sent to take over a section of the escarpment. There was much noise and confusion, but no enemy approached close enough to be effectively engaged. A group of I tanks lumbered up over the rim and shortly afterwards the excitement died down, the enemy having withdrawn in some haste when the tanks appeared.

Headquarters 13 Corps and Rear New Zealand Division moved into Tobruk during the night of 28 November, and Advanced New Zealand Division moved westwards and took up a position a few miles east of Belhamed ridge. Early next morning Major Smith and the 13 Corps' line detachment attached to Divisional Signals set out to take a line through the corridor to Headquarters 13 Corps in Tobruk; by daylight they had reached Ed Duda without running into trouble, but shortly afterwards the party was shelled for several miles in the corridor. After they had laid 18 miles of line, which took them within the Tobruk perimeter, the cable ran out, so Smith made his way into Tobruk and borrowed some more to complete the circuit. At this stage the line went dead and

Lance- Corporal Munro's detachment, which was with Rear New Zealand Division in Tobruk, was sent back along the cable to find the fault. The circuit was restored for brief intervals, but the speech level between Headquarters 13 Corps and Advanced New Zealand Division was so low that the circuit was almost unworkable.

After staying that night with Headquarters 13 Corps Major Smith, with Munro and his detachment, set off next morning on the return journey to Advanced New Zealand Division. During the night heavy fighting had taken place in the corridor and the cable had been badly damaged in many places; part of the line between Ed Duda and Advanced New Zealand Division had to be relaid because of the extensive damage it had sustained. While the party was searching for and repairing the numerous faults it came under fire several times, but by 6 p.m. communication between Headquarters 13 Corps and Advanced New Zealand Division was again restored. The party returned to Zaafran, only to find on its arrival that the circuit had been interrupted again. No further attempts were made to restore it, however, because Advanced New Zealand Division, less a small Battle Headquarters, was preparing to move into Tobruk.

The situation was now changing rapidly for the worse. Enemy pressure was increasing, and on the evening of the 29th 21 Battalion was thrown off Point 175 by German armour which penetrated its lines by a ruse. ¹⁶ Heavy attacks had been launched against Ed Duda, but the troops from the Tobruk garrison beat them all off. This was the fighting that Major Smith and Munro's detachment had run into on their return journey from Tobruk.

On the 29th 1 South African Brigade was placed under command of 2 NZ Division to assist in the now precarious situation at Sidi Rezegh and Belhamed, where the enemy was making more and more determined efforts to throw 4 and 6 Brigades off the high ground. At 3.30 p.m. that day a liaison officer from 1 South African Brigade arrived at Headquarters 6 Brigade in an armoured car equipped with a No. 9 wireless set. He was sent on immediately to Advanced New Zealand

Division, where the GOC established wireless communication with the commander of the South African brigade and instructed him to bring it up quickly. It was the expectation of the arrival of this brigade that lulled any suspicions that might have been raised in 21 Battalion on Point 175 later in the day when the enemy overran its positions. Three German tanks gained the position by coming in with their turrets open and the crews, wearing black berets for the occasion, sitting on the outside. At Headquarters 6 Brigade, under whose command 21 Battalion was at the time, the first intimation of the attack came when the battalion commander (Major Fitzpatrick ¹⁷) called for artillery support.

'They are into my lines with three tanks and are taking prisoners. Artillery support at once for God's sake!'

Later Fitzpatrick again called urgently for artillery support, and shortly afterwards he called:

'Everyone has left. What shall I do? They're right on top of me....'

The voice broke off suddenly and was not heard again.

The K Section No. 11 set on which the 21 Battalion commander called so urgently for support must have been removed from its truck and dug in on Point 175, probably in the Battalion Headquarters' dugout, because later the truck came in to Headquarters 6 Brigade driven by a K Section signalman, who was then attached temporarily to L Section.

On the afternoon of the 29th Captain Feeney, OC No. 3 Company, was wounded in the head by a shell splinter at Headquarters 6 Brigade, where he had arrived a short time before with the Divisional Headquarters' reconnaissance group to discuss with the OC L Section Divisional Headquarters' next forward move. He was evacuated soon afterwards to Tobruk.

At dawn on the 30th there was still no sign of 1 South African Brigade and the enemy was still in possession of Point 175. First light, however, revealed a large concentration of transport led by a number of armoured vehicles on the skyline east of Point 175. At first it was thought to be the expected 1 South African Brigade which had still not put in an appearance. A little later, however, carrier patrols established that the column was hostile, and concentrated fire from 4 and 6 Field Regiments was brought to bear on it. Special lines were quickly run out to the two regimental headquarters by a B (cable) Section detachment, and Brigadier Miles, the CRA, directed the shelling, which set fire to two tanks and a large number of vehicles. The column quickly withdrew eastwards.

At 4.30 p.m. that day 6 Brigade's weakened western flank was assailed by a strong force of infantry supported by fifty tanks, and Sidi Rezegh fell into enemy hands. By 5.15 p.m. the enemy was firmly in possession of the ridge and 24 and 26 Battalions had been overrun. At Headquarters 24 Battalion the No. 11 wireless set terminal manned by two L Section operators, Signalmen Ashe ¹⁸ and Stewart, ¹⁹ was dug in under cover. Ashe and Stewart watched tensely as the forward companies were overrun and the tanks broke through towards Battalion Headquarters, and as they watched they gave a running description of the attack to the operators on the control set at Headquarters 6 Brigade.

'Jerry is now attacking the forward companies and he's got tanks. The tanks are in amongst the company and have broken through....
They are now through the reserve company and are approaching
Battalion Headquarters. Yes! Here they come —we'll soon be overrun....
the tanks are right on us but our blue and white flag is still flying.
Cheerio....' Silence.

During this attack on 24 Battalion's position the brigade commander, Brigadier Barrowclough, called from Headquarters 6 Brigade on the forward wireless net and demanded to speak to an officer. At 24 Battalion, where the wireless terminal was dug in in a trench separated by about fifty yards of fire-swept ground from the Battalion Headquarters' dugout, Stewart tried to explain to the Brigadier that the remote-control cable had been shot away, but was ordered to fetch an

officer at once. To replace the damaged remote-control equipment Stewart and Ashe had rigged up a captured German telephone in the Battalion Headquarters' dugout and connected it to the remote-control unit at the set with German field cable. Stewart called the headquarters' dugout on this telephone and passed the Brigadier's request. The battalion signal officer clambered out of the headquarters' dugout and commenced to run through the hail of fire towards the set, but when he was only half-way across he was wounded in both legs and lay helpless in the open. Without a moment's hesitation Ashe climbed out of his trench and ran across to the stricken officer, whom he carried on his back to the wireless dugout. Unfortunately this act of cool courage was never reported and escaped recognition because Stewart, who witnessed the whole affair, was taken prisoner with Ashe some time later. ²⁰

The enemy's latest success at Sidi Rezegh opened a dangerous gap in the corridor defences and placed 4 Brigade and the remnants of 6 Brigade in a difficult position.

That night wireless communication with 1 South African Brigade, which for some inexplicable reason was still several miles south of Point 175, broke down owing to battery failure. OC A Section sent Sergeant Smith to examine the wireless batteries in the South African liaison officer's armoured car and, if necessary, replace them with two from an A Section vehicle. To his horror Smith found that the batteries, which were of the ordinary car type, were completely exhausted, and that no spare ones were carried in the car. He noticed also that the two South African operators were exhausted from want of rest. Despite his brusque, forthright, and faintly contemptuous manner towards anyone who did not belong to 2 NZ Division, Smith looked on the two operators with a compassionate eye. Since their arrival the day before he had watched their methods carefully and later, to the surprise of all around him, had been heard to remark that 'they weren't too bad'. Smith brought relief operators and batteries from A Section and sent the two South Africans off to get some sleep. Within a short time wireless communication with 1 South African Brigade was restored.

At eight o'clock that night the GOC sent Advanced New Zealand Division into Tobruk, keeping only a small Battle Headquarters to direct the next day's operations. The Signals component of Battle Headquarters consisted of the CO (Lieutenant- Colonel Agar), OC A Section (Captain Borman), and forty-five other ranks. There was a signal office detachment under Sergeant Vincent, a B (cable) Section detachment under Sergeant Pierce, and five wireless detachments, including the armoured car set working to 1 South African Brigade. Later in the night, after Advanced New Zealand Division had left for Tobruk, Battle Headquarters moved westwards and took up a position on the southeastern slope of Belhamed. A little later 6 Field Regiment moved up and deployed its guns about 500 yards farther west.

Signals at Battle Headquarters worked tirelessly all that night. An RD tent was dug in about four feet deep and its walls heavily sandbagged. Sergeant Pierce and his linemen laid out new cable to 4 and 6 Brigades, and Sergeant Smith sped from wireless truck to wireless truck checking up on the signal strengths on each net and the state of wireless batteries. At last, in the early hours of the morning, the men settled down to snatch a little rest before dawn brought the perils of the next day's fighting.

Shortly after 7 a.m. on 1 December the enemy mounted a fierce attack on Belhamed with tanks and lorried infantry. The attack swept north from Sidi Rezegh, engulfing Headquarters 6 Brigade, 6 Field Regiment and 20 Battalion. At Brigade Headquarters heavy artillery and mortar fire quickly put all line communications out of operation. L Section's stores truck and the signal office truck both received direct hits and were destroyed, and another direct hit, which blew in the sandbagged signal office shelter, destroyed the Fullerphone terminal and public phone. By this time all circuits, including local lines, had been broken beyond repair by shellfire and blast. Casualties occurred quickly, the first being Signalman Rea, ²¹ who was wounded in the foot while attempting to repair a break in one of the lines. Others wounded were Signalmen Gavan, ²² Fell, ²³ and Neilson, ²⁴ and Signalman Williams ²⁵

of B (cable) Section detachment attached to L Section.

At G Section, in 6 Field Regiment's area, all line communications failed shortly after the attack began, despite the determined efforts of Corporal Baird ²⁶ and his linemen, who continued to repair lines under the heavy fire. Wireless communications to batteries, however, continued without interruption. At 7.50 a.m. the section was ordered to withdraw north-eastwards to a small wadi. By this time the enemy had swept into the regimental area and his tanks were right up to the muzzles of the guns. OC G Section set up a wireless-telegraphy signal centre and continued to maintain communications to all batteries and to the regimental commander's reconnaissance set. The section had now lost six of its vehicles, of which three were totally destroyed and two disabled and abandoned; a sixth had been hit but was taken in tow.

By 9 a.m. the section was withdrawing northwards towards Tobruk with the remnants of the regiment, and it was at this stage, in the face of the overwhelming enemy fire, that the men displayed the real spirit of Divisional Signals. There was no chaos and little confusion. Signalman Carnegie, ²⁷ the driver of the signal office 3-ton lorry, brought his vehicle forward to the dug-in signal office as though on a practice exercise, and waited calmly for the men to get aboard, which they did without haste, bringing as much equipment with them as they could carry. Sergeant Toms ²⁸ even brought out the exchange switchboard. Carnegie would not drive off until he was sure that his crony, Marfell, ²⁹ was aboard. Finally he moved off, but unfortunately the lorry stopped a shell when within reach of the edge of the escarpment. Carnegie tried to crawl the remaining few yards by turning the engine with the self-starter but without success, and the vehicle had to be abandoned.

One man, Signalman Bennett, ³⁰ was killed during the attack, and nine others were missing.

At Battle Headquarters Signals was astir at first light, each detachment looking to its own tasks in the cold light of dawn. Sergeant Pierce was already away with his linemen making good the hasty repairs

effected during the night by line patrols on the 4 and 6 Brigade circuits, where damage had already occurred from wheeled and tracked vehicles. OC A Section and Sergeant Smith bustled around the four wireless trucks, which were dispersed at 150-yard intervals in a wide semicircle around the western end of the area. In the dug-in RD tent where the signal office was set up Sergeant Vincent ³¹ prowled restlessly, watching the operators at the Fullerphone terminals and scanning the incoming traffic with a critical eye for priorities and transmission delays. Presently Lieutenant-Colonel Agar and OC A Section clambered into the signal office to look over the completed preparations for the day's work.

Since dawn there had been the usual sounds of gunfire from the west and south and the incessant rumble of transport. Suddenly, shortly after 7 a.m., the noise increased so quickly that in a few minutes the air was full of crashing detonations as heavy enemy fire came down on Belhamed just forward of the Battle Headquarters' area. Mortars added to the awful din and vicious machine-gun fire whistled through the kneehigh camel-thorn, whipping off the tops of the bushes and tossing them high in the air. Already the dispersed wireless trucks which lay closer to where the fire was coming down had suffered damage. The radiator of Sergeant McKenzie's vehicle was rent wide open by a flying splinter, while in another vehicle a bullet had shattered the vulcanite steering wheel from which a flying fragment inflicted a painful and bloody flesh wound on Signalman Hattersley's ³² face. In another part of the area a shell or mortar-bomb splinter had torn away the brake rods on B (cable) Section's 3-ton layer lorry. Hard by the signal office Sergeant McKenzie stood below the D Section 3-ton stores lorry counting into a sack A Section's portion of the day's rations. Every now and then an angry spatter of machine-gun fire interrupted his counting so that he dropped the bag in confusion and then cursed softly to himself as he tipped the beef tins and biscuit packets out on the ground and started afresh. At this stage Sergeant Vincent emerged from the signal office tent and clambered over the tailboard of the stores lorry. Just as his rear was about to disappear into the lorry he received a severe wound in the buttocks.

Meanwhile the enemy attack had swept right up to the guns of 6 Field Regiment, only a few hundred yards to the west near the summit of Belhamed. Through the brief rifts which showed momentarily in the thick pall of smoke and dust which now almost completely masked the western end of the feature, the watchers at Battle Headquarters could see men lifting their arms in the air as the German tanks swarmed through the gun positions. Anxious eyes watched the GOC as he moved about the area, seemingly oblivious that his headquarters was about to be overrun. As the minutes passed Lieutenant-Colonel Agar began to issue instructions in readiness for the destruction of call-sign books, row directories and other secret papers, should orders be given for the headquarters to be evacuated.

The GOC was next seen standing outside the South African armoured car, microphone in hand and headphones clamped over his uncovered head, speaking to 1 South African Brigade. By now the machine-gun fire coming into the area had reached a crescendo of fury, and bullets clanged on the side of the armoured car as the General imperturbably continued his wireless conversation. Sergeant Smith came over from the car to where Agar stood near the signal office. He jerked his thumb in the direction of the General and spat on the ground expressively. 'The man's mad! Why the hell doesn't he get inside the car?'

In the direction of the now silent guns of 6 Field Regiment the enemy tanks could be seen lumbering forward in the swirling smoke and dust; between the tanks groups of infantry moved slowly forward, the fire from their machine carbines filling the air with an incessant stutter. Suddenly from the G office came the order to withdraw eastwards to 4 Brigade's area near Zaafran. Vehicles began to turn, picked up speed slowly and disappeared down the slope and into the deep wadi behind the headquarters' area.

Meanwhile Captain Borman was in a dilemma. The area was rapidly emptying of vehicles, but his wireless trucks were still dispersed on the

western perimeter of the headquarters and very close now to the advancing German infantry and tanks. Borman set off at a run for the nearest vehicle, shouting as he passed it for Signalman 'Bluey' Gaughan, the NCO in charge, to start up and clear out. Gaughan, conscientious to the last, raised a perspiring and anxious face and yelled: 'What about our half-wave aerial?'

'Leave the bloody thing and clear out,' said Borman as he raced for the next truck, where by this time, fortunately, the NCO had sensed that the exodus had started and was already turning his vehicle into the east. By this time, too, the remaining two vehicles were on the move, so Borman started back to where his own 8-cwt truck waited with his driver, Signalman Bond, ³³ a hundred yards or so away. He reached the truck safely and called to Bond: 'We can't move until Tweeddale's truck is past. Start up the engine ready to move and chuck my bedroll in the back while we wait.'

Bond started up the engine, which spluttered briefly and stopped. He ran around to the back and seized the bedroll, muttering imprecations as he worked. Borman, anxiously watching McKenzie's truck lumber slowly past with its shattered radiator belching steam at every grinding lurch, caught some of Bond's words.

'What did you say?' he called.

'Nothing,' said Bond.

'What did you say?' again, angrily.

'Well,' said Bond, pausing briefly from his perspiring labours, 'If you want to know, I said: "To hell with your bloody bedroll! You think more of your — blankets than you do of my hide."'

At this point the conversation began to flag. Both McKen- zie's and Tweeddale's trucks were now coasting easily down the slope towards the deep wadi and shelter, so Borman and Bond leaped into their truck and, after one or two unsuccessful attempts to start the engine, which finally

burst into life, followed at a breakneck pace and reached Lieutenant-Colonel Agar's party at Zaafran in safety.

During the day the remnants of the Division concentrated at Zaafran came in for some heavy shelling. It soon became obvious that the enemy was attempting to encircle the position, particularly to prevent any movement towards Tobruk. By 3.30 p.m. tanks and lorried infantry appeared on the skyline to the north of Zaafran, while more tanks and infantry began to close in from the east.

Both wireless links to 4 and 6 Brigades were now closed down, but Battle Headquarters Signals still operated the control station of the forward control net on which Advanced New Zealand Division in Tobruk was still working. A line was run to Headquarters 4 Brigade, a short distance to the east of Battle Headquarters' position, and this constituted the only line communication in the Division.

During the afternoon a plan was made for all remaining New Zealand troops to withdraw eastwards at dusk, then south and then east again towards the Egyptian frontier. The GOC called up Headquarters 30 Corps by RT and spoke to General Norrie about his intentions. Sergeant Smith stood by the set while the General spoke and listened in horrified silence while he described his plan in the plainest of plain language, quite unblemished by the merest pretence of RT procedure or security precautions. Smith bounded over to OC A Section: 'Did you hear what he said? Did you hear?' he yelled and, without waiting for answer, 'Tiny said that we are going to break out at dusk—four miles east, nine miles south-east over the escarpment and then flat out for the wire! And all in clear! The last words were almost a shriek. Throwing out his arm in the direction of the sinister black shapes squatting on the distant skyline to the north, he turned and peered earnestly into the face of Lieutenant-Colonel Agar, who had come up to see the fun. 'And what does he think those bastards out there are going to do about it, sir?' As he sauntered off dejectedly, fragments of his mournful soliloquy floated back to his hearers: '.... nine miles to Point 192.... east to the wire.... nine miles to Hell, more like....'

Preparations for defending the divisional position until after dark were immediately put in train, primarily for defence against attack from the west. At 4 p.m. the enemy was observed to commence a closing-in movement. Half an hour later a fierce battle was in progress, I tanks, 25-pounders and anti-tank guns exchanging shot for shot in a slogging match with the advancing armour. Attacks from the north, east and south were beaten off, and at five o'clock, just as the light began to fail, the divisional transport began to form up, 4 Brigade in the lead, followed by Battle Headquarters, and 6 Brigade bringing up the rear. The column was ready to move off in fifteen minutes, but was delayed by 4 Brigade's difficulty in disengaging. At last, after about an hour's wait in the gathering darkness and the obscurity of the smoke and dust hanging over the area, the column got under way and moved off quickly towards the east, without molestation from the enemy who, except for an odd stray shell, gave no sign that he was aware of the withdrawal.

By half past three next morning the Division had reached Bir Gibni, on the Trigh el Abd, where it bivouacked for the rest of the night, continuing its march to the Egyptian frontier soon after dawn. That afternoon it passed through the wire at the point where, fourteen days before, it had swept through on the high tide of adventure.

At 3 p.m., on the Egyptian side of the frontier, lines were laid out in the bivouac area from Battle Headquarters to 4 and 6 Brigades' headquarters to deal with administrative traffic. The wireless range to Tobruk was now increasing rapidly, so just before the Division resumed its march eastwards on 3 December communication to Advanced New Zealand Division, Headquarters 13 Corps, and the Tobruk Garrison was closed down.

The Division reached Baggush on 5 December in a raging dust-storm, in which headquarters and units cast about for a considerable time to locate their old areas. Signals reached its area early in the afternoon, and by four o'clock a signal office was open, with lines running to 4 and 6 Brigades, to Baggush military exchange, and to Headquarters 83 Line

of Communication Sub-Area at Burbeita.

Lieutenant-Colonel Agar immediately set about reorganising the remnants of his unit to handle divisional communications until Major Smith and the remainder of Signals were able to return from Tobruk. Battle Headquarters Signals was divided into four sections. Headquarters Section was responsible for command and administration, with Agar as CO, Borman as Adjutant and Administration Officer, and Sergeant McKenzie as NCO. No. 1 (wireless) Section, with fourteen operators and electricians, was under Sergeant Smith; No. 2 (cable) Section, with six linemen and two drivers, was under Sergeant Pierce; and No. 3 (operating) Section, with six operators, four despatch riders, one lineman, one driver and three orderlies attached from Battle Headquarters was under Sergeant Green. 34 Wireless and line communications to Headquarters 4 and 6 Brigades were resumed, but no attempt was made to re-establish wireless communication with Advanced New Zealand Division and Headquarters 13 Corps in Tobruk.

Meanwhile, in the frontier area, 5 Brigade was engaged in its task of containing the enemy forces in the Bardia fortress and reducing the more lightly held positions at Capuzzo, Musaid, and Sollum barracks. Early on 22 November a strong fighting patrol from 23 Battalion, accompanied by engineers, anti-tank guns and carriers, attacked Capuzzo and captured the garrison there. The patrol was accompanied by the K Section No. 11 set which normally provided the rear wireless link to Headquarters 5 Brigade. After the post had fallen the patrol cut every line, both poled and field cable, which it could find in the area. It then ventured further afield in the direction of Musaid, where a poled circuit at an important road junction was demolished. This cut enemy communications between Sollum, Musaid and Halfaya to the east, and Bardia, Gambut and Tobruk to the west.

K Section came in for a share of the booty which the capture of Capuzzo yielded. This included an Italian truck fitted out with a very complete direction-finding equipment, a considerable number of enemy

wireless sets, and no end of German and Italian field cable. Lieutenant McFarlane despatched the DF truck and wireless sets to 2 NZ Division, but retained the cable, which he used to strengthen his line communications to 22 Battalion at Bir Zemla, at the outer defences of Bardia, to 23 Battalion astride the Bardia- Capuzzo road, and to 28 (Maori) Battalion at Sollum Barracks.

By the 24th Headquarters 5 Brigade had, in addition to its normal line and wireless communications to its forward battalions, a line circuit to Headquarters 13 Corps, obtained by a tee-in to the corps' line running to an advanced landing ground nearby. Fifth Brigade was now under the command of 4 Indian Division, and its rear No. 9 wireless link went to that division's headquarters, which was directing the attacks on the frontier defences of Libyan Omar and Omar Nuovo farther to the south. Communication with Headquarters 13 Corps was provided on this same wireless link by means of a 'flick' frequency, but this channel was unsatisfactory owing to the limited time allowed to Headquarters 5 Brigade on the corps' net and the heavy traffic, all of which was enciphered.

Reports were now beginning to come in of the heavy fighting raging farther to the west at Sidi Rezegh and of the disaster that had overtaken 5 South African Brigade, which was overrun by German armour. On the 25th came the news that Rommel had broken away from the battles in the west and, by passing around to the south, was bringing his armoured forces eastwards towards the British rear. According to air reconnaissance reports the enemy column consisted of 2000 vehicles led by 100 tanks. Late that afternoon it was already close to the frontier and moving towards Halfaya. The advanced landing ground at Sidi Azeiz, the defence of which was one of 5 Brigade's primary tasks, now had its perimeter lined with eleven guns and four machine guns. In all Headquarters 5 Brigade had barely 600 men with whom to hold off the threatened attack.

In the first light of dawn next day (the 26th) the first phase of the fighting at Sidi Azeiz, which was to end in the capture of Headquarters 5

Brigade, opened suddenly and dramatically. In his book ³⁵ Brigadier Hargest describes the events of that morning:

The darkness of the early morning was shattered by the crash of an eighteen-pounder gun. The whole camp sprang into action. The klaxon horn sounded, men slid into their battle positions; shot after shot was fired by the gun. Then, as we waited for the assault of the enemy which we thought must surely be upon us, an unmistakably Cockney voice came across: 'Stop shooting, you silly bastards, we're British.' And so they were. A column of German transport driving British trucks full of British prisoners had stumbled on us in the darkness and the role of captor and captive had been rapidly reversed. At the sound of the first gun the prisoners in the trucks disarmed their German guards whom they were now bringing in.

So opened the little drama of Sidi Azeiz which was to develop in intensity all that day to end a little more than twenty-four hours later in General Rommel's attack with his Afrika Corps. By sheer weight of metal he was to reduce our camp into a blazing ruin and overwhelm us with his tanks.

Wireless and line communications within the brigade and to Headquarters 13 Corps remained stable throughout that day except for the interruptions that inevitably occur when tracked vehicles are moving in areas where field cables lie. On the rear wireless-telegraphy link to Corps, however, Headquarters 5 Brigade was unable to attract the attention of the control station, which, engrossed as it was with traffic between Corps and the formations farther to the west in the Tobruk corridor, appeared to ignore calls from both Headquarters 4 Indian Division and Headquarters 5 Brigade.

All that day enemy columns passed to the east of Headquarters 5 Brigade, whose guns were in action against them during the afternoon. Early next morning, the 27th—a critical day in the affairs of 5 Brigade—the line to 22 Battalion in the north failed and Headquarters 13 Corps could not be raised either by line or wireless. It was learnt later that

Corps had suddenly moved westwards without telling 5 Brigade of its intentions. Shortly after 7 a.m. a message from Divisional Cavalry reported forty enemy tanks approaching the Brigade Headquarters' position from the direction of Bardia. A bare twelve minutes later shells from the enemy armour were falling in the area. Lieutenant McFarlane's truck and K Section's stores truck were both hit and burnt out. All lines were now cut, except for the local circuits in the headquarters' area, and wireless communication with Headquarters 13 Corps was still not restored.

The enemy armour had approached to within 2500 yards and was pouring in a devastating fire, which was increased by enemy artillery and machine guns coming into action from behind the crescent-shaped line of tanks. About a quarter to ten the tanks came in and overran the headquarters, which was by now an area of blazing vehicles. Behind the armour came infantry carried in half-tracked troop-carriers, and the fight was over. Guns on both sides were now silent, 5 Brigade's because they were all disabled and their crews killed or wounded, and the enemy's because the tanks were now right on the target area.

All K Section's transport and the signal office were burnt out, but no one was killed. Only one man, Signalman Laskey, ³⁶ was wounded. As the German infantry swarmed in among the now silent and stationary tanks, the men were rounded up, counted and disarmed.

F Section, which had come in to the Brigade Headquarters' area with Headquarters 5 Field Regiment the day before, when the probability of a heavy enemy attack on the area had become a certainty, fared less fortunately than K Section. Not all of its transport was burnt out, but every vehicle was disabled. Line communication to the guns, however, was maintained from the signal office truck right until the end. At 8 a.m. OC F Section, Second-Lieutenant Stevenson, sustained severe wounds from which he died about two hours later. The rest of F Section, with the exception of Signalmen Leary and Mitchell, ³⁷ who were then with B Troop 27 Battery of 5 Field Regiment in the Capuzzo- Sollum area

with their wireless detachment, were taken prisoner and marched off to Bardia that same day with the rest of the captives from Headquarters 5 Brigade.

Shortly after dawn on the 27th 22 Battalion, at Bir Zemla in the Menastir area to the north, observed a large enemy column east of Brigade Headquarters at Sidi Azeiz. During the early morning heavy fire was heard from the direction of Brigade Headquarters, and a little later a message was received by wireless saying that the Brigade Headquarters' area was being attacked. Very shortly afterwards all communications with Brigade failed altogether, although efforts were made to restore it by wireless and despatch riders. A 22 Battalion despatch rider, who volunteered to ride into Brigade Headquarters to ascertain what had occurred there, left at 1 p.m. but did not return. During the afternoon determined efforts were made by the K Section operators on the wireless terminal at 22 Battalion to establish communication with other British units, but without success.

At 23 Battalion, too, Brigade Headquarters' silence was causing considerable concern. Throughout the night of 27- 28 November the K Section wireless terminal at this battalion broadcast on various frequencies the message: 'New Zealanders holding out at Capuzzo and Sollum. Aid and air support wanted urgently.'

At 10.15 a.m. on the 28th wireless communication was established with the CRA 4 Indian Division by means of an H Section No. 11 set, and 23 Battalion learned that Headquarters 5 Brigade had been overrun and captured the day before.

A conference was held at Musaid on the 29th to formulate plans for reconstructing and reorganising Headquarters 5 Brigade. Lieutenant-Colonel Andrew, ³⁸ CO 22 Battalion, was appointed to command the brigade, which was to remain under the command of 4 Indian Division. Second-Lieutenant Catchpole, ³⁹ of 5 Field Regiment, was appointed brigade signal officer, and a new K Section was made up of regimental signallers from 5 Field Regiment and the battalions of the brigade. On 7

December seventeen other ranks from Signal School Base arrived at Musaid to join the section. About this time, too, a detachment of sixteen men of Royal Signals arrived from the signal section of 25 Light Anti-Aircraft Regiment, Royal Artillery. They brought with them five No. 11 wireless sets. A No. 9 set was borrowed from Divisional Cavalry to provide a rear link to Headquarters 4 Indian Division and a cable-laying truck with several miles of cable from 27 Battery of 5 Field Regiment.

By 8 December the new section had laid out the normal line and wireless communications for a brigade, but was very short of transport. That day orders were received that the brigade would move next morning, and arrangements were made accordingly to reel in all lines at first light. Brigade Headquarters moved off about 7.30 a.m. on the 9th, but a number of K Section men who had no transport were inadvertently left behind. They finally made contact with Brigade Headquarters through a 1 South African Division despatch rider, and a water truck was sent back to pick them up, together with their equipment.

Lieutenant Lowe and an NCO, both of Royal Signals, arrived at Headquarters 5 Brigade on 10 December to take over command of K Section, whereupon Second-Lieutenant Catchpole returned to 5 Field Regiment. Later that same day a T Air Support Control Section detachment joined Headquarters 5 Brigade.

The brigade moved to Acroma on the 11th and set up a signal office there, but lines were not laid to units, all communications being by wireless. Traffic for Headquarters 13 Corps was passed over the T Air Support Control Section's No. 9 set.

During the morning of the 14th Brigade Headquarters was twice attacked by formations of Ju87s, and in the first raid three men of Royal Signals were killed. On this day Captain K. Robson and seven other ranks, all from Royal Signals, arrived and Lieutenant Lowe returned to Headquarters 13 Corps. Lieutenant Jory arrived from 2 NZ Divisional Signals on 15 December to assume command of K Section. Captain Robson and all other Royal Signals personnel returned to

Headquarters 13 Corps on the 21st.

By the 23rd 5 Brigade was at El Adem awaiting transport to take it to the rear, where the brigade was to rejoin the New Zealand Division. On Christmas Day it was still there. That day K Section's war diary records that 'as a special treat we had fresh bread instead of biscuits'.

The brigade began to move on the afternoon of the 25th and reached Baggush and rejoined the Division on the 30th.

Advanced New Zealand Division and Divisional Signals remained at Tobruk until 8 December, when they left to rejoin Battle Headquarters at Baggush. They had entered Tobruk Fortress on the 1st and joined Rear New Zealand Division there at dawn. During that morning two officers, Lieutenant Rose and Second-Lieutenant Shirley, ⁴⁰ and seventeen other ranks of G Section reached Tobruk and reported to Divisional Signals. Shirley was to have taken over command of G Section the day before from Rose, who was to be Adjutant in place of Lieutenant Wilkinson, who had been wounded on 25 November. Rose, however, had been unable to join Divisional Signals that day because of the fierce fighting which was raging in the Sidi Rezegh area. He assumed the duties of Adjutant on the evening of 1 December.

G Section's ranks had been sadly depleted—one man being killed and nine others missing—and all but two of its vehicles had been lost. Both H Section and the 14 Light Anti-Aircraft Signal Section were safe in Tobruk. Divisional Signals immediately set about the task of compiling a roll of all members of the unit in Tobruk, which disclosed that there were 239 all ranks, including Major Smith (the second-in-command), Captain Pryor (OC No. 1 Company), Captain Fletcher (OC No. 2 Company) and Captain Feeney (OC No. 3 Company), who was then in 62 British General Hospital. There were three warrant officers, including the RSM (WO I Barrett), thirteen staff-sergeants and sergeants, and 210 rank and file. Little was known by those in Tobruk of the fate of C, E, F, J, K and L Sections, except that the wireless terminal set at Advanced New Zealand Division could still hear traffic passing between Battle

Headquarters, Headquarters 4 Brigade and Headquarters 6 Brigade, which indicated that A, J and L Sections, at least, were still active. During the morning of the 3rd a message in clear was received from Battle Headquarters, saying: 'Tell Bert going to laundry. Do you understand IMI'. ⁴¹ Major Smith understood the oblique reference to Baggush, or 'bag-wash', and replied: 'Yes. Understood.' A few minutes later a second message from Battle Headquarters said tersely, 'X 494 AR VA', ⁴² and the link closed down.

The unit suffered a distressing loss on 5 December when Captain Feeney was drowned just outside Tobruk harbour. German aircraft sank the ship *Chakdina*, in which he and a number of other wounded were being evacuated to Alexandria. Signalman Perry, ⁴³ another wounded man from Divisional Signals, was also lost in this ship.

Much of the unit's equipment and transport, including six wireless trucks, two No. 11 wireless sets and nine miles of D Mark VIII cable, was transferred to 70 British Division in Tobruk, very much against the inclinations of Major Smith who, remembering how difficult the task of re-equipping the unit had been after the Greece and Crete campaigns, fought hard to retain as much as he could.

All New Zealand troops in Tobruk, with the exception of certain units then under command of 70 British Division for operational tasks, left on 8 December to rejoin Battle Headquarters and 4 and 6 Brigades at Baggush. They passed through the frontier wire late that afternoon and bivouacked for the night on the Egyptian side after an uneventful trip. Two days later Divisional Signals rejoined Lieutenant-Colonel Agar and his Battle Headquarters' Signals in the old unit area at Baggush.

It was learnt on the 17th that, with the exception of Signalmen Leary and Mitchell, the whole of F Section was still unaccounted for. It was already known that Second-Lieutenant Stevenson had died of wounds on 27 November, but in the absence of information concerning his men, it was assumed that they had been taken prisoner of war, together with Lieutenant McFarlane and his men of K Section. A new F

Section was immediately formed and placed under the command of Second-Lieutenant Cooper. ⁴⁴ The new section marched out from Baggush on the 20th to join 5 Field Regiment at Tobruk.

The remainder of the month passed at Baggush in training and reorganisation, Christmas Day being celebrated in traditional style with a Christmas dinner, of which the total cost of £68 from regimental funds was lightened by a generous donation of £10 from the Corps' Regimental Association in Wellington.

¹ Capt J. McKenzie, BEM; Christchurch; born Hororata, 6 Apr 1911; P and T telegraphist; OC NZ Base Sigs Tp, K Force, Aug 1950-Aug 1951; C Tp 1 Commonwealth Div Sig Regt, Korea, Aug 1951-Apr 1952.

² Lt C. Smith, m.i.d.; New Plymouth; born England, 9 Apr 1910; mechanician.

³ Sigmn J. J. V. Gordon; born NZ 10 Feb 1906; postmaster; killed in action 23 Nov 1941.

⁴ Sigmn L. A. Wells; born Wellington, 16 Oct 1903; telegraphist; killed in action 23 Nov 1941.

⁵ S-Sgt D. V. Schofield; Hastings; born Pukekohe, 15 Dec 1914; telegraphist; wounded 23 Nov 1941.

⁶ Sigmn G. F. Montgomery; Gisborne; born Scotland, 27 Aug 1912; wounded 23 Nov 1941.

⁷ Sigmn G. H. Roil; Auckland; born Wellington, 18 Jun 1909; baker.

⁸ Capt P. J. Brennan, MC; Opunake; born New Plymouth, 12 Nov 1918; OC H Sec Sigs Feb-Jun 1942, F Sec Jul 1942, E Sec Dec

- 1942-Mar 1943, R Sec Mar-Jun 1943, K Sec Jun 1943-Jul 1944.
- ⁹ L-Cpl A. G. Rush; born Whangarei, 9 Apr 1915; telegraphist; killed in action 25 Nov 1941.
- ¹⁰ L-Cpl W. J. Hornsey; born England, 23 Jul 1912; clerk; killed in action 25 Nov 1941.
- ¹¹ Sigmn J. C. Clark; born NZ 1 Mar 1916; exchange clerk; killed in action 25 Nov 1941.
- ¹² Sigmn S. S. Pearmine; born Western Australia, 20 Sep 1907; cinema operator; killed in action 25 Nov 1941.
- ¹³ Maj S. J. K. Hislop; Williams Lake, British Columbia; born Napier, 23 Jun 1909; radio officer; OC 14 AA Sig Sec Jun-Nov 1941, A Sec Apr-Jul 1942, L Sec Jul 1942-Jan 1943; 2 i/c Sig School Base Jan 1943-Mar 1944; OC 2 Coy Apr 1944, 1 Coy May-Sep 1944; wounded 25 Nov 1941.
- ¹⁴ L-Sgt T. Edwards, m.i.d.; born NZ 16 Jan 1908; civil servant; died of wounds 26 Nov 1941.
- ¹⁵ Sigmn R. A. Rodgers; Dunedin; born Dunedin, 31 Jul 1915; printer's machinist; twice wounded.
- 16 The German column was thought to be South African.
- ¹⁷ Lt-Col T. V. Fitzpatrick, ED; Auckland; born Waihi, 27 Nov 1909; solicitor; actg CO 21 Bn Nov 1941; CO 1 Bn Hauraki Regt 1942-44, 1 Bn Waikato Regt 1943; wounded 1 Dec 1941.
- ¹⁸ Sigmn B. V. Ashe; born Victoria, 12 Oct 1918; driver; p.w. 30 Nov 1941; died while p.w. 12 Mar 1944.

- ¹⁹ Sigmn D. G. Stewart; Auckland; born Invercargill, 17 Nov 1915; civil servant; wounded Apr 1941; p.w. 30 Nov 1941; escaped 1945.
- Ashe, who were among the prisoners of war held in Campo PG 57 near Udine, in the north-eastern province of Venezia, were taken by train to Germany. The prisoners were carried in cattle trucks under heavy German guard, but during the journey over the Brenner Pass Ashe contrived to evade the notice of the guards on the truck on which he and Stewart were travelling and jumped off the train. This bold bid at escape came to disaster, however; Ashe landed on a frozen embankment, slipped, missed his foothold and sustained serious injuries from his fall. His attempt had been seen from the train, which was brought to a halt; he was taken, unconscious, back to the truck where he remained without attention for twenty-four hours. When the train reached Salzburg he was examined by a German officer, who had him removed to a hospital where he died a few months later.
- ²¹ Sigmn R. J. Rea; Wellington; born Lower Hutt, 7 Aug 1909; assistant lineman; wounded 1 Dec 1941; p.w. 22 Jul 1942.
- ²² Sigmn J. P. Gavan; Invercargill; born Raetihi, 28 Mar 1919; railway clerk; wounded 1 Dec 1941.
- ²³ Sigmn H. A. Fell; Hamilton; born Wanganui, 29 Jan 1919; carpenter; wounded 1 Dec 1941.
- ²⁴ Sigmn G. D. Neilson; Wellington; born Wellington, 26 Oct 1918; hosiery worker; wounded 1 Dec 1941.
- ²⁵ Sigmn R. B. Williams; Wellington; born NZ 29 Mar 1911; clerk; wounded 1 Dec 1941.
- ²⁶ L-Sgt J. W. Baird; Auckland; born Ardrossan, Scotland, 28 Apr 1910; faultman.

- ²⁷ L-Cpl D. G. Carnegie; Wellington; born Scotland, 24 Jan 1919; panelbeater.
- ²⁸ Lt J. McK. Toms, m.i.d.; Seddon; born Christchurch, 8 Jul 1909; clerk.
- ²⁹ L-Sgt J. L. Marfell; Wellington; born Sawyers Bay, Otago, 21 Nov 1917; clerk.
- ³⁰ Sigmn D. P. Bennett; born NZ 14 Jul 1918; telephone lineman; killed in action 1 Dec 1941.
- ³¹ Sgt C. Vincent; Auckland; born NZ 12 Jan 1914; telegraphist; wounded 1 Dec 1941.
- ³² Cpl S. G. Hattersley; Nelson; born Canada, 10 Mar 1913; draughtsman; wounded 1 Dec 1941.
- ³³ Sigmn J. G. Bond; Wellington; born NZ 5 Nov 1912; P and T lineman.
- ³⁴ Sgt R. M. Green, m.i.d.; Piopio; born Blenheim, 10 Jan 1904; telegraphist.
- 35 Farewell Campo 12 (Michael Joseph Ltd.), 1945.
- ³⁶ Sigmn W. F. Laskey; Perth; born Rangiora, 21 Jan 1911; clerk; twice wounded.
- ³⁷ Cpl A. Mitchell; Paparoa; born Ross, 8 May 1912; postmaster.
- 38 Brig L. W. Andrew, VC, DSO, m.i.d.; Wellington; born Ashhurst, 23 Mar 1897; Regular soldier; Wellington Regt 1915-19; CO 22 Bn Jan 1940-Mar 1942; comd 5 Bde 27 Nov-8 Dec

- 1941; Area Commander, Wellington, Nov 1943-Dec 1946; Commandant Central Military District Apr 1948-Mar 1952.
- ³⁹ Maj S. F. Catchpole, MC, m.i.d.; Auckland; born Huntly, 12 Apr 1916; salesman.
- ⁴⁰ Maj J. R. Shirley, OBE; London; born Napier, 27 Apr 1915; radio engineer; OC C Sec Sigs May-Dec 1941, G Sec Dec 1941-Jul 1942, K Sec Jul 1942-Mar 1943, A Sec Mar 1943-Apr 1944, 2 Coy Apr-Oct 1944; NZ Sig School, Bari, Oct 1944-Jan 1945; 4 Sig Sqn Jan-Apr 1945; 2 i/c Div Sigs Apr 1945; Deputy Assistant Director, Scientific Research, England, 1948-50; comd British Operational Research, Far East, 1950-52; representative for USA and Canada of Scientific Adviser to Army Council, 1952-53.
- ⁴¹ IMI: A Morse procedure signal meaning 'Interrogative'.
- ⁴² Morse procedure signals with the following meanings: X 494, 'Close down'; AR, 'End of message'; VA, 'End of transmission'.
- ⁴³ Sigmn R. S. Perry; born Ireland, 27 Dec 1914; labourer; died at sea 5 Dec 1941.
- ⁴⁴ Lt D. C. H. Cooper, m.i.d.; born Hastings, 21 Oct 1914; salesman; killed in action 4 Jul 1942.

DIVISIONAL SIGNALS

CHAPTER 10 — SYRIA

CHAPTER 10 Syria

EARLY in January 1942 the New Zealand Division, except for Divisional Cavalry and 6 Brigade, left the Western Desert and concentrated at Fayid in the Suez Canal Zone to reorganise, refit, and train for whatever the future might hold in store. E and J Signal Sections—with 4 Field Regiment and Headquarters 4 Brigade respectively—did not reach the Canal until later in the month, having been in the meantime at Maadi Camp, where they were relieved on 24 January by G and L Sections, which had left Baggush the previous day with 6 Field Regiment and Headquarters 6 Brigade. C Section, still with Divisional Cavalry in the Tobruk area at the beginning of the month, did not reach Maadi Camp until the 30th, after spending three weeks at Baggush.

During the seven weeks the Division spent in the Fayid area much training was done. In addition to the general training that occupies the various branches of the service in rear areas, there was a Divisional Headquarters road movement exercise in which a new divisional formation was practised; there were also exercises in combined operations on the Sinai shore of the Gulf of Suez, in which both 4 and 5 Brigades practised beach landings; and there was a good deal of reorganisation and section training in Signals.

Lieutenant-Colonel Agar had turned his attention to the design of an efficient mobile signal office vehicle and a properly camouflaged and dug-in signal office shelter for use in static operations. The current arrangement, by which the signal office was accommodated in a 3-ton lorry and in canvas shelters erected on each side of the vehicle, was as unsatisfactory as any that could be imagined. There was little or no protection from shell or bomb splinters, and the confusion within the interior of the vehicle, where orderlies, signal clerks, operators and despatch riders jostled, shouldered, hustled and shouted, each trying to make himself understood above the din, gave ample evidence of the need

for a much more orderly arrangement. Fullerphone instruments and switchboards were often mounted crazily on rickety collapsible signal office tables, and sometimes even on old packing cases, and crammed up in one corner of the vehicle tray where operators strove vainly to copy traffic under the Heath Robinson lighting system. On the steel floor of the tray, against which the men's hobnailed boots resounded in a continuous din, lay kitbags, blanket rolls and sometimes even cooking gear, in the path of bewildered NCO superintendents and orderlies.

Sometimes the Fullerphone terminals and the switchboards would be installed in dug-in shelters under the side canopies, and then the confusion was less noticeable, although the operators still had to peer with strained and red-rimmed eyes under the feeble and uncertain light shed by two or three headlight lamps rigged untidily along the roof of the canopies and fed, more often than not, by a single six-volt wireless battery.

Moreover, each of D Section's four detachments had a different arrangement for setting up a static signal office according to the whims of the detachment NCOs. One detachment might install its switchboards and Fullerphones in the vehicle itself; another would place them in slit trenches dug under one or both of the side canopies. Although some of the various arrangements exhibited intelligent thought, the almost complete lack of uniformity in signal office drill in the section as a whole was a serious defect.

The task of finding a suitable design for both types of signal office—mobile and static—fell to Captain Marshall, who had recently taken command of No. 3 Company after a term as OC J Section with Headquarters 4 Brigade in Libya, where he had had some experience of a dug-in signal office similar in some respects to that envisaged by the Colonel for use at Main Headquarters New Zealand Division.

Before proceeding with his task, Marshall was carefully briefed by the Colonel on the main essentials of the design. The mobile office in each detachment, for instance, would be required to have a uniform layout for terminal equipment such as distribution and protection frames, exchange switchboards and Fullerphones; lockers would have to be provided for stowing such loose items of equipment as terminal boxes and stationery, and there would have to be arms racks in an easily accessible position in the vehicle. Mobile offices were tentatively defined as vehicle offices for use during moves and in static positions where halts would not exceed twelve hours. If the headquarters remained halted at any stage of an operation for more than twelve hours the signal office would be transferred to a dug-in shelter of predetermined design; its principal features would be a depth of three or four feet underground, extended above ground to an effective height for headroom by sandbagged walls built up around the rectangular perimeter; separate compartments for exchange switchboards, Fullerphone terminals and signal clerks, cipher operators and despatch riders would be provided by sandbagged partitions; and as an adequate covering a large waterproof tarpaulin would be suspended at headroom height over the whole pit on a vehicle canopy or other suitable supports, and properly camouflaged. At the entrance to the signal office the tarpaulin cover would overlap by a few feet to provide an efficient light-trap.

Other details included the provision of a telephone in a wooden box fixed to a stake erected about twenty yards from the signal office. This was for the use of visiting staff and liaison officers, whose attention would be drawn to it by a blue and white painted board nearby inscribed with the words 'public telephone' in bold letters. This arrangement, in fact, had already been in use in November in the Libyan battles and had proved its value, not only as an extremely useful facility for visiting officers, who were often at their wits' end to obtain brief use of a telephone in G and administrative offices, but to keep the signal office itself clear of casual callers who aggravated the congestion in the confined space, to the annoyance of signalmasters and superintendents.

Another innovation which had also been introduced in Libya in an experimental way was the remote-control annexe. This was another dugin shelter, similar in construction to the signal office shelter but much

smaller. It would be sited close to the G office and roughly on a line between that office and the signal office. To a six-line universal call switchboard installed there remote-control lines would be run from all dispersed wireless terminals in the headquarters area. This arrangement would enable staff officers to speak over any wireless link from their own telephones or, if this were impracticable because of line attenuation or low signal strengths for radio-telephony communications, they could go to the nearby annexe itself and speak directly on the remote-control units.

On 25 January the new war establishment for an infantry divisional signals, which had been anticipated to some extent the preceding October by the provision of additional wireless resources at Main Headquarters New Zealand Division and the headquarters of the infantry brigades, was brought fully into use. Its principal feature was the introduction of a new company, Headquarters Company, which took over the responsibilities of M (technical maintenance) Section and the Quartermaster and his staff—henceforth to be known as Administrative Section—who until then had been part of the unit headquarters' establishment.

The new organisation aroused little interest among those concerned, except perhaps Major Smith, who was appointed to command the new company. In No. 1 Company, however, there was a good deal of amused speculation as to what Major Grant would find for a substitute for that persistent but elusive scapegoat on company parade—"that man in M Section". Ever since the unit had been formed in Trentham in 1939 until he left for his six months' tour of duty as OC Signal School Base in October 1941, Major Grant had gone through the now familiar procedure on company parades, in which M Section was always drawn up in the rear, of calling the parade to attention and watching the company intently for anything up to a full minute and a half for the merest sign of a fidget or wavering in the steady ranks. Failing to detect any sign whatsoever of unsteadiness—the men knew the drill and played up for him manfully—he would roar suddenly: 'Stand still—that man in M

Section!' Having got that off his chest, he would then stand the parade at ease and the morning ritual would be over. Now the daily performance was gone forever, because administrative people never held parades if they could possibly get out of it; in any case, the commander of the new company was not likely to worry about imaginary men with non-existent fidgets in the rear rank of M Section.

The first week of February passed with exercises in beach landings in the Gulf of Suez by 4 and 5 Brigades, in which J and K Sections provided the usual brigade communications after the landings had been made. Generally these exercises were unexciting affairs attended by the usual upsets and chaotic separations of wireless operators from their sets, which were usually found later to have gone ashore from the troopships in another boat. These happenings were dismissed nonchalantly by the men as SABUs or NABUs, according to the degree of disorganisation which attended them. Some of the dawn scenes on these beach exercises were not without their humorous highlights. There was a good deal of 'scone-doing' by harassed staff officers, who strode up and down howling irately for 'operators to work these bloody sets', or alternatively, according to the unpredictable order of arrival of landing craft from the ships off shore, 'bloody sets so that we can find out what's happened to so-and-so battalion'.

On 25 February a warning order came from Divisional Headquarters to move on the 27th. Preparations began next day with the striking of tents and loading of stores. That night those who were to travel in the road party slept in the open beside their vehicles. Lieutenant-Colonel Agar and the Adjutant left shortly after dawn on the 27th for Tel Aviv, where they bivouacked for the night. On the second night they reached Headquarters Ninth Army, at Broumana, and conferred with the Chief Signals Officer there. Next day they reached Baalbek in the early afternoon, in time to make an inspection of the signal office and barracks before the road party arrived.

The road party crossed the Canal soon after 8 a.m. on the 27th, but made slow progress at first because of sand drifts on the Sinai Desert

road. Promontories of loose wind-driven sand reached across the road every few hundred yards like miniature marching dunes, and as the heavy lorries swung wide to avoid them the outside wheels dropped off the verge and sank into the yielding sand. Then the crews had to scramble out to push and heave until the vehicles lurched drunkenly back on to the blistering bitumen. The road party bivouacked that night at Abu Aweigla, moved off early next morning, crossed the Palestine frontier and passed through Beersheba on to Lydda, where they bivouacked at Biet Lid Camp the second night. They crossed the Syrian frontier early in the afternoon of 1 March and reached 164 Transit Camp, on the northern outskirts of Damascus, that evening.

This journey through Palestine into Syria was a new and thrilling experience, and the men forgot their usual rude jests as they gazed at the beauty of the countryside. They passed green crops in the fields and orange groves, and saw lush pastures red with a hundred thousand anemones. Many of the wild blooms at the roadside were larger and darker and with a richer beauty than any they had seen under cultivation in New Zealand. In the still of the evening the breeze stirred slightly in the groves, bringing with it the sweet fragrance from the orange plantations and the almond blossom, and the men went about their bivouac tasks with a new vigour.

The journey was continued next day, and the road party reached Baalbek in the early afternoon. An hour later the rail party, which had left Kantara for Haifa on 28 February and had continued its journey by bus, rejoined the rest of the unit. The men were quartered in a former French Foreign Legion barracks—Gouraud Barracks—which consisted of several two-storied stone buildings honeycombed with scores of small cell-like rooms, those on the first floor being fronted along the length of the buildings by narrow balconies fenced in with iron rails.

At the other end of the village were the Wavell Barracks, where Headquarters New Zealand Division was installed. There also were the divisional signal office and offices for the Colonel and the Adjutant.

It was all very pleasant in this sunny village of Baalbek, but Lieutenant-Colonel Agar had no intention of allowing the men to fall into the holiday spirit. He confirmed this the day after the unit's arrival by issuing a training directive which said plainly enough that its object was to achieve a readjustment of signal practice from desert conditions as quickly as possible, to avoid the stationary outlook, and to preserve the principle and practice of mobility. Physical fitness, too, was to receive proper attention.

These edicts had a tone of insistence, and very soon the various sections were hard at work. A (wireless) Section commenced a period of training in the 24-hour maintenance of wireless communication over greater than normal ranges with frequent changes of frequencies, and also in ground station drill and practice in setting up dismounted wireless detachments in dug-in shelters. B (cable) Section spent its time and energies laying and building lines along roads and through built-up areas, in addition to the maintenance of the numerous poled-line circuits which constituted Ninth Army's principal communications in the area.

Perhaps more important than most of these activities were the new designs for dug-in and mobile signal offices, which had been commenced at Fayid a month before and were examined, re-examined, and modified several times a week until finally they began to reach that stage of near perfection at which the Colonel aimed. It was his hope that the new offices, particularly the dug-in shelter, would be completed and brought into use in the forthcoming divisional exercises.

At this stage very little had actually been done in a practical way, and the responsibility for the design and its translation into actual form was transferred to No. 1 Company. Major Pryor, the company commander, set to work with the aid of a copper-wire framework and carefully fashioned pieces of brown paper, representing the outer covering and interior fittings, to construct a scale model in the form in which he thought the finished office should appear. But the D

(operating) Section NCO detachment commanders preferred to trace their design with picks and shovels, and soon had their men at work on the first stage of the job, which obviously was a hole in the ground of suitable dimensions. This part of the business completed, they then looked around and decided among themselves the most suitable pattern for dividing the pit into properly partitioned compartments.

And so it went on, each detail being carefully noted and placed in its correct sequence as the work progressed, so that complete uniformity in the method of construction would be maintained by all four detachments of the section. Each man had his task. Some broke the ground with picks while others with shovels filled sandbags with the spoil, none of which was allowed to lie about outside the perimeter of the pit to indicate earthwork construction to the prying eyes of enemy reconnaissance aircraft. As the bags were filled they went into the making of the outer parapet and the interior partitions. Fresh ideas and modifications were incorporated into the original and indefinite design, and each section detachment strove to outdo the others in construction time and neatness of the finished office. Sergeant Charlie Morris's ¹ detachment eventually led the field in this competitive enterprise, and it was their office which the Colonel inspected with a satisfied eye during the divisional exercises at Forqloss in May and June.

Nevertheless, for all these intensive training activities and the constant reminders that the unit must be held ready for battle at a day's notice, the change of scene and climate from the monotonous and dreary dun-coloured desert encampments and the debilitating Egyptian summer heat began to show its beneficial effects. In their off-duty hours the men began to look around and examine what was to them a newly found land, where verdant pastures and flower-bedecked fields clothed the lower foothills of the snow-capped Lebanon mountains. The natives, too, far from being despised Wogs, were tall, stern men with severe eyes —until greeted by these strange but friendly Antipodean soldiers; then their saturnine countenances would break into a brief flood of smiles. With barely perceptible inclin- tion of the head and a swift movement of

hand from brow to breast in the traditional Islamic gesture of salutation, they passed on their way, aloof and inscrutable.

The Lebanon, of which the Bekaa valley (where Baalbek is situated) is the heart, forms a natural fortress guarding the approaches to Palestine and the Suez Canal from the north. An enemy thrusting south from Turkey would be compelled to make a wide detour to the east across the Syrian Desert unless he could force this natural bastion. The two mountain ranges, the Lebanon and Anti- Lebanon, dominate all three main routes to Palestine: the coastal road, which passes through Beirut, the Bekaa valley, and the arterial road from Aleppo to Damascus.

The plan of defence for Syria and Palestine included the preparation of tank-proof fortresses sited to deny an enemy the use of all main arteries of communication in southern Syria, Palestine and Transjordan. Altogether there were five of these fortresses, of which Djedeide lay in the Bekaa valley and thus became the responsibility of the New Zealand Division. Considerable work had already been done on Djedeide by the formations previously in the area; the New Zealanders took over the task of completing the defences, which were expected to be ready by mid-May. Signals' part in this task was the construction of signal offices and a remote-control annexe within the headquarters area of the fortress; dugouts for spare wireless sets and those which would not be installed in command offices; and the planning, siting and construction of buried cable runs and cable test-points in collaboration with the Divisional Engineers.

While this back-breaking business of digging huge, ugly, gaping holes with picks and shovels was going on, A (wireless) Section had ventured farther afield on more pleasant tasks. To Djerablous, on the Turkish frontier north-east of Aleppo, where the Euphrates flows as a wide, shallow, sluggish stream into Syria, and to Raqqa, 90 miles down the river, No. 9 wireless detachments had been sent in March on internal security duties, which consisted of the transmission of flood warnings from Djerablous to a Royal Engineer company employed on the construction of a large bridge across the river at Raqqa. Both

detachments were out-stations on a group which included also Headquarters 4 Brigade at Laboue and Headquarters 6 Brigade at Aleppo; the control station was at Divisional Headquarters at Baalbek.

The range from Baalbek to Djerablous—over 200 miles—set a stiff test for the No. 9 sets, and at first the good R8 signals logged during the hours of daylight fell off sharply as darkness closed down each evening, and did not build up again into readable transmissions until some time after dawn the following morning. Within two or three days, however, after exhaustive trials, during which the Colonel watched with undisguised interest this unforeseen but opportune test of his wireless section's capabilities, suitable frequencies for stable operation during the twenty-four hours of daylight and darkness were brought permanently into use. From then on the group continued in communication between control and all out-stations in good, crisp, resonant Morse.

Divisional exercises, or more correctly, a series of brigade group exercises, commenced in the Forqloss area on 21 May. Divisional Headquarters was represented on the ground in all these exercises, of which the first was carried out by 4 Brigade Group, followed on 29 May by 6 Brigade Group. The last of the series began on 13 June, when 5 Brigade Group left Aleppo for the Forqloss area. Suddenly, however, on the 15th, 5 Brigade was summoned to proceed immediately to Djedeide, where by this time the air was heavy with crisis. The day before a Ninth Army order was received at Divisional Headquarters stating that 2 NZ Division was to move immediately to Egypt, where the situation in the Western Desert was causing some uneasiness. The Division was to move to Matruh in the shortest possible time, preserving in the meantime the strictest secrecy, and to this end was to foster the impression among the troops that the preparations for the move were part of a full-scale divisional exercise originally planned to commence on the 20th.

Signals moved off with Divisional Headquarters at 6 a.m. on 16 June. E Section (with 4 Field Regiment), G Section (with 6 Field Regiment) and 14 Anti-Aircraft Signal Section left the same day,

followed by J Section (with Headquarters 4 Brigade) next day, F Section (with 5 Field Regiment) and K Section (with Headquarters 5 Brigade) on the 18th, and H Section (with 7 Anti-Tank Regiment) and L Section (with Headquarters 6 Brigade) on the 19th.

Through southern Syria they went, joining the coastal road in northern Palestine, where Main Divisional Headquarters bivouacked the first night at Tulkarm. They pushed on next day through Lydda and Gaza, south-eastwards to Beersheba, and then through the Sinai Desert.

The men watched from the fast-moving transport as the green fields and orange groves slid by—watched in faint nostalgia as they had done three months before, when they had come up through this pleasant land. But perhaps the nostalgia was stronger now, enlivened by rumour, whose lying tongue had been at it again. They were going home! Some of the ships that were to take them there were already lying at Suez to take them aboard! The stories grew from hour to hour and lost nothing in the telling. An A Section operator had heard it from a Divisional Headquarters' orderly who, it appeared, had got the 'gen' from a brigadier's jeep driver with whom he had passed the time of day outside Divisional Headquarters the day they left Syria. Between them all they put two and two together and made five, but their companions listened eagerly.

Some stories were shot with odd flakes of confirmation which seemed to the more credulous to turn mere rumour into possibility, possibility into probability, and then, by a few deft turns of imagination, into certainty. What of the divisional exercises at Forqloss on the 20th, for example? Here they were on the 19th crossing the pontoon bridge over the Suez Canal, and Forqloss lay many leagues behind them. And, again, what of the secrecy in which the move continued to be shrouded? All fernleaf signs on their vehicles had been painted over at the start of the move and all cap badges, shoulder titles and other New Zealand insignia—except, curiously, the Maori place-names emblazoned boldly on the windscreens of a few vehicles —taken off and put out of sight. Was this not the same procedure as had been followed by the Australians

earlier in the year when they suddenly left Syria and Palestine for home?

The birth of this hopeful conjecture occurred on the 19th somewhere on the road between Ismailia and Cairo, and the eager heads in the backs of the three-tonners came closer together. A soldier suddenly remembered another Australian story that he had heard somewhere. The details were a little hazy now, but it was coming back to him. Yes! He remembered now. He had heard it from a cook in the officers' mess at Headquarters 4 Brigade at Kabrit last January. Among the guests at a mess 'do' one night were several Australians, one of whom had sidled up alongside a New Zealander and said, confidentially: 'I suppose you know we're going home? Well, we've got 700 bottles of beer that we want to be shot of. Give us the akkers, pal, and they're yours.'

But all the convictions so carefully built up over the last four days faded rapidly as the tires whirred harshly on the black tarmac and bore the column swiftly up to the outskirts of Heliopolis, now looming close ahead. Next they were on the Mena road and turning right at the Mena House corner, and very soon they were coasting down the approaches of the long desert road to Alexandria. The phantom ships at Suez, away beyond the haze which hung over the Delta, lifted their anchors from the mud and slipped silently away into oblivion.

They reached Amiriya that evening, refuelled their tanks for 400 miles, and were away again early next morning before the sun struck or the sand-devils were up to revive their recollections of the dreariest and most uncomfortable transit camp in North Africa.

Main Divisional Headquarters and Signals reached Matruh at 4 p.m. on 20 June and moved to a bivouac area at Umm el Rakham, 11 miles west of the town. The Division was now in General Headquarters Reserve and under the command of 30 Corps, whose headquarters was then at Garawla.

Immediately Divisional Signals arrived in the Matruh area a signal office was opened and line communication established with

Headquarters 84 Base Sub-Area. Late in the afternoon of the next day, however, the Division was suddenly ordered by 30 Corps to occupy the Matruh fortress, and by evening Main Headquarters was bivouacked just west of the town and within the fortress perimeter. A signal office was opened immediately in the new location to maintain line communication with 84 Base Sub-Area and the closing group of Divisional Headquarters still at Umm el Rakham. No communications had yet been opened to 4 and 6 Field Regiments near Ras Abu Laho, or to Headquarters 4 Brigade at Smugglers' Cove, east of the town. Early next morning, the 22nd, 4 Brigade was moved to the perimeter defences between the Sidi Barrani road and the coast, and Brigade Headquarters occupied the Egyptian barracks west of the town. Late that afternoon Signals moved again, this time to the area just vacated by 84 Base Sub-Area Signals, and was able to establish direct line communications by the fortress underground cable system to Headquarters 4 Brigade, 18 and 19 Battalions, Headquarters Divisional Artillery, and 4, 5 and 6 Field Regiments. Communication to 20 Battalion was through Headquarters 84 Base Sub-Area and thence by poled-line route to Charing Cross.

By this time 5 Brigade Group had arrived and was bivouacked at Smugglers' Cove.

It is now time to examine the course of events which set these preparations astir in the Matruh fortress and which had brought 2 New Zealand Division hot-foot over nearly 1000 miles in five days from the Lebanon. Soon after the withdrawal of the Division from the fierce fighting of the opening days of December 1941 for possession of the corridor to Tobruk, the enemy had been gradually pushed back towards the approaches of Gebel Akhdar. He had attempted a last stand on a line running south-west from Gazala and there, on the 13th, his tanks had fought a gruelling battle with the artillery of 4 Indian Division. Rommel had disengaged on the 17th and withdrawn his armoured divisions and other formations westwards to Agedabia, leaving the broken 21 Italian Corps to make its own way back to Benghazi. The New Year had found the Indians in possession of Benghazi and light British mobile columns

patrolling around Agedabia, while Rommel had lurked in his bolt-hole at Agheila, south of the Gulf of Sirte. He had lost vast quantities of stores and sustained considerable losses in men and tanks, but for all that his withdrawal had been orderly and he had entered his Agheila line in fair condition; he could not have been turned out easily from what was one of the strongest positions along the whole coast of Egypt and Libya.

This had been the situation in January 1942. With the whole of Cyrenaica in British hands, Rommel had suddenly leapt out from his lair at Agheila on the 21st and driven back the British patrols. His movement north-eastwards had continued, and by 4 February the British forces stood on a line stretching from Gazala to Bir Hacheim, 40 miles to the south. This had marked the limit of the enemy advance for the time being, and both armies had remained on the defensive until the last week in May, when (on the 27th) Rommel had struck again. His show of force against the northern portion of the defences and then the turning movement of his armour around the south of Bir Hacheim had culminated in the crushing blow, after three weeks of confused fighting, struck at the very heart of Eighth Army at Knightsbridge, 17 miles west of El Adem. On 19 June, when the advance parties of the New Zealand Division were beginning to arrive in Matruh, the British line had withdrawn to the Libyan frontier, with strongly fortified positions in the Tobruk area.

On that same day the Germans had cut the road east of Tobruk and closed up on the perimeter defences. Early next day, the 20th, they had mounted a furious onslaught with artillery, bombing aircraft, armour and infantry. By the evening most of the defences had been overrun, and the garrison surrendered next morning. With the fall of Tobruk most of the chances of holding the enemy on the frontier line collapsed. With the exception of a delaying force left in the Sollum area, therefore, the British troops had withdrawn to Matruh, 125 miles to the east.

The New Zealand Division had not been involved in these operations, although 5 Brigade Group had taken part in the December pursuit of the retreating forces and had fought on the right of 4 Indian Division at

Gazala. A small group of New Zealand Signals, however, had operated almost continuously with Eighth Army in the Western Desert since October 1941. This group was T Air Support Control Signals, most of whose wireless detachments had been attached to British and Indian units, some as far forward as Benghazi and Agedabia. None of these detachments had been allotted permanently to any unit, but only for as long as they were required to provide air-support communications. Thus, T Section had been nearly always in the forward areas.

On 1 December 1941, when the Division was withdrawn from Sidi Rezegh and Belhamed, T Section was in Tobruk with Headquarters 13 Corps. The tentacle detachments with 4 and 6 Brigades, then withdrawing towards the Egyptian frontier, were unfortunately out of wireless range before they could be instructed to rejoin the section headquarters in Tobruk. The tentacle with Headquarters 5 Brigade, from which nothing had been heard since 25 November, had been captured at Sidi Azeiz on the 27th, as OC T Section (Lieutenant Foubister) was to learn later, and its crew, Lance-Corporal Martin, ² Signalman Dick ³ and Signalman Gates, ⁴ had been taken prisoner. (Martin and Dick were released at Bardia five weeks later.)

T Section was now reduced to seven tentacle detachments, three with 4 Indian Division and four in Tobruk. No one could hazard a guess as to when the two tentacles with 4 and 6 Brigades would rejoin the section. On 10 December a tentacle was sent to the reorganised 5 Brigade, then at Bir el Amud, near Gambut, and moving towards Acroma. Another had gone on the 2nd to 32 Army Tank Brigade, then in the corridor to Tobruk, six miles south of the town.

The section left Tobruk with Headquarters 13 Corps on the 12th. The chase was on—to Acroma, Tmimi (on the way the tentacle with Headquarters 5 Brigade, which was to go no farther west than Gazala, was recovered), Mechili, and Msus, where the section spent Christmas eking out its normal army rations with the remnants of the last parcel mail and a few extras which the cook had been hoarding for such an

occasion. On the 27th the section was off again, 30 miles southwards to Antelat.

By this time the tentacles were well dispersed—one with Central India Horse in Benghazi, one with Headquarters 4 Indian Division at Barce, another with 7 Indian Brigade at Derna, and two with the 7 Support Group and 22 Guards Brigade near Agedabia. On the 28th the two tentacles which had been withdrawn from the Tobruk corridor with 4 and 6 Brigades rejoined the section at Antelat, bringing with them ten operator reinforcements from New Zealand Signal School Base.

Pressed by Rommel's advance in force from Agheila on 21 January, 13 Corps moved back to Msus, and a few days later to Mechili. In the face of the growing enemy threat the withdrawal was continued to Tmimi, and on 4 February to Acroma. Here a redistribution of tentacle detachments was made, one each going to 1 Armoured Division, 150 Infantry Brigade (of 50 British Division), 200 Guards Brigade, Central India Horse, 4 Indian Division, and 1 South African Division. On 17 February one was sent to 5 New Zealand Brigade, which had just arrived in the El Adem area from Fayid.

Early in March the section was informed that it was soon to be relieved and would rejoin the Division with Ninth Army in Syria. This was welcome news indeed, and the men were keyed up to a high pitch of expectancy. The relief took place on 8 March, No. 2 Army Air Support Control Signals taking over all air-support communications, and T Section commenced to move to Cairo. However, the section was not to see Syria after all, for on 13 April, after a spell of four weeks at Signal School Base, during which Christmas had been belatedly celebrated at a section dinner in Cairo, it was ordered back to the Western Desert to rejoin Eighth Army. Early in May the section reached Headquarters 30 Corps, a few miles south of El Adem, and took over immediately from No. 2 Army Air Support Control Signals. Tentacle detachments were despatched to Headquarters 7 Armoured Division, 7 Motor Brigade, the Free French Brigade at Bir Hacheim, and to Main Headquarters Eighth Army.

The lull on the Gazala- Bir Hacheim line, which had lasted since 15 February, was broken early on 27 May. Early that morning Lieutenant Foubister and his driver, Signalman Silvester, had visited the tentacle at Headquarters 7 Motor Brigade near Bir el Gubi. From there they went to the last-known position of Headquarters 7 Armoured Division, 17 miles north-west by north from El Gubi. At this time, however, 7 Armoured Division was farther east and nearer El Gubi, but Foubister did not know this. When he was about five miles short of the armour's supposed position he saw about a thousand vehicles moving up from the south in three groups. At first he thought these were South Africans and he passed through the gap between the first and second groups and continued north-westwards, but after going several hundred yards he felt the impulse to stop and put his glasses on the columns. He discovered to his consternation that they were German, whereupon he turned about and, passing back through the gap between the second and third groups, made off towards El Gubi to warn 208 Squadron RAF, which was at the advanced landing ground there. Curiously, the enemy took no notice of the lone 8-cwt truck scurrying back and forth through his column, and Foubister was able to hurry off unmolested.

During this involuntary reconnaissance of 90 Light Division, Signalman Silvester was unusually silent and forbore to make any comment or ask any questions. It was not until several weeks later, and then in his cups, that he told his OC plainly and frankly what he thought of the incident and of his fool- hardiness in venturing so close to the enemy columns.

In due course Foubister reached El Gubi, where he reported what he had seen, but 208 Squadron discounted his story, saying that a tactical reconnaissance aircraft had been over the area that morning and had reported no enemy movement. Foubister then scouted around to find someone who would listen to his story, and eventually found a New Zealand squadron-leader who arranged for another aircraft to have a look around. This aircraft reported the location of the enemy columns a

short time later, and the information was passed on immediately to 30 Corps at El Adem. An hour later shells from the enemy columns were falling in the Corps' area.

In the early armoured clashes which occurred that day a German battle group captured the headquarters of 7 Armoured Division, and the division's forward control set was lost. The T Section tentacle, however, evaded capture and took over the division's wireless communications to forward formations, which included the Free French Brigade at Bir Hacheim.

A second T Section tentacle detachment was taken to the French at Bir Hacheim on 1 June to relieve the one already there, which was expected to move out with a French attack north-westwards in the Rotonda Segnali area, 40 miles away. The second tentacle was intended to serve the relieving force, an English formation known as Greyforce, but as only one battalion of the French eventually was able to go to Segnali, the garrison at Bir Hacheim now had two tentacles. This was a happy turn of events for the first tentacle as the French had lost their forward control set some days before, with the result that all the normal tactical wireless traffic had to be handled by the T Section set in addition to its usual air-support communications. An increasingly heavy burden had fallen on the detachment as the French called for more and more RAF assistance to help ward off the enemy's incessant attacks. On 8 June four T Section men were wounded by airburst shrapnel, but could not be evacuated as the French garrison was now completely surrounded. Fortunately, only one of the men, Signalman Sutherland, ⁵ had sustained serious injury, and the others continued their normal duties on the sets.

On the 10th, because of lack of supplies and the almost complete exhaustion of the garrison, the French prepared to evacuate Bir Hacheim. Both T Section detachments were with the first transport column to break out. As the vehicles moved slowly forward in the pitch darkness, trying to avoid the minefields and wire on the perimeter defences, they came under heavy anti-tank and machine-gun fire.

Several trucks were blown up on mines and others were set ablaze, but the two tentacles managed to scrape through without hurt, several times narrowly escaping destruction by a hair's breadth. After getting clear of the general mělée, they made off quickly in a south-westerly direction for about eight miles and then turned south for 30 to 40 miles. At dawn they found themselves in a heavy ground mist which covered the desert for miles around, and the two vehicles became separated.

Lance-Corporal McAnsh's ⁶ detachment (T13) searched for Corporal Pye-Smith and his companions in T4 for some time, and then headed north-east towards 30 Corps' position near El Adem. After travelling some distance they saw ahead of them a vehicle which, to their hopeful imaginations, appeared to resemble the missing T4. They approached it cautiously, to be greeted suddenly by a burst of small-arms fire, whereupon they made off smartly towards the east. A little later McAnsh halted, started up his set and called T4, who answered immediately and reported that they were with friends.

McAnsh's detachment pushed on again and, after breakfasting with Rear Headquarters 7 Motor Brigade, whom they encountered soon after speaking to T4, they reached the marshalling position of the French Brigade, 16 miles south-east of Bir el Gubi. Here they received instructions by wireless to return to Headquarters 30 Corps at El Adem, and they set off again after lunch. About eight miles south of El Adem they came on a New Zealand airman, Squadron-Leader Ward, of 73 Squadron RAF, sitting beside his grounded aircraft. At first Ward couldn't believe his eyes when he saw the fernleaf sign on the vehicle and the New Zealand shoulder titles of its crew, but he accepted McAnsh's invitation of a ride to El Adem with alacrity. T13 reached Tactical Headquarters 30 Corps late that afternoon and then moved on again to rejoin Main Headquarters of the Corps at Sidi Rezegh.

Meanwhile Pye-Smith, with his detachment, had reached Main Headquarters Eighth Army, where Signalman Sutherland was admitted to a casualty clearing station for urgent attention to his wounded foot, which was in a dangerous state through lack of medical care.

The enemy, now unhindered by the fallen Bir Hacheim position, began a rapid concentration of his forces in the Acroma- El Adem area. In bitter fighting in the vicinity of Knightsbridge the British armour sustained heavy losses against Rommel's tanks, reinforced by a newly arrived Italian armoured division. On the night of 14-15 June the British forces were withdrawn from the Gazala positions, and Main 30 Corps retired to the frontier wire, to a position just south of Sidi Omar.

Before T Section shook the seven months' accumulation of Cyrenaican dust from its hobnailed boots it was to add another incident to its already imposing chapter of Western Desert adventures. On 12 June, some time before an enemy attack on the El Adem box developed, the section's office truck—used for the occasion in lieu of a 15-cwt water truck—left Main Headquarters 30 Corps' position near Sidi Rezegh to collect water from Tobruk. The route was by way of El Adem to Ed Duda and thence to Tobruk, but half a mile east of Ed Duda the truck, with its driver, Signalman Meier, 7 and the section cook, Signalman Boyle, 8 was captured by enemy infantry. They were added to the Germans' already considerable bag of prisoners; soon afterwards, however, the enemy party and its captives were heavily shelled by British guns, and in the confusion Meier managed to sneak off unseen. He later joined up with two Royal Armoured Corps drivers, with whom he made his way to the east, reaching a British unit's lines at Sidi Rezegh that night. Three days later Boyle, having also escaped by some means, was reported to be safe with 22 Armoured Brigade.

On 18 June 30 Corps moved back from the frontier area to Buqbuq. The general withdrawal eastwards to Matruh was now in full swing and T Section, which had left 30 Corps and come under the command of Main Headquarters Eighth Army on the 21st, had found itself on the 23rd at Baggush, where it was relieved by No. 5 Army Air Support Control Signals next day. At this time 30 Corps was ordered back to Amiriya to reform and refit. T Section rejoined the Corps at El Imayid on 28 June, and continued under its command until it was disbanded on 14

September 1942, exactly one year after its formation. In that year it had had a record of achievement in wireless communications probably not excelled by any section of New Zealand Divisional Signals—with comparable equipment—throughout the war.

Postscript: The following is an extract from a letter, dated August 1942, from General Headquarters Middle East Forces: GHQ would like to record their appreciation of the excellent work done by the T (NZ) Air SC Signals during the last two campaigns in Cyrenaica and Egypt.

(Signed) G. F. McL EAN, Brigadier for Lieut-General, Chief of the General Staff.

¹ L-Sgt C. L. Morris; Te Kauwhata; born NZ 7 Mar 1904; grocer.

² WO II N. C. Martin; Nelson; born Nelson, 28 Aug 1919; salesman.

³ Sigmn G. F. Dick; Auckland; born Hawera, 6 Jun 1916; electrician.

⁴ Sigmn N. C. Gates; Lower Hutt; born England, 29 Dec 1915; grocer; p.w. 27 Nov 1941.

⁵ L-Cpl B. W. Sutherland; Wellington; born NZ 1 Aug 1917; transport clerk; wounded 8 Jun 1942.

⁶ Maj I. McAnsh; Beverley, England; born England, 12 May 1916; lineman; wounded 8 Jun 1942; seconded to British Army.

⁷ Sigmn L. R. Meier; Christchurch; born Christchurch, 4 Feb 1917; sawyer.

⁸ L-Cpl F. S. Boyle; New Plymouth; born NZ 4 Aug 1913; labourer.

DIVISIONAL SIGNALS

CHAPTER 11 — MINQAR QAIM

CHAPTER 11 Mingar Qaim

MEANWHILE, in Matruh, the New Zealand Division hardly had time to look around to examine its new tasks under 30 Corps in the defence of the fortress, which Corps declared was 'to be held at all costs', before there was a sudden change of command and it was again under 10 Corps, which was taking over the fortress defences from 30 Corps, now ordered to reform and refit at Amiriya. The change of command, however, made little difference to the Division's responsibilities, and Signals continued to operate the fortress underground cable system for the principal divisional communications.

The western sector of the Matruh fortress was occupied by 4 Infantry Brigade, while 5 Infantry Brigade, with 26 Battalion under command, held the eastern sector. Sixth Infantry Brigade, with its two remaining units, was to be brought up from Amiriya, where it had been intended to hold it in reserve, and 24 and 26 Battalions would then occupy the fortress's out-posts, situated within the minefield itself. Suddenly, however, when these plans were about to be put into practice, yet another change in command occurred. Before 6 Brigade could commence its move forward from Amiriya, the Division was ordered to hand over to 10 Indian Division and be prepared to move in reorganised battle groups to the south of Matruh, and operate there in a mobile role under 13 Corps.

New Zealand Divisional Signals handed over the Matruh fortress communications to 10 Indian Division Signals on 25 June and made ready to move out that evening with Divisional Headquarters. Fourth Brigade Group was the first to leave the town; it was followed two hours later, at 5.30 p.m., by the Divisional Headquarters Group, which halted soon after nightfall ten miles to the south of Garawla and just east of the Khalda track, where it bivouacked for the night. Fifth Brigade Group left Matruh late that night and bivouacked at Bir Ali el Qadi, at the northern end of the divisional dispersal area. By this time the main

formations of Eighth Army had been withdrawn behind the Matruh line. The enemy, already east of Sidi Barrani, had halted during the day, but resumed his advance, headed by 90 Light Division, that evening and was expected to reach the Matruh minefields early next morning.

The New Zealand Division spent the morning of the 26th preparing defensive positions and organising transport and supplies for the tasks of securing a box in the Mingar Qaim area to deny the escarpment to the enemy, and of operating mobile columns to attack and delay his advance. Soon after midday 5 Brigade Group left the dispersal area and moved to Mingar Qaim, where it set up its headquarters in a wadi close to Point 216. Headquarters 5 Field Regiment was established a short distance to the south-east of the brigade's position, with its guns deployed on the open plain beneath the escarpment. Fourth Brigade Group reached Bir Abu Batta at 6.40 p.m. and took up positions east of the Khalda track. It was here, late in the evening, that the brigade area was bombed and strafed by twenty-four enemy planes, seven men being killed and over fifty wounded. Among those killed was Signalman Dale, ¹ of J Section; Signalman Benton, 2 who was among the wounded, died next day. While making a brief reconnaissance of the brigade area in a truck, Dale and Benton, both despatch riders, were caught unawares by the raiders swooping in over the area in the gathering dusk. A search was begun when they did not answer a rough roll-call of J Section's men after the raid, and Signalman Provan found them some time later. Dale had been killed instantly, and the truck was completely wrecked. Benton was taken immediately to an RAP in the brigade area, where a medical officer, seeing his wounds, shook his head and said it was unlikely he would see out the night.

Meanwhile, Divisional Headquarters had arrived in the area and, while halted on the fringe of 4 Brigade's position, had also been caught during the raid. There were no losses in Divisional Signals, although Lieutenant-Colonel Agar, had he been given to premonitions, might have expected some other misfortune to follow the narrowly averted debacle which had occurred that evening in the dispersal area at Bir el Sarahna.

From the time of their departure from Matruh the evening before both Main and Rear Divisional Headquarters had been combined and had moved in one group. When the group was formed up at Sarahna ready to move off on the evening of the 26th, the Colonel had walked up and down the waiting transport to ascertain, in a more or less cursory way, that all his unit's vehicles were in their correct places in the column. At the last moment he had discovered, quite by chance from a casual conversation, that Divisional Headquarters was to split into two and that Rear Headquarters was about to move to a position some 17 miles to the east of Main Headquarters' projected location at Minqar Qaim. He had hurried off quickly to the G office truck at the head of the column and persuaded the GSO 2 to delay the move for a few minutes while Rear Headquarters' signals was extricated from the mass of assembled transport.

In due course Main Headquarters arrived at the escarpment and began to set up its offices on the flat below, about a mile west of the Khalda track. While the vehicles were still extending out to their dispersal positions in desert formation, orders were suddenly given to move several hundred yards south onto a low escarpment below the main one, and confusion set in afresh in Signals' area. By this time lines were already going out to 4 and 5 Brigades, and in the haste of Main Headquarters' second move there was no time to reel in the cable, so the lines were dragged along behind the signal office vehicle and were straightened out and tidied up when the headquarters finally settled down. Major Grant, OC No. 1 Company, when recounting the incident later, drily observed that 'it was not a procedure to be recommended but it worked in this case, which was the only time it was attempted, to my knowledge, although the reverse idea of dragging the signal office switchboard behind a line-laying party had been known to occur, although quite unintentionally.'

Hardly had this little flurry settled down when Lieutenant-Colonel Agar was confronted with a fresh problem which, easy enough to solve in normal circumstances, was on this occasion a little different and considerably more difficult. He was accosted suddenly in the Divisional Headquarters' area by Brigadier Weir, ³ the CRA, who asked him to lay lines from Headquarters Divisional Artillery to 4, 5 and 6 Field Regiments. There was nothing very difficult about this, especially as the CRA was ready to lead the cable-laying detachment to the regiments, but unfortunately the CRA's headquarters was lost and not in the place where it should have been at the head of the Divisional Headquarters' area.

On the arrival of Main Headquarters in its first position below the escarpment, Brigadier Weir had gone off to visit his field regiments. When he returned some time later, however, Main Headquarters had moved, and he found only his Intelligence Officer, Lieutenant Norrie, 4 who had remained at the old position with an A (wireless) Section detachment under Signalman Leonard 5 to await the Brigadier's return. The small party, led by the Brigadier's jeep, set off in the darkness to find Divisional Headquarters, which they located after some difficulty on the low escarpment to the south, where it had settled down again after its hurried move. But when the CRA reached the head of the Divisional Headquarters' area, where his headquarters should have been, there was no sign of the Brigade Major or the vehicles of Headquarters Divisional Artillery. The Brigadier was worried and perplexed at the absence of his headquarters on the eve of a critical battle; Norrie could tell him little except that the headquarters had accompanied Main Divisional Headquarters when it moved from its first position below the escarpment.

Besides asking for a cable-laying detachment to lay out lines to the regiments, Brigadier Weir had asked Colonel Agar for an operating detachment to man the Headquarters Divisional Artillery exchange. Agar himself brought the detachments to the CRA's headquarters a little later, and from there the Brigadier led the cable-laying truck first to 5 Field Regiment, in 5 Brigade's area near Minqar Qaim, and then to 6 Field Regiment, in the Divisional Reserve Group.

The Brigadier was up again before daylight, eager to be off in search

Hanna, ⁶ the Brigade Major, came in with the headquarters' group, having spent an anxious night with 4 Brigade, in whose transport columns he had been caught up the previous night in the confusion of Divisional Headquarters' hurried move in the dusk. There were some mutual recriminations, but the Brigadier was too relieved at the recovery of his headquarters to expound his views of the incident at any appreciable length, and paused only briefly to dismiss the affair with a few terse and brusque comments in his inimitable manner.

The recital of these events serves as a convenient introduction to the manner in which the CRA acquired his own signal communications. Hitherto the normal divisional-brigade circuits had been used to keep him in touch with his regiments, which had invariably been deployed under the command of brigade groups. There had been much discussion between the GOC and the CRA on the question of employing the field regiments under the centralised control of the CRA, and earlier in the month, in Syria, these discussions had reached the stage where centralised control was to be tried out on the full-scale divisional exercise planned to take place at Forgloss. Colonel Agar was closely concerned with the question of the communications necessary for efficient centralised control of the Division's artillery fire power, and he and the CRA planned the inauguration of a separate CRA's exchange, which in addition to switching field regiment lines, would be connected by at least one junction circuit to the exchange switchboard at Main Divisional Headquarters.

No increases in signals establishment or equipment were involved in these separate artillery communications. Although Signals could ill afford at this time to extend its commitments, the additional communications were provided quite cheaply from D Section's resources, which were elastic enough to stand a small additional strain. Two switchboard operators, therefore, were detached for fulltime employment at Headquarters Divisional Artillery. B (cable) Section's contribution consisted of one 15-cwt cable-laying truck, which was detached as

required on a part-time basis. For A (wireless) Section there was no additional outlay, because the employment of one No. 11 wireless set at the CRA's headquarters as a control set for the field regiments' wireless group and for use as the CRA's reconnaissance set had already been accepted as a more or less normal part of the Division's communications.

Another development in the artillery signal communications occurred on 26 June, but with a different trend. This was the disbanding of H Section (with 7 Anti-Tank Regiment), from which some men were to be absorbed into other signal sections and the remainder posted to Signal' left-out-of-battle group at Maadi Camp.

At 5 p.m. on 26 June 2 NZ Division passed from 10 Corps to 13 Corps, whose orders were 'to secure a box in the area Minqar Qaim in order to deny the escarpment to the enemy and to operate all round with mobile columns to attack and delay the enemy advance'. By nightfall the Division was deployed in battle order along the escarpment: 5 Brigade Group held the most westerly positions around the slight salient called Minqar Qaim; the Divisional Reserve Group formed a protective screen for Divisional Headquarters just to the west of the Khalda track; 4 Brigade Group lay along 3000 yards of the escarpment to the east of the track.

Late that evening the enemy was reported to be only six miles west of the New Zealand positions, and during the night he breached the minefields south of Matruh and continued to move east in some force. To the south, a few miles away, lay 1 British Armoured Division, believed to have at the most 100 tanks.

The battle opened on the 27th with the sound of distant gunfire soon after dawn, but it was not until 8.30 a.m. that enemy fire began to fall in the Division's area. While the first shells were falling an enemy column led by a group of fifteen tanks was seen moving across the Division's northern front. The enemy's first ranging shells landed between Divisional Headquarters and 5 Brigade, and to these the New

Zealand guns replied. The artillery duel continued throughout the day, and the enemy's fire, although not particularly heavy at first, increased gradually in intensity until towards midday it had inflicted many casualties and caused at least two groups of transport to disperse rapidly.

The brunt of the fire fell first on 5 Brigade's area. Unfortunately the brigade's transport, including a number of K Section's vehicles and the entire battery-charging equipment, became separated from Brigade Headquarters in the morning and was prevented by enemy intervention from returning. Earlier in the morning the Brigade Commander had decided that the headquarters' area was too congested and likely to attract fire, so he instructed his Staff Captain (Captain Dugleby 7) to take all non-operational transport to a position in the lee of the Division, to move from there only if he came under fire, but on no account to lose communication with Brigade Headquarters.

Captain Dasler, OC K Section, remained with Brigade Headquarters, and with him were the forward control wireless set No. 11, the wireless set No. 9 which provided the rear link to Main Divisional Headquarters, the cable-laying truck, and a signal office detachment. Both wireless sets were dismounted from their vehicles and were dug in on ground which, owing to its rocky nature, afforded little protection. The section's second-in-command, Lieutenant Sidey, 8 with two operators and a No. 11 set mounted in an 8-cwt wireless truck, had joined the B Echelon vehicles assembling on the flat about a mile to the north of the Brigade Headquarters' wadi. Here he had under his control the section's main battery-charging equipment, a 1250-watt set which, with the bulk of the batteries on the charging bank, was laid out on the ground alongside its 15-cwt truck. Although it is not known for certain, this set was probably the section's only charging equipment, as the small 300-watt Chore Horses (trade name), one of which was later to become a part of each wireless set's equipment, were then in extremely short supply, there being probably not more than half a dozen in the whole of the Division.

Sidey had no liking for his job with the B Echelon and preferred to remain with Dasler at Brigade Headquarters, but the Brigadier was

adamant that none should remain in the headquarters' area unless he were needed there. Dasler, however, had foreseen certain difficulties in saving valuable section equipment should the headquarters be forced to move suddenly during the battle, and had contrived to retain his 3-ton signal office lorry by concealing it at the head of the wadi where it turned east out of sight of the headquarters. Later in the day Dasler brought this vehicle out and used it to carry out wounded sappers from the entrance to the Brigade Headquarters' wadi, where enemy artillery fire had inflicted several casualties on a minelaying party there.

About 10 a.m. Sidey took his driver and truck down to the transport assembly area. He had hardly arrived when artillery fire began to fall among the vehicles. In accordance with earlier instructions to move if shelled, the transport was quickly off the mark, hurried right across the front of the Division's positions, turned south near Abu Batta, and formed up again at Point 197, about three miles south-east of Headquarters 4 Brigade. It is understandable that the move was carried out in some haste, especially by K Section's battery-charging truck, on which the charging set and batteries had first to be loaded. No doubt the electrician and the driver of the truck did not wish to be left too far behind the rapidly disappearing transport group.

During the confusion of this hurried move a small incident occurred that was later to assume a greater significance than it would normally deserve. When the shelling first commenced, Sidey, who was some distance away from the battery-charging truck, jumped into a DR truck standing nearby and drove quickly over to the charging equipment to oversee its loading. The completion of the loading was the signal for K Section's vehicles to move off after the B Echelon transport. Sidey's own truck was standing close by and he told its driver to move with the rest, but the driver, apparently misunderstanding the order, drove off in the opposite direction and returned to the Brigade Headquarters' area. Sidey did not discover his truck was missing until the transport had reassembled at Point 197, but by then it was too late to do anything about it. In the back of that truck were two fully charged wireless

batteries. Later in the day wireless communication to 21 Battalion at Bir Khalda and the B Echelon transport group south-east of 4 Brigade might have been more successfully sustained by the use of these fresh, fully charged batteries, but their presence was quite unsuspected by all at Brigade Headquarters except the driver of the truck, who had no inkling of their importance at that time.

About midday Dasler called the reconnaissance set from Brigade Headquarters and asked Sidey to send him a set of charged batteries. A curious thing then occurred. Sidey, instead of complying at once, as he was able to do, for some of the batteries had reached full charge, suggested that if Dasler would 'leave it for another hour or so' the rest of the batteries would be charged and he could then send them also. To this suggestion Dasler agreed! Perhaps he was misled by the smoothness of his wireless communications at that time, for all out-stations, including that with 21 Battalion at Bir Khalda some miles to the south, were maintaining communication with the control set at Brigade Headquarters at good signal strengths; but whatever the reason, by acquiescing in Sidey's suggestion he had unwittingly relinquished his last opportunity to replenish his failing battery power.

Early in the battle the enemy appeared to the north, which was the only direction from which the Division's positions enjoyed no protection whatever, and with little or nothing to impede his advance to the east, steadily enveloped the Minqar Qaim defences. Moreover, the powers of infiltration which his tanks and armoured cars gave enabled him to interpose between widely dispersed groups and dislocate even local supply lines. This is precisely what happened to 5 Brigade and its B Echelon transport.

Some time after Dasler's first request for batteries, Sidey was just about to remove the last of them from the charging bank and send them all off to Headquarters 5 Brigade, when enemy tanks appeared from the north-east. Fifth Brigade's B Echelon transport was almost in the direct line of advance of these tanks, which were approaching towards the eastern flank of 4 Brigade. Before the advance could be halted by 4 Field

Regiment's guns, fire from the tanks began to fall among 5 Brigade's vehicles. The drivers appear to have been taken by surprise by the appearance of this new threat, and it is feared that the transport group's hasty movement towards the south to safety was spontaneous rather than orderly. Nine miles were covered before the leaders could be stopped and the vehicles regrouped. Now Dasler might whistle for his batteries in vain. Some hours earlier he could have had all the batteries he wanted.

Meanwhile, at Headquarters 5 Brigade, the effect of these dire events began to emerge, firstly in the Brigadier's inability to recover his troop-carrying transport, now prevented from returning to the area by the intervening enemy armour, and secondly in the failing strength of his wireless communications to his battalions, caused by the almost exhausted batteries and the capricious but well-known behaviour of wireless transmissions during the late afternoon and early evening.

The Brigadier's concern for communications to 22 and 23 Battalions was not great, however, because the lines to these units were in fair order; but 21 Battalion's position was not known, and its only means of communication with Brigade Headquarters was by wireless. The Brigadier did not require communication with the battalion until midafternoon when, at 3 p.m., the Brigade Major (Major Fairbrother 9) spoke to Lieutenant-Colonel Allen by RT at good signal strength. But a little later, when Brigade tried to raise both 21 Battalion and B Echelon to instruct them to return to the brigade area by the most direct route, neither could be heard.

The need for wireless communication, even if it could be maintained for only a few minutes, was now urgent. Throughout the day enemy columns had been bypassing the Division's positions to the north and had attacked both 4 Brigade and the Reserve Group with tanks and infantry, and it was now obvious that the Division would have to retire before the enemy concentrations to the east became too strong. The original orders to the Division contained no 'last man, last round' injunction, but stressed only the need for a strong delaying action. This

had been accomplished and plans were now being prepared for the Division to break out at nightfall to the east before a too formidable enemy force was able to build up in the wadi south of Bir Abu Batta, which lay east of the Khalda track and on the route by which the Division would have to escape if it was not to be entirely surrounded and captured.

About 7 p.m. Sidey managed to re-establish communication with Brigade Headquarters. The Brigade Major instructed the Staff Captain to bring the transport to the brigade area by the most direct route, but before the column could move a party from 21 Battalion appeared on the scene with the information that the route was closed by the enemy. The transport was now about 10 miles to the south-east of its former position at Point 197, from which it had fled on the approach of the enemy armour earlier in the afternoon, and over 16 miles in a direct line from Brigade Headquarters. It is not surprising, therefore, that Sidey's attempts to restore communication achieved such little success.

The wireless set No. 11 has a limited radio-telephony range, even when it is in first-class order and its batteries are fully charged. Its performance is affected to a marked degree by its unsuitable frequency range—4.2 to 7.5 megacycles—which is good for telegraphy during daylight but almost unusable for telephony during darkness, except at very short ranges. For telegraphy, too, the range is shortened considerably during darkness, being usually quite unusable between five and about 100 miles; beyond 100 miles, however, the sky wave puts down a strong stable signal.

During the transition periods between daylight and darkness, at dusk and dawn, signal strengths vary considerably, especially at the frequencies covered by the No. 11 set range. This is a physical phenomenon which can be compensated for only by knowledgeable selection of frequencies—known in wave propagation parlance as MUF (maximum usable frequency)—or by the erection of elaborate aerial arrays. Neither of these methods was available in the Western Desert in 1942; because of tactical reasons and the rapid movement of

formations, the choice of aerials was restricted to simple vertical rod radiators, grossly inefficient devices except when extended to an effective height of a quarter of a wave-length, and to half-wave horizontal aerials suspended on light poles capable of being rapidly erected and dismantled. Moreover, the compromise device incorporated in the end circuit of the No. 11 wireless set to extend electrically the effective height of the vertical rod aerial, which is the set's normal equipment, by means of inductive loading, offsets to a large extent any advantage that would otherwise be gained by the use of a half-wave horizontal aerial.

The excellent maximum usable frequency data then being produced by the so-called 'back-room boys' in the United Kingdom and the United States ¹⁰ had not reached the Division in 1942, and it is extremely doubtful whether anyone in Signals had even heard of it; but even if they had, the extremely limited allocation of frequencies allotted by higher formations by means of the block system would not have allowed any intelligent selection of maximum usable frequencies for more than one or, at the most, two wireless circuits in the whole of the Division.

During the night the transport column, moving in a north-westerly direction in a last attempt to regain the divisional area, encountered British armoured cars, at the first sight of which a part of the column turned and fled eastwards again. Sidey seized the opportunity to borrow an armoured car's wireless set No. 19 and make another attempt to reestablish communication with Headquarters 5 Brigade, but his efforts were of no avail.

Meanwhile, at Brigade Headquarters, the Brigadier and the Brigade Major were in an agony of impatience and anxiety because of their inability to make wireless contact with either 21 Battalion or the missing transport column. Although a brief restoration of the link to B Echelon earlier in the evening had enabled the Brigade Major to send a message instructing them to return to the brigade area at once, they had not put in an appearance. The Brigadier had sent out two liaison

officers to take a message to the column, but they had been unable to get through because of the artillery and tank battle then being fought just to the south of the Divisional Reserve Group.

In accordance with the Division's plan for withdrawal to the east that night, 5 Brigade was to begin moving back from Minqar Qaim to the forming-up position near Divisional Headquarters at 9 p.m., but the Brigadier, bereft of his troop-carrying transport, appeared to be faced with the almost impossible task of moving his brigade on foot. Divisional Headquarters, however, was well aware of these difficulties, and hasty plans were made to carry the 5 Brigade units on as many of its vehicles as could take extra loads.

In due course the brigade reached the forming-up position. While the Brigadier and the Brigade Major were bustling about fitting their men here and there on this and that vehicle, Dasler came hurrying up and announced that communication had again been established with B Echelon. The Brigade Major hurried off to the set, which was again fitted into its vehicle, and leaning over the tailboard, took the microphone and put the headphones to his ears. Very faintly, but quite readable through the incessant hiss of atmospheric noise, the B Echelon operator's voice sounded as if from an immense distance. By this time Brigadier Kippenberger, summoned by Dasler, had come up and was standing nearby. There was now no time to bring the transport in, as the long line of vehicles in the divisional column, standing silently in the darkness under the midnight sky, was expected to move off at any minute. Major Fairbrother put the microphone down for a moment, turned to the Brigadier and said: 'We haven't time to put this into RT code, sir. I'm going to let it go in clear.' Then, as the Brigadier nodded agreement, he spoke into the microphone, enunciating his words carefully and distinctly: 'Go east to Amiriya.' He repeated this message several times and then, out of the vast remoteness of the night, a small faint voice acknowledged the message. Fairbrother put the microphone down, removed the headphones and moved away. A little later —a matter of minutes—B Echelon called again and sent an authentication challenge

signal. While Dasler hunted quickly through the papers on the operator's bench for the answer of the day to the challenge, a message was sent saying: 'Monty says so.' A few minutes later communication failed again, and was not restored that night.

When the first message, 'Go east to Amiriya', was received at the B Echelon set, Sidey was unhappy about it. Firstly, it did not fit in with his expectations of the Division's movements. He knew that the Staff Captain was still searching his mind desperately for a plan that would take the transport back to the brigade area. Secondly, even although the Staff Captain, who was listening on the set at the time, said afterwards that he had recognised Fairbrother's voice, the message itself seemed to Sidey to be suspect, lacking as it did the usual security precautions imposed in the use of RT. Moreover, the incident took his thoughts instantly to a signals instruction he had seen only a few days before which said—he remembered the words clearly:

One method of deception much used by the Germans in the present operations has been the sending of false messages in English on our wavelengths. Signals should be on their guard against this. ¹¹

He therefore instructed the operator to send the authentication challenge signal of the day. But, instead of receiving in return the correct answering procedure, which would have established the identity of the distant station beyond doubt, a voice said: 'Monty says so.' Very soon afterwards communication failed again, so Sidey passed the message to the Staff Captain and added, as he was bound to do, that he could not guarantee its supposed origin because of lack of identification of the transmitting station. Sidey's idea, which was not so fantastic as some accounts of the incident tend to make it appear, was that the enemy, who might well have been aware of 5 Brigade's predicament, was seeking by a subterfuge to send the transport still farther east and so immobilise the brigade.

There was a conference on the spot between Captain Dugleby, Major Good ¹² (OC 6 Reserve Mechanical Transport Company), Major Lincoln ¹³

(OC 7 Field Company), the brigade transport officer, and Sidey. Finally, a decision was made to ignore the message and remain in bivouac for the night.

Thus ended the day of battle for 5 Brigade, a day of much perplexity and anxiety, most of which had been brought about by the separation from the brigade of two of its major components and the uncertainty of communications between these two groups and Brigade Headquarters. The day ended, too, with the Division almost completely encircled by the enemy who, however, had not pressed his assaults with any determination. No direct attack had been made on 5 Brigade, but its gun positions had come under very heavy counter-battery fire throughout the day. Brigade Headquarters' area had also come in for its share of shelling, but casualties had been very light. In K Section there had been only one, Signalman McEwan, ¹⁴ a despatch rider, who had been killed instantly by a shell which had fallen close to the signal office shelter.

At the eastern end of the divisional area, where 4 Brigade was deployed along the escarpment to the east of the Khalda track, several fierce armoured and infantry attacks were successfully beaten off during the day. In the late afternoon 28 (Maori) Battalion broke up the last attempt of the day to penetrate the brigade's defences, and soon afterwards tanks of 1 Armoured Division appeared from the south-west and took up a position on the escarpment overlooking the divisional area.

Fourth Brigade's positions were under heavy artillery fire for most of the day, but little trouble was experienced in keeping line communications intact. J Section, however, sustained heavy casualties, three men being killed and four wounded, two of them seriously. The first to fall was a lineman, Signalman Sarjeant, who was repairing a line termination at the signal office. At 5.35 p.m. Sarjeant, standing only a few feet behind the exchange operator, was killed instantly by a shell which burst close by. The exchange operator escaped unhurt, but there was considerable havoc in the signal office shelter.

Only a few minutes later Sergeant Ratcliffe ¹⁵—like Sarjeant, one of J Section's original stalwarts—was severely wounded by a shell splinter while working in the open with some of his men repairing line faults in the headquarters' area. As he fell Ratcliffe called out to his companions: 'Take cover, you chaps. I've got mine.' He had indeed—dreadful multiple wounds from which his life ebbed away later that night in an RAP, where Signalman Provan had taken him in a DR truck. Ratcliffe, a pugnacious little man, had been a persistent rebel against authority but, for all that, was a likeable fellow and a good soldier. Several times that day more than one J Section man had watched his recklessness as he moved about in his jaunty manner in the open, and had said: 'Shorty's asking for it today!' But most linemen were like that, and Ratcliffe was merely typical of the breed of men like McIvor, Pemberton, Hanrahan, 'Hippo' Smith, and perhaps a dozen others in the unit who faced the daily hazards of their tasks with an unconscious devotion to duty, call it what they might in their own rough way.

For some time after Ratcliffe was taken away there was a brief lull in J Section's misfortunes. Many of the men were still busy at work repairing the damage to the signal office. By this time the shelling had died away into a desultory fire, which dropped odd shells and occasional salvos around the area. Preparations were now being made for the move to the forming-up positions for the attack planned to break open an escape route through the enemy who surrounded the Division.

Some vehicles had already been marshalled in readiness to move off from the brigade area and it was in one of these, J Section's 3-ton signal office lorry, that Provan came upon Signalman Hodge ¹⁶ sitting alone in the dusk. Provan asked why he was sitting up there, a target for a stray shell. Hodge said that he had been instructed to wait in the truck, of which he was the regular driver, until the headquarters moved off. 'But,' Provan expostulated, 'why do you have to sit up there like a silly bloody hen on a roost when you could wait just as well in a slit trench?' Ken Hodge was a quiet-mannered fellow, but he had a streak of obstinacy in his nature. He had been told to wait in the truck, and wait in the truck

he would, come what might. So Andy Provan climbed up beside him and said: 'Now, look here, Ken...' or words to that effect. Suddenly Signalman Irvine ¹⁷ appeared. He looked up at the two and started the argument all over again. 'What the hell are you two sitting up there for?' he asked. Provan explained, so Irvine climbed up to try his way with Hodge. Provan had just turned aside to fill his pipe when the shell struck, detonating against the frame of the canopy and spraying the truck like an airburst. Hodge got the worst of it and died from loss of blood that night beside Ratcliffe in the RAP. Provan and Irvine were there too, bleeding from a dozen wounds.

In the Divisional Headquarters' area the day had started with the sound of distant gunfire soon after first light, but it was not until some hours later, about 8.30 a.m., that shells first began to fall in the area between Divisional Headquarters and 5 Brigade. The shelling gradually increased in intensity until at eleven o'clock the enemy was putting down a heavy fire. Lines to 4 and 5 Brigades and to the Divisional Reserve Group nearby suffered the usual damage which shell and mortar fire inflicts on ground cable, but there were no serious interruptions to communications, although wireless was frequently brought into use while breaks in lines were being repaired. With two exceptions, the usual communications were provided: line and wireless to both brigades and line to the Divisional Reserve Group, although there, too, an A Section wireless detachment stood by to take up its task should the group, by a sudden move or other contingency, become separated from Divisional Headquarters. Of the two exceptions to the normal scale of communications centred at Main Divisional Headquarters, one was the omission of a line circuit to Rear Division, which was located about 17 miles to the east of Minqar Qaim, but wireless was provided by means of a No. 11 set at Rear Headquarters working to the C control set at Main Headquarters. The other exception was the lack of line communication to 13 Corps, but in this case, too, wireless was used instead.

An additional feature of the Division's communications, which has been discussed earlier in this chapter, was the provision for the first time in battle of direct line communications between Headquarters Divisional Artillery and the field regiments. The CRA, under whom the GOC had for the first time agreed to place the whole of the Divisional Artillery, was anxious for the success of the new arrangement and encouraged with a few gruff words the scratch team from D (operating) Section under the command of Lance-Corporal Parker. ¹⁸

The little detachment soon settled down in its new surroundings and after a time began to invent nicknames for those about them. Their former fellow workers of D Section became 'those people who run the board at Main', which wasn't a nickname but which had much the same effect with a slightly depreciatory sense. The CRA became 'Steve' to them in their private moments, which wasn't a nickname either but a mark of respect and affection disguised as an unpardonable liberty. The Brigade Major, Major Hanna, became, quite undeservedly, 'Priority Bill'.

The success of the CRA's own line communications in their first trial in battle was neither spectacularly brilliant nor depressingly dull. Perhaps it can best be described in Brigadier Weir's own words:

.... 5 and 6 Field Regiments were connected to HQ NZA by line and radio right throughout the battle and the fire of these two regiments was, in a crude way, directed on occasions from HQ NZA. 4 Field Regiment was not connected by line but we were in touch by radio from time to time. 4 Field Regiment were so far away that they virtually fought under command of 4 Infantry Brigade. However, in so far as an actual battle was concerned Minqar Qaim was the first operation in which HQ NZA and its communications functioned under centralized control and was the forerunner of the very highly efficient organization which we built up at El Alamein.

During the morning no direct attack threatened the Divisional Headquarters' area or that of the Divisional Reserve Group, but the enemy's shellfire, which had steadily increased in intensity, reached its peak about 11 a.m., and it was then that the first serious casualties occurred. Dispersion of vehicles and offices, generally, was good and this

afforded considerable immunity from the heavy fire. Suddenly, however, a salvo of several shells crashed down close to the G office truck and the wireless remote-control annexe which, because of the hardness of the rocky ground, had not been sunk deep enough to afford more than the barest protection from splinters and blast. Its sides had been built up with sandbags, but both ends were open and it was through one of these that a hail of splinters passed, killing Signalman McKenzie ¹⁹ and Lance-Corporal Matthews ²⁰ instantly, and wounding two others.

Soon after midday the enemy mounted his first armoured attack, but his tanks and some lorried infantry deployed on their left were halted by the guns of 4 Field Regiment. About three hours later another attack came in from the north-east against 4 Brigade, but the twenty tanks and about 200 troop-carrying vehicles were again driven off, this time from close range, to which the enemy was allowed to approach before the field and anti-tank guns opened up. While this attack was in progress another enemy column approached from the east and, passing to the south of 4 Brigade's defences, scattered the B Echelons of both 4 and 5 Brigades in confusion. This column continued in a general westerly direction and then approached the Divisional Reserve Group's positions from the south. By this time the attack on 4 Brigade from the north-east had been driven off, but shells now began to fall in the divisional area from the south. A number of Divisional Headquarters' and Reserve Group vehicles were caught between the attackers' and defenders' fire; it was in one of these, a D Section 3-ton lorry which was damaged slightly, that Signalman McGregor ²¹ was killed by a shell.

By about 6 p.m. the enemy's fire had slackened considerably and there were no more direct attacks on the Division's positions.

Preparations for the night move to break out to the east through the enemy concentrations grouped in and around a deep re-entrant just to the east of 4 Brigade's positions were now well under way. About 9 p.m. transport started to move into the marshalling area near Divisional Headquarters, and by midnight the columns were formed up ready to move; but because of the late arrival of one of the battalions at the start

line for 4 Brigade's attack, it was about 1.30 a.m. before these columns started to advance.

Led by 19 Battalion, the infantry of 4 Brigade moved off silently in the moonlight with fixed bayonets and advanced towards the narrow neck of high ground which separated the two large re-entrants immediately to the south of Bir Abu Batta. The object of the attack was to clear the enemy from this neck so that the divisional transport could pass through and break out eastwards to safety, but because of the delay at the start line Brigadier Inglis, who had taken command of the Division when Major-General Freyberg had been wounded earlier in the day, decided to move around to the south of the attack and then turn east. First light would soon be upon them, and he planned to be well clear of the area by dawn and to have the Division on its way to the Alamein defences as quickly as possible.

As the divisional convoy moved off with its vehicles five to eight abreast and turned right to pass around to the south of Abu Batta, fierce fighting broke out to the east, where 4 Brigade had run into increasingly heavy fire after advancing about 1000 yards without opposition. At first the enemy's fire had been light, but it had quickly increased in weight as the New Zealanders bore down on him out of the night. Suddenly, as they approached close to his laager, they broke into a run and, yelling war cries, were quickly in among the startled Germans who, taken utterly by surprise, began an erratic and poorly directed fire from all sides of the encampment. Many tried desperately to escape in the darkness, while others, roused from their sleep by the clamour, were struck down as they climbed from their slit trenches to seize their arms. The New Zealand infantry swept through the laager and mopped up everything they encountered; soon they were on the eastern side of the re-entrant, where they reformed. The success signal was then fired to bring the transport up, and a little later the brigade was embussed and on its way eastwards along the planned line of withdrawal.

While this grim struggle raged in the re-entrant, where the fitful

moonlight glinted on the steel of the few unstained bayonets among the many now clouded darkly with Aryan blood, and the cough of grenades punctuated the shrill whining of gears as trucks filled with panicstricken Germans tried desperately to escape into the open, the divisional column, moving in close night formation, was still passing the wheeling point and following its leaders south. When the leading vehicles had gone about a mile and a half they came to a sudden halt as green flares soared into the sky immediately ahead of them. Naturally there was no reply to this challenge, nor was there time to give any orders to deal with this new threat lying across their path, for after a very short pause the Germans quickly opened fire. When the foremost vehicles halted, those in the rear closed up so that the column offered a highly vulnerable target to the fire which, judged from the amount of tracer from machine-guns and tank and anti-tank guns, came from a considerable enemy force. Very soon a number of vehicles were burning fiercely; their flames illuminated the scene and showed the German gunners the closely massed transport which had come surging down upon them. For a time there was confusion; some casualties occurred, and more vehicles were set alight by the now heavy enemy fire. But presently the head of the column was moving again and turning left, guided by the intrepid Lieutenant-Colonel Gray (18 Battalion), who could be seen by those nearest the head of the column standing up through the roof hatch of his staff car with his arm stretched out towards the east. Farther back, where others had not seen their leaders turn left, some vehicles wheeled right to get out of the line of fire, and others, still farther back, turned about and retraced their way northwards.

The leading group of the column was racing eastwards at high speed across very rough ground, but it had now emerged from the dreadful maelstrom of fire, and after a few miles it halted for a brief spell before continuing on towards Alamein. In this group were the vehicles of Divisional Signals. There was no opportunity at this stage to assess the losses in men and transport that might have occurred in the mêlée. These losses, as it turned out, were inconsiderable, but the adventures

which befell some of the unit's men served for many a long day as lively topics of reminiscence.

The capture of the unit office truck was Signals' most serious loss; with it went the Adjutant (Captain Ayto ²²), the RSM (WO I 'Red' Murphy ²³), the orderly-room sergeant (Sergeant Thompson ²⁴), and three signalmen, of whom Walker, ²⁵ the driver of the vehicle, died of wounds in a German casualty clearing station somewhere near Sidi Barrani two or three days later. Several infantrymen of 5 Brigade, who had been placed hurriedly on the vehicle just before the column moved off, also went with Ayto and his men into captivity.

During the general confusion when the column encountered the main opposition, the office truck became jammed between two disabled vehicles, and Signalman Walker commenced backing and filling in an attempt to get it clear quickly. One or two other vehicles nearby, one of them an ambulance, had caught fire and were burning fiercely. While Walker was extricating his truck, Ayto and the others alighted and tried to rescue the wounded from the burning ambulance, but the fierce flames drove them back. They managed to pull clear another ambulance that had caught alight, and quickly beat out the flames.

By this time Walker had got his vehicle clear of its obstructions, and Ayto and the rest climbed aboard again. But the main column had disappeared and there were no other vehicles in sight, except those burning all over the area and lighting up the scene with their dancing flames. Ayto spoke sharply to Walker, telling him to get moving quickly, but there was no reply; Walker was slumped down under his wheel with a wound in his head. Ayto jumped out quickly and called for assistance to get him out of the cab. The vehicle was a 3-ton Ford lorry in which a raised steel engine hood occupied the centre of the cab, and Walker's body had fallen under the steering column and between the engine hood and the cab door. Several minutes passed before they got him out, and their chances of escape were diminishing quickly. They laid him on the ground and tried to revive him.

Just then a medical orderly approached and asked if some of Ayto's party could assist him with a number of other wounded who were lying about in the area. The last opportunity to escape had now passed, as enemy troops were closing in on the scene, so some of Ayto's men went off with the orderly. Sergeant Thompson and Signalman Stigley ²⁶ set about destroying all the security documents and unit records which the truck contained, while Ayto and Murphy, with Lieutenant Alpe, ²⁷ of 14 Light Anti-Aircraft Regiment, who had just appeared on the scene, looked around for anything else they could disable before the Germans appeared. Murphy removed the breech block of a 25-pounder field gun and buried it, while Ayto and Alpe disabled the elevating gear of a Bofors anti-aircraft gun.

They then returned to the office truck, where they met Thompson with the last of the papers in his hand and just about to cast them on to the flames of a burning truck where he had destroyed all the others. Suddenly a German voice called out for them to put their hands up, but as the party walked towards their captors, Thompson managed to fling his last handful of papers on the fire.

Ayto and Alpe were immediately segregated from the men and, after a while, taken to the headquarters of a panzer division and placed under guard. About daylight the men were brought in in vehicles, among which was Signals' office truck, from which the men managed to acquire, unseen by their guards, a blanket and some other articles of kit. They were all herded together on the side of a small hill, and some were interrogated by the Germans. Meanwhile WO I Murphy moved among the rest and cautioned them in a low voice that they were to give no information except their names, ranks and regimental numbers. Soon afterwards Ayto was permitted to rejoin his men. His description of the treatment meted out to them is recounted in his own words:

About 9 a.m. the group comprised approximately eighty New Zealanders, two British officers from an armoured unit and a Canadian air force pilot. At this point the Commandant of the Panzer Division came

forward with his Intelligence Officer as interpreter and then the New Zealanders were instructed to leave all their kit on the side of the hill and form up in three ranks. The Divisional Commander then said: 'Tonight you New Zealanders fought us and didn't fight fair. You shot prisoners and bayoneted wounded and now we will show you that we can be just as hard as you.' We were then searched one by one and had everything, even handkerchiefs, taken from us except the clothes we were wearing. We were then formed up in another position and some of the German NCOs fitted the butts to their machine-guns. It looked as though we were to be shot. One of the British officers, who was not concerned in this, went up to the Divisional Commander and spoke to him in German. I was able to ask him later what he said and he said that he told the German commander that he thought it would be a mistake to start shooting prisoners as from then on there would be no prisoners taken by either side. He was roundly told off for his interference. Whether this had any effect, or whether the whole thing was designed to frighten us I don't know, but we were told we would be left standing in three ranks all day as a punishment. At this stage four or five men were taken away to bury the dead at the point where the breakthrough had taken place the night before. Signalman McMillan was one of this party. When he returned the remainder had gone and he remained with the Panzer Division HQ and travelled with them when they advanced next day, coming under shell fire at Fuka from our own side. Next day he was taken back and met up with the rest of the orderly room staff in the cage at Tobruk.

The main group was left standing in the sun, the only relief occurring when a party was required to bury some of the dead and the wounded who had died on the spot. These tasks were given to those most affected by standing in the sun and in most need of relief. A little after midday the German supply column arrived. We were lucky in that the opportunity had to be taken to send us back and so we were spared the rest of the day standing in the sun. We were not allowed to take anything with us except our paybooks—not even water.

Ayto and his crew, although their misfortunes led them into a long and miserable captivity, were not the only ones in Signals to brush against the fringes of disaster during that night's frantic gallop through the enemy positions. In another part of the column Second-Lieutenant Collett, ²⁸ second-in-command of A (wireless) Section, rode a motor-cycle just behind Major Grant's staff car when the convoy moved off. In the midst of the enemy's heavy fire Collett, who was straining his eyes ahead for obstacles which would bring him down but over which heavier mounts might ride roughshod, suddenly felt some missile strike the rear part of his cycle, which immediately began to lose speed as the engine spluttered fitfully. He remained in the saddle, hoping that the engine might pick up again before his cycle, now yawing wildly from side to side, came to a stop. Suddenly, from out of the flame-shot gloom, a heavy truck bounded towards him, and before he could do anything to avoid a collision, it swept right over him and his cycle. Though dazed, Collett was quite unhurt, and for the next few minutes or so skipped nimbly from side to side to avoid being run down by the thick stream of transport which raced past.

After a time the vehicles began to thin out, and presently only one truck passed him every two or three minutes. He now began to feel lonely, and his fears of capture mounted rapidly. Then a 3-ton lorry filled with infantry appeared out of the night; it slowed down as it passed him, and he leapt on to the near running-board and clung desperately to the side of the cab. The enemy fire was still fairly heavy and coming from the right of the truck's course; from his precarious foothold on the cab step Collett watched in fascinated silence as the driver slammed on his brakes every now and then and brought the heavy vehicle to a grinding halt just as a stream of glowing tracer missiles flashed past a few inches in front of the windscreen. There was no lack of encouragement from the soldiers in the back of the lorry for this driver, who had reduced his split-second timing to a fine art. Soon, when the lorry had gained the safety of the silent desert beyond, it stopped, and Collett was able to leave his insecure foothold and climb inside.

Signals' adventures in that night of breath-taking incidents end with an account of Major Grant's escape with his driver and batman from his burning staff car, which was struck twice by enemy shells within a few minutes. The first, apparently an anti-tank shell, hit the rear of the car, exploded, and blew in the rear locker. Grant and the two signalmen scrambled out quickly, expecting the car to burst into flames at any moment. Nothing happened, but another shell struck a nearby gun quad, which immediately burst into flames and quickly incinerated its occupants. Grant and his companions could do nothing to help because of the intense heat, so they got back into their car and tried the engine which, to their surprise, started immediately. No sooner were they under way again than a second shell struck the car with a shattering explosion and the vehicle appeared to be enveloped in flames. Grant jumped clear through the roof hatch, while Signalmen Clooney ²⁹ and Green ³⁰ managed to get out through the doors.

The area was now brightly lit by the flames from their car and from several other vehicles burning close by. A machine gun started up from the darkness beyond the dancing flames, and a soldier who had joined them from somewhere just as they escaped from the car was wounded twice. Clooney was hit by a splinter from a shell or mortar bomb which burst nearby. They moved quickly out of the brightly lit area, and Grant set a course by compass to the east. Through his binoculars he could see a group of tanks some distance away, so they made as little noise as possible and worked their way cautiously along a low ridge, dodging from side to side of the crest whenever anything suspicious loomed ahead.

When they had progressed in this way for about half an hour, they heard another group of vehicles running the gauntlet of fire behind them. Guns crashed heavily again amid the crackle of small-arms fire, and one or two vehicles went up in flames, but soon the little party heard the column moving along the desert about 400 yards from their low ridge. Two of them ran as quickly as they could towards the transport and managed to intercept the last vehicle in the column. A challenge rang out and the hearts of Major Grant and his companions

seemed to rise into their mouths in the sickening fear that, having eluded the enemy successfully, they were now to be shot down by friends. Grant called out quickly: 'What about a lift?' and the reply came back: 'O.K. Come aboard.' As he and his men climbed into the lorry, they were met by the congratulations of 19 Battalion men, who said that he and his party had appeared out of the night so quickly that they were thought at first to be German motor-cyclists.

¹ Sigmn I. W. Dale; born NZ 17 Feb 1917; labourer; killed in action 26 Jun 1942.

² Sigmn D. Benton; born NZ 7 May 1916; lineman; died of wounds 27 Jun 1942.

³ Maj-Gen C. E. Weir, CB, CBE, DSO and bar, m.i.d.; Wellington; born NZ 5 Oct 1905; Regular soldier; CO 6 Fd Regt Sep 1939-Dec 1941; CRA 2 NZ Div Dec 1941-Jun 1944; commanded 2 NZ Div 4 Sep-17 Oct 1944; 46 (Brit) Div Nov 1944-Sep 1946; Commandant, Southern Military District, 1948-49; QMG Army HQ Nov 1951-.

⁴ Capt S. P. Norrie, m.i.d.; Auckland; born NZ 5 Jun 1917; civil servant.

⁵ Capt M. J. Leonard; Waimate; born Geraldine, 3 Mar 1912; railway clerk; Adjt Div Sigs Mar-May 1945; OC Sigs, PW Repatriation Unit, UK, 1945-46.

⁶ Lt-Col G. P. Hanna, OBE, m.i.d.; Auckland; born Auckland, 21 Apr 1916; solicitor; BM 2 NZ Div Arty May-Nov 1942; GSO 2 2 NZ Div Nov 1943-Jun 1944, Oct 1944-Feb 1945; GSO I (Ops) NZ Corps 9 Feb-27 Mar 1944; CO 5 Fd Regt May-Sep 1945.

⁷ Maj L. W. Dugleby, m.i.d.; born Wairoa, 6 Jun 1914; clerk; killed in action 13 Apr 1943.

- ⁸ Maj T. K. S. Sidey, m.i.d.; Dunedin; born Dunedin, 8 Oct 1908; barrister and solicitor; OC G Sec Sigs Aug 1942-Mar 1943, R Sec Jun-Jul 1943, L Sec Aug 1943-Apr 1944, 3 Coy Sep-Oct 1944, 2 Coy Oct 1944-Feb 1945.
- ⁹ Col M. C. Fairbrother, DSO, OBE, ED, m.i.d.; Wellington; born Carterton, 21 Sep 1907; accountant; BM 5 Bde 1942-43; commanded in turn 21, 23 and 28 (Maori) Bns, Apr-Dec 1943; CO 26 Bn Oct 1944-Sep 1945; Associate Editor, NZ War Histories.
- ¹⁰ Interservice Radio Propagation Laboratory of the Joint Communications Board in collaboration with the Interservices Ionosphere Bureau and the National Physical Laboratory in the United Kingdom; the Australian Radio Propagation Committee; and the Carnegie Institution and National Bureau of Standards in the United States of America.
- ¹¹ The italics are the author's; they emphasize that there was a good reason for Sidey's suspicions.
- ¹² Maj G. G. Good, OBE, m.i.d.; Salisbury, Southern Rhodesia; born New South Wales, 14 Nov 1913; dental mechanic; OC 6 RMT Coy Feb 1942-Sep 1943.
- 13 Lt-Col L. A. Lincoln, m.i.d.; Auckland; born Auckland, 14 Sep 1902; civil engineer; OC 18 Army Tps Coy 1940-42; 7 Fd Coy Jan-Sep 1942; DCRE No. 8 Works RE Sep 1942-Aug 1943; CRE No. 56 Works RE Aug 1943- Nov 1944.
- ¹⁴ Sigmn R. J. MacF. McEwan; born NZ 23 Jun 1913; tractor driver; killed in action 27 Jun 1942.
- ¹⁵ Sgt B. A. Ratcliffe; born Kaitangata, 1908; acting line foreman; died of wounds 27 Jun 1942.
- ¹⁶ Sigmn K. M. Hodge; born Masterton, 4 Oct 1912; pumice

- worker; died of wounds 27 Jun 1942.
- ¹⁷ Sigmn J. H. Irvine; Dunedin; born Ohakune, 22 Jun 1915; saw miller; wounded 27 Jun 1942.
- ¹⁸ Sgt J. W. Parker; Auckland; born Auckland, 29 Nov 1913; telegraph operator.
- ¹⁹ Sigmn E. W. McKenzie; born Gore, 28 Jul 1915; clerk and telegraphist; killed in action 27 Jun 1942.
- ²⁰ L-Cpl E. J. Matthews; born NZ 21 Oct 1917; P and T cadet; killed in action 27 Jun 1942.
- ²¹ Sigmn A. D. McGregor; born NZ 24 Aug 1905; clerk; killed in action 27 Jun 1942.
- ²² Capt J. Ayto; Waiouru; born Invercargill, 11 Sep 1911; Regular soldier; Adjt Div Sigs Feb-Jun 1942; p.w. 28 Jun 1942.
- ²³ WO I J. A. Murphy, m.i.d.; Lower Hutt; born London, 17 May 1911; radio engineer; p.w. 28 Jun 1942.
- ²⁴ Sgt W. R. Thompson; born NZ 24 Feb 1904; clerk; p.w. 28 Jun 1942; died while p.w. 29 Dec 1942.
- ²⁵ Sigmn F. R. Walker; born NZ 15 Jun 1913; clerk; died of wounds 30 Jun 1942.
- ²⁶ Sigmn E. Stigley; Ashburton; born NZ 24 Jun 1915; schoolteacher; p.w. 28 Jun 1942.
- ²⁷ Capt G. F. Alpe; Auckland; born Auckland, 21 Jan 1920; clerk; p.w. 28 Jun 1942.

- ²⁸ Maj D. K. Collett; Christchurch; born Gore, 30 Jan 1913; radio design engineer; wounded 27 Jun 1942; Signals Research and Development Establishment, UK, 1944; Radio Production Unit, Woolwich, 1945-46.
- ²⁹ Sigmn T. F. Clooney; Palmerston North; born Marton, 30 Apr 1913; signal erector, NZ Railways; wounded 28 Jun 1942.
- ³⁰ Sigmn A. J. Green; born England, 4 Apr 1908; labourer; died on active service 3 Jun 1943.

DIVISIONAL SIGNALS

CHAPTER 12 — A HARD SUMMER

CHAPTER 12 A Hard Summer

THE Alamein defences, bounded on the north by the sea and to the south by the huge expanse of the virtually impassable Qattara Depression, lay on the very threshold of the Nile Delta and the Suez Canal, a mere 60 miles to the east—glittering prizes which Rommel pressed forward to seize before the failing impetus of his almost exhausted formations brought his advance to a halt. Here, where the vast desert wastelands of Cyrenaica and western Egypt converge to a narrow defile less than 40 miles wide, General Sir Claude Auchinleck, Commander-in-Chief Middle East Forces, decided to stand and fight for the possession of Egypt.

In the north of this line, which unlike the Gazala-Bir Hacheim defences needed no mass of armour to hold its southern extremity, 1 South African Division held the Alamein Box covering the railway and the coastal road. Twenty miles to the south-south-west lay Fortress A, a prepared defensive position on which work had first commenced in the preceding September, and here 2 New Zealand Division came after escaping from Minqar Qaim to take its part in the defence of Egypt. Another 15 miles in the same direction was Fortress B, at Naqb Abu Dweis, near the lip of the Qattara Depression, and intended in the original plans for the occupation of the Alamein Line to form the southern extremity of the defences. Fortress B was held by 5 Indian Division which, however, consisted at the time of only a few mobile columns and was so depleted that it was barely the strength of one brigade. Moreover, it had very little artillery and no water. After a few days the Indian Division was withdrawn to reorganise, and Fortress A became the southern bastion of the line. The gap between Fortress A and the Qattara Depression became the responsibility of mobile columns of 7 **Armoured Division.**

The 20-mile stretch of ground between Fortress A and the South African positions in the Alamein Box in the north was marked by two principal features. The first, Ruweisat Ridge, which bisected the line at right angles about eight miles north of Fortress A, was a long, low feature rising almost imperceptibly in the west and running in a low crest for 10 miles to the east, where it ended abruptly in a low bluff. It was of considerable tactical importance—from its crest the northern sector lay under direct observation—and in the ensuing weeks the struggle for its possession was to cost much blood. A short distance north of Ruweisat's western extremity lay the second feature, Deir el Shein, a small depression bounded by low steep escarpments. It formed an isolated strongpoint in the Alamein Line and was occupied by 18 Indian Infantry Brigade, which had just been brought to the Western Desert from Iraq.

The Qattara Depression itself, a perpetual and practically impassable obstacle that precluded any possibility of a serious outflanking threat in the south, is a wide expanse of salt marshes about 7000 square miles in area. These marshes, in the vast hollow which lies below sea level at depths varying between 200 and 450 feet, are covered with a crust of sand and salt which crystallises into ridged surfaces not unlike a lightly wind-ruffled sea. In summer the evaporation rate exceeds the rise of moisture from the watery layers below and the surface becomes firm, but in winter the capillary attraction is aided by decreased evaporation and occasional local rainfall, so that the crust becomes much softer. The danger of attempting to cross these marshes lies not so much in the hardness or softness of the sabakha, as the mixture of sand and salt is called, but in the depth of the marshes themselves. Where the depth is considerable the hardening of the crust is positively dangerous because the crystallised surfaces will bear little weight and heavy transport venturing to cross them would sink through into the morass below.

The first groups of New Zealanders from Minqar Qaim began to arrive in the Qattara Box area soon after midday on 28 June, and later in the day larger, more organised columns came in. By nightfall Main and Rear Divisional Headquarters, the Divisional Reserve Group, and 4 and 5 Infantry Brigades were concentrated about three and a half miles to the

north-west of the Box. Divisional Signals rejoined Main Division in the area about 9 p.m., and immediately set about counting its losses which, despite the rigours of the Minqar Qaim battle, were satisfyingly small, although the non-appearance of the Adjutant with his staff and the unit office vehicle caused considerable difficulty and anxiety.

By the afternoon of the next day signal communications were stabilised and in normal working order, new call-sign row directories, column sequences and radio-telephony codes having been obtained from Main Headquarters 30 Corps. Although the signals system was able to settle down again so quickly under the executive direction of Nos. 1, 2 and 3 Companies' headquarters, which had sustained little or no dislocation during the lively events of the day before, the loss of the unit's nerve centre, as it were, represented a major disruption in its operational and administrative machinery. Not only was Lieutenant-Colonel Agar deprived suddenly and at a singularly inopportune time of his Adjutant and RSM, but he had also lost all his unit's records.

It was a situation which might have arisen perhaps half a dozen times before in the field and therefore not one on which to waste unprofitable lamentations, so the Colonel set to work to restore the position as best he might. To OC No. 3 Company, Captain Marshall, fell the task of reorganising the unit headquarters. He gathered about him a new headquarters staff and set to work to rewrite war diaries and compile casualty returns, for which he was forced to rely solely on various soldiers' statements as to when and where so-and-so had been killed, somebody else had been wounded, and so on, until names, regimental numbers, next-of-kin and all the other innumerable details were once again more or less accurately recorded. For his work at this difficult time, for his resourcefulness while acting as Signalmaster during the Minqar Qaim battle, and later for his work as OC No. 1 Company during the anxious days of July and August, Marshall was awarded the MC.

The enemy had not yet appeared, having spent the 29th capturing Matruh, from which some of the garrison escaped and made their way to

the Alamein defences. But his aircraft were not tardy in putting in an appearance, and aided by the bright moonlight which flooded the desert in the closing days of June, began to harass the defenders. Fortunately their bombs caused very little damage and few casualties, although the signal office at Main Divisional Headquarters narrowly escaped destruction in the early hours of the 30th, when two bombs fell close beside its dug-in shelter, wounding one man, Signalman Bevin, ¹ putting several lines out of order, and shaking the interior of the office like a dice box, so that switchboards, Fullerphones, and other movable installations were thrown violently about in wild disorder.

The Division came under the command of 13 Corps on the 30th, and by the late afternoon Main Divisional Headquarters, from its new position at Deir el Munassib, was in communication with Main Headquarters 13 Corps by Fullerphone superposed on speech circuits, and with Tactical Headquarters 13 Corps and Headquarters 7 Armoured Division by speech circuits. In the rear two control sets at Main Headquarters 13 Corps worked forward to Main Headquarters 2 New Zealand Division, 7 Armoured Division, 5 Indian Division and 1 Armoured Division by wireless telegraphy, and to Tactical Headquarters 13 Corps, Main New Zealand Division, 7 Armoured Division, 1 Armoured Division and 5 Indian Division by radio telephony. Forward of Main Divisional Headquarters the usual divisional communications consisted of Fullerphone telegraph circuits superposed on speech circuits to 4, 5 and 6 Infantry Brigades, wireless communications on the RT net working forward from the A control set to 4 and 5 Brigades, and wirelesstelegraphy communication working forward from the B control set to Divisional Cavalry in the outpost line. From the C control set wireless communication was also available to the NZASC supply column and Rear Divisional Headquarters. The usual Divisional Artillery wireless communications were provided from a No. 11 control set at Headquarters Divisional Artillery working forward to No. 11 sets at the headquarters of 4, 5 and 6 Field Regiments.

Late in the afternoon of the 30th the enemy put in his first

appearance on the ground when a strong concentration of his advanced elements was reported to be only 12 miles north of the Qattara Box. His main advance, however, appeared to be directed south of the coastal road. He opened his assault on the morning of 1 July with an attack on 1 South African Division in the Alamein Box, but the defenders, by this time well entrenched, beat him off. His second attack, this time on the Indian positions at Deir el Shein, gained ground, however, and by nightfall the strongpoint was overrun.

The situation at this time was considered to be precarious and fraught with peril for Eighth Army, behind which nothing lay to bar the enemy's approach to the Delta. The general expectation was that, should he penetrate the Alamein defences, he would split his forces and attempt to seize Alexandria and Cairo simultaneously. In order to meet these possibilities, a plan of withdrawal was issued in preparation for the manning of rearguard positions at Burg el Arab, near the coast 25 miles west of the outskirts of Alexandria. Eighth Army's main formations were then to pass back through the rearguard and take up positions covering Alexandria and the Delta, leaving on their way another rearguard at Alam Shaltut, which lay midway between Burg el Arab and the northern end of Wadi Natrun, 40 miles to the south-east. Divisional Cavalry and 5 Brigade were to be part of the Burg el Arab rearguard, and the rest of 2 New Zealand Division was to pass along the coastal area, bypass Amiriya, and move down the Alexandria- Cairo desert road to Wadi Natrun.

It was a disquieting document, this withdrawal plan, and it was not well received in the Division, but later, in the afternoon, an amending order arrived which sought in its preamble to allay any fears that may have been aroused by the implications contained in its predecessor. It said: 'Nothing contained in this order is to be interpreted as a weakening of our intentions to hold the present positions, or as an indication that our efforts have or are likely to fail.' The morale-building process continued shortly afterwards with a message which stated that it was not expected that the plan of withdrawal would have to be put into operation.

It was at this stage that the Commander-in-Chief decided to relinquish the prepared positions of Fortress A and Fortress B because of the absence of armour to support their garrisons, which he feared might be isolated and destroyed by a sudden and concentrated enemy attack. The New Zealand Division, therefore, was ordered to withdraw its 6 Brigade from the Qattara Box. The 5th Indian Division was also being withdrawn from Fortress B, and it was at this stage that the New Zealanders became the most southerly formation in Eighth Army's main front.

A new threat in the north, however, where the enemy appeared to be concentrating for another assault against the Alamein Box, caused 6 Brigade's withdrawal from the Qattara Box to be postponed. A plan was evolved to use the Box as a pivot on which 13 Corps was to wheel north against the enemy's southern flank and attempt to divert his strength from the expected massed assault against 30 Corps in the coastal sector. As part of this plan, a strong mobile column from 4 Brigade, followed a little later by one from 5 Brigade, moved off to the north early on 2 July. A few hours later both columns were amalgamated under the command of the CRA (Brigadier Weir), who maintained wireless communication with Main New Zealand Division by means of a No. 9 wireless set detachment from A (wireless) Section.

All that day the column moved about to the east and north-east of the Alam Nayil ridge, a low feature about two and a half miles long which rose out of the desert about five miles north of the Division's positions, but encountered none of the enemy. By nightfall the column was bivouacked just to the north of Alam Nayil, where it was instructed by Main Divisional Headquarters to remain for the night and be ready next morning to support a British armoured attack planned to move westwards past the Qattara Box and then strike north in an attempt to take the enemy's positions in the rear. Early next morning a strong enemy column was observed to the north-east moving south, and the guns of the New Zealand column immediately opened fire. Soon, in response to a wireless message from the CRA asking for infantry

assistance, 19 Battalion arrived on the scene. A little over two hours after the enemy was first sighted, the engagement was over; it had yielded over 300 prisoners and the greater part of the artillery of the *Ariete Division* had been destroyed.

Among the captured material, which included five British 25-pounders, was an Italian gun tractor, of which the driver, a middle-aged Italian with a frightened and submissive manner, would not or could not answer the questions fired at him. Several New Zealanders tried to start the engine of the tractor, which the CRA regarded fondly as a legitimate trophy for his own prowess, but without success. Brigadier Weir addressed the Italian: 'Start her up, Joe.' But the poor fellow was too terrified to do anything but maintain a quaking silence. An interpreter, or someone who could speak Italian, was brought from somewhere and the Italian was told to 'talk and talk fast!' Evidently the sound of his mother tongue calmed his terror of these fierce strangers; he answered all that was required of him and then, starting up the tractor, drove it into Main Divisional Headquarters' area in the wake of the CRA's column.

Soon after this success, which the CRA's column and 19 Battalion shared between them, 5 Brigade moved quickly west of the Qattara Box and struck north at the enemy's southern flank at El Mreir, a depression two and a half miles south-west of the western end of Ruweisat Ridge. Although it failed to carry its objective, this attack, together with the destruction of *Ariete's* artillery, forced the enemy to regroup his forces and abandon his projected frontal attack on the South Africans in the Alamein Box.

At 9.30 a.m. on 4 July Signals lost two killed and six wounded in an air raid, in which nine Stukas suddenly appeared without warning low over Main Divisional Headquarters' area and dropped their bombs on the too closely grouped transport. Signalman Yates, ² Major Smith's batman, who was sitting on the side of his slit trench talking to a British gunner from a nearby medium battery, was killed by a bomb which fell directly in the slit trench. There was no trace of the British gunner, who must

have been killed too; nor was he identified.

Lieutenant Digby Cooper, who commanded F Section at Headquarters 5 Field Regiment, was on his way to Headquarters Divisional Artillery when the Stukas swept in over Main Divisional Headquarters' area. He had been asked just a short time before the raid to go to the artillery headquarters to discuss some problems relating to signal equipment in 5 Field Regiment. Soon after the raiders had gone Captain Borman, OC No. 2 Company, received a telephone call from Corporal R. Hulford, at F Section, who said: 'Mr Cooper has been killed, sir.' Borman and Signalman Glensor 3 took their truck and searched for Cooper, whom they found where the greatest weight of bombs had fallen; he was lying on the ground midway between his undamaged truck and a slit trench about twenty yards away, to which he had apparently been running. He had died from several wounds received in the explosion of a bomb at close quarters. Cooper had been a happy, pleasant, well-liked young officer, and he was sorely missed for a time, not only in F Section but in the Signals officers' mess, where his stories, always clean and always funny, and his outrageous puns and quips never failed to raise a ripple of amusement. In F Section he had been immensely popular with the men and also with the commander of 5 Field Regiment, who rated highly his abilities as a Signals officer.

Two hours later a flight of Mehos—those sinister, swift fighters which seemed never to run out of cannon ammunition however long their unwelcome stay—came in suddenly from the west and lashed the area with a hail of fire which killed Lance-Corporal Anderson, ⁴ a driver in Administrative Section, and mortally wounded Signalman Bain, ⁵ an A Section operator, who died a few days later. Rob Anderson, a First Echelon soldier, was another favourite—a quiet, well-mannered fellow with an awkward gait and a slow, hesitating mode of speech —and the despair of all the unit's RSMs and CSMs, none of whom had ever been able to teach him to march or keep in step in a squad of men.

During the next few days a general movement westwards in

preparation for an attack north-westwards took place, and 6 Brigade, which had been withdrawn from the Qattara Box, returned and reoccupied it on 5 July. Fifth Brigade was still south of El Mreir; because of heavy opposition it was unable to get across to its northern side. On the 5th 4 Brigade was brought around to the south-west of El Mreir, and two days later moved north and drew level with 5 Brigade on its right. These moves brought both brigades into a position designed to lend support to a British armoured attack on the western end of Ruweisat Ridge, but during the afternoon of the 7th the threat of an enemy armoured attack from the west caused 4 Brigade to withdraw again to the south. Meanwhile a British armoured attack by 30 Corps in the north, planned to push westwards while the New Zealanders and Indians were creeping up on the enemy's rear from the south, was postponed. The net result was that the enemy was left in firm possession of the ground west of Ruweisat Ridge. Moreover, he had strengthened his positions between the western end of Ruweisat and El Mreir by stiffening his Italian formations there with German infantry. The New Zealand Division was now in an uncomfortably exposed position and likely to be isolated should the enemy make a thrust south-eastwards towards Deir el Munassib from Ruweisat, so orders were given for an immediate move eastwards to positions on a shortened Corps front.

By early morning on the 8th the Division was back in the Deir el Munassib- Deir Alinda area after a very difficult night move. Sixth Brigade left the Box again that day and moved east to a reserve position from which it moved back to Amiriya in reserve next day.

The Division's positions faced north, with 5 Brigade just to the south of Deir Alinda, the Divisional Reserve Group in the centre, and 4 Brigade on the left at Muhafid, a large depression about three miles to the north-east of Munassib.

Next day the Italians stormed the Box with a grand display of bravado and captured it easily, mainly because it was quite empty, although this did not detract from a noble feat of Italian valour. Major-General Kippenberger has recounted how he watched this attack, and ends by saying that 'It was all very pretty and I was sorry someone was not there to deal with it properly'.

On the evening of the next day the enemy moved in between Deir Alinda and the high plateau a few miles to the south, and there was a brief squabble with 21 Battalion. That night 5 Brigade moved east through 4 Brigade's positions to get out of an uncomfortable position. There was a good deal of jumping about from place to place at this time, but the signs were that some sort of stability had returned and that the critical phase which marked the opening days of July was easing to some extent. British armour had swept the enemy from Alam Nayil ridge and remained there in firm possession, watching the area south of Ruweisat Ridge from hull-down positions. A good deal of precious time, which in those anxious days was the very essence of success, had been gained to give Eighth Army a breathing spell, and this enabled both armour and infantry to pick up new strength and shake down into a better state of organisation.

On the 14th, a few minutes before midnight, Main Divisional Headquarters settled down again after a series of short moves which had brought it around the eastern end of Deir el Muhafid and then northwestwards in general conformity with the movements of 4 and 5 Brigades, which at that moment were moving forward in an attack planned to capture the central and western portions of Ruweisat Ridge. This new position of Main Headquarters, in a shallow depression about three and a half miles east of Alam Nayil, had just been vacated by Headquarters 5 Brigade.

The attack, under 13 Corps, was the culmination of several planned assaults which, during the previous ten days, had either been postponed or dropped altogether for a variety of reasons. It consisted of a three-brigade night operation, with 4 NZ Brigade on the left striking for the western end of the ridge, 5 NZ Brigade in the centre directed onto the central portion, and 5 Indian Brigade on the right to capture the eastern end. Zero hour was 11 p.m., and an hour earlier Headquarters 5 Brigade

moved off to the start line; with it went—or rather, was intended to go—a B (cable) Section detachment to extend the Main Divisional Headquarters' line forward behind Brigade Headquarters as it went. Similarly, Divisional Signals extended its Corps and Rear Divisional Headquarters' lines forward as it moved up from Muhafid to occupy 5 Brigade's old location. Very much the same sort of arrangement occurred at Headquarters 4 Brigade, where another B Section detachment temporarily attached to J Section carried the Main Division-4 Brigade line forward as Brigade Headquarters moved.

This method of moving along line laid on the divisional axis of advance and extending the lines as the leading brigades advanced, or alternatively waiting until the leading brigades halted and then sending the lines forward quickly, was later to become the standard and well-tried drill of taking communications forward to leading elements with the least delay possible. It had a tremendous advantage over the usual wasteful method of putting cable on the ground and then having to take it up again quickly whenever a brigade moved, but an essential condition to its successful employment was, of course, that Main Divisional Headquarters and the brigades should move along a predetermined axis of advance and not scurry around between widely divergent points as they had been doing, quite unavoidably, during the last two weeks.

So far as 5 Brigade's part in the attack was concerned, the line communication plan went wrong quite early, in fact before the brigade passed the start line. From Deir Umm Aisha the 5 Brigade- 22 Battalion line ran north-westwards towards the start line; it was this line that was to be joined on to the Main Divisional Headquarters-5 Brigade line and thus become part of the divisional artery. Actually, a D Section signal office detachment arrived at Headquarters 5 Brigade before it moved off from Deir Umm Aisha at 10 p.m. and installed an exchange there in readiness for Main Divisional Headquarters' arrival about midnight.

Just before Headquarters 5 Brigade moved off from Deir Umm Aisha towards the start line, where it would assemble behind 22 Battalion, a fault appeared suddenly on the 22 Battalion line, which was later to

become part of the Main Division-5 Brigade artery. By this time—about 10 p.m.—the K Section line detachment was away taking up the 21 and 23 Battalion lines, so Captain Dasler, the section commander, led the attached B (cable) Section detachment forward to find the fault, leaving Sidey, his second-in-command, in charge of the section. The fault was soon traced and rectified, but Dasler, instead of turning back and rejoining Headquarters 5 Brigade at once, continued on and led the detachment towards the start line. Very soon another fault appeared on the line. Leaving the detachment standing, Dasler took one of its linemen in his own truck and went back along the line to locate the fault which, however, remained undetected. As he previously had made careful arrangements for Signals at Main Divisional Headquarters to maintain the line forward—this was a Main Headquarters' responsibility and there was no need for special arrangements—he turned back again to rejoin the B Section party, but lost his way in the darkness and did not reach it until daylight.

Meanwhile Headquarters 5 Brigade had reached the start line and found no trace there of the B (cable) Section detachment which was to extend its Main Division line forward with it. A foot party from K Section, equipped with a drum barrow and three miles of single D Mark III cable, had already gone forward from the start line and was laying a line behind 22 Battalion, which was moving behind the two assaulting battalions. This party rang back just before Brigade Headquarters moved off from the start line and reported that it had laid two and a quarter miles of cable along the brigade axis. The purpose of this was to enable the battalions, when they reached their objectives, to locate the cable on the brigade axis, extend it to their battalion headquarters, and so gain immediate line communication with Brigade Headquarters. But Brigade Headquarters did not move on the same bearing as that taken by the foot party, so that soon after it left the start line it had no line communication either to Main Divisional Headquarters or to its forward battalions, even had they been able to find the cable in the darkness and the confusion of battle.

The third of the unlucky incidents which were to render Dasler's signal plan so ineffective now occurred. K Section's cable detachment had been left at Deir Umm Aisha to reel in 21 and 23 Battalions' old lines. This job completed, it was then to move to the start line and travel behind Brigade Headquarters, taking up as it went the cable laid by the drum barrow party on foot. It was one of the intricacies of the signal plan that this detachment, moving behind Brigade Head- quarters, was to reel up the forward cable and send it forward at intervals in another vehicle to the drum barrow party to eke out its three miles and so provide enough to reach the battalions' final objectives, six miles away on the ridge. However, K Section's line detachment's cable-laying apparatus broke down while the 21 and 23 Battalions' lines were still being reeled in at Deir Umm Aisha, with the result that the detachment did not reach the start line in time to catch Brigade Headquarters before it moved off, which was about 11.20 p.m.

Wireless communications also had a brief and unhappy existence that night. The generator in the No. 9 set on the Main Divisional Headquarters' rear link developed a fault, but communication was quickly restored by the substitution of a No. 11 set working back to the C control set at Main Division on the divisional master frequency. But this was not entirely a satisfactory substitute. At Main Headquarters the A control set, which controlled the forward brigade group, was located quite close to the G office and was therefore readily accessible to the G staff; the C control set, on the other hand, was stationed some distance away. Inevitably there were delays while the GSO 1 (Colonel Gentry) stumbled in the darkness towards an unfamiliar set, and this caused considerable exasperation and impatience both at Main Divisional Headquarters and at Headquarters 5 Brigade. Moreover, Headquarters 5 Brigade was deprived of its lateral wireless communication to Headquarters 4 Brigade on its left.

The wireless communications within 5 Brigade itself, which were normally provided by a No. 11 control set at Brigade Headquarters working forward to No. 11 terminal sets at the headquarters of each

battalion, were drastically modified for this operation to conform to an order that no transport was to move with the assaulting battalions. These terminal No. 11 set, which included one located with Headquarters 6 Field Regiment, moved with the A Echelon transport immediately behind the Brigade Headquarters group, and their usual places with battalions were taken by No. 18 sets working back to a No. 18 control set installed in the staff car of the Brigade Major (Major Fairbrother), who had to assist him a regimental signaller from 22 Battalion. The intention was that the No. 11 sets should go forward and take up their normal tasks after the battalions had reached their objectives on the ridge.

In 1942, however, No. 18 sets were unreliable instruments, owing chiefly to the advanced stages of deterioration in the dry cell batteries which were then supplied in the Middle East to operate them. 'Tropicalised' battle batteries, that is, batteries with hermetically sealed containers to prevent excessive evaporation of their exciting fluids in tropical countries, had not then reached the Middle East, and units had to make do to the best of their ability with the ordinary unsealed batteries which, more often than not, had almost expended their 'shelf life' in some remote ordnance store before they reached units in the field.

The batteries of the No. 18 sets in 5 Brigade—and probably the other two brigades too—were all 'new' ones. They were part of a batch, barely sufficient for his needs, that Dasler had received three days before from Divisional Signals' Quartermaster (Captain Waters), who like quartermasters the world over, was concerned not so much with the inward efficiency of the various items of equipment which passed through his hands as with their outward appearance, which he expected to tally as closely as possible with the description entered on his indent vouchers. These that he gave Dasler were beautiful batteries, resplendent in bright paper labels of red and blue and with shiny brass terminals, but inanimate as dry bones at their useless hearts. Dasler took them to his electrician and had them tested to gauge the veracity of their labels

which said that each contained sixty lively volts. But they were useless, so he sent Sergeant Eadie ⁶ back to Rear Divisional Headquarters to procure some more. There was none, however, the Quartermaster having dispensed his meagre stocks to other sections. The battalions said those that Dasler had would do and took them away.

Soon after midnight fighting broke out ahead of Headquarters 5
Brigade, where 23 Battalion met the first opposition. It spread quickly to 21 Battalion, and then flared up on 4 Brigade's front away to the left.
Wireless communication continued reliably throughout the night to 22
Battalion, only a short



Mr Churchill meets Lt-Col G. L. Agar at Headquarters 13 Corps

Mr Churchill meets Lt-Col G. L. Agar at Headquarters 13 Corps



Lt C. Smith washing clothes near Kaponga Box

Lt C. Smith washing clothes near Kaponga Box



Messing in a signal truck near Burg el Arab before Alamein

Messing in a signal truck near Burg el Arab before Alamein



Laying a line from a cable truck



Repairing a line, Tripolitania

Repairing a line, Tripolitania



Divisional HQ signal office in action. J. H. Penney, R. C. Bennett and J. V. Sherborne are in front, with M. A. Curry and R. M. Green behind

Divisional HQ signal office in action. J. H. Penney, R. C. Bennett and J. Sherborne are in front, with M. A. Curry and R. M. Green behind



Maori Battalion deseats Divisional Signals in the New Zealand Rugby championship final in Tripoli. L. E. Vaughan, captain of the Signals team, is in the centre

Maori Battalion defeats Divisional Signals in the New Zealand Rugby championship final in Tripoli. L. E. Vaughan, captain of the Signals team, is in the centre



A dug-in signal office at Divisional Headquarters, south of Enfidaville

A dug-in signal office at Divisional Headquarters, south of Enfidaville

Battalion after a few exchanges in radio telephony, and was not restored again during the battle. Contact with 21 Battalion's set was maintained at good signal strength and remained so, but suddenly the Brigade Major discovered to his consternation that the set and its operator had become separated from Battalion Headquarters and could not rejoin it.

Thus, from the very beginning of the attack, Headquarters 5 Brigade had a none too satisfactory substitute wireless link and no line communications whatever to Main Divisional Headquarters, although a resolute attempt by Sergeant Eadie, of K Section, to restore the latter very nearly succeeded. The time—which cannot be determined with any accuracy—was probably several hours after the advance commenced. Eadie took a jeep and made his way back to the start line, along which he moved in a south-westerly direction searching for the Main Division-4 Brigade line, which he knew must lie somewhere close at hand. After a time he came across a cable and, teeing-in with a field telephone, heard Corporal H. L. Smith, a line- man of E Section, talking to Colonel Gentry, the GSO 1 at Main Division. Eadie knew or guessed that E Section had teed-in 4 Field Regiment on 4 Brigade's line, but in any case the fact that the GSO 1 was on the line was sufficient for him to identify it as the Main Division-4 Brigade circuit. He disconnected his telephone, teed-in a cable in place of it, and led the wire back to

Headquarters 5 Brigade, where he informed Brigadier Kippenberger that he could now talk to Main Division by telephone. Before the Brigadier could use it, however, the line went dead.

By first light all three battalions of 5 Brigade were on the ridge and preparing to dig in. The 22nd Battalion was intact, and so was the 23rd, but the 21st, which had become split into several parties in an encounter with enemy tanks during the advance through the enemy outpost line, was widely dispersed, and its CO, Lieutenant-Colonel Allen, formerly commander of Divisional Signals, had been mortally wounded. Accompanied by a 23 Battalion sergeant, Allen was returning to the rear to bring up his reserve companies when he stumbled on to an Italian strongpoint which had been bypassed during the advance. He received four bullet wounds in the chest and died that afternoon at a medical post near 4 Brigade's positions at the western end of the ridge.

The supporting armour which was to have come up at first light did not put in an appearance, and soon after dawn German tanks swept in in a counter-attack from the south-west and completely overran 22 Battalion.

Meanwhile Headquarters 5 Brigade, which had halted two miles south of the ridge, had come under heavy fire and had been forced to withdraw about two miles south to a shallow depression which was later to become widely known as Stuka Wadi. It was here, a short time later, that Dasler and the lost B (cable) Section detachment rejoined the headquarters and restored line communication to Main Divisional Headquarters.

Throughout the day persistent attempts were made by various people at Headquarters 5 Brigade to get through to the ridge, but all were beaten back by fire which swept the intervening ground from the direction of El Mreir. Dasler had already assembled Corporal Barron's ⁷ line detachment and a No. 11 wireless set detachment, and had gone forward as far as the enemy's fire would permit in readiness to seize the first opportunity of reaching the ridge and so establishing

communication between the infantry there and Brigade Headquarters. Dasler had previously asked permission from the Brigade Major to go forward, but Fairbrother refused, saying that the brigade Intelligence Officer, Captain McPhail, ⁸ was trying to find a route through in a Bren carrier.

From their position near an artillery forward observation post, Dasler and his two detachments watched McPhail's carrier moving to and fro across the front looking for a gap through which to reach the ridge. Some time passed and, as it was apparent that the IO's efforts to get through were not meeting with much success, Dasler turned and took his line and wireless detachments back to Brigade Headquarters, where he was greeted by the Brigadier with the question: 'What the hell are you doing here now, Dasler?' Stung into quick resentment by this reception, Dasler jumped into his jeep and headed back again, still followed by Barron and the wireless detachment. By this time the Brigadier had seen that the Indians on the right had succeeded in clearing out resistance below the ridge, so Dasler swung eastwards and finally reached the ridge through the Indians' positions. He reached 23 Battalion and immediately established wireless communication with Brigade Headquarters.

It was then that Dasler learned of Lieutenant-Colonel Allen's mortal wound, so he set off in his jeep towards 4 Brigade, at the western end of the ridge, with the object of seeing the Colonel, who was reported to be in an RAP there. About 4 p.m. he reached Headquarters 4 Brigade, where he hoped to learn of the whereabouts of the RAP. Soon after his arrival Brigadier Burrows 9 received a message from his infantry that they were being heavily attacked by armour. Hearing the Brigadier inquiring anxiously about his anti-tank guns, Dasler came forward and said that there were about fifty tanks over the ridge in the rear. The Brigadier asked him to go immediately and get support from them as quickly as possible. Dasler drove back quickly and reaching the first tank, which was about 200 yards from Headquarters 4 Brigade but on the southern side of the ridge, climbed up on it, asked for the armoured brigade commander, and was directed to another tank some distance away. The

brigade commander stated that he couldn't move his armour, but would send a reconnaissance officer forward, which so infuriated Dasler that he retorted that it 'would be a bloody waste of time'. Jumping into his jeep, he drove back again across the ridge towards 4 Brigade, whose area by this time was enveloped in such a curtain of fierce fire that he was forced to return to 23 Battalion, farther along the ridge. There he picked up Barron's line detachment and made his way back towards Headquarters 5 Brigade, meeting on the way Brigadier Kippenberger and Captain McPhail, who were going forward to the ridge. Dasler reported what he had seen to the Brigadier and continued on to Brigade Headquarters.

That night 21 and 23 Battalions and the remnants of 22 Battalion were withdrawn south of the ridge, after 5 Brigade's valorous attempt to secure a lodgment there had failed. Most failures, however bitter, point useful lessons, and two important ones for Signals were brought out in this battle. The first was that terminal sets should not be separated from the headquarters they serve, which means that if they cannot be carried forward with the headquarters of battalions in trucks or carriers, they must in the last resort be manhandled. The second lesson was that the No. 18 set, at that time the only infantry-type set available, could not perform adequately the tasks of the No. 11 set, which was the only set available at that time for battalion terminals. Moreover, the No. 11 set suffers from severe limitations of performance and cannot be compared with the greatly superior equipments, such as the No. 19 high-power and No. 22 types, which came into more general use later in the war.

There was a salutary lesson, too, in the failure of line communications. Complexity in line communications must be avoided at all costs when they are to be established during night operations. K Section's plan for line communications in the Ruweisat battle was much too elaborate to hold a reasonable promise of success. There were too many things that could go wrong; most of them did go wrong, although the plan to extend the Main Divisional Headquarters' line behind Headquarters 5 Brigade as it moved forward should have succeeded and

would almost certainly have done so had not the B (cable) Section detachment been sent back along the cable to locate a fault that in the normal course of events would have been traced and repaired by a detachment from Main Divisional Headquarters. The plan for providing line communications from a moving brigade headquarters to battalions fighting their way forward in darkness through an enemy outpost line was doomed to failure from the start. Moreover, Headquarters 5 Brigade did not move along the same bearing as that on which the forward artery had been laid, so whatever small chances of success the scheme had in the beginning vanished quickly as the attack progressed.

There is another and equally dismal side to the picture. The overall tactical plan for the operation was hastily prepared, with no proper liaison with the Indian brigade on the right, or with the armour that was supposed to join the infantry on the objective at first light as defence against the German counter-attack.

Besides Dasler and his line detachment, several important parties became lost during the move to the start line. A large group of anti-tank guns that was to move behind 22 Battalion lost itself in the darkness, and the brigade Intelligence Officer, who went off on his own to find the lighted start line, became separated and did not rejoin Brigade Headquarters until some time later.

In 4 Brigade's attack, which went forward on the left parallel to and simultaneously with 5 Brigade's, Brigade Headquarters was divided into two parts. Main Headquarters moved behind 20 Battalion, which as reserve battalion followed the two leading battalions, the 18th on the left and the 19th on the right. A B (cable) Section detachment, attached temporarily to J Section for the attack, moved behind Main Brigade Headquarters and extended the Main Divisional Headquarters' line forward. During the advance this line was used frequently for communication between Main Brigade and Main Divisional Headquarters. When Main Brigade Headquarters reached the objective at the western end of the ridge at first light, however, the cable detachment was halted about half a mile in the rear, having exhausted

all its cable. Corporal George Sinton, one of J Section's veteran linemen, went back on foot with some more cable and was just able to make his way back to Main Headquarters 4 Brigade through the heavy enemy fire which began to fall south of the ridge. Some time passed, and still the cable detachment with the Main Divisional Headquarters' line did not appear. It was discovered later that it had been captured and its crew, together with Lieutenant Alp, ¹⁰ the second-in-command of J Section, taken prisoner.

Immediately upon Main Brigade Headquarters' arrival at the western end of the ridge a line was put out to 20 Battalion, but none was laid to 18 or 19 Battalions, which were digging in only three or four hundred yards from Brigade Headquarters. The only means of communication with Main Divisional Headquarters was now the No. 9 rear link set, since the B (cable) Section detachment had been captured. Apparently no attempt was made by Signals at Main Brigade to find the Main Division line, the end of which lay only half a mile away, but from Rear Brigade Headquarters, where the brigade's fighting transport and guns had been halted by enemy fire near the western end of Stuka Wadi earlier in the attack, Signalman Nilsen, 11 a J Section lineman, came forward under fierce fire for two miles and repaired several breaks in the cable before he was eventually forced to retire. A little later, escorted by several Bren carriers, he made another attempt to repair the line through to Main Brigade Headquarters, but was again forced back. For these plucky attempts carried out with complete disregard for his own safety, he received an immediate award of the MM.

At Rear Headquarters 4 Brigade, halted near the north-western edge of Stuka Wadi, it soon became clear that the brigade's internal wireless communications had failed early in the attack. Nothing was ever heard from the No. 11 set at 18 Battalion, and it was believed to have been captured about dawn. The set at 19 Battalion succumbed early in the advance, when the engine of its vehicle was holed by a direct hit from a small shell, and it became separated from Battalion Headquarters; the vehicle was eventually forced by enemy fire to retire to Rear Brigade in

tow behind another vehicle. The set with 20 Battalion reached the objective with the battalion, but no traffic passed between it and the control set at Main Brigade, probably because the latter had been damaged soon after dawn by a nearby shellburst while it was being removed from its vehicle and installed in a slit trench. There is some evidence to support this belief.

The only other set on the brigade forward control group was the brigade commander's reconnaissance set, manned by a J Section operator, Signalman Somerville, 12 and stationed at Headquarters 4 Field Regiment. Somerville maintained a continuous listening watch on the group and called the control set at Main Brigade Headquarters every five minutes throughout the battle, but had no contact with any station on the group. At 3 a.m. he received a message from Main Brigade saying that the first objective had been captured, and a few minutes later the same message came from a station which he could not identify. From then until late in the afternoon nothing further was heard on the group until, at 5.17 p.m., Somerville heard a station using 20 Battalion's call sign calling the control set at Main Brigade at low signal strength. This call was heard also by the control set, which Somerville heard making weak answers without gaining contact. This suggests that, although the Main Brigade Headquarters' control set's receiver was working satisfactorily, its transmitter was defective. After a time the weak signals from 20 Battalion ceased altogether.

Wireless communications between Main Brigade and Main Divisional Headquarters continued without interruption until late in the afternoon by means of the No. 9 rear link set. A not unusual feature of the operation of this link was that although Signalman Byers, ¹³ the operator at Main Brigade, had several messages calling for artillery support and replenishment of small-arms ammunition awaiting transmission, he was unable to break in on Main Division's transmissions because all the traffic coming from there had 'P' priority and therefore took precedence over his messages, which were in a lower category. Byers did not bother to inform the brigade staff of these

delays, but altered the priority of his messages, quite on his own initiative, to 'O ii P' and, breaking in on Main Division's transmission, managed to get them away.

This overloading of wireless circuits with a preponderance of priority traffic to the almost complete exclusion of ordinary messages was an old defect. Notwithstanding the lessons learned in the campaigns in Greece and Crete, when high- priority messages often represented as much as 80 per cent of the total traffic handled by Signals, staff officers still persisted in marking most of their signal messages with the highest priority they were entitled to use by virtue of their various appointments. The result, of course, was chaotic and almost rendered the priority system completely useless. With the increasing use of radio telephony for operational traffic between divisional and brigade staffs, however, this nuisance was abated to a considerable extent, but important administrative traffic transmitted by wireless telegraphy continued to suffer long delays because of the abuse of priorities.

Another curious thing about this No. 9 set link from Main 4 Brigade to Main Divisional Headquarters was that all transmissions were apparently made in WT, although the range—less than nine miles—was well within the set's speech transmission capabilities. There is no evidence that the set's transmitter was faulty, except the probability that its rod aerial erected close to the slit trench in which the set was installed was too short to achieve radiation over the normal speech range.

Even as late in the war as the middle of 1942 there persisted among many formation commanders the curious belief that enemy direction-finding stations were able to pinpoint locations of headquarters by means of bearings taken on wireless sets operating at those headquarters. As a result of this quite erroneous belief, many commanders hesitated to use wireless at all in certain circumstances. ¹⁴ Others often forbade the erection of high-rod aerials in the belief that a tall mast, however slender, was certain to attract the unwelcome attentions of artillery observers and low-flying aircraft.

Enemy direction-finding installations carried in the field could not pinpoint particular wireless sets. Under the best conditions the equipment available in field installations could achieve bearings correct to two degrees on either side of the true bearing; this is an error that expands to unworkable proportions as the range between the directionfinding set and the intercepted set increases. The best that enemy direction-finding could achieve, then, was to determine areas in which wireless sets were working, to detect their movements and so deduce probable movements of units, and to relate call signs to areas; but this correlation of areas and call signs could only be achieved in significant proportions when the direction-finding units were working in close collaboration with intercept units, so that as the organisation expanded in size it tended to fall farther back towards rear areas and therefore nearer to the limits of range of the smaller-powered sets on which interception was being practised. The single call-sign procedure in use in Eighth Army, daily changing of these call signs, frequencies of transmission and strength of signals, and the elaborate equipment required to determine night propagation paths of 'sky wave' transmissions were other important factors which restricted the value of the results achieved by enemy direction-finding and intercept units in the forward area.

In 1942 in Eighth Army it became almost axiomatic that command in battle should be maintained as long as possible by radio telephony. It gave quick results and preserved the personal touch between commanders, but an essential condition of course was that headquarters had to be kept well forward. As ranges increased or wireless conditions deteriorated, the use of radio telephony became more difficult and eventually impossible, and resort had then to be made to the 'key conversation' procedure at which many operators became adept in a very short time. The procedure went something like this: the staff officer, more often than not sitting beside the operator and wearing a spare set of headphones, would write his message on the back of a message form or other convenient piece of paper, putting the essential parts of it into

radio-telephony map reference and appointments codes as he wrote. Sometimes, according to his facility in the use of the various codes, he would speak his message directly to the operator, who would then transmit it by telegraphy. Similarly, replies were received by telegraphy and then scanned and decoded by the staff officer.

Reference to staff officers writing 'key conversation' messages on the backs of message forms will probably remind readers of other curious habits. The signal message form was often put to unauthorised uses: soldiers wrote letters home and doggerel verse on their backs, and some embryo artists used them to make pencil sketches of the desert's 'pastoral' scenes. Others again used them for less dignified but utilitarian purposes, but staff officers used only the front of them for writing formal messages for transmission by the usual means of communication. When 'key conversation' messages were to be transmitted, however, officers invariably turned the form over and wrote on its back, and after a time the operators caught the habit too. They would send off the message and then, while waiting for the reply, would carefully turn their message pad over and poise their pencils.

There is one very important observation that has to be recorded concerning the evolution of wireless communications in mobile operations in 1942, and that is that the stage at which command had to be exercised in battle by means of enciphered signal messages was postponed until no other course was possible to preserve communications.

The reader, having read this digression or, according to his mood, bypassed it entirely, is invited to return to the account of 4 Brigade's misfortunes on the afternoon of 15 July. At Rear Brigade Headquarters, which was still unable to get forward to the ridge owing to the presence of enemy infantry and armour between it and Main Brigade, a spare No. 9 set brought up from Main Divisional Headquarters was added to the divisional forward control group in an effort to re-establish communications with Main Brigade. The operator was able to hear all the other stations on the group at good signal strength, but was quite

unable to break in because of the stream of priority traffic passing between Main Divisional and Main Brigade Headquarters.

Meanwhile at Main Brigade, where the headquarters had been under heavy artillery and mortar fire for most of the day from enemy positions in the Deir el Shein area and to the west, all signal communications except the wireless link back to Main Division had failed completely. There were no lines to battalions, the only one that had been laid—that to 20 Battalion— having been almost completely destroyed by enemy shell and mortar fire.

At 4 p.m. the enemy launched an attack with tanks, armoured cars and infantry. It came in with great speed and, supported by heavy artillery fire from north of the ridge, completely overran all three battalions. During a lull which followed in the shelling and machine-gun fire, Captain Paterson suggested that the men should eat, and soon he and Lance-Sergeant Campbell, ¹⁵ Corporal Stevenson, ¹⁶ and Signalmen Gaze and Molloy ¹⁷ were crouching behind a low parapet of sandbags, preparing to make a meal of tinned fruit. Paterson was on his knees and was just about to hand an opened tin to Molloy when he gave a groan and rolled over on his side, blood pouring from a wound in the crown of his head. At first Campbell and the other men thought Paterson was dead, but on finding that he still breathed, applied a field dressing.

About 6 p.m. enemy armoured cars—about three in number —entered the Brigade Headquarters' area, and after destroying all equipment and transport which could not be moved away, drove off, taking with them a number of serviceable trucks and anti-tank guns. About an hour later more armoured cars entered the headquarters' area and began to round up prisoners. Many J Section men were among them, and altogether the section was in a bad way. Both the No. 9 set and the No. 11 forward control set, together with RT codes, call-sign lists and other secret papers, had been destroyed by their operators, and the section commander was slowly dying from his head wound.

While the enemy was still rounding up the prisoners, British armour

started to shell the area from the south-east, and the armoured cars immediately withdrew westwards, herding the prisoners before them. In the confusion the Brigade Commander (Brigadier Burrows), the CO 19 Battalion (Lieutenant-Colonel Hartnell ¹⁸) and the brigade Intelligence Officer evaded capture and escaped. An hour later they returned and, collecting a few stragglers and loading two vehicles full of wounded, including Paterson, made off again across the ridge towards the southeast, but when they had gone only three or four hundred yards they were intercepted again by enemy armoured cars. The party was loaded in threes onto the outside of these armoured cars, which then moved off, taking with them also the two vehicles carrying the wounded.

After about an hour's travelling the cars halted and the group bivouacked for the night. Since he had received his wound a few hours earlier, Paterson had not recovered consciousness and had had no medical attention except the rough dressings applied by his men; nor were the Germans able to provide any. At first light he was found to have died during the night, and he was buried at the German bivouac, two and a half miles north-west of the Brigade Headquarters' position, by two of his signalmen who used their steel helmets to dig a shallow grave.

Thus passed one of Signals' most promising officers, a quiet, well-bred and extremely likeable fellow who had concealed considerable ability behind a restrained manner. In times of need, however, this ability had emerged and earned for Paterson the enduring respect of his seniors. One such occasion had occurred on the afternoon of 14 July, when preparations were being made for that night's attack. At Headquarters 4 Brigade, near the eastern end of the Alam Nayil ridge, a shell had burst under the command truck, killing a brigade headquarters' runner and wounding the Brigade Major, Captain Pearson.

19 The Brigade Commander had been on a reconnaissance at the time, so Paterson, then the only senior officer at Brigade Headquarters, had assumed the duties of Brigade Major; he had then got in touch with the CO 19 Battalion and asked him to take command until the Brigadier's return.

Of the party which the armoured cars had rounded up, two had managed to hide themselves on the boulder-strewn slope of the ridge and finally escaped to the Division's lines. One was Brigadier Burrows, in whom the trick of evasion was beginning to become a habit, and the other was Corporal Stevenson-'Black Jake'-of J Section. They became separated in the darkness and each made his way back independently. Black Jake had acquired a pair of white canvas shoes from somewhere, and these he put on to enable him to move silently across the wide stretches of gravel, upon which boots make a loud crunching sound in the still air of desert nights. For all his caution, however, he stumbled into a German tank harbour, where he hid for a while in the shadow of a tank, several times barely escaping detection by groups of Germans who strolled about the harbour in the darkness. Fortunately the night was dark and he was soon able to slip away unobserved and continue his march in what he thought was the general direction of the Division's positions. By a strange chance, the first vehicle he came on was that of OC No. 2 Company Signals standing in the Headquarters Divisional Artillery area at the head of the Divisional Headquarters' position.

It was about 2 a.m. when Stevenson approached the dim silhouette of what appeared to be the friendly shape of a Dodge 8-cwt truck. OC No. 2 Company was awakened by the soft crunching of cautious feet in the darkness and called out: 'Who goes there?' 'It's Stevenson—Black Jake,' came the reply.

He came in, his steel helmet tilted on the back of his head, his rifle still slung over his left shoulder, and a wide grin splitting his dark visage. Then more gravely: 'I've come in from 4 Brigade. They're scuppered and most of J Section are in the bag.' Sid Glensor found him a spare blanket and a packet of biscuits. Jake sank down on the running board and announced that he was pregnant. Then, with easy unconcern, he went on: 'About an hour ago I came through a Jerry tank laager. Ran into it in the dark and hid for about half an hour. I could hear the bastards standing around talking, but I managed to get away all right.'

At daylight he was taken down to Divisional Headquarters to tell the Intelligence Officer what he knew, and then on to Divisional Signals, where Lieutenant-Colonel Agar learned for the first time of the fate of J Section and that Tom Paterson was probably dead.

Main Divisional Headquarters left its location at Muhafid at 11 p.m. on the 14th, just about the time that 4 and 5 Brigades were moving off from the start line towards the German out post line which extended in some depth south of the ridge. Signals took over the signal office site just vacated by K Section, where an advanced D Section detachment had already installed an exchange switchboard. Early in the attack there were some telephone conversations between Main Division and Headquarters 4 Brigade by means of the line being laid forward behind 4 Brigade, but this communication soon broke down and contact was then maintained by radio telephony, which also soon became erratic. Because of the breakdown which had occurred in 5 Brigade's No. 9 rear-link set, contact was main tained through the C control set which, however, was not readily accessible to the G staff for RT conversations because it was some distance from the G office.

When Main Divisional Headquarters arrived at its new posi tion at Deir Umm Aisha the sounds of heavy firing could be heard, and it was soon obvious that the assaulting battalions were being strongly engaged. The sinister sound of continuous enemy mortar fire dominated the noise of battle away to the north-west, and later came the sound of tank-gun fire. In the brief intervals between the low booming of the heavier weapons, the chatter of Spandaus sounded its spiteful tenor accompaniment.

About 2.30 a.m. the codeword DOG, which denoted the capture of the outpost line, came from both brigades. Just before first light the codeword TIGER came by RT from 4 Brigade, which had captured its objective on the ridge. The situation at 5 Brigade was obscure; its Brigade Major had reported just before dawn that Brigade Headquarters was not in touch with the leading battalions but that both were probably

on their objectives.

Despite the uncertainty of the situation on the ridge, Main

Divisional Headquarters moved at first light along the axis of advance.

The next location was to be in Stuka Wadi—just forward of the brigades' start line—but after Main Division had gone about a mile and a half it was seen that the area ahead was occupied by brigade transport in some density.

Moreover, an RT report received about this time from Head quarters 5 Brigade stated that the area ahead of Main Division was under fire and that enemy armour was attacking south of the ridge. Ahead of Main Division, now moving more slowly and cautiously, could be seen the glowing tracer from tank and anti-tank guns looping swiftly to and fro in the half light in long sweeping arcs. Suddenly up went the blue flag at the head of the column in the signal to withdraw, and the whole Divisional Headquarters formation turned about and retraced its tracks to the position it had just left. This was the second time in the Division's desert fighting that Main Divisional Headquarters had executed an almost perfect right-about-turn on the march; the first had occurred near Zaafran in the Libyan battle the year before. Drivers swung hard on the wheels of their heavy vehicles and, despite their ribald com ments on the staff's methods of running a war, were very glad to turn their backs on the fire hurtling back and forth like orange meteors not far away.

During the day the infantry held their positions on the ridge under almost continuous artillery and mortar fire, but enemy activity south and west of the ridge prevented supporting weapons from getting forward and coming into action. Late in the afternoon reports reached Main Division that 4 Brigade, on the western end of the ridge, had been overrun by enemy armour. That night the GOC (Major-General Inglis) ordered 5 Brigade to withdraw from its positions and regroup south of the ridge. The withdrawal was successfully carried out and the brigade went into new positions facing north and north-west.

The outcome of this disastrous battle, fought entirely by infantry without the promised armoured support and almost completely without artillery support, was the loss of one brigade and one battalion from another brigade. Signals suffered pro portionally in the loss of both officers and twenty-two other ranks of J Section. Many of the section's vehicles, four wireless sets, and the major part of its cable were captured or destroyed. An ironical twist of circumstance sent Lance-Sergeant Shirley back into captivity after only a few days in the field with the Division, to which he had recently returned after escaping from Crete.

K Section, in striking comparison, suffered only slight losses, the only casualty being Signalman Mason, ²⁰ who was killed in a bombing raid on the 15th. None of the section's vehicles or wireless sets was lost, although a considerable quantity of cable laid out on the ground during the night attack was never recovered.

On 16 July 4 Brigade, less 18 Battalion, which had suffered least of the brigade's three battalions, was ordered to Maadi Camp to be reorganised, and 6 Brigade was immediately ordered up from Amiriya where it had been in reserve. The 22nd Battalion, which had suffered most heavily in 5 Brigade, was also sent back to Maadi to reform.

The Division's task in the next attack planned by 13 Corps was the capture of the eastern tip of the El Mreir depression, and 6 Brigade was given the job. It was to have the support of the whole of the Divisional Artillery and a medium battery of Royal Artillery. In addition, 5 Brigade was to assist with mortar and machine-gun fire on the eastern end of El Mreir. To form up for the attack from its existing line running north and south, 6 Brigade had to perform a sort of 'at the halt—right form' movement which brought its left flank almost on to the enemy defences in the west. Headquarters 6 Brigade split into two, as 4 Brigade had done at Ruweisat; the forward head quarters, which was to follow hard on the heels of the assaulting battalions, was called Tactical Headquarters, and that which remained in the rear until the objective was captured became Main Headquarters.

The communications plan was very much the same as that for the Ruweisat operation, except for one or two slight modifi cations. The battalions' No. 11 sets, for example, were to be carried forward in carriers, which indicated that some notice was at last being taken of the lessons demonstrated by failures of communications in former battles. The Main Division-Brigade Headquarters' line was to be extended forward as Tactical Headquarters moved, a normal sort of procedure and one which presents no great difficulties so long as the cable can be adequately maintained.

Cable laid out on the ground is susceptible to damage from many sources; shell and mortar fire keep the best of line detachments busy, but where armour is operating over the ground on which cables lie, lines are mangled almost beyond repair and often have great lengths torn out of them and carried away for hundreds of yards in the tracks of tanks and carriers. In sandy stretches of desert little harm occurs because the tank tracks merely push the cable under the surface, but where lines cross rocky ledges and outcrops the tracks of tanks seize them like the jaws of a giant barracuda and grind them to pieces.

From Main Divisional Headquarters two lines were laid for ward to Main 6 Brigade Headquarters, and one of these—that with the Fullerphone circuit superposed on it—was intended to be strapped through to the Tactical Headquarters' line after the objective had been taken. From Main Division a line also ran to Headquarters 5 Indian Brigade, whose part in the Corps' plan was to advance westwards along the ridge and clear the enemy from its western end. Headquarters 5 Indian Brigade was also represented on the Corps' forward radiotelephony and wireless-telegraphy groups and was therefore in lateral wireless communication with Main Headquarters New Zealand Division.

Soon after the attack commenced at 8.45 p.m. on 21 July, Tactical Headquarters 6 Brigade, which consisted of Brigadier Clifton, his Brigade Major (Major Weston ²¹), a line detach ment, the No. 9 rear-link set and the No. 11 forward control set, a defence platoon detachment and three

battalion liaison officers, set off in the wake of the attacking battalions. Com munications went wrong from the beginning. Although con tinuous RT communication was maintained with Main Division by the No. 9 rear-link set, no contact could be established with any of the three battalions, whose No. 11 sets, instead of being up with the battalions' headquarters, had been left to move with the transport columns some distance in the rear. The 26th Battalion, the right leading unit, entered the depression just before midnight, but was completely out of touch with Tactical Headquarters 6 Brigade because its transport, with whom its No. 11 set was moving, had lost direction and was halted in a minefield. The carrier in which the No. 11 set was fitted was damaged, and later returned to Main Head quarters 6 Brigade in the rear. The 25th Battalion, on the left, reached its objective at 1 a.m., but its No. 11 set was also in the rear with the transport column which, like that of 26 Battalion, lost direction and, proceeding on a course too much to the east, was halted by an enemy minefield. It was some time after the objective had been reached that 25 Battalion made wireless contact with the Brigade Commander at Tactical Headquarters Very much the same sort of thing happened at 24 Battalion, and it was some time after 2 a.m. before wireless communication between Tactical Headquarters and 24 and 25 Battalions was firmly established. No wireless contact was made during the battle with 26 Battalion.

Tactical Headquarters joined up with 24 Battalion at 3.30 a.m. and the situation appeared to be satisfactory with both 25 and 26 Battalions on their objectives. Between 4.30 a.m. and dawn, however, the enemy threw in an attack with twenty tanks and machine-gun fire, and the area, heavily congested with vehicles of 25 Battalion, which had not had time to disperse properly, was soon lit up brilliantly by burning trucks. The tanks opened fire from the north, and as it was still dark, were shooting blind at first. But very soon one of them scored a lucky hit on an anti-tank portee and set it ablaze; other vehicles quickly went up in flames and turned the area into a brightly lit target. Presently the tanks came in for the kill and rolled right over the area, with the result that Tactical Head quarters 6 Brigade and 24 Battalion were completely

overrun. Some of the men escaped in vehicles, but about two hundred, who tried to make their way eastwards on foot over one and a half miles of rising ground to the nearest cover, were quickly rounded up by the enemy and marched away into captivity.

At Main Divisional Headquarters the A control set on the forward RT group last heard Tactical Headquarters 6 Brigade at 6.8 a.m. at fair signal strength; thereafter there was complete silence, and communication was never restored. During the morning a B (cable) Section detachment attempted to get forward to repair the line between Main and Tactical Headquarters 6 Brigade, but was stopped two and a half miles west of Main Headquarters by a screen of British tanks and New Zealand anti-tank guns, which would not permit it to proceed farther west. Main Divisional Headquarters instructed the detachment to remain there and act as a report centre.

At 6.50 a.m. the first news of the disaster was received at Main Divisional Headquarters from Headquarters Divisional Artillery, which had received reports from a regimental observation post. Later it was learnt that 25 Battalion had been attacked by tanks and that 24 Battalion and Tactical Headquarters 6 Brigade had been completely overrun by fifty tanks.

Sixth Brigade suffered very heavy losses in transport; the major part of Tactical Headquarters and 24 Battalion was lost, and there were also considerable losses in 25 Battalion. Signals lost fourteen men from L Section, and the section commander, Captain Laugesen, was reported to be missing. No trace of him was ever found.

In the report made later by Brigadier Clifton on the conduct of the operation, two significant comments appear under the general heading 'Communication'. The first is: '... where infantry are attacking on foot by night, their sets working to Brigade should be man-handled....' It is difficult indeed to understand why the lessons contained in the reports of 4 and 5 Brigades' commanders on the Ruweisat battle only a week before were not heeded. Certainly there were no specific instructions

intercommunication lessons learnt during that operation, but all commanders were aware of them, and none more so than Lieutenant-Colonel Agar, who spoke to General Inglis before a divisional conference and asked him to stress to commanders that battalion No. 11 terminal sets should on no account become separated from their battalion headquarters, and that if sets could not be taken forward by other means they should be manhandled when infantry were attacking on foot at night.

The second comment in the report of the commander of 6 Brigade says: '.... It was intended to lay cable on the Brigade axis. With the movement of our own and enemy tracked vehicles plus normal hazards this line never operated.'

Now this line, which was actually laid behind Tactical Headquarters 6 Brigade as it advanced, passed through at least one minefield gap, a defile in which the cable would inevitably have been dreadfully mangled by the transport, both tracked and wheeled, that traversed the gap in both directions that night. Certainly the danger might have been easily averted if the line had been built back to the side of the gap and in the minefield itself, but the cable-laying detachment would then have lost touch with Tactical Headquarters, which would have drawn ahead and passed out of sight in the darkness. Shell and mortar fire falling on field cable might be described as a normal hazard, and so might tracked vehicles crossing a cable in the open desert, but the danger to cable laid through a minefield gap in darkness during a battle might well have been foreseen. The failure of wireless communications in 6 Brigade's attack on El Mreir was caused by the separation of terminal sets from their headquarters and not by any neglect or omission on the part of Signals.

¹ Sigmn C. J. Bevin; Wellington; born NZ 29 Jul 1918; stable hand; wounded 30 Jun 1942.

- ² Sigmn A. W. Yates; born Dunedin, 6 Feb 1919; postal messenger; killed in action 4 Jul 1942.
- ³ Sigmn S. P. Glensor; Wellington; born London, 18 Jan 1909; salesman.
- ⁴ L-Cpl R. B. Anderson; born NZ 12 Sep 1908; carpenter; killed in action 4 Jul 1942.
- ⁵ Sigmn J. C. Bain; born Taihape, 14 Dec 1917; Railways clerk; died of wounds 9 Jul 1942.
- ⁶ Sgt F. Eadie, m.i.d.; Auckland; born Onehunga, 26 Dec 1918; P and T cadet.
- ⁷ Sgt C. O. Barron, MM; Timaru; born Clinton, 8 Jan 1915; lineman.
- ⁸ Lt-Col E. A. McPhail, DSO, MC and bar, m.i.d.; Rangiora; born Wanganui, 31 Dec 1906; bank official; CO 23 Bn 6 May-10 Jun 1944, 4 Aug-13 Oct 1944; CO 21 Bn 30 Oct 1944-25 May 1945; wounded 9 Apr 1943.
- ⁹ Brig J. T. Burrows, DSO and bar, ED, m.i.d., Order of Valour (Gk); Korea; born Christchurch, 14 Jul 1904; schoolmaster; CO 20 Bn Dec 1941-Jun 1942; 20 Bn and Armd Regt Aug 1942-Jul 1943; comd 4 Bde 27-29 Jun 1942, 5 Jul-15 Aug 1942; 5 Bde Mar 1944, Aug-Nov 1944; 6 Bde Jul-Aug 1944; Commandant Southern Military District 1951-53; Commander K Force Oct 1953-.
- ¹⁰ Capt J. H. G. Alp; Wanganui; born Chatham, England, 7 Feb 1914; accountant; wounded and p.w. 15 Jul 1942.
- 11 Cpl G. J. Nilsen, MM and bar; Motueka; born Kaikoura, 24 Sep

- 1914; P and T lineman.
- ¹² Cpl R. Somerville; Motu; born Ashburton, 20 May 1915; telegraphist.
- ¹³ Sigmn J. H. Byers; Wanganui; born Wanganui, 26 Dec 1919; civil servant; p.w. 15 Jul 1942; escaped 24 Dec 1943.
- 14 This entry from the diary of an Operations staff officer was made during the Libyan battle of November 1941: 'The only catch in using wireless was that Jerry quickly located every HQ by his Direction Finder and promptly shelled us. When he attacked, he made straight for HQ and bagged them before mopping up. I got over it by digging in the sets well away and only using radio for essentials when line failed and M.D.R.s were getting shot up.'
- ¹⁵ L-Sgt T. C. Campbell; Clinton; born Milton, 28 Mar 1911; telegraphist; p.w. 15 Jul 1942; recaptured Nov 1942.
- ¹⁶ Sgt J. L. Stevenson; Kaiapoi; born Fairlie, 22 Apr 1912; telegraphist.
- ¹⁷ Sigmn J. T. Molloy; Wellington; born Greymouth, 21 Mar 1909; postman; wounded and p.w. 15 Jul 1942.
- ¹⁸ Brig S. F. Hartnell, DSO, ED, m.i.d.; Palmerston North; born NZ 18 Jul 1910; carpenter; CO 19 Bn and Armd Regt Oct 1941-Apr 1943; comd 4 Armd Bde 6 Jun-31 Jul 1943, 5 Bde 9-29 Feb 1944.
- ¹⁹ Maj R. S. Pearson, m.i.d.; Christchurch; born NZ 28 Feb 1908; civil servant; BM 4 Bde Jul-Nov 1942; wounded 14 Jul 1942.
- ²⁰ Sigmn J. T. Mason; born Dunedin, 24 Jul 1912; starch maker; killed in action 15 Jul 1942.

²¹ Maj G. C. Weston, m.i.d.; Christchurch; born New Plymouth, 18 Nov 1916; student; SC 6 Bde Jul 1941-Jun 1942; BM Jun-Jul 1942; p.w. 22 Jul 1942.

DIVISIONAL SIGNALS

CHAPTER 13 — ROMMEL'S LAST BID FOR EGYPT

Rommel's Last Bid for Egypt

JULY passed into August without any signs of important activity by the enemy. His Stukas, however, continued to call several times a day. The last of each day's visits occurred with a monotonous regularity within a few minutes of the same time, just before dusk, so that the expression 'Stuka time' came to be widely used in the Division. When the sun was just beginning to sink below the horizon and the flies had already left for wherever they roosted for the night, to husband their energies for the infliction of the next day's torments, a restful calm seemed to settle over the divisional area. Men strolled about and chatted; others sat about their vehicles and bivouac tents and wrote letters, mended socks, and attended to the innumerable small tasks which fall to the soldier in the field who liked to preserve the outward appearances at least of civilised behaviour amid the drudgery and degradation of war; others congregated in small groups to broach twelve-ounce tins of American beer and toast eternal damnation to Jerry, the Ites, the ancient land of Egypt—and the flies. Then, as the dusk deepened, the little groups would break up, the sock menders would rise from their tasks and, without any apparent co-ordination, the men would stroll casually towards their own private slit trenches and stand above them, casting nonchalant glances from time to time at the darkening western sky. Then, too, the Bofors crews would be seen testing the elevating gear of their guns and carrying clips of 40-millimetre shells to a handy place of readiness within their posts. This was Stuka time.

Suddenly, right on time, there came from the gloom of the western sky the low drone of aircraft engines, swelling and receding in the pulsating rhythm by which the men identified the non-synchronous motors of unfriendly aircraft at night. Now there were no men above ground except the crews of the Bofors guns, whose ugly muzzles were slowly training up and round towards the sound of the approaching raiders. From the bottom of a slit trench it was a grand spectacle. The big lumbering shapes, thirty to forty strong, trundled in over the

headquarters' area, banked over slowly on to one wingtip, and then came rushing down in a screaming dive. Presently little dark blobs appeared below the planes and fell away quickly towards the ground in wide curves, and the men in the trenches took a firmer hold on Mother Earth. Sometimes they would call to each other from trench to trench. 'Watch out, Bill, and don't get up too soon. One of the bastards has only let three go. He's going to catch the ack-ack blokes on the hop.' Amid the roar of the raiders' engines and the whistle of the falling bombs could be heard the staccato barking of the Bofors as they pumped their tracer into a vast cone of flaming streamers, which seemed to reach to within a few feet of the marauders' bellies as they flattened out of their dives and turned clumsily towards home. All over the area were great clumps of black billowing smoke, shot with crimson barbs of flame, and the air trembled with the awful crunch of the detonations.

The raiders were gone now, and the pall of smoke and dust was starting to clear. Here and there among the acres of dispersed vehicles a few trucks—miraculously few, it seemed—burned fiercely and sent black pillars of oily smoke into the sky. Men clambered from their trenches, dusted down their clothes with open palms and threw a few rude gestures and obscene curses after the departing planes.

Although they made jokes about them afterwards, the men did not like these Stuka raids. Newcomers to the field sometimes evinced a desire to see one, but their curiosity was invariably fully satisfied after one dose of Ju87. Casualties were usually few, but generally two of three trucks were destroyed, which strangely enough always seemed to be those which carried ammunition or petrol.

At dawn each morning, almost before the first faint rays of light appeared in the east, the flies were back at their nefarious work; foul, putrid, loathsome pests that swarmed in hundreds of thousands everywhere in Eighth Army's lines—and, the men fervently hoped, in the enemy's lines too—settling on the eyes, mouths and nostrils of sleeping men, or wherever else moisture might be found, and irritating the waking ones with the ceaseless caressing and settling of their horrible

mucus-laden legs. Normally placid temperaments were gradually undermined by this plague and lashed into excesses of ill-temper which even the summer heat had failed to rouse. Men went about their tasks with butter muslin and gauze veils covering their necks and faces like Tuareg tribesmen; others took refuge in the cabs of their trucks, closed the windscreens and side windows and evicted the flies already there with flit- guns. But soon the sun, beating a fierce heat on the metal bodywork, filled the cabs with a suffocating and intolerable torment, and the men were driven into the open again. At mess trucks and wherever men handled food in the open the flies swarmed about in black swirling clouds and fought for their share of food between hand and mouth. They sneaked through chinks in face nets, crept through the vents in the tops of opened cans of beer, and crawled inside open-necked shirts to suck at body perspiration beneath armpits and waist bands.

This plague had first appeared early in July, when the Division occupied a position near Munassib where some native troops had been located a little earlier. The primitive excremental habits of these people, together with old but still filthy traces of indiscriminate defecation left by Egyptian labourers who had been employed on the Qattara fortifications a year earlier, quickly bred vast swarms of flies, probably the most resourceful of their kind in the whole wide world.

At dusk the flies went away, but the heat remained. In the dug-in signal office, entirely enclosed by a heavy tarpaulin and its entrance covered with a double drape to serve as a light trap, perhaps a dozen men worked throughout the night. The atmosphere below the low canvas roof was intolerably heavy, and the operators and signal clerks perspired so profusely that the sweat trickled through their hair and ran down inside their clothes or dripped off their bent heads onto the message pads on which they wrote. It covered their hands, too, so that Fullerphone operators could hardly grasp their keys. All the elements of exasperation were there, but no one complained. At dawn these men went out again to face the flies and fight them for their breakfast, and then snatched some sleep, between Stuka raids, in their slit trenches

and bivouac tents, hemmed in by curtains of gauze which kept some of the pests out and most of the heat in.

In the wireless vans it was as bad and often worse, especially in the 5 ft by 6 ft interiors of the 'bread-vans' where some of the No. 9 sets were installed. Here the operators on watch sat through the night, and the sweat trickled down through their hair too. It tickled their scalps and ran down their faces and left its acrid taste on their lips before it dripped off their chins and noses onto the operating benches to form little pools of water. At dawn they, too, would have to go to the mess trucks and fight for their breakfast. The flies at Alamein in July 1942 were so incredibly numerous that few of those who afterwards heard descriptions of them ever believed the sober truth.

August was a month of significant events. It brought a new commander to Eighth Army, a little man with cold eyes, restless energy, a confident demeanour and a firm belief in bowler hats for those who needed them. He went quickly but without haste from formation to formation and shot quick, terse, and unequivocal questions at the people he went to see; when he received terse and informative replies he went away pleased. His name was Montgomery and his rank Lieutenant-General; with his coming occurred the rebirth of confidence in Eighth Army and an abandoning of the now almost unconscious habit of glancing back over the left shoulder to count how many ditches there were before the last one.

The nearest 'ditch' at that time was at a place called Alam el Halfa, a prominent feature about 12 miles to the east of 2 New Zealand Division's positions, where 13 Corps was then busy preparing a defensive box to which it was to fall back if turned out of the Alam Nayil positions.

General Montgomery liked plain words, but 'box' was not one of them, and he forbade its use to describe what he said should be called a 'defensive position'. Boxes usually had lids and no one was going to put the lid on Eighth Army if he had anything to do with it. He also disliked the expression 'alternative positions' and said that Eighth Army would stay where it was and fight; if it couldn't stay there alive it would 'stay there dead'. To give force to this edict he commanded that all formations were to despatch all but essential transport to a rear area. So off went all the Division's non-essential transport to a place called SWORDFISH area near Amiriya.

Main Divisional Headquarters moved from its position near Deir el Hima, about two miles east-south-east of Stuka Wadi, to an almost equally barren stretch of desert two miles to the north, where the Engineers were constructing great underground dugouts for headquarters offices. Here Signals' headquarters office, signal office, and officers' and mens' messes were housed in dugouts; the remaining transport, which was now reduced to twenty-three vehicles and eight motor-cycles, was dug in in open pits and camouflaged.

By this time General Montgomery was planning the defeat of Rommel. Already he had decided that Rommel would attack first. He had decided also that he would be beaten and then it would be his (Montgomery's) turn to take the offensive, which would be launched in such strength and with such determination that the Germans would be cleared out of Egypt and eventually out of North Africa. In due course he issued an order of the day to that effect. In the meantime, however, Eighth Army's task was to prepare to resist the enemy's final effort to break through to the Nile Delta and the Suez Canal.

August's second momentous event was the visit of Mr Churchill to Eighth Army's lines. He arrived at Main Headquarters 13 Corps on the 20th and there met representatives of formations and units of 2 NZ Division and other formations of the Corps. Lieutenant-Colonel Agar and Corporal H. L. Smith represented Divisional Signals at this reception, where the Prime Minister, wearing a boiler suit, pith helmet and the inevitable cigar stuck between his beetling brows and aggressive chin, greeted all with a few brief words and a handshake.

On the 31st, August's third moment in history, Rommel struck for

the Delta and the conquest of Egypt. But General Montgomery had seen him coming in his mind's eye and was ready. According to him Rommel was a creature of habit who would repeat former tactics that had brought him success. Rommel vindicated this belief by striking in the south of the British line as he had done at Gazala three months before. His striking force contained nearly all his armour armour and the cream of his infantry, and its task was to break in through the British minefields in the south, move quickly east and then strike northwards to crush Eighth Army's armour, after which the isolated infantry formations might easily be dealt with before the panzers rolled easily and victoriously towards Alexandria and the gateway to the East. Of such stuff are dreams of conquest made!

Although the battle of Alam el Halfa in the opening days of September was a tense struggle for the possession of Egypt, the crucial and anxious time had already passed. The 2nd July was generally regarded as the turning point; it was then that Rommel's desperate efforts to sustain his eastward drive towards the Delta had begun to flag, and since then both sides had been methodically building up their resources for a decisive stroke. The Germans had put down defences in considerable depth behind their forward positions and were neglecting no opportunity to speed up their administrative and supply services from the ports of Tobruk, Benghazi and Tripoli. The British line at Alamein, woefully thin, was being held doggedly and stubbornly by means of thrusts against the enemy's forward defences. In this fashion during the months of July and August Eighth Army prevented Rommel from amassing enough strength for a decisive stroke, and in the first week of September inflicted on him a sharp setback. He spent his strength in a vain thrust towards the east and whittled away his armour on the British artillery and tanks snuggling comfortably in hull-down positions in front of Alam el Halfa.

This feature, instead of being an 'alternative position', was now the eastern bastion of Eighth Army's positions, and became the focal point of the September fighting. It was literally stiff with field, medium and

anti-tank artillery, which struck hard and spitefully at the panzers as they approached from the south-west and then turned north to get behind the Alamein defences. The enemy attack began to slow up and came to a halt. Simultaneously the RAF began a series of crippling strokes against the concentrations of armour and transport. After suffering heavy losses, Rommel began to withdraw and left his wake strewn with the wrecks of tanks and soft-skinned transport. General Montgomery then attempted to close the gaps in the minefields and so block the escape route, but the Germans fought hard for survival. Finally, when the British defences had been restored and the enemy badly mauled, Montgomery called the show off. He now had his breathing space to bridge the month of September, and nothing could hinder his preparations for the counter-stroke.

In the early hours of 30 August the New Zealand brigades moved into new positions facing south in readiness to meet the expected attack. Two battalions of 5 Brigade occupied the Alam Nayil ridge and the third, the 22nd, which had just returned from Maadi, where it had been reforming and refitting after its losses at Ruweisat Ridge on 15 July, carried the line northwards from the brigade's left flank and faced east. On the right of 5 Brigade was 132 Brigade of 44 (Home Counties) Division, a formation recently arrived in the Middle East to reinforce Eighth Army. For this battle 132 Brigade was under the command of 2 NZ Division. On the right again was 6 Brigade, whose positions were not changed from their north and south line, although 25 Battalion—the southernmost unit— carried out vigorous patrolling to the south-west.

The New Zealand Box, as it was called despite the Army Commander's dislike of the term, was closed on the north, at some distance, by 5 Indian Division, to the north of whom again were the South Africans. The New Zealand defences, therefore, were the most southerly of Eighth Army's fixed positions.

The Division's part in the plan to cause 'alarm and despondency' in the ranks of the *Panzerarmee Afrika* was an attack designed to strike southwards against the northern flank of the enemy's column, of which the head was halted under the guns of Alam el Halfa on 3 September. The general pattern of the attack was a thrust southwards by 5 Brigade and 132 Brigade to objectives which stretched from Muhafid in the east to Deir Alinda, a mile or so to the west. From 6 Brigade 26 Battalion was to move south and west to secure 132 Brigade's right. Behind Alam Nayil the Divisional Artillery, built up to twice its normal strength with Royal Artillery field and medium regiments, reared its 144 ugly snouts towards the south, to lend its thunder to the brawl when the enemy mounted the inevitable armoured counter-attack at dawn.

Signals' plan was simple but comprehensive. Two line circuits ran from Main Divisional Headquarters to Tactical Headquarters 5 Brigade, near the eastern end of Alam Nayil, and two others to 6 Brigade, three miles to the west. The B (cable) Section detachment with K Section was to extend one of the Main Divisional Headquarters' lines behind 5 Brigade as it moved, and then lay a second line back to Rear Headquarters 5 Brigade to join up with the second Main Divisional circuit. From there, that is, from Rear 5 Brigade, it was to set off on the most difficult and hazardous part of its task, the laying of a lateral line to Headquarters 132 Brigade which, at this stage in the operation, would be several miles south of Alam Nayil and close to the eastern end of Deir Alinda. It was while laying this lateral that the detachment's truck was disabled by shellfire, but there were no casualties and the line was continued with a jeep until a second B Section detachment arrived to complete the task.

Within 5 Brigade itself lines were not to be laid to 21 Battalion on its objective on the northern rim of Muhafid or to 28 (Maori) Battalion at Munassib until both had reported by wireless that they were in position. The 21 Battalion line was eventually taken through according to plan, but was of little use as it was almost continuously disrupted by enemy shellfire. K Section's line detachment worked on this line continuously between 21 Battalion and Tactical Headquarters 5 Brigade; the average number of breaks reported by each patrol was thirty.

The line taken forward to the Maori Battalion by jeep did not reach the battalion headquarters, which could not be located. Finally it was terminated at a regimental aid post and the line party returned to Tactical Headquarters to report. By this time the line was of little use, large gaps having been torn in it by airburst shellfire, but later, when the Maoris withdrew from Munassib, where they had wrought dreadful havoc among German transport harboured there, the line was continued from its temporary termination at the RAP towards 21 Battalion, away to the left at Muhafid. The jeep line party, however, was unable to reach the edge of Muhafid and the attempt was abandoned.

Lines were also run to 22 and 23 Battalions, but that attempted to 2 Buffs of 132 Brigade, on 5 Brigade's right, was unsuccessful because of heavy enemy shellfire.

The wireless plan within 5 Brigade worked out still less satisfactorily. At Tactical Headquarters 5 Brigade the control set, a No. 11, was to work forward to terminal No. 11 sets installed in jeeps moving with 21 and 28 Battalions. Other terminal sets, also No. 11 but stationary with their headquarters, were at 22 and 23 Battalions and at Rear Headquarters 5 Brigade. Another station included on this group was that with 50 Royal Tank Regiment, but communication with this set was never established owing to faulty netting at the tank regiment's headquarters. Fortunately there was at Tactical Headquarters a Dingo scout car with a No. 19 set netted on one of the tank regiment's squadron frequencies, and this was used for communication.

At an early stage in the attack both the No. 11 sets with 21 and 28 Battalions became separated from their headquarters, but that of the former eventually reached Muhafid and wireless communication with Tactical Headquarters 5 Brigade was maintained from then on without interruption.

Communication was never established with 28 Battalion; it appears certain that the set did not reach Battalion Headquarters, which itself was separated from the rifle companies so earnestly at work among the German transport on the floor of Munassib. Soon after first light the battalion was withdrawn under cover of a smoke screen put down by the artillery.

Although 5 Brigade's positions came in for a good deal of shelling during the morning, the enemy's armoured counter-attack, strangely enough, did not develop until about midday. The Brigade Commander was ready for it when it came, however, and called down a heavy artillery concentration where he thought it might do the most good. The tanks scuttled away to safety, and the New Zealand infantry watched them go with elation. During the afternoon the enemy attempted another counter-attack, but it was much less determined than the midday affair and was easily driven off by artillery and mortars.

Captain Shirley was a little dismayed by the failure of his careful signal plans, but had he known it he could have written it off with a fairly easy conscience against experience. This was his first attempt at communications for an infantry battle, and he hadn't looked carefully enough for the snares. Previously he had been with Divisional Cavalry, which used line communications very rarely and maintained the greater part of its communications by wireless. Then he had been for a time with 6 Field Regiment, whose more or less standardised line and wireless communications, like those of other regiments, seldom incurred serious disruption from enemy fire. During the planning stages of the September battle Shirley had presented what the Brigadier called 'a good and comprehensible signal plan'. After studying it carefully, the Brigadier had asked Shirley if it would work. 'One hundred per cent, sir,' he had replied, with all the boyish exuberance of his nature and the wide perpetual grin which split his eager countenance.

During the attack, when repeated calls on the wireless to the battalions brought no response, it was the Brigadier's turn to grin. But John Shirley need not have despaired. He was not yet acutely aware of the habit to which battalions were addicted in night attacks—that of allowing their wireless sets to become separated from battalion headquarters. Nor did he realise the unreliability of lines laid in exposed

positions in the open, where they were in almost continuous danger of damage from vehicle tracks. There were many signals officers who knew just how vulnerable cable laid in the desert was, but none more so than Lieutenant-Colonel Agar who, however, continued to persist in his belief that the policy of pushing lines forward energetically in an attack was still worth while, despite the numerous hazards.

Line communications to 132 Brigade for the attack took very much the same pattern as those for 5 Brigade, except that there were no lines on the ground before the attack commenced. It was decided, therefore, to use Headquarters 6 Brigade, between which and Main Divisional Headquarters there were already two line circuits, as a switching centre for 132 Brigade. Headquarters 6 Brigade, which was not to move, lay about three miles west of 5 Brigade and almost the same distance north of 132 Brigade's assembly position. An extra B (cable) Section detachment was sent from Main Divisional Headquarters to Headquarters 6 Brigade, and was to be met there by an officer representing 132 Brigade who would guide it to his headquarters. It was to lay a line as it went and later extend it behind 132 Brigade as it moved with the attack. This task done, the line detachment was then to lay a second line back to Headquarters 6 Brigade, where it would be joined through direct to Main Division. The plan included no details of line or wireless communications within 132 Brigade itself, which were in the hands of the brigade's own signal section.

The first thing to go wrong was the late arrival of the representative from 132 Brigade at Headquarters 6 Brigade. In due course, however, he put in an appearance and went off with the B Section detachment, from which the first report was received when it was two miles from Headquarters 6 Brigade. Some time went by, but there were no further reports, so another detachment was despatched to lay another line. This second detachment reported back at intervals, stating that the line was severely damaged by tank and carrier tracks. After it had progressed three and a half miles nothing further was heard from it either.

At first light, therefore, a signals officer was sent out to investigate. He found the first detachment at Headquarters 132 Brigade, but its line had not been connected to a telephone or an exchange and no one there could give him any information —a not surprising state of affairs since the headquarters had been heavily shelled throughout the night and had received so thorough a drubbing that it was quite unable to maintain any sort of control. The second detachment was later discovered to have been waylaid by some unidentified officer who used it to carry wounded men to the rear. Eventually, however, both detachments were back on the job and, after numerous breaks had been repaired, communication was finally established with Headquarters 6 Brigade at 9 a.m. The second line was then laid back from 132 Brigade to Headquarters 6 Brigade and joined through to Divisional Headquarters at 10.50 a.m.

Meanwhile 26 Battalion, which was to move south to extend 6 Brigade's positions and so provide cover for 132 Brigade's western flank, had moved outside the defensive minefield to its forming-up area. A line had previously been laid in daylight to this place, where 26 Battalion was to pick up the L Section line detachment which would extend the cable behind the battalion as it moved. This line was through to 26 Battalion's final position at 3 a.m., but was continually interrupted by enemy shelling and the movements of tracked vehicles. Most of the damage occurred in the minefield gap, where Battalion Headquarters and an anti-tank troop were held up by heavy enemy artillery and mortar fire. Corporal Gordon, 1 the NCO in charge of the line detachment, moved about under the heavy fire and continued to repair breaks in the cable with a complete disregard for his own safety. After the line was laid, Gordon and his detachment patrolled it ceaselessly, repairing breaks wherever they occurred and moving continuously in the open under heavy shell, mortar and machine-gun fire. For his indomitable courage and outstanding qualities of leadership, Gordon was awarded the MM.

The 26th Battalion's attack met severe opposition that night, and one of its companies became isolated and fought it out with a

numerically superior enemy until only a few remained unwounded. During the morning of the 4th Brigadier Clifton, the 6 Brigade commander, went out to look for this missing company and was himself taken prisoner through approaching a group of troops whom he thought were friendly. With him went Lance-Corporal Dowling, ² of L Section, the operator on the Brigadier's reconnaissance set. Dowling's capture was the only casualty suffered by Signals in this battle.

Rommel's withdrawal to the west was now in full flight and by the 5th, six days after the battle began, he was again beyond the western minefields. Thus, the enemy's final effort to achieve the conquest of Egypt, described so grandiosely in Rommel's special order of the day on 30 August as 'the attack for the final annihilation of the enemy', became an utter failure that left the balance of superiority in Montgomery's hands.



(See pages 379-380)



Inspection of Divisional Signals by General Freyberg before the departure of the first furlough draft, June 1943

Inspection of Divisional Signals by General Freyberg before the departure of the first furlough draft, June 1943



The move to Italy-loading a jeep

The move to Italy—loading a jeep



Repair and maintenance truck in the Sangro valley

Repair and maintenance truck in the Sangro valley



The road to the cookhouse at the Sangro

The road to the cookhouse at the Sangro



A forward signal centre near Castelfrentano, A. C. Francis operating an exchange

A forward signal centre near Castelfrentano, A. C. Francis operating an exchange



Testing field cable after the snowstorm on New Year's Eve 1943

— A. McKechie and R. J. McConway

Testing field cable after the snowstorm on New Year's Eve 1943 —A. McKechie and R. J. McConway

¹ Sgt N. Gordon, MM; Gisborne; born Canada, 16 Aug 1905; electrical lineman; wounded May 1941.

² L-Cpl C. E. Dowling; Wellington; born Wellington, 27 Apr 1920; clerk; p.w. 4 Sep 1942; escaped Apr 1945.

DIVISIONAL SIGNALS

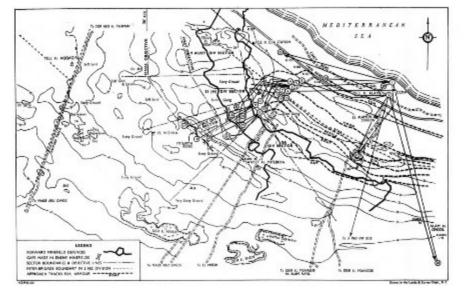
CHAPTER 14 — THE ALAMEIN OFFENSIVE

CHAPTER 14 The Alamein Offensive

ON 10 September 2 New Zealand Division was relieved in the central sector of the Alamein Line by 44 (Home Counties) Division and a Greek brigade and was withdrawn to a rest area near Burg el Arab. As many officers and men as possible were given four days' leave. Those who remained in the rest area, which lay among the silver sand dunes on the coastal side of the main road, spent the four days in a sort of 'easy duty' routine, waking when they pleased, playing cards, mending and washing clothes, and drinking beer brought to them from Alexandria and Cairo in great white wooden cases, each containing four dozen bottles. At night they rigged their bivouac tents in the lee of the dunes to take shelter from the keen night sea breezes, because the summer was waning now and the sun had lost its fierce noonday heat which once baked the hard earth like a hot brick. Some of the men, more hardy than their fellows, disdained overhead shelter and slept in the open on the crests of the dunes, from which, when they awakened in the mornings, they raced nimbly down to the wide sandy beach and plunged into the warm sea. By some mysterious and unspoken accord between cooks and men, punctuality at mess became a matter of individual inclination.

In the Divisional Signals' area decimated signal office detachments operated skeleton signal services that served to keep Divisional Headquarters and the various groups in touch with one another for administrative purposes and to preserve communications in operation against a sudden emergency.

But this pleasant retreat soon came to an end and on 18 September the Division was on wheels again, bumping its way across the sandy wastes towards its new training area, near the north-western end of Wadi Natrun, where an intensive programme of battle training under the newly formed 10 Corps commenced on the 24th. This 10 Corps, which consisted of 1 and 10 Armoured Divisions and 2 New Zealand Division,



RATTLE OF EL ALAMEIN, OCTOBER 1942

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BATTLE OF EL ALAMEIN, OCTOBER 1942

Principal Wireless Communications

was to have the role of passing through the enemy's defences and destroying his armour after the infantry of 30 Corps had made a bridgehead. The New Zealand Division, however, was to return to 30 Corps when the training for the offensive was completed and was to take part in the infantry assault, passing again to 10 Corps to take up the chase when the breach was made.

On 19 September the structure of the Division underwent a major change when it was reorganised on the new model of two infantry brigades and one armoured brigade. In the absence of 4 Brigade, which was then at Maadi and about to be converted into an armoured formation, the armour was represented by 9 Armoured Brigade, which consisted of three British regiments (3 Hussars, Royal Wiltshire Yeomanry, and Warwickshire Yeomanry), each of them newly equipped with American Sherman and Grant tanks armed with 75-millimetre cannon and secondary armaments.

Very soon preparations were in hand for a full-scale divisional exercise, which was planned to be carried out under conditions and on terrain as similar as possible to the Miteiriya Ridge sector, in the northern portion of the Alamein Line, where the Division was to launch itself against the German and Italian defences one month later.

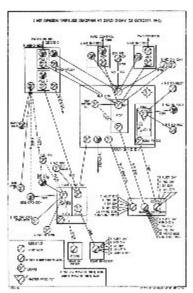
In Divisional Signals these preparations included a thorough examination and assimilation of the lessons brought into sharp relief by the failures which had marked operations like the Ruweisat and El Mreir battles of July. This was a responsibility which fell upon Lieutenant-Colonel Grant, who assumed command of the unit from Lieutenant-Colonel Agar on 22 September. Agar had at last succumbed to the effects of fatigue and overwork which had assailed him for two extremely trying Egyptian summer months and had been evacuated with jaundice to 1 NZ General Hospital at Helwan.

The lessons were easy enough to interpret, but much more difficult to assimilate. Most of them had to do with almost the entire class of equipment the unit used at that time: its limitations, particularly those of the useful range of operation of the No. 11 and No. 18 wireless sets; the comparative durability and speech-level ranges of British D Mark III and D Mark VIII and American E Class field cable; the incomparable superiority of the American 12-line BD 72 switchboard over the British 10-line universal-call unit; and the still unsolved problem of the high mortality rate in battery-charging engines, both 300-watt and 1260-watt, under tropical conditions.

Battery-charging sets—represented in the 1260-watt class by a wide variety of makes—were in such extremely short supply in the Middle East in 1942 that brigade and field regiment signal sections had less than 30 per cent of their normal field scales. Moreover, those sets they did have were in such a precarious state of mechanical disrepair that each had to be continuously nursed along with reduced charging loads to stave off as long as possible the inevitable breakdown and consequent interruption to wireless services. So serious was this situation that on one occasion during the operations in July and August Lieutenant-Colonel Agar averred that one serviceable 1260-watt charging set might be reckoned as worth ten wireless sets. Many of the sets' mechanical defects were inherent in their designs; for example, couplings between engines and generators on the 550-watt Jap sets were insufficiently robust and broke down frequently. No internal-combustion engine will

continue to run efficiently under desert conditions unless it is fitted with an air filter at the intake duct; none, or very few, of those in use in the Division at that time had air filters. The sets' cooling systems suffered, too, from the necessity of operating the engines in pits and slit trenches to protect them from damage from flying shell and bomb splinters.

Three armoured command vehicles arrived at the unit on 25 September. These huge vehicles were new to the Division, although a similar office lorry, the unarmoured command vehicle, had been in use at Main Headquarters 2 NZ Division for some time. The new vehicles were distributed on the scale of one each to 5 and 6 Brigades and Main Divisional Headquarters. The UCV was transferred to Rear Headquarters 2 NZ Division. The ACVs were considered a basic requirement in the reorganisation of Signals because, as General Freyberg pointed out to Lieutenant-Colonel Grant, the Division's brigades and headquarters groups would be required to operate with its armoured component in a highly mobile role in much



2 NZ DIVISION WIRELESS DIAGRAM AT ZERO D-DAY (23 OCTOBER 1942)

the same way as the German 90 Light Division did with 15 and 21 Panzer Divisions. After some persuasion along these lines, the Chief Signal Officer 10 Corps had provided the three ACVs. Primarily command vehicles, they were fitted with wireless sets and were thus

accounted part of Signals' establishment and driven and maintained by Signals' drivers.

The arrangement of sets and office tables in the ACVs varied in the three headquarters, but in that at Main Divisional Headquarters the forward command radio-telephony control set was located near the front of the vehicle and the radio-telephony link set to Corps Headquarters was at the rear. Along the sides of the vehicle were fixed large expanses of talc or celluloid-covered maps, and on these British and enemy dispositions were shown in different colours. About midway along the interior were placed the tables at which the G 1 and G 2 staff officers worked. The GOC was rarely in the ACV, of which the GSO 1 was the 'master'. Later, when caravan-office lorries of the unarmoured-command-vehicle type were introduced for the use of senior staff officers, the GSO 2 became the acknowledged master of the ACV.

Another valuable addition to the unit's transport was a fleet of six new 10-cwt four-wheel-drive wireless vans, obtained from the CSO 10 Corps by Lieutenant-Colonel Grant by the same 'highly mobile' argument which had secured the ACVs. They replaced the old-style 'bread-van' 15-cwt two-wheel-drive trucks which had proved to be almost undesertworthy in the soft-sand stretches of the central sector of the line because of their habit of embedding themselves to the axles in soft patches and resisting all efforts at extrication. These new vans, besides their four-wheel drive, had sufficiently powerful engines to provide adequate traction in soft going, and were sleek and trim looking, with sufficient interior headroom for two operators to work comfortably. Their suspension springing was sufficiently resilient to permit operators to write in reasonably legible hands while they were moving at a fairly smart pace. Altogether, they were a considerable improvement on the clumsy, lumbering 'bread-vans' and the cramped 8-cwt 'pick-ups' with which both operators and the staff had borne so long and patiently.

Full-scale divisional and brigade exercises commenced on 26 September and continued into the opening days of October. Bad going was deliberately chosen for these exercises, and it was really difficult. It tested the new transport seriously, but demonstrated that Signals could keep up, and that wherever mobile headquarters could go there also would be their wireless communications.

On 14 October the Division moved off from its training area near Wadi Natrun and staged at Imayid. There were now only nine days to go before the Great Encounter, and preparations began immediately for the movement of formations and units forward to the northern sector of the line.

Both sides were firmly established behind carefully prepared and extensively mined positions, with the German defences extending back in considerable strength and depth. The Eighth Army plan, compressed into a few words, was to punch a hole in these defences with infantry, pass the armour through to overrun the enemy's gunline behind his rearmost defensive belt, destroy his armoured formations, and exploit to the west. A simple and effective plan, but the essence of its success lay in the achievement of tactical surprise.

At the same time that the main assault was launched in the north, diversionary attacks were to be made in the south and along Ruweisat Ridge in the central sector to pin down the widely dispersed armour— 15 Panzer Division and the Italian Littorio and Trieste Divisions were in the north and 21 Panzer Division and the Italian Ariete Division in the south. Simultaneously, a Royal Navy demonstration off Ras el Kanayis was to hold the attention of 90 Light Division, deployed on coastal protection duties at Ghazal.

In order to deceive the enemy as to the actual point of impact, Eighth Army's plans included deceptive measures prepared and executed with considerable ingenuity and skill—so skilfully and with such ingenuity, in fact, that the German commander ¹ was completely outwitted.

The principal features of this deception programme were the

confinement to the hours of darkness of all moves of formations and units from the staging areas to the assembly areas and from the assembly areas to the forward areas, the gradual building up over several days of dummy offices, vehicles, and gun positions in the forward areas so that the sudden appearance of large concentrations of transport and headquarters installations would not disclose British preparations to enemy reconnaissance aircraft, and the setting up of working wireless groups in the training areas in the rear to maintain a normal level of signal traffic between 'mock' headquarters of corps, divisions and lower formations.

An enormous amount of detailed planning went into the practice of this wireless deception. Averages for signal traffic levels for the preceding two or three months were carefully worked out and allotted to each day of the deception period in corresponding quantities so as to give verisimilitude to the false traffic. The use of dummy ciphers for this traffic was not permitted and all dummy signal messages were first written out in English and then enciphered in the normal manner so that enemy intercept services would not discover the ruse by an inopportune discovery that faked ciphers were in extensive use.

From 1 October wireless silence periods of thirty-six hours were imposed each week throughout the whole of Eighth Army. The idea of this was to accustom the enemy to the appearance of more or less regular periods of silence on normally busy wireless groups so that when formations began to move, under a strictly enforced wireless silence, from training areas to staging areas, from staging areas to assembly areas, and from there to dispersal points in the forward areas, the mass migrations would be completely concealed from the enemy intercept services. Meanwhile the dummy wireless groups would get to work and fill the air with their spurious traffic, so that Herr Rumpelstiltskin at his little intercept set would continue to wonder at the Englander's lack of guile and imagination.

To ensure proper supervision and execution of the scheme and to preserve its deceptive nature in the finer details, selected staff officers remained behind at the mock headquarters with the wireless operators. An essential part of their duties was to speak in radio-telephony over the various circuits and pass dummy messages constructed in the current RT codes.

On 16 October Second-Lieutenant Wilton ² took one of his B (cable) Section layer parties forward to the site where Main Divisional Headquarters would be located when the battle opened on the 23rd, and began to lay Main Division-brigade lines. An edict which first appeared in Eighth Army's orders and which then percolated down through the strata of command, repeated successively in corps, divisional and finally brigade orders, stated that the means of communication were to be duplicated and reduplicated to ensure the quick passage of information once the battle was joined. But ground cable, no matter how many times its routes were duplicated, might just as well not be laid at all in a congested battle area where it would be exposed to every conceivable danger of destruction from armour tracks to shell and mortar fire and blast. So the lines were buried—sunk a foot in the ground all the way forward from Rear Divisional Headquarters to the headquarters of brigades, and down to troops of field regiments. To do this a 'rooter', a sort of mole plough, was lent to formations by Eighth Army Signals. It ploughed a trench 12 to 18 inches deep and was drawn by a tractor. After the cables were laid working parties filled in the trench. Altogether, between 16 and 20 October, B (cable) Section trenched and buried 40 miles of cable in this way in the divisional area.

The planning of signal communications, which of course could not commence until after the publication of 2 NZ Division's operation order on 19 October, was the most severe test the unit had undertaken so far in the war. Throughout the whole of that night Lieutenant-Colonel Grant and his Adjutant (Captain Foubister) worked steadily on the preparation of Signals' operation order, planning line routes, allocating wireless frequencies, and setting out the tasks of detachments in great detail. When the plan was finished they checked and rechecked it with great care: frequency allocations—especially those to 9 Armoured

Brigade, where wireless communications were of vital importance—locations of formation and unit headquarters, and the great mass of detail relating to the construction and routes of junction circuits to traffic-control exchanges, timings for wireless listening watches and breaking of wireless silence, the extraction and issue to signal offices and headquarters' offices of code-sign lists for armoured regiments, infantry brigades and battalions, and field and medium regiments and batteries. Finally, there was the translation of the complex overall signal plan into line and wireless diagrams which, when completed, appeared as immense and seemingly intricate networks of circuits radiating forward to brigades and the armour, rearwards to Corps Headquarters, and laterally to neighbouring formations.

Although infantry battalions did not move into their forming-up positions until the night before the attack, skeleton headquarters and the forward signals group of Main Headquarters 2 NZ Division were in position early in the afternoon of the 21st, having dribbled forward in small groups from the staging area all that morning, turned off at the Qattara track, crossed the railway line and settled in a short distance west of the track and midway between Sun and Moon tracks.

Sun and Moon tracks were two of a series of specially constructed tracks which led from Alam el Onsol, ten miles to the rear, where the Division's fighting transport was already begin- ing to concentrate, to the eastern edge of the British minefield. There were six of these tracks all told, Sun, Moon, Star, Bottle, Boat and Hat in that order. With Sun track, the northernmost, near the main road, they lay in a more or less parallel pattern at intervals varying between 200 and 3000 yards. At intervals along each track its own distinctive sign, cut to shape from sheet metal, was erected on a short staff supported in a cairn of stones. The signs were all on the northern side of the tracks, so that traffic moving west had them always on its right-hand side. These were the routes along which the fighting transport would move forward after dusk on the night of the attack; along them too would come the armour, which was to debouch at first light the following morning from the objectives to be

won by the infantry on the rocky, boulder-strewn south-western slopes of Miteiriya Ridge.

The four infantry divisions which comprised 30 Corps occupied sectors facing the enemy defences from the sea to the southern part of Miteiriya Ridge. In the north was 9 Australian Division; next came 51 (Highland) Division, tense and expectant for the revenge it was about to inflict for the defeat it had suffered at Rommel's hands at St. Valery in June 1940; then came 2 New Zealand Division, which also had some old scores to pay off; and on the left was 1 South African Division.

Altogether there were nearly 1000 guns; of these 104 were in the New Zealand sector and comprised the New Zealand Divisional Artillery, one Royal Artillery field regiment, and one Royal Artillery medium battery.

The New Zealand Division's attack was to be launched with two brigades, 5 Brigade on the right and the 6th on the left. Its two main tasks were to capture Miteiriya Ridge and hold its south-western slopes between its north-western extremity and the Division's left boundary, and to hold the passage open for 10 Corps' armour to pass through. A third possibility was envisaged in the exploitation of success to the south and south-east if the two main objects were achieved according to plan.

At precisely 9.40 p.m. on 23 October—the hour at which the artillery preparation against known enemy gun positions was to commence and five minutes after the infantry had moved off from the start line towards the enemy's forward defences— the horizon rippled and sparkled with hundreds of bursts of fire as the guns burst into perfectly synchronised action. As the flashes scintillated on the dark curtain of the night the guns settled down to a thunderous din in which conversation in normal tones was quite inaudible, even at distances of several hundred yards from the nearest battery positions. In the background the duller but ominous thudding of the mediums sounded, while to the north the corps' artillery behind the Highlanders and Australians grumbled incessantly.

At 9.55 p.m., after fifteen minutes of hammering at the enemy guns,

the artillery fell silent for five minutes, and then, at zero hour, struck again, this time on the enemy forward defended localities, where the curtain of fire hung for twenty minutes while the infantry closed up to the barrage.

Both 5 and 6 Brigade Headquarters were sited well forward, almost on the start line and within a few hundred yards of each other. The initial attack to seize the first objective was to be carried out by one battalion from each brigade, the 23rd on the right and the 24th on the left. When they had reached and captured the first objective, which lay 3400 yards from the start line and on the far side of the first enemy minefield, the advance was to pause for an hour, after which the remaining two battalions from each brigade were to pass through and attack the second and final objective on the bare south-western slopes of the ridge.

On the right, in 5 Brigade's sector, 23 Battalion stepped off across its start line promptly at 9.35 p.m. and advanced towards the first enemy minefield, 2000 yards away, where (at ten o'clock) the artillery barrage would play for twenty minutes on its opening line and then lift forward, ahead of the infantry, 100 yards every three minutes.

A K Section line detachment under Corporal Barron followed in the rear, extending the brigade line by means of an ACL ³ No. 3 mounted in a jeep. This method of extending the line forward had been chosen because it would enable cable to be pulled off the layer at the minefield by hand and thus avoid endangering the vehicle. At 10.55 p.m., almost an hour after the standing barrage began to fall on the enemy's foremost defences, Barron called Brigade Headquarters on his line and reported that, judging by the amount of cable he had expended, his party was one mile out. The account of the line party's adventures during the attack is best given in Barron's own words.

Sheridan, ⁴ Simpson ⁵ and myself started off from Brigade HQ, keeping the 23rd in sight until we struck a bad patch of shelling where Simpson was wounded by a shell which also cut our line right at the layer. We

sent Simpson walking back and Sheridan and I carried on.

We were laying our line approximately 100 yards north of the axis (I had had the experience of laying on or near a track) and by this time the leading group of Engineers was on our left travelling parallel with us. It was very bright moonlight by this time and when we came to the first enemy minefield we could plainly see the odd mine. I spoke to the BM [Major Fairbrother] at brigade on the line and he told me to push on.... I thought at the time as there was no infantry fighting ahead, what's the use of two of us carrying the wire. We could only carry a mile and then we have to come back for more probably just when more wire and the phone might be useful. I had a walk across the field and the Engineers said they wouldn't be long [clearing the gap].

I'm pretty certain that Coop ⁶ had not brought the support arms up when we got through the field and got cracking again. We had been told that the 23rd would be digging in just through and to the right of the gap in the field so we went through and about 250 to 300 yards right of the axis and then travelled parallel with it again. Came upon a crashed plane where BM or someone informed me was the centre of 23 Battalion area. Not a sign of 23rd. 22nd passed us then. I was speaking to the BM telling him 23rd weren't there and that I had passed the place where they should have been. All he said was that I was talking rot and I was going to tell him that I would get Skinner ⁷ of the Engineers to speak to him if he wanted the truth from an officer when my line was cut by some shelling. By this time we could see our shells landing in front of the 22nd Battalion so reckoned the 23rd must be in front of the barrage. Coop came and used the phone and told the BM what was happening....

Anyway, we carried on, then stopped to put a new coil of wire on and Sheridan pointed to something nearly under the back wheel and asked me what it was. One look was enough for me to recognize a French type mine. Then when we had a good look we saw we were about sixty yards or so into a minefield. The Engineers by this time had struck it too so I walked across and asked Skinner if he wanted to speak to the BM. He used the phone and got me to confirm his statement as to the distance

we had travelled. We had laid practically a straight line and I told him what length of wire, also what distance I reckoned, as by that time I could judge fairly accurately what distance a mile of wire would lay.

I went ahead a little way through the field, saw we were at the ridge and also saw the 23rd coming back. Told the BM or Brigadier. He told me to get Romans ⁸ who spoke to him on the phone. I think Coop might have had an 18 set in the back of his truck but I think it was just before 23rd came back that his truck got hit by a shell. Anyway, Jack McKee ⁹ had a set in a carrier and was with the Engineers all the time and Coop or no other wireless truck was in front of them.

When daylight came we took our line through the field but couldn't hook up to 22nd as their CO [Lieutenant-Colonel Campbell ¹⁰] wasn't there and no one else would say where they wanted the phone. CO did eventually turn up and after about an hour decided where he was going to have his headquarters.

Every time I spoke to the BM or the Brigadier they wanted a report on the fighting. Told them every time there was nothing doing on our front but a lot of small arms [fire] to the right. When I say nothing I mean there was only an occasional flare up for a moment or two....

[Mine] was the first vehicle after the Engineers' two 3-tonners [to pass through the minefield gap] and it was only a matter of twenty minutes after that I told the BM I was past the 23rd final objective.

My line was only cut twice but of course while we were laying we couldn't keep on speaking to the BM. I think he did tell us to ring him every ten minutes or so and perhaps I did let him wait a good long time sometimes as I couldn't see much use in ringing when there was nothing to report and when there was he didn't take any notice of what I told him.

It was a very easy night for us that night; all the luck was with me. That line of ours seemed to have a charmed life as it wasn't because of any shortage of enemy shelling that it didn't get cut more often....

Back at Brigade Headquarters the staff waited, after 23 Battalion had crossed its start line, with the ill-concealed impatience that is a human failing on the eve of great events; but as the minutes lengthened into hours without any word of the progress of the advance and with no sign, in the thickening haze which rose over the front to obscure the bright moonlight, of the success rocket which was to be fired by the 23rd when it reached its objective, impatience strengthened into anxiety and perplexity. About 11.30 p.m., half an hour after the battalion should have reached its objective on the western side of the first enemy minefield, news reached Brigade Headquarters—it is thought from a No. 18 set with a section of 6 Field Company, although the evidence is scanty and unreliable—that the right-hand gap in the minefield was clear. Brigadier Kippenberger immediately ordered the battalion's transport, under the command of Captain Coop, to go forward by that route.

Meanwhile 23 Battalion had crossed the first enemy minefield at 10.30 p.m., and fifteen minutes later both the CO and the Adjutant had agreed that they must have reached their objective. At this stage the battalion signals officer reported that the terminal No. 11 set had broken down and that the battalion had no communication with Brigade Headquarters. It was subsequently discovered that the jeep in which the set was mounted, together with the mortar carriers and the commanding officer's jeep, had been held up by an unmarked minefield; thus, the interruption to wireless communication was only temporary. Several hundred yards in the rear Barron and Sheridan were still bringing the brigade line forward and soon after eleven o'clock, when they reported to Brigade Headquarters that they were 2000 yards out, encountered the first mines on the eastern fringe of the enemy field. A few minutes later, about 11.30 p.m., the Engineers had cleared the gap and Barron passed through. But on the western side, in the place which he recognised from earlier instructions as the battalion's objective, he found no one. He rang back on his line and reported what he had found, or rather, had not

found; this was just as inexplicable to the brigade staff as it was to Barron and accounts for their frank disbelief of his statement.

Shortly afterwards Captain Coop arrived at the gap with his transport. Both he and Major Skinner, OC 7 Field Company, spoke to Brigade Headquarters on Barron's line and confirmed that 23 Battalion was nowhere to be seen in its objective area.

Actually the battalion was ahead of its objective—and had been since 11.15 p.m. It was in front of the standing artillery barrage, which was playing on the line of the first objective for an hour before lifting forward for the second phase of the attack. Lieutenant-Colonel Romans sent his adjutant back to Brigade Headquarters at 3 a.m. to bring the battalion's fighting transport forward, and then went forward himself to find his infantry, which was pressing on towards the final objective. He managed to collect his companies and led them back to their own objective, where they dug in in readiness to meet counter-attacks. Battalion Headquarters was established at 2 a.m. and line communication opened with Brigade Headquarters.

For the manner in which he laid the brigade line close up behind 23 Battalion in its advance towards its objective, Corporal Barron received an immediate award of the MM. His exemplary coolness under fire and standard of leadership enabled him to carry out his difficult task with success; his initiative in passing back valuable information to Headquarters 5 Brigade during the attack gained specific mention in the citation.

On the left of the divisional sector 24 Battalion crossed its start line at 9.30 p.m. in the first phase of 6 Brigade's attack. At first it encountered hardly any fire, but as the advance continued the leading companies swung too far to the right, thus leaving Battalion Headquarters exposed to fire from enemy positions which had been missed by the left-hand company. While the leading companies approached the first objective, Battalion Headquarters came to a halt in an enemy minefield, and it was here that it attempted unsuccessfully to

communicate with Headquarters 6 Brigade by means of the terminal No. 11 set manhandled forward by its L Section operators.

Meanwhile the Engineers, accompanied by a carrier in which was mounted a No. 11 set manned by a K Section operator to pass back information to Headquarters 6 Brigade on the progress of clearing gaps in the minefield, were following close on the heels of the infantry. They cleared the first gap quickly, passed through, and pressed on towards 24 Battalion's objective on the western side of the field. As they approached it they found that they were a little too close to the standing barrage on the line of the first objective, so halted and waited until the guns lifted forward again. As the barrage lifted forward, however, a number of shells fell short and landed among the Engineer party, one of them scoring a direct hit on L Section's cable-laying jeep and putting it and its equipment completely out of action. This put an abrupt end to the usefulness of the line which had been laid forward from Headquarters 6 Brigade up to this point, and together with the failure of the battalion's terminal No. 11 set, completely severed communication between Battalion Headquarters and Brigade Headquarters.

The same shell which destroyed the cable-laying jeep also wounded the operator of the No. 11 set in the Engineers' carrier, a K Section man, Signalman Baugh. ¹¹ His neck wound bled profusely, and although some of the Engineers had great difficulty in stemming the flow of blood and tried to persuade him to leave the set and be sent back to the rear, Baugh refused to go and insisted on operating the set until a relief operator could be sent. For two hours, although he fainted twice and had violent fits of retching, Baugh continued to pass back information from the OC 8 Field Company (Major Reid ¹²) to Brigade Headquarters until he was relieved by an operator sent up from K Section. For his gallant conduct Baugh received an immediate award of the MM.

The second phase of the attack, in which two battalions from each brigade passed through the first objective, commenced at 12.55 a.m. on 24 October, when the standing artillery barrage began to lift forward. On the right of 5 Brigade's sector 21 Battalion crossed its start line and

followed close up behind the barrage, encountering shell and mortar fire which increased in intensity as the battalion neared Miteiriya Ridge. A few minutes after 3 a.m. the infantry companies reached their objective and began to dig in.

On the left of 5 Brigade's sector 22 Battalion sustained several casualties before it had crossed its start line. Some of these were caused by slight enemy shell and mortar fire, and some by shorts from the artillery barrage. The battalion maintained a steady advance against considerable opposition, especially in the centre and right of the sector, which intensified into heavy shell and mortar fire as the forward companies moved up the north-eastern slopes of Miteiriya Ridge. All four companies joined in the final attack on the crest of the ridge, and by 2.35 a.m. the battalion was in possession of the final objective.

In 6 Brigade's sector, on the left of the divisional front, 25 and 26 Battalions crossed their start lines about 11.40 p.m. During the early stages of the advance 26 Battalion, on the right, encountered negligible resistance, but met heavy fire on the ridge. Battalion Headquarters, which was moving at the head of the reserve company, came under heavy fire as it approached the ridge and sustained several casualties. A direct hit from a shell disabled the terminal No. 11 set and, since the L Section cable-laying party had not yet reached the ridge with the brigade line, reduced the battalion's communications to the rear to the use of runners. Two L Section signalmen went back to Brigade Headquarters to get new parts for the No. 11 set, which was again in operation by 6.30 a.m.

On the left of 6 Brigade's sector 25 Battalion advanced against only slight resistance but, like 22 Battalion, suffered some casualties near the start line from shells falling short in the barrage. After continuing for a little over 3000 yards the battalion halted at a marked minefield, mistakenly presumed to be its objective. At daybreak, however, the forward companies were found to be 800 yards short of the actual objective and some distance to the north of their proper positions.

The normal communications for the battle were augmented by carrier pigeons from an Eighth Army loft, supplied in pairs to infantry brigades, Divisional Cavalry, and Tactical Headquarters 2 NZ Division. Early on the 24th two of these birds were released, each carrying a situation map and a report, one from the GOC's tank at Tactical Headquarters and the other from Headquarters 6 Brigade. The first, that from Tactical Headquarters, was wounded in flight, but managed to make its way to the rear, where it was picked up near Tactical Headquarters Eighth Army and returned to its temporary loft at Main Headquarters 2 NZ Division. The second bird reached Eighth Army unharmed with early and valuable information.

By 7 a.m. on the 24th Miteiriya Ridge was in New Zealand hands, except on the left where 25 Battalion was halted some distance short of the final objective. The armour, however, had not managed to get far enough forward to press on. Both the Royal Wiltshire Yeomanry of 9 Armoured Brigade and Staffordshire Yeomanry of 8 Armoured Brigade (the leading formation of 10 Armoured Division) had crossed the ridge, but had sustained heavy casualties in tanks and were withdrawn. Throughout the day the New Zealand positions were heavily shelled, but the enemy failed to mount the expected large-scale counter-attack, being no doubt daunted by his own minefields on the ground which he would now have to traverse and the presence of heavy tanks right up behind the ridge.

At Main Headquarters 2 NZ Division the day of the battle had started well for Signals. Early in the morning eight new charging sets arrived from Eighth Army Signal Park and were quickly allotted to sections. Their arrival, even at that late hour, was hailed by brigade and field regiment signal sections as a providential release from the continual fear of the last few months that wireless communications would soon fail completely for the lack of serviceable battery-charging equipment.

The day passed quietly, with movements of men and vehicles restricted to the barest minimum even in the Divisional Headquarters'

area. At 9 p.m., one hour before zero, all wireless circuits assumed a continuous listening watch in readiness for the breaking of the long wireless silence when the brigades moved into the attack and made contact with the enemy. At twenty minutes to ten came the sudden crescendo of fury from the Corps' artillery. At six minutes past ten communication failed suddenly on both lines to Headquarters 5 Brigade, despite the buried cables, but contact was quickly restored through Headquarters 6 Brigade and the brigades' lateral lines.

Twenty minutes after zero hour—the time when the infantry reached the standing artillery barrage on the enemy forward defences—wireless silence was lifted and communication was established at maximum signal strength to all stations on the Division's forward control groups except Divisional Cavalry.

Midnight passed without any major interruption to either wireless or line communcations, except for a brief disconnection in the line to Tactical Headquarters 9 Australian Division in the northern sector. Soon after 1 a.m. two reports, the first from 5 Brigade and the other from 6 Brigade, stated that they had line communication forward to the gaps in the enemy minefield. Both 5 Brigade's lateral lines, to the left brigade of 51 (Highland) Division on the right and to 6 Brigade on the left, were working satisfactorily, and so were the CRA's circuits to 4, 5 and 6 Field Regiments. The lateral lines between regiments, however, failed suddenly at 1.15 a.m., but were quickly restored and the regiments were again in communication fifteen minutes later.

Sixth Brigade's lateral line to the South African brigade on its left appeared to be disrupted from the beginning of the battle, and the South Africans, whose responsibility it was to maintain it in repair, apparently failed to do so. About one o'clock, therefore, L Section sent off a patrol to locate the fault and bring the line back into communication. The patrol consisted of one man, Sergeant Compton. ¹³ It was a surface cable, and Compton ran it through his hands as he plodded his way towards the South African sector. He reached the brigade's signal office without finding any trace of a fault and entered to find the South

Africans sitting about talking and drinking tea and apparently quite unconcerned at the line's failure. Compton was angry and tired and his comments left the South Africans in no doubt as to his attitude. He returned to Headquarters 6 Brigade, to find on his arrival that the line was again in working order.

By 3 a.m. brigade lines were being carried forward quickly to battalions near the final objective, but L Section had great difficulty in keeping its circuits intact forward of 24 Battalion's position at the first objective because of damage by tank tracks and shelling. Throughout the day lines to 24 Battalion and to 25 Battalion, the latter on the left where it was halted short of the final objective, were maintained without very much difficulty, but that to 26 Battalion, on the right of the brigade's objective, did not reach Battalion Headquarters and was still not through by 5.15 p.m. that evening. These lines in front of brigades, of course, were surface cables and were not protected like the buried routes in the rear. In 5 Brigade line circuits suffered only brief dislocations throughout the 24th, so that terminal wireless sets at battalions were able to close down to give operators reasonable periods of rest.

By late evening on 24 October Main Divisional Headquarters' communications had stabilised sufficiently to permit the administrative and wireless-telegraphy forward-control groups to revert to listening watches, subject of course to the now well-drilled proviso that all sets would reopen communications immediately on the failure of lines. But there was little apprehension on this score. Except for brief interruptions on some lines, the buried cables had provided good stable circuits throughout the battle as far forward as brigade headquarters. Wireless, too, had worked well and sustained all expectations of the reliability of the No. 9 set.

Signals suffered very lightly in casualties in the first phase of the attack. There were none at Main Divisional Headquarters and the field regiments, except in E Section, where Corporal H. L. Smith's line

detachment ran on to a trip wire connected to a booby-trap disguised as a 44-gallon drum. Smith was sitting beside the driver of the truck and saw the trip wire just as they were almost on it. By some sixth sense he divined danger and yelled to the driver to stop. But he was too late and the drum full of explosive completely destroyed the vehicle. Smith and his four companions were all wounded, three so seriously that they died later, Signalmen McCann 14 and Carter 15 that day, and Signalman McDonald ¹⁶ next day. E Section's high proportion of casualties, in comparison with those of other sections, was no doubt due to 4 Field Regiment's employment in support of 9 Armoured Brigade. The regiment moved into the mine and booby-trap infested areas forward of the infantry start line soon after 3 a.m. on the 24th and by daylight had reached the north-eastern slope of Miteiriya Ridge. In L Section there was only one loss, Signalman Lorimer, ¹⁷ a wireless operator with 26 Battalion's No. 11 set, who was killed early on the morning of the 24th. By good fortune K Section survived the attack without loss.

On 24 October a decision was made to continue the offensive that night in an attempt to break the enemy gunline and pass 9 Armoured Brigade and 10 Armoured Division through. At 10 p.m. the attack started off, led by Divisional Cavalry. The enemy, who was expecting the attack, dropped parachute flares over the minefield gaps and bombed and shelled them incessantly, but about 2 a.m. on the 25th Divisional Cavalry, 9 Armoured Brigade, and part of 10 Armoured Division had crossed the ridge. Divisional Cavalry was withdrawn at daybreak, but 9 Armoured Brigade stayed forward of the ridge all day to discourage counter-attacks, although it lost some tanks. Gradually the front became static again, with considerable shelling by both sides. Dust and smoke still hung over the battlefield, so that visibility and observation became almost negligible. The enemy attempted several probing attacks with tanks and infantry, but all were thrown back, and night fell without any major engagements having occurred.

Meanwhile, at a conference at Main Divisional Headquarters, the GOC had informed his formation commanders that exploitation to the

south was no longer possible. The initial attack had just failed to push the enemy off his gunline, and now 10 Armoured Division was to be withdrawn from the New Zealand sector to join 1 Armoured Division farther north, where the Australians were to attack northwards towards the coast on the night of the 25th. In the meantime the New Zealand Division was to reorganise its front for defence.

In due course the Australians attacked vigorously and captured their objectives, but the armour was still not able to burst through the enemy gun screen. Tenth Corps was then temporarily relieved of its task of breaking out, and plans were immediately made for another large-scale attack by 30 Corps to force a breach. The New Zealand Division was instructed to secure its front against any form of counter-attack and to co-ordinate its flanks with I South African Division on the left and 51 (Highland) Division on the right. Accordingly, that night (26-27 October) 25 and 26 Battalions put in an attack, reached their final objectives and straightened the New Zealand line. In this operation Headquarters 6 Brigade did not move, so L Section had little to do except continue to maintain its shell-torn lines and extend those of 25 and 26 Battalions forward to their final positions.

The New Zealand Division was withdrawn from the line on the 28th and its sector was taken over by I South African Division. The New Zealand Divisional Artillery, however, remained in the forward area to support further attacks by the Australians in the north. By midday on the 28th Main Headquarters 2 NZ Division was established slightly to the north of Alam el Onsol, where lines were immediately laid to formations and wireless closed down to listening watches. During the period of planning for supercharge, which was the code-name for 30 Corps' second assault, every possible opportunity was seized to rest the men after their labours of the preceding four days. Swimming parties were sent off to the beach, and the Quartermaster produced a free issue of beer for all ranks of Divisional Signals.

Late in the afternoon of the 30th the Divisional Headquarters reconnaissance group and forward signals left Alam el Onsol and moved

forward to the new battle position of Main Divisional Headquarters. They were followed very soon after by the main group, and by 7 p.m. Main Divisional Headquarters was established within a mile of its position at the opening of the Alamein battle on the 23rd. The attack, which was originally planned to take place that night but was postponed until the early hours of 2 November, was to be a 'rip-split-or-bust' affair, and the General made it plain that there were to be no 'ifs' or 'buts' or, as General Montgomery would have put it, no 'belly-aching'. General Freyberg, who had only two moods in battle—pugnacity and optimism—wore his most bellicose look as he explained that it was to be an 'all in' effort. General Montgomery would have called it a 'gut-tearing process'.

The New Zealand order of battle was impressive. In addition to the Division's normal composition there would be under its command 9 and 23 Armoured Brigades and 151 (Tyneside) and 152 (Highland) Infantry Brigades; the Divisional Artillery was to be reinforced by seven field regiments of 1 and 10 Armoured Divisions, two field regiments of 51 (Highland) Division, three medium regiments of Royal Artillery, and one field regiment of 9 Australian Division. The infantry assault was to be made by 151 and 152 Brigades and 28 (Maori) Battalion, supported by a carefully timed creeping barrage and shelling of enemy positions in the path of the advance by 360 guns.

Signal communications for the operation followed the same general pattern as that for the initial attack. All lines as far forward as headquarters of brigades and as far to the rear as corps headquarters were buried, but this time there was only one circuit to each formation. Much more extensive use was made than formerly of the two Eighth Army exchanges, Victoria and Waterloo, which were primarily switching exchanges to enable formations to be connected quickly to the numerous traffic-control posts on the tracks along which the armour approached the forward area. On this occasion both exchanges were connected to almost every formation headquarters in 30 Corps and thus became the nerve centres of the line-communication network of the corps. Both lay fairly close up near the forward area and were manned by

Eighth Army Signals. From Waterloo lines ran to both 151 and 152 Brigades, and these were strapped through to Main Divisional Headquarters to give direct communication with superposed Fullerphone circuits. Victoria acted as the switching centre for higher and subordinate formations in the rear, where the armour lurked in readiness to hurl itself forward when the infantry had hewn a passage through the enemy's positions.

At five minutes past one in the morning of 2 November the concentrated fire of the artillery fell like the crack of doom on the enemy's forward defences, and 151 and 152 Brigades moved forward to the assault. On the left 152 Brigade met little opposition, and its advance continued without a hitch. Its line communications were remarkably stable and suffered very few disruptions. On the right, however, the Tynesiders ran into stiffer resistance, and Brigade Headquarters was soon out of touch with the leading battalions. Consequently it was not until 6 a.m., five hours after the attack began, that 30 Corps could be informed that 151 Brigade had reached its final objective.

During the night 9 Armoured Brigade crept forward slowly along the lanes cleared of mines by New Zealand engineers, but it was delayed by enemy opposition and at 5 a.m. was ordered by the GOC to push on regardless of mines to its objective just west of the Rahman track. At first light the brigade found itself right in the German gunline, and, in a gallant action at close quarters, lost most of its tanks but knocked out many of the enemy guns. The enemy counter-attacked with his armour from the north, west and south-west, but was halted by 1 Armoured Division and the artillery of 10 and 30 Corps, and suffered such crippling losses that Rommel decided to withdraw from the Alamein Line.

Meanwhile, the Royal Dragoons, an armoured car regiment which had broken through in the dawn mist, was sending ebullient reports of the havoc and desolation being wrought among German and Italian soft-skinned transport in the rear areas.

That night 6 Brigade relieved 151 Brigade in the north of the bulge;

it was a very difficult relief, carried out with no moon and no exact knowledge of the positions of 151 Brigade's battalions.

During the morning of 3 November General Freyberg made a tour of the front and decided that the battle was over at Alamein. Early that afternoon the Division received a warning order to be ready to embark on mobile operations. The GOC spoke to the Army Commander by telephone and said that he was ready to go and asked for additional armour. As a result the Division acquired 4 Light Armoured Brigade, which led the way out through the gap next day.

At the gap the traffic congestion was almost chaotic owing to the absence of any attempt at traffic control, and it was late afternoon before the Main Divisional Headquarters' group was through and able to shake out into desert formation. The tracks leading to the gap from the east were now feet deep in thick grey dust, which rose in dense, choking clouds as the long lines of hurrying vehicles plunged through the deep drifts. The huge tanks dipped and reared like ships taking water over their bows in a heavy sea, and their crews sat in their turrets like grey ghosts peering forward with red-rimmed eyes through the dust. Other grey ghosts scurried by in jeeps with windscreens thrown wide open for visibility; the wind whipped their smarting eyes, from which tears ran down their ashen faces like rain rivulets on a dirty window pane. Suddenly, however, they were out on the hard, pebbly desert and turning south-west on the first stage of the Division's wide sweep around the enemy's flank to Fuka. An hour later Divisional Headquarters passed a large group of disconsolate prisoners trudging wearily in disorderly array towards the north-east—six or seven hundred dispirited Italians escorted by one lone South African armoured car.

The column changed course slightly, continued a little south of west for a time, and then swung north-west towards Fuka. Divisional Headquarters halted behind the armour about 7.30 p.m., and the men hurriedly set about preparing the evening meal. After midnight, when 5 Brigade had arrived, machine-guns opened fire some hundreds of yards

to the south-east and sent tracer soaring over the column, to fall a short distance to the north. At first no one paid very much attention, except to make occasional amused comments about 'bloody Maoris again with some new spandaus'. Soon, however, the unseen gunners shortened their range and the fire began to fall among the vehicles. Amusement changed quickly to concern as the tracer curved over gracefully in the darkness and splashed viciously on the hard stony ground. Some men took cover behind the off-side front wheels of vehicles, while others, the incurably nervous, assumed airs of nonchalance and cast furtive glances about to see where a fold in the ground might afford some cover. The fire continued steadily for some time, and it soon became plain that the much-maligned Maoris were in no way to blame for the now uncomfortable situation which existed at the head of the divisional column.

Suddenly, from the small group of tanks whose dark silhouettes showed against the dim star glow of the northern sky came the dry, crunching sound of tracks as a tank swung round and lumbered slowly off into the night. Some time passed. From another of the tanks standing silently in the gloom at the head of the column, a calm, unhurried and mellifluous County voice was heard in the still night air speaking into a wireless set's microphone: 'Hullo, Freddie. Hullo Freddie. Have you anything to report? Over.' Apparently Freddie had seen nothing yet, for the voice sounded again: 'Hullo Freddie. Hullo Freddie. Have you anything to report? Over.' There was silence for several minutes, then suddenly the heavy machine guns of the invisible Freddie's tank yammered stridently in the night, and a stream of vivid tracer formed a wide arc towards the low ground near the tail of the column, where Freddie had apparently seen something to rouse his suspicions.

The enemy fire was irregular now, coming in erratic bursts, but still falling in among the vehicles at the head of the divisional column. The voice took the air again: 'Hullo Freddie. Hullo Freddie. A little more to the left. Over.' The tank's guns chattered again in several spiteful bursts

until suddenly, about two or three hundred yards down the column, a small flame flickered in the darkness and burst quickly into bloom as an ammunition truck caught alight. The burning vehicle belonged to 5 Brigade's column and, intelligence of this mishap having come quickly by some means to the head of the column, the voice spoke again: 'Hullo Freddie. Hullo Freddie. Don't do that Freddie. The New Zealanders don't like it. Over.' The tank's guns had fallen silent, and presently it trundled back out of the night and melted again into the dark mass of shadows beyond the armoured command vehicle in front.

Meanwhile, at the rear of the column, K Section, or rather, a portion of it, had become involved quite involuntarily in a lively little skirmish between a small isolated German party and the 23 Battalion carrier platoon. This section's troubles had started late in the afternoon, when 5 Brigade, after a long wait at the heavily congested minefield gap, had gone through in clouds of swirling dust into the open desert. The dust had caused fuel-pump trouble in many vehicles, and a couple of hours later K Section's signal office three-tonner had faltered and jerked to a halt. The trouble had soon been rectified, but late in the evening, just as the laggard had caught up with the tail of 23 Battalion's column at the rear of 5 Brigade, its engine had stopped again and it had to be taken in tow.

About midnight the column had halted and K Section's second-incommand, Lieutenant Catley, ¹⁸ who had been riding with his driver in the cab of the three-tonner, snatched some sleep. In the back of the lorry the five or six K Section men who comprised the signal office detachment were also soon fast asleep. The door of the cab was suddenly wrenched open, a head appeared and a German voice said hopefully: 'Italiano?' Catley, awake and alert in an instant, replied with great presence of mind: 'Si. Si.' The head started to withdraw, but the driver was awake now and gave vent to his feelings with a very vulgar expletive, whereupon the head vanished quickly. The next second the muzzle of a rifle appeared inside the cab and a voice said: 'Hands up!'—in English. Catley made a quick grab at the rifle, but missed, and it was

withdrawn quickly, the intruder making off at a run.

Catley jumped out and went to 23 Battalion's column to warn the troops that an enemy party was in the vicinity. As he turned back to rejoin his vehicle he heard a voice call out that some 'bloody Ites wanted to surrender'. Thinking he would encourage them to come in quickly, he drew his pistol and fired a shot across the front of a shadowy group of men whom he could see approaching about fifty yards away. This was the signal for a burst of automatic fire from the group, who were not Italians but a party of determined Germans with no thought of surrender.

The fight didn't last long, although the signal office detachment tumbled out and returned the fire with their rifles. Several signalmen were wounded in the first hail of automatic fire, and Catley went down with a wound in his thigh. There were several more bursts of fire, and presently the Germans closed in and took some prisoners whom they hustled along quickly to several trucks waiting nearby.

They were just about to put the prisoners aboard and make off when 'Freddie' opened up with his tank guns from near the head of the Divisional Headquarters' column. In the confusion that followed Catley, Lance-Corporal Petrie, ¹⁹ and a battalion orderly, Private Leith, ²⁰ went to ground among some camel-thorn bushes and hid from sight. Bullets were now whizzing about like angry wasps, and suddenly 'Freddie' scored his hit on the ammunition truck, which cast a bright glare over the surrounding desert. In this light a German officer, who happened to pass close to where Catley and his two companions were hugging the ground (and cursing the 23 Battalion carriers for being so tardy in putting in an appearance), saw them and hustled them off to where the enemy trucks were about to start. Just then the 23 Battalion carriers arrived, and Catley and two other wounded men were bundled into a truck full of sweating German infantry. The Germans were ill-tempered and jittery, and Catley, who had a working knowledge of German, was able to study at close hand the Afrika Korps in flight.

At daylight the Germans were still travelling swiftly westwards. Whenever RAF planes appeared they behaved very nervously, and on one occasion, when two or three fighters swooped suddenly from nowhere over the little convoy, the trucks jerked to a halt and the Germans leaped out and burrowed into the sand, with their broad backsides reared skywards. Poor Catley and his companions could not move because of their wounds; they lay in the truck and listened breathlessly to the roar of the planes, expecting every instant to hear the cannon shells ripping through the vehicle's canvas canopy. Soon the planes went away and the Germans returned to their places, grinning sheepishly and explaining to one another in high relief: 'Unsere' ['Ours'].

A little later more aircraft appeared; this time they were not friendly but RAF, and the Germans grovelled in real earnest to escape the withering hail of machine-gun fire. When the planes had gone they returned again to their truck, this time with no sheepish grins but with grim, set expressions on their faces. Catley could not resist the opportunity for a jibe; he raised himself on one elbow and addressed the German sergeant: 'Unsere!' The German stared for a moment and then turned and grinned at his companions.

Some of the trucks had been disabled in this little affray. Their German occupants debussed quickly and ran frantically after the other vehicles, while their former captives decamped smartly in the opposite direction and eventually joined British units.

Next afternoon the convoy was intercepted by British armoured cars. The trucks ground to a halt, and soon the captives heard the Tommies giving the Germans the rough side of their tongues in homely North Country accents. The armoured car troop leader was rather reluctant to take Catley along with him, as he was eager to push on westwards and run more quarry to earth. He suggested hopefully that Catley and his two men should remain with the Germans, whom he said were bound to be picked up again farther to the west, but Catley, having had enough of German company, climbed painfully out of the truck and, with his two

companions, watched the cars herd the enemy vehicles away to the west. They then hobbled slowly eastwards, taking advantage of occasional hitch-hikes, until they reached a British dressing station where their wounds were treated.

Most of the K Section men who had been captured with Catley at the rear of 5 Brigade's column the previous night managed to escape or were released by British armoured cars, but Lance-Corporal Petrie, whom the Germans had mistaken for a wounded man because of a bandage wrapped around a boil on his leg, was taken to a German dressing station and then on to a prisoner-of-war cage. Petrie was curiously unlucky in this incident. He had had his boil for some time—it was the last of a number that had troubled him for months—and the medical officer to whom he had taken it for attention had pooh-poohed any suggestion that he should be sent out to a casualty clearing station until the infection cleared up. The Germans, however, were a little more solicitous and took Petrie's bandage at its face value, so that he was hurried off to the German dressing station instead of being given a sporting chance to escape with the other K Section men.

Some time before Catley's encounter with the German party another misfortune had befallen K Section. It was after nightfall and 5 Brigade was moving in very close formation, with perhaps eight to ten vehicles abreast and nose-to-tail in columns that stretched back interminably to the rear. In the central column and about 100 yards from the leading vehicles, Brigade Headquarters' armoured command vehicle loomed high above the surrounding sea of transport. The brightness of its electrically lit interior was in sharp contrast to the darkness of the desert night outside, relieved only by the dim glow of the stars and throbbing with the murmur of a thousand smoothly running engines. Officers sat at tables facing wall maps, and the wireless sets buzzed steadily, dropping intermittently into low growls as the motor-generators took the load when the operators pressed their keys. The great vehicle rode smoothly as its driver pushed it steadily through the night, and the whirr of the huge tires on the desert gravel came only faintly to those within.

Suddenly there was a muffled report, followed instantly by a shriek of escaping air, and the big vehicle lurched violently and stopped with a pronounced list to the left. There was no spare wheel, and as it would take considerable time to repair a blowout, a 3-ton lorry was brought alongside and the maps and documents were quickly transferred to it. Two K Section wireless trucks were brought up and their sets took over the brigade's forward control group and the rear link to Main Divisional Headquarters. In ten minutes or so the column was on the move again, leaving the ACV in charge of Corporal Banner, ²¹ K Section's electrician, and the driver-mechanic, Signalman Moir, ²² to await the arrival of the LAD from the rear. Soon afterwards the brigade column, guided by Very lights to direct it to the divisional rendezvous, closed on the Divisional Headquarters column, which had halted a few miles ahead.

Some time later the crew of the ACV reported by wireless to Headquarters 5 Brigade that the tail of the brigade group had passed without any sign of the LAD. Captain Shirley, OC K Section, worried that he might not see his ACV again, wire- lessed the corporal to bring it in slowly on the flat tire. Long signals were sent out to enable Banner to take a bearing on his homing loop, and to make doubly sure, Shirley persuaded the brigade staff captain to part with a huge rocket which had originally been intended for a success signal in the Alamein battle, and which Shirley now used as a beacon. The rocket left the ground with a mighty roar, startling the dozing occupants of nearby vehicles into instant wakefulness. It soared high into the sky and burst into a brilliant constellation on which Banner was able to check the bearing taken on his homing loop.

Shortly afterwards Catley and the Germans started their private fracas at the rear of 5 Brigade's column. The machine-gun fire was fairly lively, and bullets whipped between the wheels of vehicles, so Shirley climbed into a jeep to raise himself above the low-flying missiles, and wondered what he was going to say in his letters of condolence to the next of kin of the men in the ACV, now cut off from the brigade. After a time he went to a wireless truck to see how they were faring, and arrived

just in time to take an RT message from Banner, who said: 'On fire.... cannot transmit.... smoke.... Off.' Shirley switched his set to 'send' and yelled 'Say again!' several times, but there was no response.

When Banner received his instructions to bring the ACV in slowly on the damaged tire, he told Moir to get going. All went well until the tire, which had become overheated, burst into flames. The fire quickly spread to the engine, but the crew managed to put it out before any serious damage occurred. Banner then decided not to go on, but to wait until some LAD turned up. The K Section men, with their wireless sets, were picked up later by an English unit, carried some distance and set down again in a completely uninhabited spot which someone said lay on the route New Zealand Rear Headquarters would follow. Luckily news of their predicament somehow reached Headquarters Divisional Signals, which by that time was about ten miles farther to the west, somewhere near Fuka. Captain Dasler, OC No. 3 Company, immediately despatched his quartermaster-sergeant, Staff-Sergeant Kruck, 23 to pick them up and return them to K Section at Headquarters 5 Brigade. Kruck had an 8-cwt truck and a half-tracked vehicle which three German prisoners had ridden in to Divisional Headquarters the day before; it was a weird looking contraption, best described as a motor-cycle with two caterpillar tracks instead of a rear wheel. It towed three small trailers, and into these Kruck loaded the four K Section men and their gear and led them to Headquarters 5 Brigade.

Meanwhile Signalman Moir, whom Banner had left in sole charge of the disabled ACV, spent his time moping about and going outside occasionally to watch for passing transport. Presently he saw a group of men approaching on foot. He needed no second look to see that they were Italians, and knowing their treacherous habits when the odds were heavily in their favour, he hastened inside the ACV and made all the doors fast. The Italians soon came up, and Moir could hear them trying to force an entry. Reflecting that they were only Italians and therefore unlikely to show much stamina against a surprise move, he conceived a plan. Seizing a tommy gun, he opened the roof hatch carefully, sprang

out suddenly on to the flat roof and brandished his weapon. The Italians surrendered without a shot being fired, but Moir did not want prisoners on his hands. 'B—r off!' he roared, and the Italians took to their heels.

Early on the morning of 5 November the Division moved off towards the high ground to the west of Fuka. During the afternoon 4 Light Armoured Brigade encountered opposition from an enemy position covered by a minefield which ran south from the Fuka escarpment, and some delay occurred while the Divisional Artillery was deployed and brought into action. Fifth Brigade was called up and sent northwards after 4 Light Armoured Brigade, which had gone to cut the road. They could not prevent the enemy from withdrawing that night.

At first light next morning the Division was on wheels again and moving quickly towards the high ground south of Baggush, but light rain which began to fall during the morning developed later into a deluge and turned the desert into a quagmire in which vehicles soon sank to their axles. For the rest of that day and the whole of the next the Division was immobilised in the mud and separated from its supply column, struggling slowly forward several miles to the east. The chase was resumed on the 8th, but the enemy, who had had the sealed surface of the coastal road for an escape route, was now scurrying westwards in full flight towards the frontier.

Mersa Matruh was reported to be clear of the enemy and was occupied on the 9th by 6 Brigade. Next day the Division reached the foot of Halfaya Pass, which was captured at dawn on the 11th by 110 men of 21 Battalion, with only two casualties. The Division then climbed the long winding road up the pass and crossed the frontier into Cyrenaica, where it stayed in bivouac in the Menastir area until 5 December.

¹ Field Marshal Rommel had left Africa for Europe on 23 September and did not return until the British offensive had been in progress two days. General Georg Stumme, who was appointed acting commander in Rommel's absence, died of heart failure while on a reconnaissance in the morning of 24 October, and the

command was taken over by Lieutenant-General Ritter von Thoma (commander of the *Afrika Korps*) until Rommel arrived in the evening of 25 October.

- ² Maj E. J. Wilton, m.i.d.; Thames; born Thames, 6 Jun 1915; postal official; OC B Sec Jun-Oct 1942, E Sec Apr-Jun 1943, D Sec Aug 1943-Apr 1944, L Sec Dec 1944-Feb 1945, HQ Coy Feb-Mar 1945, 2 Coy Mar-Apr 1945.
- ³ Apparatus cable-laying.
- ⁴ Sigmn M. P. Sheridan; Wellington; born NZ 31 Mar 1919; clerk.
- ⁵ Sigmn D. S. Simpson; Wairoa; born NZ 15 Jan 1917; lineman; wounded 23 Oct 1942.
- ⁶ Capt M. J. Coop; Dunchurch, England; born Christchurch, 21 Jul 1911; shepherd; DAPM Maadi Camp Sep 1941-Jan 1942; OC HQ Coy 23 Bn, Oct 1942; three times wounded.
- ⁷ Maj C. F. Skinner, MC, m.i.d.; Westport; born Melbourne, 19 Jan 1900; OC 7 Fd Coy 1942-43; wounded 3 Nov 1942; MP (Motueka and Buller) 1938.
- ⁸ Lt-Col R. E. Romans, DSO, m.i.d.; born Arrowtown; business manager; CO 23 Bn 1942-43; twice wounded; died of wounds 19 Dec 1943.
- ⁹ 2 Lt J. McKee, m.i.d.; Frankton Junction; born Thames, 13 Nov 1911; telegraphist.
- ¹⁰ Col T. C. Campbell, DSO, MC, m.i.d.; Fiji; born Colombo, 20 Dec 1911; farm appraiser; CO 22 Bn Sep 1942-Apr 1943; commanded 4 Armd Bde Jan-Dec 1945; Area Commander, Wellington, 1947; Commander of Army Schools, 1951-53; Commander Fiji Military Forces 1953.

- ¹¹ Sigmn C. Baugh, MM; Taipuha; born Lancashire, England, 5 Jul 1918; P and T clerk; three times wounded.
- 12 Lt-Col H. M. Reid, MC and bar, m.i.d.; Christchurch; born Auckland, 21 Mar 1904; civil engineer; OC 6 Fd Coy Jun-Aug 1942, 8 Fd Coy Aug-Dec 1942; CO Forestry Group (UK) Jul-Oct 1943; attached Air Ministry Dec 1943-Feb 1944; twice wounded; wounded and p.w. 16 Dec 1942; released Tripoli, 23 Jan 1943.
- ¹³ Lt I. B. Compton, m.i.d.; Wellington; born Hastings, 2 Feb 1920; telegraphist.
- ¹⁴ Sigmn H. McCann; born NZ 5 Mar 1911; inspector of factories; died of wounds 24 Oct 1942.
- ¹⁵ Sigmn H. McG. Carter; born Auckland, 27 Apr 1916; labourer; died of wounds 24 Oct 1942.
- ¹⁶ Sigmn L. McDonald; born Christchurch, 6 Mar 1918; farmer; died of wounds 25 Oct 1942.
- ¹⁷ Sigmn G. S. Lorimer; born NZ 9 Dec 1916; Railways clerk; killed in action 24 Oct 1942.
- ¹⁸ Capt T. R. Catley; Durban, South Africa; born London, 21 Mar 1911; company manager; QM Div Sigs Jun 1943-May 1944, Jun-Sep 1944; OC HQ Coy May-Jun 1944; wounded 5 Nov 1942.
- ¹⁹ S-Sgt D. Petrie; Masterton; born Timaru, 2 Feb 1920; telegraph cadet; p.w. 5 Nov 1942.
- ²⁰ Pte W. D. Leith; born Clyde, 31 Aug 1915; rabbiter; wounded and p.w. 5 Nov 1942; died 24 Oct 1948.
- ²¹ Cpl N. T. Banner; New Plymouth; born Feilding, 10 Dec 1916;

radio mechanic.

²² S-Sgt R. Moir; Trentham; born Taihape, 25 Jan 1916; metal worker.

²³ S-Sgt J. R. Kruck; Auckland; born Aratapu, 21 Feb 1910; bus driver.

DIVISIONAL SIGNALS

CHAPTER 15 — FROM BARDIA TO TRIPOLI

CHAPTER 15 From Bardia to Tripoli

AT Menastir the days passed pleasantly enough in the cool of the North African winter as the Division trained and refitted and found time to revive its football. In every corner of the area goal posts sprang up overnight, and soon the first matches of the divisional Rugby competition were in full swing. A visiting RAF officer who called at Divisional Headquarters during the month on some business or other gazed in wonder at the forest of goal posts and the levelled grounds and muttered to himself every few minutes: 'Bloody good idea! Bloody good idea!' When asked what was such a good idea, he replied that if the advanced RAF squadrons were to follow up the New Zealanders, they would merely have to join up the closely spaced football grounds and would have the best landing grounds in North Africa in next to no time.

On 26 November Lieutenant-Colonel Agar returned from his two months' absence in hospital and on convalescent leave and resumed command of Divisional Signals.

The Division came under the command of 30 Corps again on 2 December, and three days later left the Menastir area on the first stage of its long journey to Tripolitania. The route lay along the Trigh Capuzzo to El Adem, through Knightsbridge, where rusted remains of British armour still lay in its Cauldron graveyard, then on to Bir Hacheim, where more gaunt skeletons of tanks stood like ghosts on the skyline against the fading evening light. Here the Division bivouacked for the first night. It resumed the journey early next morning and travelled 162 miles across the desert wastes south of Gebel Akhdar. Onwards it continued during the next two days, through Msus and Saunnu, until early in the afternoon of the 8th it reached Haseiat, 30 miles south-east of Agedabia. Here there was a halt for a day or two, and line communications made their first appearance for tactical employment since the battle of Alamein.

The Division moved off again on the 11th and struck south



through difficult going, where formations were compelled to converge from their normal desert formation into three columns, and in the afternoon of the 13th crossed Chrystal's Rift, a vast wadi of soft sand which, but for the work of the Engineers with their bulldozers, would have been impassable for transport. The enemy was now believed to be withdrawing from his forward positions at Marsa Brega in the Agheila line, and the New Zealand Division's task was to swing wide around his southern flank, cross the Marada track, and move quickly north-westwards to seize the high ground west of the salt marshes and so intercept his retirement. The Division covered close on a hundred miles in three marches on the 14th, bivouacked at 11 p.m., and continued the advance early next day, which brought it late in the afternoon to the west of Bir el Merduma. Sixth Brigade, in the van, was directed northwards to cut the main road, along which the enemy was retreating, but was held up just short of it. The Brigade staged a night attack and secured a few prisoners.

The night of the 15th passed quietly at Main Divisional Headquarters, but early next morning large groups of enemy transport escorted by tanks appeared from the east and approached the positions of 5 Brigade, deployed about half a mile to the east. There was a tense air of expectancy, as it was believed that the whole of the *Afrika Korps*, 15 and 21 *Panzer Divisions* and *go Light Division*, ¹ was in the rearguard now about to try the New Zealanders' Minqar Qaim trick. But suddenly the enemy swung to the north and scuttled to safety through a

gap between 5 Brigade and 6 Brigade, about six miles to the north. By midday the fracas was over, and the only people left with any sense of satisfaction, however slight, were the gunners of 4 Field Regiment, who had managed to engage several groups of transport and tanks slipping swiftly past to the north at ranges varying between 1000 and 12,000 yards.

On the morning of the 17th the Division set off towards Nofilia, where the German rearguard was reported to be. General Freyberg's plan was another 'left hook': it was to pass to the south of the village and turn north to cut the road to the west. Fifth Brigade approached the road about 10 miles west of Nofilia late that afternoon. By this time, however, the enemy was already scurrying westwards along the road. His flank guards brought 5 Brigade's battalions under heavy fire as they crept forward in unexpectedly heavy going just short of their objective. The fight continued into the night, but before daylight the enemy had disengaged and fled westwards.

During this affray signal communications worked smoothly enough, except that K Section encountered the usual difficulties caused by transport fouling and breaking cable when lines were being taken forward to 23 and 21 Battalions. In an attempt to reduce the risk of damage caused by vehicles, K Section's linemen carefully moved the cables some distance away from tracks, but these precautions availed them little because transport sought out the lines to use as guides to Brigade Headquarters. Eventually, about 6 p.m., a line reached 23 Battalion and communication was established. On the left, however, the line party pressing forward behind 21 Battalion was hampered by the innumerable breaks in the cable caused by shellfire in their rear and by the depredations of carrier tracks and vehicles. Moreover, the jeep in which 21 Battalion's No. 11 terminal wireless set was installed was immobilised by shell splinters early in the fight; the set was removed from the damaged vehicle and carried forward by hand, wireless communications with Brigade Headquarters being interrupted until another vehicle was sent up from K Section.

The Division remained in the Nofilia area until 14 January. Everyone made himself thoroughly comfortable in readiness for the Christmas and New Year festivities, which were celebrated in the usual 2 NZEF style with turkey, roast pork, and plum pudding. There were even fresh vegetables, conjured up from somewhere by the supply services, and best of all, two bottles of beer for all ranks. The GOC made his usual Christmas Day round of unit messes and spoke briefly to the men in his friendly manner.

At the Divisional Signals' mess, where the men sat about at their ease and the officers served as waiters in a friendly spirit of camaraderie, the General arrived shortly after noon. He congratulated Signals on their work, commending especially the drivers for their untiring energies in the year's operations. Perhaps he was thinking of Signalman Cy Marshall, ² the driver of his ACV. Marshall was a quiet, even-tempered fellow and a first-class driver, with an almost passionate attachment for his huge vehicle. He drove with both hands on the wheel, his eyes fixed undeviatingly on the route ahead and his head cocked slightly to one side so that his ears might detect instantly any break or flutter in the rhythmic throbbing of the diesel engine.

On one occasion during the chase of the fleeing enemy the great vehicle was thundering along at the head of the divisional column. Inside, the General strode up and down, clasping and unclasping his hands in an agony of impatience and saying to the GSO I every few minutes or so: 'We must get on. We must get on.' Then he, or sometimes the GSO I, would go forward to the driver's compartment and say, 'Faster, driver.' Or perhaps 'Can you get a bit more speed, driver.' Marshall, who was not given to outbursts of exasperation even when there was considerable provocation, soon began to be a little irritated by these continual urgings and admonitions, and when the General approached his compartment again, turned his head and said: 'Sir, I'm getting as much out of the old bitch as I can.'

Thus 1942 ended for 2 New Zealand Division, a year in which the

fortunes of war had receded on the ebb tide of defeat after the desperate fighting of the preceding November in Cyrenaica, until the slack-water period in July and August, after the stirring events of Minqar Qaim. Now, with the Alamein victory, had come the turn of the tide. Eighth Army was at last sweeping forward towards the final defeat of the Panzerarmee Afrika and the dissolution of Italy's much-vaunted African Empire.

A momentous year of endeavour, and twelve months' march nearer home.

Divisional Signals commenced the New Year by winning a quarterfinal game from 27 (Machine Gun) Battalion in the divisional Rugby competition, with five points to the machine- gunners' three. They drew a bye for the semi-final and thus reached the final which, according to rumour and the General's optimism, was to be played in Tripoli.

But the New Year also brought less pleasing things. One of them was the introduction of the new phonetic alphabet which, to Signals, had strange and outlandish sounds, quite unlike their old friends, Ack, Beer, Charlie, Freddie, and all the others that had served so faithfully down the years until the Americans intruded their Able Bakers, Dogs and Jigs—at an Allied conference at Casablanca, it was believed—as part of their contribution to overall Allied strategy. Some of the old hands, like Staff-Sergeant Murphy ³ and other diehards of the pre-war Territorial Force, muttered sullenly at the change and wondered aloud and profanely why the Yanks couldn't accept Johnny London and Monkey Nuts, which had helped to win at least one world war and half of another.

The Division left Nofilia on 3 January and was assembled on the 15th near Wadi el Meeghlia, east of the Gheddahia-Bu Ngem track, almost 100 miles south of Misurata and near the western extremity of the Gulf of Sirte, where the coast turns sharply northwards from Buerat. This was D-day for the operation in which Eighth Army was to capture Tripoli. The attack went by the name of FIRE EATER, and the New Zealand Division's part in it was to advance by an inland route through

Beni Ulid and Tarhuna, destroying any enemy forces that it might encounter.

The Division set off next day on the first stage of the advance, and passed through Beni Ulid in the bright moonlight of the late evening of the 19th. The long line of vehicles wound sinuously through the village in a silence broken only by the low growl of gears, and passed between picturesque buildings and tall, gently waving palms. By the afternoon of the next day the Division was about 15 miles south of Tarhuna. So far the only fighting had been several sharp brushes which the tanks of the Royal Scots Greys and Divisional Cavalry had had with enemy rearguards.

Late in the evening of 20 January 30 Corps ordered the Division to have a brigade group ready to go at short notice direct to Tripoli. By the evening of the 22nd the Division, with the armour and 5 Brigade Group leading, was on the Garian-Tripoli road and striking north towards Azizia. Here 5 Brigade encountered determined enemy resistance, but 15 Panzer Division withdrew during the night, and the New Zealanders pushed on next morning through Azizia and Suani Ben Adem to the Azizia Gate of the city. But patrols of 11 Hussars, followed by Highlanders who had advanced along the coast, had entered the city early that morning and forestalled 5 Brigade's hopes of being the first Eighth Army troops in Tripoli.

Thus, on 23 January, exactly three months after General Montgomery had launched his offensive at Alamein, he brought his Eighth Army to the gates of Italy's last African prize and seized it almost without firing a shot. Fifth Brigade took over the southern portion of the city and established its headquarters in the government agricultural research station.

Early that afternoon General Freyberg, accompanied by Brigadier Gentry and a small party from Headquarters 6 Brigade, including a wireless detachment from L Section, ran into a small enemy ambush at Bianchi, some miles south-west of Suani Ben Adem, and came under rifle

and machine-gun fire at very close range. There were a few casualties, including one of the operators on the wireless set, but the General was persuaded to withdraw while his ADC, Captain Griffiths, ⁴ engaged the enemy with a tommy gun. The remainder of the party, which mustered only three rifles all told, was forced to fall back on a farmhouse under machine-gun and mortar fire. By this time the brigade staff captain's car had received a hit and was burning fiercely. The enemy reached the other vehicles and began to loot them, but help arrived in the shape of two Stuart tanks and some guns from 27 (Machine Gun) Battalion, whereupon the enemy withdrew. During this affray Second-Lieutenant Whitehead, ⁵ second-in-command of L Section, led the small party of riflemen in a stalking practice, but they could not get close enough to get a shot in before the enemy withdrew.

By early evening Divisional Headquarters had reached the Bianchi area and settled into bivouac in a large wheat field. A week later, on the 30th, the headquarters moved to a new location near Castel Benito aerodrome, where the men settled themselves in in the greatest comfort they could contrive among the almond and olive groves. Here they were told that a review of the Division by the Army Commander would take place in a few days' time and that Lieutenant-Colonel Agar was to command the Divisional Troops— Royal Scots Greys, Divisional Cavalry, Divisional Engineers, Divisional Signals, and 27 (Machine Gun) Battalion—for the occasion.

By this time many of the men had been into Tripoli on daily leave rosters, but most of them were keenly disappointed in the pride of Mussolini's empire. The city was squalid and impoverished and wore a dejected look, and there was little for the men to do except wander about its streets and peer through the windows of the tiny little shops which, except for one or two that sold trashy bric-a-brac, were closed and deserted. A wide palm-lined drive swept along the sea front, with lines of impressive buildings in the European style on its shoreward side. At the western end of this marine drive, or Corniche, was the Piazza Italia, from which the city's principal thoroughfares radiated. The piazza

bore witness to the Italian zest for ornateness with its fountains, statuary, and the usual crop of Fascist ceremonial flagstaffs. In the piazza, too, was the mediaeval citadel, a relic of the city's Turkish rule, lending a bizarre oriental air to the cheap and transient splendours of Italian imperialism.

The long 1400-mile march from Alamein's wastes to this great German-Italian supply base had presented no special problems in signal communications for 2 New Zealand Division. Line communications, which were laid out at most of the overnight halts during the advance, had had little or no tactical employment, so that the burden of communications fell mainly on wireless which, except for extended ranges on some links and some night atmospheric conditions, worked satisfactorily at good signal strengths. In the semi-permanent bivouac areas around Tripoli and at Suani Ben Adem and Castel Benito, however, lines assumed a new importance for inter-formation communications, and before long a fairly extensive network of circuits radiated outwards from Divisional Headquarters by field cable, poled-line routes, and salvaged German rubber-sheathed quad cable built back into hedges and ditches.

Besides the responsibilities of providing signal communications and the enjoyment of its comfortable bivouac in the pleasant shade of the almonds and olives, Divisional Signals had another engrossing interest. This was its football team's preparations under its captain, Second-Lieutenant Vaughan, for the final of the divisional Rugby competition. Vaughan drove his men hard. There were spells of physical training at least twice daily, and in the evenings he bullied them into long training runs. In between times he co-opted the assistance of Corporal Harry Jones, ⁶ a D Section NCO who possessed a respectable ability at hockey and football. Between the two of them they hammered the team, carefully chosen by Corporal Barney Armstrong, ⁷ the unit's sole selector, into a compact bunch of players who were, Vaughan declared with pardonable pride, as 'fit as fighting cocks and able to fight their own weight in wild- cats'. At Castel Benito aerodrome an Australian

fighter squadron of the RAF had prepared a playing field for its own use, and here Vaughan exercised his team in practice matches against the Australians. By the beginning of February the players had reached a stage of superb physical fitness, but the consensus of opinion in the divisional lines favoured their opponents, the Maoris.

On 4 February, however, interest in the forthcoming match was submerged for the time being in a fresh tide of excitement when it was learned that the review by the Army Commander for which the Division had been training was to be before none other than Mr Churchill. The parade took place that afternoon. The men lunched under the trees at the rear of the parade ground, after which the markers were called out and the Division assembled in review order. Fifteen minutes before the expected arrival of the Prime Minister every man was in position, eyes glancing along the road from every point of the parade to catch the first glimpse of the official party. At 2 p.m. General Freyberg called his Division to attention as the cars of the party approached. Next came the General Salute, which the men executed in perfect timing, and then Mr Churchill, accompanied by General Freyberg, inspected the parade from the Prime Minister's car. After the Prime Minister had addressed the Division in impressive Churchillian accents, the parade marched past the saluting base, unit by unit.

Within a week enthusiasm for the forthcoming Rugby match between Signals and the Maoris was again in full spate; the Maoris appeared to be still leading in favour, although a few people who had been keeping their eyes open began to introduce a note of caution into the prevailing opinion.

The day dawned under an overcast sky and light showers fell early in the afternoon. There was a brisk westerly wind blowing down the field, but the ground had settled down firmly after some recent heavy rain and was in excellent condition for the game. It was on the same ground where the Division had been reviewed by Mr Churchill ten days before. Honoured soil, indeed, even though it had once been Italian! The Division arrived in force to see the game and huddled in greatcoats

along the side-lines, some spectators climbing on top of the scores of 3ton lorries drawn up at vantage points. Around the field Bofors guns poked their long snouts into the air to meet any threat from enemy maurauders.

Divisional Signals won the toss and elected to play down wind. From the outset the match was played at a killing pace, and as each man gained possession of the ball he was brought down by relentless tackling. The first half was a grim struggle for the Maoris, who were forced back into their own territory by Signals' closely knit combination. In the first twenty minutes four penalties were awarded against the Maoris for infringements in the scrum, but Signals missed the first two kicks, which were taken from almost directly in front of the posts and inside the Maoris' half. A third kick, taken by Dawson, 8 went over, giving first blood to Signals. At half-time the score stood at Signals 3, Maoris nil. During the interval the latter changed their jerseys to the yellow and blue of 6 Field Regiment in place of their own black and white, which were difficult to distinguish from Signals' blue and white.

In the second spell, with the wind behind them, the Maoris opened their attack vigorously, but Signals showed themselves as capable in defence as in attack. A brilliant breakthrough by Wordley, 9 however, brought a try by Aratema, 10 which was converted, making the score 5— 3 in the Maoris' favour. Signals reacted strongly and swept down into the Maoris' twenty-five, where they were awarded another penalty. Dawson took a prodigious kick into the wind; the ball hit the cross-bar, balanced uncertainly for a brief moment and then tumbled over, to bring the score to 6—5 in Signals' favour. From this stage play became extremely vigorous, both sides fighting hard for victory. With only a few minutes left, the Maoris' hopes of winning seemed negligible, until suddenly, during some loose play inside Signals' twenty-five, Taite, 11 the Maoris' centre-threequarter and a former Hawke's Bay representative and Te Aute College player, secured possession of the ball and broke through and scored near the corner flag. The Maoris failed to convert this try, but a few minutes later the game ended, leaving them victorious by

eight points to Signals' six.

On 10 February Divisional Signals received a new British war establishment for a divisional signals, and Lieutenant-Colonel Agar set to work by the light of midnight oil to fit it into the requirements of 2 NZ Division. Two days later he had a draft establishment ready for examination and discussion by company commanders, who were expected to be ready to bring it into use on 1 March. The new establishment contained five major changes, which were, in order of importance: the formation of a new sub-unit, 4 Signal Squadron, to provide communications for the 4 Armoured Brigade, then being formed at Maadi from the original 4 Infantry Brigade; the formation of a new section, R Section, in No. 1 Company to provide wireless communications for the administration group at Rear Headquarters 2 NZ Division; the formation (or rather, official blessing) of the CRA's signal section, which was to be known as H Section, the second of that name; the reorganisation of E Section in No. 2 Company to provide the increased scale of regimental headquarters' and battery headquarters' communications for 4 Field Regiment, which in due course would support the new 4 Armoured Brigade; and the transfer of C Section attached to Headquarters Divisional Cavalry—from No. 1 to No. 3 Company.

From the company commanders' examination of the new establishment it was but a short step to dismembering No. 1 Company and reassembling it in its new order. In due course R Section went off to Rear Divisional Headquarters under the command of Lieutenant Healy, who had for his second-in-command Second-Lieutenant Missen. Second-Lieutenant Toms assumed command of the new H Section, and OC No. 2 Company came to live at Headquarters Divisional Signals, an 'indignity' that no previous artillery signals officer had ever had to endure.

¹ While go Lt Div prevented 6 NZ Bde from reaching the road, along which 21 Pz Div was retreating, 15 Pz Div escaped through the gap between 6 Bde and the rest of 2 NZ Div.

- ² Sigmn C. H. A. Marshall; Takapau; born Takapau, 16 Mar 1918; telephone exchange clerk.
- ³ WO I J. R. P. Murphy, EM, m.i.d.; Wellington; born NZ 9 Jul 1914; clerk.
- ⁴ Maj J. L. Griffiths, MC, m.i.d.; Feilding; born Wellington, 9 Apr 1912; bank officer; ADC to GOC 2 NZ Div Feb 1941-Dec 1943, Jul 1944-Dec 1945.
- ⁵ Maj D. D. Whitehead, m.i.d.; Singapore; born NZ 24 Mar 1919; telephone exchange clerk; GSO 2 Sigs, HQ BCOF, 1946.
- ⁶ L-Sgt E. H. Jones, EM; Wellington; born Taihape, 22 Feb 1917; clerk.
- ⁷ Cpl C. G. Armstrong; Kohu Kohu, North Auckland; born Ireland, 31 Dec 1907; clerk.
- ⁸ L-Sgt R. E. Dawson; Wanganui; born Masterton, 2 Sep 1913; insurance agent.
- ⁹ Capt W. P. D. Wordley; Pakotai, Northland; born Dargaville, 3 Aug 1915; labourer; twice wounded.
- ¹⁰ Cpl D. K. Aratema; Auckland; born NZ 23 Feb 1919; forestry worker; twice wounded.
- ¹¹ Capt C. Taite; Te Kuiti; born Taihape, 24 Oct 1920; labourer; wounded 4 Jul 1942.

DIVISIONAL SIGNALS

CHAPTER 16 — FINAL CAMPAIGN IN AFRICA

CHAPTER 16 Final Campaign in Africa

A WEEK after the occupation of Tripoli Eighth Army's patrols crossed the frontier into Tunisia, where Rommel had withdrawn his forces behind the Mareth Line. From this strongly defended position, which lay like an insurmountable barrier between Eighth Army and First Army, ¹ he moved quickly north and attacked an important communications centre and supply base at Tebessa. American formations there were severely mauled, but reinforcements from the north prevented the enemy from consolidating his gains, so that he was forced to move south again to meet the threat developing from Eighth Army against the Mareth defences, which he had left in the hands of an Italian garrison during his excursion in the north.

On his return to Mareth Rommel decided to attack Eighth Army and regain the initiative. No doubt he thought that his right flank was secure and that any attempt to outflank Mareth from the west would be defeated by the difficult country there. In January, however, a New Zealand patrol of the Long Range Desert Group had made a careful reconnaissance of this area and had found a passage through the Matmata Hills, which would enable a striking force to make a wide turning movement around the enemy's western flank and force a breach between the north-western end of the extension of the Mareth Line and the impassable barrier of Djebel Tebaga. This task, which fell to 2 NZ Division—to be constituted as a corps for the operation because of its increased strength—was to be matched simultaneously by a frontal attack on the Mareth Line by 30 Corps, which was to destroy the enemy holding troops and then advance and capture Gabes.

Although Rommel's withdrawal under pressure from Kasserine and his return in armoured force to Mareth meant that he almost certainly contemplated an attack against Eighth Army's forward positions to stave off for a time the threat from the east, these considerations were not allowed to interfere with the planning of Pugillist, the operation by which

General Montgomery hoped to carry the Mareth Line. Nevertheless, the enemy's intentions were interpreted as a sufficient threat to cause the Army Commander to form a firm base at Medenine against which Rommel might spend his strength in vain.

The New Zealand Division was warned at very short notice on 1 March to move to Medenine to strengthen the sector there. The order first said that the Division was to be ready to move at four hours' notice from 1 a.m. on 2 March, but only a few hours later this was amended drastically to four hours' notice from 4 p.m. on the 1st.

Needless to say, there was a certain amount of frantic activity to extricate the men of Signals from their comfortable bivouacs and make them ready for a night march to operational positions. Company commanders rushed about feverishly, pausing momentarily at the unit office or the quartermaster's store to pick up or leave pieces of paper, in much the same way that an express train picks up and casts off tablets at a wayside station. In odd corners of Signals' area officers and senior NCOs came together at intervals for a few brief moments, conversed in terse question and answer, and quickly dispersed again about their various occasions.

By 8 p.m. all vehicles were lined up in their appointed places in a leafy lane skirting the headquarters' area, where the Main Headquarters 2 NZ Division column stood ready to move. An hour and a half later the long column began the second most difficult night journey—the worst was yet to come—that the Division encountered in the whole African campaign. The route lay through Bianchi and Suani Ben Adem to the coastal road west of Tripoli, and then on through Zuara and Ben Gardane to Medenine, which was reached soon after midday next day, after a journey of 190 miles.

The presence of the New Zealand Division was to be completely concealed from the enemy, and accordingly a strict wireless silence within the Division was imposed. An extensive network of lines, however, was quickly laid out, and by 5 March, the day before the

Medenine battle began, in addition to duplicated circuits to 5 and 6 Brigades and Main Headquarters 30 Corps, there were direct lines from Main Divisional Headquarters to 4 Light Armoured Brigade and to Main and Rear Headquarters 7 Armoured Division. The CRA 2 NZ Division had separate circuits to 4, 5 and 6 Field Regiments and to the Commander Army Group Royal Artillery. The 201st Guards Brigade, whose rear line was terminated at Main Headquarters 7 Armoured Division, had a lateral circuit to 5 Brigade on its left. On 3 March, before 4 Light Armoured Brigade's line was laid, the only means of communication between Main Divisional Headquarters and the armour was by wireless. Arrangements were made to employ a Royal Signals operator from an air support tentacle set to operate the New Zealand set and so preserve the secret of the Division's presence in the area.

The Medenine battle began early on the morning of the 6th with heavy shelling of Eighth Army's forward positions. There was moderate shelling of the rear areas, and the Divisional Signals at Main Divisional Headquarters received a few heavy shells at first light. The battle—considered to be a model defensive battle—was short-lived, however, and by evening the enemy had withdrawn into the Mareth defences again. His losses amounted to fifty-two tanks, which fell to carefully sited antitank guns.

On 12 March Main Headquarters 2 New Zealand Division moved back towards Ben Gardane and then turned south-westwards along the Foum Tatahouine road on the first stage of the 'left hook' to turn the Mareth defences. The Division had passed from the command of 30 Corps the night before and was now New Zealand Corps, which had under its command 8 Armoured Brigade, King's Dragoon Guards, one field, one medium and one anti-tank regiment of Royal Artillery, General Leclerc's French from Chad, and a Free French column.

Main Divisional Headquarters approached Ben Gardane in the middle of the afternoon and continued along the Foum Tatahouine road. Early in the evening a halt was made while a meal was prepared to fortify the men for the long night march which lay ahead, and at 9 p.m. the column moved off again along the narrow, dusty road which was little better than a cart track.

All that night they travelled on what was probably the most difficult night march encountered in the African campaign. Sometimes the vehicles crept along at a snail's pace, the drivers straining their eyes ahead to keep the rear of the vehicle in front in view lest they might wander from the track. The dull, drab colouring of their vehicles' bonnets and mudguards merged into the grey background of the track and surrounding desert, so that they drove blindly except for the dim shapes which rocked and swayed ahead. Once in a dry riverbed some of the trucks and lorries lost contact and bumped their way through shingle and between huge boulders before they found their way back to the column.

At first light they were out on the almost indistinguishable desert track south of Foum Tatahouine and approaching Wilder's Gap, where the route passed through the Matmata Hills to the assembly area, where the Corps was to wait until 19 March in the best concealment from enemy air reconnaissance it could contrive.

Since the commencement of the move on 12 March a strict wireless silence had been imposed throughout the Corps, but in the assembly area an Eighth Army Signals No. 18M set manned by Royal Signals operators was used at Main Headquarters New Zealand Corps for traffic to and from Main Headquarters Eighth Army. This set had previously been attached to Main Headquarters L Force—Leclerc's French force from Lake Chad—where it and another detachment located with Rear Headquarters L Force had formed the terminal sets on an Eighth Army wireless group. All wireless traffic between Main Headquarters New Zealand Corps and Main Headquarters Eighth Army was to be routed through this No. 18M set detachment, which was to retain its L Force call signs and frequencies and by this deception conceal the New Zealanders' presence on the enemy's western flank.

New Zealand Corps assumed temporary ownership of four other

Eighth Army Signals wireless sets for the Tebaga operation; of these, two were SCR 245 sets employed by R Section at Rear Headquarters 2 NZ Division to provide communications between the Commander NZASC (Colonel Crump ²) and his two terminal stations at the New Zealand ammunition point and the New Zealand Field Maintenance Centre; the others were SCR 299 A sets—400 watt equipments—one of which at Main Headquarters NZ Corps provided the rear radio-telephony link to Tactical Headquarters Eighth Army. The fourth set, which was not brought into use until 17 March, was the Main Headquarters NZ Corps' terminal station on the 30 Corps- 2 United States Corps group. The SCR sets were United States Signal Corps' equipment.

The arrangement of this group requires some explanation. Thirtieth Corps, at that time breasting up to the Mareth defences, was in wireless communication with 2 United States Corps, which was advancing eastwards from the direction of Gafsa in central Tunisia towards the area Sfax-Sousse, on the Tunisian littoral north of Gabes. It was the plan of the Chief Signals Officer Eighth Army that as soon as New Zealand Corps' wireless silence was lifted—at 6 a.m. on 21 March, or on previous contact with the enemy—the Corps should establish wireless communication with the Americans, whereupon 30 Corps would drop out of the group and relinquish its control to New Zealand Corps.

All these fine details of wireless organisation—they included normal and alternative operating frequencies and call-sign book row numbers—were arranged by signal messages passed between the Chief Signals Officer Eighth Army and New Zealand Corps by the No. 18M set which 'intercepted' the pseudo-L Force traffic.

Early in the evening of 19 March New Zealand Corps commenced to move on a nine-vehicle front from the assembly area on the first stage of its march to the Tebaga Gap. The move was made in bright moonlight, but the going, which consisted of dunes and stretches of soft sand, made progress slow. The Corps halted at 2 a.m. after having covered about 40 miles, and lines were laid out immediately to brigades

and local headquarters' offices.

During this night move General Freyberg had received a message from Main Headquarters Eighth Army which said, 'BENGHAZI MINUS', code words meaning: 'We have information that the enemy is aware of your outflanking movement but there is no reaction'. There were several other code words, each of which conveyed different information according to the circumstances. For example, one code word meant that the enemy was aware of the movement and that his reaction was violent. As a result of this message, BENGHAZI MINUS, General Freyberg decided to push on at 8 a.m. and to break wireless silence an hour earlier. Accordingly, a few minutes before 7 a.m., all wireless sets opened up, and a few minutes later contact was established at good signal strengths on all circuits except that to 2 United States Corps, from whom no answer was received all that day, although they could be heard quite clearly continuing to work 30 Corps. For some reason 30 Corps had failed to relinquish control of the group to New Zealand Corps as previously arranged and was still using the group control call sign. This caused a good deal of confusion, and it was not until Lieutenant-Colonel Agar had sent off a number of signal messages to Chief Signal Officer Eighth Army that communication was finally established with the Americans next day.

All day on the 20th New Zealand Corps made good progress over very difficult going, and halted at 7 p.m. within sight of the country around the approaches to the Tebaga Gap. That afternoon, at 4 p.m., there had been an unfortunate incident when several American fighter-bombers swept over the column and dropped a number of bombs on the Divisional Artillery Headquarters' column. ³ This 'raid' was quite unexpected, especially as the planes' markings were plainly seen. One of the bombs exploded just at the rear of an H Section truck and killed Signalman Benfell, ⁴ who was riding on the back of the vehicle.

The Corps was away again at first light on the 21st. General Freyberg intended to achieve tactical surprise, and to do this he planned to move his corps swiftly on a narrow front across the difficult country

ahead and strike quickly and hard. The Corps halted at 4.30 p.m. near the approaches to the Gap. Main Headquarters 2 NZ Division was sited on an open, flat piece of country surrounded by high hills, from which the sounds of a brisk artillery duel reverberated back and forth in the calm evening air. Preparations were going forward quickly for an attack by 6 Brigade to capture a strongly held prominent feature, which lay in the centre of the Gap and immediately behind the broad minefield belt lying across the three-mile-wide portal.

Already Signals had encountered the usual difficulties in maintaining field cable where it lay at the mercy of roving vehicle wheels and armour tracks, so that L Section, which was endeavouring to carry lines forward from Headquarters 6 Brigade to the battalions' battle positions, soon had to call for B (cable) Section's assistance to enable it to maintain the lines in more or less satisfactory communication. Later in the evening, about an hour before 6 Brigade's attack was planned to commence—at 10 p.m.—the line maintenance problem became much more troublesome, probably because the moving armour and carriers could not see the field cable in the darkness and therefore made no attempt to avoid running their tracks along it. In several places great gaps were torn in the lines where the rapacious jaws of tracks had picked up whole lengths of cable.

Complaints began to come in to the Signal Office at 10.15 p.m. from G office that General Freyberg was unable to speak to the commander of 6 Brigade (Brigadier Gentry) because the line was either not through or was interrupted. Captain Foubister, who at that time was doing his shift as Signalmaster, stood these complaints off as long as possible with admirable tact and patience; but they became more and more clamorous until finally Lieutenant-Colonel Agar, who feared that he had already committed his Main Headquarters' cable-laying resources beyond a safe limit, decided to send an officer forward to ascertain the position and rectify it if possible. He instructed OC No. 3 Company, Captain Rose, to go forward quickly, find 6 Brigade and get the line into as good a state of repair as possible.

Rose set off in his jeep and in due course reached 6 Brigade's start line, where Brigadier Gentry was watching the progress of the battle. But the Brigadier was not interested in telephone communication with Main Headquarters, and said as much in so many words. At the moment, his manner said as plainly as any words, he was engrossed with the launching of the assault and wanted to get on with it; he would talk to Division later. So Rose, obeying Agar's instructions, took one of the B (cable) Section detachments that had been assisting L Section and began to lay another circuit back towards Main Divisional Headquarters. After halting several times to retrace its route and repair faults that had appeared already on the new line, the detachment eventually reached Headquarters Divisional Artillery, which lay some distance forward of Main Divisional Headquarters. Here the line was taken onto H Section's switchboard to restore communication between Main Divisional Headquarters and Tactical Headquarters 6 Brigade at the earliest possible moment.

Meanwhile 6 Brigade was pressing its attack and in due course captured Point 201, which gave New Zealand Corps an important vantage point in the Gap. During the difficult period when such strenuous efforts were being made to restore line communications, wireless had been working well within the restricted limits of use to which it could be put in the preparatory stages of the battle. Communication by wireless telegraphy on such an occasion was quite impracticable because of the delays in transmissions imposed by the enciphering and deciphering of operational messages. Obviously, too, radio telephony could not be used freely because of the risk of a premature disclosure to the enemy intercept services of New Zealand Corps' intentions.

So far in the first encounter with the enemy at Tebaga, Signals had sustained only one casualty. This had occurred about 4.30 p.m., when Signalman Feeney, ⁵ of H Section, was wounded at Headquarters Divisional Artillery by an enemy shell and died from his injuries half an hour later without regaining consciousness. Feeney was buried on the

spot by the chaplain of 64 Medium Regiment, Royal Artillery. The fact that his death was Signals' only casualty was poor comfort to Second-Lieutenant Toms, OC H Section, who had lost two men almost within twenty-four hours.

By this time the frontal attack on the Mareth line by 30 Corps had commenced. Although 50 Division had seized a bridgehead, it was having considerable difficulty in retaining it.

Throughout the day on the 22nd lines continued to sustain extensive damage from tracks and wheels, but by the evening much of the transport and armoured movement had subsided, and line communications became more stable. By the early hours of the morning on the 23rd, however, movement in the forward areas began to increase again, so that lines were again 'out' more often than they were 'in'. Fresh efforts by B (cable) Section to select alternative routes for the lines were unsuccessful because of the depredations of transport, which seemed to roam at will in the congested area in the approaches to the Gap.

The 24th passed quietly enough at Main Headquarters 2 NZ Division in the rear area, except for occasional enemy air activity, but nearer the front there was considerable movement as units took up their positions in front of the enemy's defences, which were now growing in strength with the arrival of fresh reinforcements.

Meanwhile the Army Commander and General Freyberg had drawn up a plan for reinforcing New Zealand Corps with 1 Armoured Division to breach the enemy's defences in the Gap and pass the armour through to exploit towards Gabes and El Hamma. Thirtieth Corps had lost its bridgehead at Mareth and suffered considerable casualties, so General Montgomery decided to send his armour, which had not yet been committed, on a forced march round to the west in time to sweep through the Tebaga Gap on the heels of New Zealand Corps' assault. This operation was to be called SUPERCHARGE II in perpetuation of its memorable predecessor, SUPERCHARGE, the second attack at Alamein which had broken

Rommel's defences in November.

As soon as preparations and redeployment of brigades commenced in readiness for the battle, which was timed to open at 4 p.m. on the 26th, signal communications problems grew apace. Those responsible for wireless circuits had no troubles; indeed, they had fewer than formerly because by this time 10 Corps had assembled south of New Zealand Corps and had taken over all circuits working to Eighth Army and 2 United States Corps. Since New Zealand Corps had left its assembly area on the 19th, wireless communications had been agreeably satisfactory; all traffic to and from the rear had been passed smoothly at good signal strengths, and forward of Main Corps Headquarters wireless had been used sparingly, principally because of its vulnerability to enemy intercept services or, as the old 1935 signal training manuals put it, because of its 'lack of security between its terminals'.

Lines, however, began to suffer almost immediately from the effects of tracks and wheels as transport began to roam restlessly again in the brigade areas. In the early hours of the 26th, before first light, B (cable) Section men began to show unmistakable signs of weariness from their labours of the last three or four days, which were eased only slightly by a Royal Signals line detachment coming forward from 10 Corps Signals to maintain and extend the Corps' line.

At 5 Brigade a tactical headquarters was already established on Point 201, the feature captured by 6 Brigade on the evening of 21st. From here K Section laid lines forward to 21, 23 and 28 Battalions' positions in their lying-up areas, where they would remain concealed throughout the day of the 26th in readiness to follow behind the opening artillery barrage. In 6 Brigade, on the left of the New Zealand sector, L Section had a simpler problem as only one battalion, the 24th, was to be employed in the attack. In both brigades the No. 11 wireless terminal sets were to be taken forward with the battalions' headquarters as the advance proceeded.

At 3.30 p.m. the fighter-bombers of sixteen squadrons, accompanied

by one squadron of Hurricane tank-busters and one squadron of Spitfires, appeared over the Gap and set about their task of creating havoc in the enemy's defences and rear areas in preparation for the main assault, which was to begin half an hour later. This timing of the attack in daylight was part of the plan to disconcert the enemy, who would expect the New Zealanders to follow their time-honoured precedent of attacking at night. Too many times in Egypt's Western Desert Rommel had won the toss and put the sun at his back. Now it was General Freyberg's turn to seize the advantage and, moreover, he had the weather gauge, for there was a stiff breeze at his back which would pick up the dust from the advancing armour and throw it in German faces.

At 4 p.m. the tanks of 8 Armoured Brigade rumbled over the start line and followed the artillery barrage, with the infantry close behind. During the attack communications with 5 and 6 Brigades' headquarters depended solely on the battalions' terminal wireless sets.

The attack pressed forward and reached the first objective without meeting serious opposition, but the advance towards the second objective lost some of its former precision and smoothness in the face of determined enemy resistance, especially on the left, where 24 Battalion ran into German machine-gun posts and had heavy casualties. By 6 p.m., however, the armour, followed closely by the carriers and leading infantry companies, had reached to within a short distance of the second objective. At this stage 1 Armoured Division, after its long and rapid march from Medenine, passed through the forward positions won by New Zealand Corps and laagered in a forward staging area to await moonrise, when the advance would be continued towards El Hamma.

Although the Gap was won, strong enemy resistance continued to hold up 28 (Maori) Battalion on the right of the sector, where a prominent feature, Hill 209, and a subsidiary feature about a thousand yards to its west, were strongly held by a German battalion. At 6 p.m., about the same time that the other battalions had almost reached their final objective, the Maoris gained possession of the lower feature and maintained a precarious foothold against spirited German counter-

attacks. An hour later Battalion Headquarters was established several hundred yards west of the lower feature, but the battalion commander (Lieutenant-Colonel Bennett ⁶) had no communication with Headquarters 5 Brigade by line or wireless, although the battalion's terminal wireless set No. 11 had not at any time lost contact with the control set at Brigade Headquarters. The set, therefore, could not have been readily accessible for Bennett's use, and he was thus unaware of the success achieved by the other battalions on the Corps' front.

Similarly, Brigadier Kippenberger knew little of what was happening in 28 Battalion's attack. About 6.30 p.m., therefore, he instructed 21 Battalion to send a patrol forward to tell Bennett to make contact with 23 Battalion and to report to Headquarters 5 Brigade by telephone as soon as a line from Brigade reached him. By the time 21 Battalion's patrol reached the Maoris, however, Bennett had already been in touch with Brigade Headquarters by wireless and expressed his anxiety about his open right flank. The Brigadier then instructed 21 Battalion to move a company up to the Maoris' right. It set off about 7.30 p.m., and with it went a party from K Section to lay a line. Soon afterwards line communication was established between Headquarters 28 Battalion and Headquarters 5 Brigade.

Except for a minor breakdown on 23 Battalion's terminal wireless set early in the attack, wireless communications were not interrupted throughout the battle. Early on the morning of the 27th a line was laid forward to 23 Battalion, and communications with Brigade Headquarters were fully restored.

On the left of the Corps' front continuous communication with Headquarters 6 Brigade had been maintained throughout the advance by 24 Battalion's terminal wireless set, installed in the CO's carrier. After the battalion reached its final objective a line was taken forward from Headquarters 6 Brigade by L Section linemen.

At Main Headquarters New Zealand Corps a warning order for a move went out early in the morning, but the headquarters sat about for most of the day awaiting the word to go. These were exasperating affairs, these long intervals of uncertainty in which drivers of vehicles sat continuously at their wheels ready to start their engines and move off. Finally the order went round that all vehicles were to go into column of route for a night move. The men looked sceptical and showed no alacrity in stowing the various bundles of gear and kit that had been progressively removed on some pretext or other from their vehicles during the long wait and now lay about on the ground in disorder. They stood around again for another two hours and then, suddenly, at 10.55 p.m., the head of the column moved off. It passed through the minefield and halted near the Roman Wall to bivouac for the night. There was some enemy air activity over the area during the night, and few men neglected to dig slit trenches beside their vehicles before they bedded down.

Next morning Corps Headquarters stood to at six o'clock, the time at which the column was to move on. At midday it was still waiting, but it moved off an hour later, only to halt again after a few miles. There were several of these short moves during the afternoon until, at 4 p.m., the column halted finally for the night.

Gabes was entered by advanced elements of New Zealand Corps just before noon on 29 March, when armoured cars of the King's Dragoon Guards and carriers of 23 Battalion reached the southern outskirts of the town, where they were besieged by an excited and clamorous population, the first friendly inhabitants to be liberated by Eighth Army. The KDG and 23 Battalion were just too late to prevent German engineers from blowing a bridge over a stream at the north-western end of the town. They noticed signs that the enemy had just completed his hasty withdrawal, but there was no evidence or smells of fresh paint which might have justified 51 (Highland) Divis- ion's later claim to have 'captured' Gabes.

Main Headquarters New Zealand Corps did not reach the town until early next morning, having made a slow and tortuous march around the

foothills and through narrow defiles, where the column several times was forced to break down into single file to negotiate the difficult going.

By 31 March New Zealand Corps was assembled in the area to the north of Gabes, and here it relinquished its identity as a corps and became 2 New Zealand Division again, under the operational control of 30 Corps, but under 10 Corps for administrative purposes.

Although the battle for the Tebaga Gap reached several high pitches of intensity in the various stages between 21 and 29 March, Signals came off lightly in casualties, both in men and equipment. None of the sections at Main Headquarters New Zealand Corps, at the headquarters of brigades or at field regiments had any losses. In addition to H Section's unfortunate loss of Benfell and Feeney at Headquarters Divisional Artillery, Signals at Rear Headquarters New Zealand Corps, under the command of the Quartermaster (Captain Waters), lost Lance-Corporal Forbes, 7 who with another man, Signalman Pirritt, 8 was salvaging parts of a wrecked jeep in an unmarked minefield near Rear Headquarters when he stepped on an S-mine, from which a splinter struck him in the chest and killed him instantly. Pirritt escaped with wounds in his left leg and arm.

By this time the enemy was withdrawn behind prepared positions at Wadi Akarit, one of the principal features in the narrow coastal plain north of Gabes, but it was not known if he intended to stand there and fight. By the evening of the next day, however, it was fairly clear that he intended to stay, and preparations were begun immediately to turn him out and resume the advance.

The assault on Wadi Akarit was commenced on the night of 5-6 April by 30 Corps, with 51 (Highland) Division on the right, 50 Division in the centre, and 4 Indian Division on the left. On the opening of a breach in the enemy's defences by these three divisions, 2 NZ Division was to pass to the command of 10 Corps for exploitation; meanwhile it waited in the rear ready to move forward quickly. By the evening of the 6th both flank divisions had reached their objectives, but in the centre the attack had

not gone forward so well, and 10 Corps was not able to pass through.

Throughout 10 Corps' forming-up area there was a full layout of line communications, but the cable suffered dreadfully from the extensive movement of tracks and wheels in the approaches to the bridgehead. Because of the acute frequency congestion caused by the convergence of both 10 and 30 Corps on the same axis of advance, wireless communications also began to suffer, and sets were trimmed back by reduced aerial dimensions to the minimum radiation consistent with stable signal strengths. In addition, the calibration of all sets was checked daily against wavemeters and standard frequency transmissions.

During the night of 6-7 April there were signs that the enemy was withdrawing from his Akarit defences. By the morning of the 7th he had gone, and the New Zealand Division moved off, headed by 8 Armoured Brigade, Divisional Cavalry and King's Dragoon Guards, after which came 5 Brigade. After a series of short moves and long halts throughout the day, the Division finally passed through the minefield gap between two of Aka- rit's main defensive features. It halted at 7 p.m. on the Tunisian plain north of Akarit. Lines with superposed Fullerphone channels were immediately put out to Headquarters Divisional Artillery, 8 Armoured Brigade and Headquarters 5 Brigade. As the Division had again taken a mobile role, the main burden of communications fell on wireless, which was now so badly affected by frequency congestion that even the Main Divisional Headquarters forward RT control group became almost unworkable at times.

The advance continued throughout the next five days, in which 8 Armoured Brigade and 5 Brigade squabbled briefly with the enemy rearguard.

The Division entered Sousse early on the 12th, and later in the day 28 (Maori) Battalion occupied the village of Sidi Bou Ali. Main Divisional Headquarters managed to get onto the main road for a spell on the 12th and bowled along at a spanking pace in column of route. As they passed

through villages and small towns, the men leaned out from the backs of the three-tonners to acknowledge the enthusiastic greetings of the populace waving Union Jacks and Allied flags, including one which someone said was called the Stars and Stripes.

In the afternoon of the 13th 5 Brigade reached the enemy's 'twenty-five yard line' at Enfidaville and attempted to seize a high feature called Takrouna, just to the west of the town, but the enemy was not to be caught off balance and offered stiff resistance. The brigade settled down in front of Wadi el Boul, a difficult obstacle which ran across the front from east to west.

Main Divisional Headquarters passed through Sidi Bou Ali, a squalid little village, on the 14th, and settled into position among the olive groves a few miles to the north. It was a beautiful spot, and few among the men had ever seen wild flowers in such profusion. The old-timers looked at the blossom-decked swards and remembered the breath-taking beauty of Greece's pasture lands, where the scarlet poppies blazed in their hundreds of thousands on the plains of Thessaly; they thought, too, in shorter memory, of the meadows of the Lebanon decked out in a carpet of anemones and poppies; but they had seen nothing like the infinite variety of colour where Tunisia's wild garden was spread. Here the soft shades of golden daisies merged gently into the blue of gentians and the scarlet of the poppies in such subtle gradation that the elusive shades and half tones of colour were almost lost to the eye. In some places the poppies marched alongside the green barley crops in unbroken patterns of vivid scarlet; in others the natives tilling between the olives had, with unconscious artistry, left splashes of red and white and blue lying against the brown soil.

The bivouac of Main Divisional Headquarters lay some distance off the main road along a low grass embankment, flanked on one side by the fringes of the olives and on the other by meadowland which reminded the New Zealanders of the green sward under the willows along the verges of the shingle beds of South Island rivers. But their stay in this pleasant retreat was short; the headquarters moved on two days

later to another site only slightly less sylvan than the first. Here the vehicles brushed to a halt under the green canopy of the olives, beneath which the wild flowers grew in the same profusion as in the meadows at Sidi Bou Ali. Here and there among the groves, in small and irregular patches of cultivation, the men found beds of homely green peas and broad beans with which the Arabs eked out their frugal livelihood.

During the advance from Akarit to Sidi Bou Ali Signals sustained no casualties until the 13th, when Signalman Cox, ⁹ a despatch rider of K Section, and the jeep in which he was taking an orderly from Main to Tactical Headquarters 5 Brigade, disappeared without trace, although most people had a fairly accurate idea of where he had gone. It all happened as a result of some silly confusion at Eighth Army or Corps caused by the shortening of a 'bound' without an accompanying change of code-name. This bound, or objective line, which went by the unedifying name of SAUSAGE, originally lay at Enfidaville, but was later placed some distance south of the town. The forward troops knew quite well where the new objective line lay, but apparently not everyone at Corps or Army did, so that when someone there said SAUSAGE to the public relations people, off went a despatch to the BBC, which announced that evening that Enfidaville had been captured.

If Cox heard this broadcast he must have got off the mark very quickly, because he left Main Headquarters 5 Brigade at 6 p.m. and was not seen again. There was a strong suspicion that he had driven on past Tactical Headquarters 5 Brigade, of whose location he had been given most detailed and explicit directions, and gone on into Enfidaville for some reason or other not so difficult to guess. This was more or less confirmed later when he was notified as a prisoner of war. Several other people, including two senior Royal Engineer officers and the Quartermaster of Divisional Cavalry, who had heard the BBC announcement, were accorded a civic welcome by the Germans in Enfidaville but did not stay.

Signals incurred another casualty on the 14th, this time a fatal one,

when Signalman Holder, ¹⁰ of C Section, attached to Divisional Cavalry, was killed by an enemy shell. Next day a casualty occurred in G Section, attached to 6 Field Regiment, when Signalman Childs ¹¹ sustained severe wounds from shell fragments and died shortly afterwards at 6 Field Ambulance.

The area in which Eighth Army now faced the enemy for the final act in the North African campaign possesses two principal features. The Dorsale, an extension of the Saharan Atlas in limestone and sandstone outcrops of irregular contour, stretches from the Algerian frontier in the south-west towards the north-east and ends in a number of djebels, of which Zaghouan is the most prominent. From Zaghouan a series of rocky outcrops breaks away from the main massif in a south-easterly direction almost to the coast to the north of Enfidaville, and of these Takrouna, which is the most southerly of the features, is sufficiently high—600 feet—to overlook the whole of the coastal plain in the neighbourhood of Enfidaville. The narrow coastal plain, the Sahel, which at its southern extremity is separated from the Tunisian Sahara by the chotts (salt lakes) and palm groves around Gabes, ends in the north at Hammamet, north of Enfidaville. To the west the plain merges gradually into a series of steppes which rise towards the Saharan Atlas. The plain is dominated by Takrouna and the Djebel Garci, a forbidding and massive feature some distance to the west.

Since 13 April 10 Corps had been shouldering forward and testing the German defences. By the 15th it was clear that the enemy intended to stand on the Enfidaville line, so preparations for Eighth Army's part in a general offensive to end the war in Africa commenced immediately.

A decision had already been taken that the main offensive would be launched in the north. On 12 April General Alexander had ordered First Army to prepare a large-scale offensive to capture Tunis and to cooperate with 2 United States Corps in its task of capturing Bizerta. The offensive was to begin on the 22nd. With the object of drawing enemy forces from First Army's front, General Montgomery had been ordered to

attack on Eighth Army's front on the 20th.

In due course 10 Corps' operation order directed the deployment of the Corps' formations and assigned to 2 New Zealand Division and 4 Indian Division the task of breaching the enemy's defences. On the right of the Corps' front, 50 Division was to hold the eastern sector facing Enfidaville; 2 NZ Division was to break in from Takrouna to Djebel el Ogla, a smaller feature 2000 yards to the east, and then exploit northwards and north-westwards; 4 Indian Division, with its western flank protected by 7 Armoured Division, was to capture Djebel Garci and exploit northwards and north-eastwards towards the coastal road.

New Zealand Division's orders for the operation, which was known by the code-name ORATION, were published on the 18th, and preparations were commenced immediately at Headquarters Divisional Signals for the provision of the vast network of line communications to serve 5 and 6 Brigades and the Divisional Artillery. In addition to its own three field regiments, the last had under command two Royal Artillery regiments, one of medium guns and the other of 25-pounders. In order that these artillery units might be adequately served, a signal centre was established forward of Headquarters Divisional Artillery, and from there lines went out to all regiments, which in turn were connected by separate circuits to the headquarters of brigades, so that in most cases the means of communication between the various headquarters was duplicated.

Wireless communications followed the conventional pattern and presented no special problems, except that the frequency congestion brought about by the heavy concentration of the wireless stations of 10 Corps crowded into the coastal plain below Enfidaville continued to hamper the smooth working of most circuits, despite Corps' strenuous efforts in policing all groups to keep them strictly to their assigned frequencies.

By 8 p.m. on the 19th Tactical Headquarters 5 Brigade had moved forward across Wadi el Boul and was established immediately south of

the Enfidaville-Pont du Fahs road, about 3000 yards south of the southernmost face of Takrouna, and from there K Section laid lines forward to the headquarters of 21 and 28 Battalions near their start lines. There was no intention that these lines should be extended forward behind the battalions as they advanced, the 5 Brigade operation order merely stating that 'lines were to be laid at earliest opportunity', which meant, presumably, as soon as the battalions were on their objectives. The CO 28 Battalion, however, instructed his signal platoon to extend the brigade line as his headquarters advanced, but the platoon's line truck was struck by an enemy shell in the early hours of the next morning and was put completely out of action. In any case the line was of little use, as a group of Scorpion tanks detonating mines in the battalion's rear apparently followed the same route and flailed the cable into pieces.

At 10.30 p.m., half an hour before the attack was timed to commence, 21 Battalion went off its line, which was then joined through by K Section to the battalion's B Company line. This line was left on the ground to provide communication from Tactical Headquarters 5 Brigade to Headquarters 23 Battalion, then moving to its forming-up area on the right of 21 Battalion's old position in readiness for the second phase of the attack.

Owing to the difficult ground over which 5 Brigade's attack was to pass, the battalions' terminal No. 11 wireless sets were to be left on the start line and their places taken by No. 18 sets until the objectives were reached. If all went well the No. 11 sets were to be called forward in their vehicles and were to wait as far forward from the start line as they could negotiate in the darkness and difficult going.

The No. 18 sets were all knocked out early in the advance by enemy fire, with the result that no means of communication existed with Tactical Headquarters 5 Brigade. Some hours after the attack started—in the early hours of the 20th—a runner was sent back from Headquarters 21 Battalion to bring its No. 11 set detachment forward. He found the set near the start line and began to lead it forward, but after a time he

lost direction and could not locate the battalion's headquarters. In the vicinity of a white house, a prominent feature just south of Takrouna, he and the two K Section operators, Signalmen Wiseman ¹² and Faithfull, ¹³ cast about in the darkness in an effort to find the battalion headquarters. While they were searching on foot they came under heavy enemy machine-gun fire and made off quickly back to their truck. Faithfull tumbled into the driver's seat with the runner beside him, but drove off too quickly for Wiseman who, still scrambling over the tailboard, was thrown to the ground and left behind. Faithfull drove the truck into the shelter of a wadi, where he discovered that Wiseman had vanished, so he started up his set and called Headquarters 5 Brigade, to whom he related his adventures. Instructed to return to Brigade Headquarters, he set off and shortly afterwards encountered 21 Battalion, which was then on its way back to its former position after having failed to reach its objective.

Meanwhile Wiseman, having lain low in a barley field under the fire which still fell in the area round the white house, crawled on his stomach for an hour until he reached the shelter of a shallow wadi, where he was able to get to his feet and make his way back in the direction of Brigade Headquarters. Soon after dawn he rejoined Faithfull and the set at Headquarters 21 Battalion, which was now in its former position only a few hundred yards from Tactical Headquarters 5 Brigade.

The 28th Battalion's terminal No. 11 set, which apparently was not left at the start line to be whistled up later, accompanied the battalion transport moving behind Battalion Headquarters. About half an hour after the advance started the truck, a Morris four-wheel-drive vehicle, plunged into a weapon pit in the darkness and broke its chassis; it was then taken in tow by a battalion anti-tank portée. About two hours later, while the vehicle was still in tow, the set's aerial and some of its batteries were destroyed by splinters from a shell which also completely destroyed 28 Battalion's signal platoon line truck travelling a few yards ahead of the wireless truck. By the time Signalman Reader ¹⁴ and his companion had repaired this damage and connected up the spare set of

batteries, the first light of dawn was in the sky. Communication with Headquarters 5 Brigade was restored, but was of little use as most of the officers at Battalion Headquarters, including the CO (Lieutenant-Colonel Bennett), were wounded, and there was little or no battalion organisation.

The 23rd Battalion, whose task was the capture of Djebel Froukr—the second phase of 5 Brigade's attack—moved off from its forming-up area near Tactical Headquarters 5 Brigade towards the valley which lay between Takrouna and Djebel Bir, a smaller feature a few hundred yards to the east. It was to advance up this valley in the wake of 28 Battalion, whose final objective, just beyond the Enfidaville- Zaghouan road, was to be 23 Battalion's start line for the attack on Djebel Froukr. The 23rd Battalion's line from Tactical Headquarters 5 Brigade was not to be laid behind it as it moved; communications, therefore, were restricted to the No. 18 set, which was to be used until the terminal No. 11 set could be brought forward. This No. 18 set, however, was knocked out early in the advance, but the Adjutant (Captain Ross 15) went back a few hundred yards and brought up the No. 11 set, which fortunately was not far behind.

At the southern end of the valley between Takrouna and Djebel Bir the CO (Lieutenant-Colonel Romans) was wounded. Command was then taken over by Captain Thomas, ¹⁶ who led the attack and eventually reached the south-western slopes of Djebel Cherachir, north of Djebel Bir and beyond the Enfidaville- Zaghouan road. The No. 11 set, however, was not forward with him and his two companies, but remained under Ross's control at the southern end of the valley where Romans had been wounded. Communication between this set and Tactical Headquarters 5 Brigade was not interrupted at any time during the battle, but this was of little use to the Brigade Commander, who was completely out of touch with the events taking place at Djebel Cherachir, where Thomas had established his headquarters at a wadi junction on the south-western fringe of the feature.

On the right of the divisional sector the two assaulting battalions of

6 Brigade, the 24th and 26th, crossed their start lines behind the artillery barrage and advanced against slight enemy opposition towards the brigade objectives, Djebel el Ogla, a feature about a mile to the east of Djebel Cherachir, and Hamaid en Nakrla, a low ridge which ran roughly north and south to the east of Ogla. Both battalions' lines to Headquarters 6 Brigade were extended behind them as the advance proceeded, and the terminal No. 11 set accompanied the battalions' headquarters. No interruptions occurred to Headquarters 26 Battal-ion's line or wireless communications to Headquarters 6 Brigade, but on the left of the brigade sector Headquarters 24 Battalion came under some heavy enemy shelling and the terminal No. 11 set was completely destroyed by a direct hit, which wounded its two operators. The shellfire was causing trouble to the line back to Headquarters 6 Brigade, too, so that 24 Battalion was frequently out of touch with Brigade Headquarters. During the interruptions to his line Lieutenant-Colonel Conolly ¹⁷ managed to send some of his messages to Headquarters 6 Brigade through Headquarters 26 Battalion, on his right, by means of its line.

By first light on the 20th the Division was in only partial possession of its objectives. Although communications between Headquarters 6 Brigade and its forward battalions had been fully restored, the situation in 5 Brigade's sector on the left was not nearly so satisfactory. Communications to Headquarters 21 Battalion, now back in its former position a few hundred yards from Tactical Headquarters 5 Brigade, were easily restored by line. There was still no direct communication by line or wireless with Tactical Headquarters 23 Battalion below Djebel Cherachir, although the battalion's terminal No. 11 wireless set, still with the Adjutant at the southern end of the valley, had been working back to Tactical Headquarters 5 Brigade without interruption since the attack commenced. From Headquarters 28 Battalion, now established in the olives near the south-eastern corner of Takrouna, there was still no communication with Brigade Headquarters.

During the morning K Section attempted to take a line forward to 28 Battalion, from which it was to be extended on to Tactical Headquarters

23 Battalion at Djebel Cherachir, but the line party could not get forward owing to heavy enemy small-arms fire. The line was terminated temporarily in the wadi where Captain Ross of 23 Battalion still remained with his wireless set; by three o'clock that afternoon it was taken forward to Headquarters 28 Battalion, and later, about five o'clock, on to Tactical Headquarters 23 Battalion. It was about this time that Ross decided to rejoin his battalion headquarters with the wireless set; the set was mounted in a jeep and he drove under heavy enemy shellfire until he reached the road just south of Djebel Cherachir. Here he organised a carrying party of enemy prisoners to manhandle the set and its heavy batteries up the wadi to where Captain Thomas had established his tactical headquarters. From then on communication with Headquarters 5 Brigade continued uninterrupted.

Meanwhile, from 21 Battalion's positions near Tactical Headquarters 5 Brigade, some enemy machine-gun posts had been observed on the western slopes of Takrouna; these posts were pointed out to a forward observation officer who was observing 4 Field Regiment's fire from a position just to the north of Tactical Headquarters. The FOO could not see the posts from his position, so some cable and the services of two signalmen were obtained from 5 Brigade and a line was laid forward from the FOO's armoured car until the enemy posts could be seen. A 21 Battalion officer called corrections back to the FOO's armoured car, which in turn brought down fire from 4 Field Regiment on the enemy positions with gratifying results. Later in the afternoon, however, some tanks entered the area and damaged the telephone cable to such an extent that the observed artillery fire was interrupted.

Early that morning, about daybreak, a party of about a dozen Maoris of 28 Battalion had succeeded in scaling the south-eastern and south-western faces of Takrouna and had seized the pinnacle. During the afternoon they were reinforced by a platoon from 21 Battalion, which had hardly arrived when two enemy parties attacked in a most determined fashion. After a bitter struggle, which ended with the feature still in possession of the Maoris and 21 Battalion men, several attempts

were made to gain touch with Headquarters 5 Brigade by means of a No. 18 set, but without success. Then a line was laid to the pinnacle from the armoured car of a 5 Field Regiment FOO in the olives below the feature, but it was destroyed by enemy shellfire within a few minutes of being laid. Later, in the early evening, another line was run to the pinnacle, this time by the signal platoon of 28 Battalion, and connected to 28 Battalion's switchboard, through which communication was immediately established with Tactical Headquarters 5 Brigade.

Soon after nine o'clock that evening the small garrison was reinforced by another platoon from 21 Battalion, but hardly had the newcomers arrived and settled in when the enemy attacked again and this time secured possession of the pinnacle, which he retained throughout a period of brisk exchanges of grenade and small-arms fire with the defenders on the lower ledge until midday next day. During this spirited fighting Lieutenant Shaw, ¹⁸ one of 21 Battalion's officers, spoke several times to Tactical Headquarters 5 Brigade through 28 Battalion's exchange.

It was during one of these conversations, while Shaw was



ITALY MAP No.1

speaking to the Brigade Major, that a sudden interruption occurred and Shaw, with a hurried excuse, put the handset of his telephone down without replacing it on the instrument and hurried off to help repulse another enemy sortie on the pinnacle. The Brigade Major laid his handset down on the table where, like a miniature loudspeaker, it emitted the sounds of strife on Takrouna. The operators at their wireless sets and all the others in the armoured command vehicle paused from their tasks to listen to the crunch of grenades, rifle shots, and angry yells which came from the telephone handset like the sound effects of a radio play. Soon the tumult died away and Shaw came back to his telephone, bawled a few times to attract attention, and then resumed his interrupted conversation.

Meanwhile, on the previous night 25 Battalion, which had been lying in reserve at 6 Brigade, had passed to the command of 5 Brigade and relieved 23 Battalion, which was withdrawn from Cherachir shortly after midnight and brought back to the rear. The line running forward from 28 Battalion to Cherachir was taken over by Headquarters 25 Battalion and remained, of course, the responsibility of K Section for maintenance.

Throughout the whole of the 21st all lines in 5 Brigade's area suffered heavily from shell and mortar fire, the line between 28 Battalion and Takrouna, in particular, being continually disrupted by enemy fire. By the morning of the 22nd, when K Section's detachment laid out another line, this time between 25 Battalion at Cherachir and 24 Battalion on the left of 6 Brigade's positions, to serve as an alternative means of communication, the linemen under Corporal Davies ¹⁹ were almost in the last stages of exhaustion. Since the attack started the detachment had worked almost continuously for three nights and two days, often under direct observation from enemy positions and, particularly during maintenance work on the line between 28 Battalion and Takrouna, under heavy mortar and shell fire. Laying the line between 25 and 24 Battalions on the morning of the 22nd was a particularly hazardous task as the route lay along a fireswept wadi for a considerable part of its length, but Corporal Davies and Signalman Nilsen exhibited exemplary coolness and an almost complete disregard

of danger. For their work during the Takrouna battle Davies received the MM and Nilsen a bar to the MM he had been awarded for his work at Headquarters 4 Brigade the previous July in the Ruweisat battle.

In the Enfidaville battle Signals escaped lightly in casualties, only eight men being wounded, including Signalmen Miles ²⁰ and Richards ²¹ of L Section, who were the operators on 24 Bat-talion's terminal No. 11 set when it was destroyed by enemy fire on the morning of the 20th, and one man killed, Signalman Franklyn ²² of G Section at 6 Field Regiment. Franklyn, with three other men from G Section, was laying a line from Headquarters 6 Field Regiment to Headquarters 65 Field Regiment, Royal Artillery, when his truck ran over a mine near the Kairouan road just south of Enfidaville. The truck was completely wrecked and Franklyn, who was driving, was killed instantly.

On the night of 23-24 April 5 Brigade was relieved by a Highland brigade and withdrawn from the front, but it was not until the night of 26-27 April, after it had been employed in operations around Djebel es Srafi and Djebel Terhouna, three miles to the north of Enfidaville, that 6 Brigade was withdrawn.

While 5 Brigade was in a rest area behind the Takrouna positions a parade of K Section in full inspection order was addressed by Brigadier Kippenberger, who paid the men a most agreeable and handsome compliment for their work during his tenure of the brigade's command. His remarks can best be given in his own words:

The more experience I have of war the more I realize how valuable Signals are. During the last three months, in fact, the last six months, or ever since I took over command, this Section has rendered valuable service. The exchange operators, wireless operators and particularly the linemen, have done excellent work. The linemen have done almost impossible work under extremely difficult conditions.

This Section of Signals is appreciated and, despite the fact that you have to put up with irascible Brigadiers and Brigade Majors, we have

always received courteous and efficient service.

Words are cheap and, as you know, I am not one to throw praise about but I would like you all to know how much we appreciate the good work you have done.

Thank you.

Although both New Zealand brigades were now withdrawn from the line, the Divisional Artillery remained in position in the Enfidaville area where the New Zealand guns were to assist in the extensive artillery support to be given 10 Corps' proposed operations to push northwards along the coast. The scale of line communications within the Divisional Artillery remained very much as it had been at the start of the Enfidaville operations a week earlier, that is, the largest that the formation had ever employed in the whole of the African campaign.

By this time the linemen at the field regiments' signal sections were beginning to feel the strain imposed by the unceasing work of maintaining lines in good repair under heavy and continual enemy shellfire, so on 28 April arrangements were made at Headquarters Divisional Signals for some of No. 1 Company's men to give them a short spell. No. 1 Company was in fair shape to do this because the previous day Main Divisional Headquarters had moved back from its battle position in the cactus hedges below Enfidaville to a pleasant spot in the olive groves seven miles to the rear. Here an easy routine was adopted in which no work, except for those employed on essential duties, was done after lunch at midday. Bathing parties were taken in unit transport to the beach at Herglia, and for those who remained behind sports were arranged in the Divisional Headquarters' area. Here, too, unusually willing fatigue parties rounded up by the RSM gathered several plots of green peas in full pod and shelled them for the men's mess.

Meanwhile 10 Corps' plan to push northwards along the coastal sector, which General Freyberg had regarded with only lukewarm interest because of his opinion that it would achieve only a limited

success, had been postponed because of the failure of one of its subsidiary operations. The 56th (London) Division, on the coastal sector, had seized some advantage north of Enfidaville, but had been thrown off its new ground by an enemy counter-attack. At this setback General Alexander, the Deputy Commander-in-Chief Allied Forces in French North Africa, ²³ authorised the abandoning of Eighth Army's attack, as 56 Division's failure was not likely to affect the plans for concluding the war in North Africa.

On 30 April 7 Armoured Division and 4 Indian Division were detached from Eighth Army and sent to reinforce First Army for the operations planned to break into the enemy's defences and capture Tunis and Bizerta. Eighth Army's policy was now to hold its existing line and exert pressure by limited attacks. The 1st Free French Division, from 19 French Corps, came under the command of Eighth Army, which then had a total of four divisions plus two armoured brigades. The Army Commander decided to use 56 Division and 1 Free French Division to hold the line, keep 51 (Highland) Division in reserve, where it might begin training for the Sicilian operations, and to use 2 New Zealand Division and one armoured brigade for operations on the western flank of his front.

General Alexander's plan was for 9 Corps—reinforced by 7 Armoured Division and 4 Indian Division—to strike the main blow from Medjez el Bab towards Tunis during the night of 5-6 May and break into the enemy's defences. When this had been accomplished, the armour was to break through the breach and assail the enemy's inner defences around Tunis before he could strengthen them sufficiently to repel the British thrust. In the north 2 United States Corps was to continue its attacks and capture Bizerta. On the right of First Army's front 19 French Corps was to attack north-eastwards on 4 May to capture Djebel Zaghouan, while the New Zealanders, from the Djebibina area on Eighth Army's left, attacked northwards to support the French right flank.

Main Headquarters 2 NZ Division moved to the Djebibina area on 4 May along narrow, dusty tracks on which the column was held up

several times by heavy traffic congestion. On arrival in the divisional area Signals put out the usual line communications, with the addition of a lateral circuit to 1 Algerian Division to provide communication to 19 French Corps. On the 7th a No. 9 wireless detachment, under the A Section sergeant, McConway, ²⁴ was sent off to join 1 Algerian Division. The detachment was back in a few days and, although no one would ever dream of describing Jack McConway as a timid person, his forceful description, embellished by a careful choice of singularly appropriate adjectives, of the disadvantages of serving with French North African irregulars caused much amusement.

In the early hours of 6 May 9 Corps broke through the enemy line near Medjez el Bab after a full-scale attack and some bitter fighting. By the middle of the morning the corps was well inside the enemy defences and 6 and 7 Armoured Divisions had passed through the breach. That night the armour was half-way to Tunis; the enemy, his forces cut in two, was not able to organise resistance in any strength. Ninth Corps' armour entered Tunis during the morning of 7 May and that afternoon 2 United States Corps entered Bizerta. Enemy troops, including some old acquaintances of the New Zealanders, 15 Panzer Division, were trapped in the area between Tunis and Bizerta and surrendered on 9 May. On the day after the fall of Tunis 6 Armoured Division drove on from the city towards Hammam Lif, with the intention of cutting off the base of the Cape Bon peninsula and so prevent escape to the beaches in the northeast from which the Germans might attempt to stage a Dunkirk. But the tanks met stubborn resistance in the narrow defile between the sea and Hammam Lif and did not reach Hammamet until the evening of 10 May, two days later. By then, however, the enemy was completely surrounded and evacuation no longer possible.

In the meantime, after limited operations by 5 Brigade on the left of Eighth Army's front, 2 NZ Division had moved back to the Enfidaville area on 8 May in order to be able to take advantage with 10 Corps of any signs of weakening in the enemy defences north of Enfidaville. Fifth Brigade, relieved in the Djebibina area on 9 May by 4 Light Armoured

Brigade and L Force, returned to the Enfidaville area and rejoined the Division.

Throughout 11 May the enemy, far from showing any signs of surrendering, continued to bring heavy artillery and nebel- werfer fire down on 10 Corps' positions in front of and around Enfidaville. But the end was not far off. The 6th Armoured Division had pushed down the coast and by last light on the 11th was just to the north of Bou Ficha. Farther to the north a First Army formation had combed the Cape Bon peninsula, captured many prisoners and vast quantities of equipment, and brought organised resistance there to an end.

The morning of 12 May brought undiminished enemy artillery activity north of Enfidaville, although the pattern of fire suggested that he was shooting away his ammunition. To encourage his surrender heavy artillery concentrations and powerful air strikes were employed, and in the afternoon 90 Light Division sent out a wireless message asking for terms. By 8 p.m. the surrender of the enemy forces trapped between 6 Armoured Division and 56 Division was complete. General Count von Sponeck, commander of 90 Light Division, surrendered to 6 Armoured Division.

At Main Headquarters 2 NZ Division interest centred in an exchange of wireless messages between the Italian First Army, still holding out opposite the centre of Eighth Army's front, and a Divisional Signals wireless set No. 9 which had been switched to intercept duties to pick up any traffic which might interest the G staff. At 4 p.m. on the 12th the New Zealanders heard an Italian First Army set trying to make contact with the British First Army by both speech and telegraphy. During the afternoon messages had been broadcast by several British formations calling on the enemy to surrender, and it was in answer to these messages that the Italians, urged by their well-developed instincts for self-preservation, were attempting to establish communication with the British First Army. At one stage they succeeded in netting to a British First Army group, but some operating delays and a falling off in signal strength resulted in confusion, which was still further increased by

other British stations interrupting the transmissions in endeavours to make contact with the Italians.

At half past eight that evening a message broadcast by the Italian First Army was copied by 2 New Zealand Divisional Signals' set and passed to the G staff for transmission to 10 Corps, who then asked if the Division would establish a link with the Italians. A No. 299A set brought into use for this task was thoroughly warmed up and carefully adjusted to the Italians' operating frequency of 3460 kilocycles. At 9.15 p.m. the Italians came up with a call to British First Army, but no answer was made. This was the signal for John Shirley, his enthusiasm properly aroused, to go into action. Ever since the Italian broadcasts had commenced he had been running between the set and the G office with all the eagerness of a Boy Scout trying to cram a week's good deeds into one day. He immediately instructed the operator to open transmission and send off 10 Corps' first message to the Italians, which read:

Commander First Italian Army from Commander 10 Corps. Hostilities will not cease until all troops lay down their arms and surrender to the nearest Allied unit.

Later, at 10.23 p.m., the Italians replied:

Reference your message. Our representatives have left to meet yours at 2200 hours your time. We have nothing further to add.

No signal procedure difficulties were encountered in these exchanges as both parties had a knowledge of the international Q code, and the Italians displayed an astonishing familiarity with British Army signals procedure.

No other messages were passed that night, except for one or two exchanges of 'operators' chat', in one of which the Italian, in an unmistakable American East Side accent, suddenly said to Shirley, 'Say Buddy'. Before Shirley could switch to 'send' to comply with this innocent request which sounded like part of a parlour game, the Italian

went on: 'Suppose you stand me a drink when this show is over?'

At first light next morning a British First Army station began to cause interference on the Italian link, so Shirley asked the Italian operator to shift down to 3440 kilocycles. The correspondence opened at 5.20 a.m. with a message from the Italian *First Army*:

We would appreciate information about our two representatives which left last night at 22 hours to meet your own representatives. This information is required at once in order to give orders so as to avoid useless bloodshed.

Then, at 6.15 a.m.:

I once more state that acting upon British First Army suggestion Italian representatives have left last night to meet British representatives and discuss conditions. Subsequently, in order to avoid further bloodshed I have ordered my troops to cease all firing and all hostilities. Signed Field Marshal of Italy Messe.

But, at 7.5 a.m., in a cautious access of Italian valour:

I understand that coloured troops are attacking the defence line of the Italian Army in area 6 kilos SSE Saouaf. As I have stated I have ordered my troops truce (?) I request that the attack be stopped immediately in order to avoid a reaction of my troops and consequent bloodshed. Signed Field Marshal of Italy Messe.

By this time a message, originated at 10 Corps at 7 a.m., was on its way:

Commander Italian First Army from Commander 10 Corps. Understand reps to be on their way. They have not yet arrived. Instruct your troops to lay down their arms and surrender otherwise hostilities will continue.

Apparently, this was too much for Field Marshal Messe, for at 8.55 a.m. came the plaintive reply:

As my proposal for a truce to give time for my reps to carry out their orders has not been accepted and as your troops are still carrying on their attack in the Saouaf area and considering the fact that my reps sent out at 2100 hours yesterday date 12 to First British Army have not yet returned have ordered my troops to lay down their weapons. Signed Field Marshal Messe.

The Commander 10 Corps allayed Field Marshal Messe's anxiety concerning his representatives at 9.30 a.m. with another message:

First Italian Army from British 10 Corps. Your representatives with a British officer carrying instructions have left for your headquarters. I have ordered my troops to cease fire pending your acceptance of these terms by 1230 hours today.

The Italians, their equanimity noticeably restored, replied at 11.23 a.m.:

British 10 Corps from Italian First Army. Your representatives have arrived here. They are speaking with our Commander. We have nothing further to add. We suggest closing down.

This was the last message to pass between the Italians and the New Zealand set. The link was kept open until 11.35 a.m., when a British intelligence officer from 10 Corps arrived at Main Headquarters 2 NZ Division and closed the set down, because (he said) he now had his own means of communication with the Italians.

At 2.45 p.m. that day, 13 May, General Alexander sent the following signal to Mr. Churchill:

Sir. It is my duty to report that the Tunisian Campaign is over. All enemy resistance has ceased. We are masters of the North African shores.

The end of the North African campaign, an event of tremendous importance in the course of the war, brought no excitement or exhibitant in the New Zealand Division. In Divisional Signals officers

and men went about their daily tasks much as they had done the day before, or for all that it mattered, a month before. Signal office shifts came and went, and linemen pottered interminably with their drums of cable and layers, but no unusual tinge of interest showed in their manner to mark the defeat of the enemy, unless the Quartermaster's announcement later in the day that there was to be an issue of two bottles of beer for all ranks next day was associated in some minds with a vague hint of official celebrations. The beer duly arrived about six o'clock next evening, but with it came news that swept away in a flash the men's anticipatory enjoyment. A frightened signalman from B (cable) Section had arrived at unit headquarters in a jeep and haltingly announced that Lance-Sergeant McIvor had been killed by the accidental discharge of a captured Italian pistol. McIvor and his companion had stopped on the road near Enfidaville to examine the contents of an abandoned enemy vehicle in which they found a wooden box containing a number of pistols. Unaware that one was loaded and cocked, McIvor had examined them cursorily and then tossed the box into his jeep. When the box landed with a jar on the floor of the jeep, the loaded pistol inside discharged its round, which penetrated the box's lid and struck McIvor in the chest, inflicting a wound from which he died a few minutes later.

In accordance with the plan for First Army to take over from Eighth Army in Tunisia, 2 NZ Division, which was not involved in the preparations for the Sicilian campaign, was withdrawn in the late afternoon to the south of Enfidaville. For the move back to Egypt the Division was divided into two flights, of which the first left the Enfidaville area on the morning of 15 May, followed by the second next day. Seventeen days later, on 31 May, the first flight crossed the Abbas bridge over the Nile at Cairo, after a journey of 1800 miles, turned right into the 'Mad Mile', and rolled its wheels along the blistering tarmac, over the familiar railway crossing beneath the pleasant groves of Maadi village, and into its old home, Maadi Camp.

Hardly had Signals settled in the Signal School when the unit was

paraded for an address by Lieutenant-Colonel Agar, who announced briefly the details of the Ruapehu furlough scheme, by which men of the First, Second and Third Echelons were to be returned to New Zealand on three months' leave.

The next event of importance occurred on 4 June, when General Freyberg reviewed a parade of Divisional Signals and addressed officers and men in these terms:

A large number of you are going back on well-earned leave to New Zealand. Towards the finish of our last remarkable campaign I felt I would like to see on parade as many of the troops of the Division as I could and to say a few words of appreciation of what you have done in the last three and a half years.

I don't remember seeing this whole Signal unit on parade in such strength before. I remember seeing you in 1940 up on top of the hill at the time when your late CO, Colonel S. F. Allen, was commander of you.

I hope you know what a very high appreciation everyone has of your work. This unit is probably the most experienced Divisional Signals unit in the world, partly because it has been recruited intelligently and picked from people with prior training, while there is also the additional system which ensures that there is always an adequate reserve of trained personnel. This unit, probably more than any other, has a greater length of war service than anybody in the Middle East and, therefore, of anybody in the British Army.

I remember with considerable pride the part that Divisional Signals took in the original campaign in the Western Desert when the Italians were driven back to Benghazi for the first time. Since then representatives of your Corps have been taking part in every activity or campaign of the Division. The amount of experience we have gained is very great and we have got to see that the same standard of efficiency is maintained notwithstanding the fact that 250 of our men are going back to New Zealand.

I don't know whether you realize the importance of this Signal Service. During those very difficult operations that we carried out in the Division from Alamein to Tunis the whole of the control of these large forces of ours depended almost entirely upon the intelligent use or silence of our wireless communications. And I am saying further that a good deal of the efficiency of the operations was dependent on the work of the officers and men of this Divisional Signals. I want you to know how much your work is appreciated.

Praise is a good thing but I hope that when you go back to New Zealand you will remember two things: the first is to remember that the war is not yet over. It is a long way from being over. And the second thing to remember is that although, in enthusiasm for our own efforts our local papers have given great prominence to the activities of our Division—and quite rightly so—we have been privileged to fight alongside some very excellent Divisions. I hope when you go back that you will sing the praises of those units which it was our privilege to serve alongside—units such as the Fourth Indian Division, the Seventh Armoured Division, the Fifty-first Highland Division and those excellent battalions of the Eleventh Hussars and the King's Dragoon Guards. Quite a lot of people are inclined to feel that we have been called upon to do an undue amount of work. Another of your jobs on returning to New Zealand is to dispel that supposition as much as you can.

You are going back after three and a half years of very hard and arduous work. For three and a half years the reputation of your country has rested on your heads and I think that you can feel satisfaction in knowing that that trust that was given you has not been misplaced. You are going back now to your own country and the reputation of the 2 NZEF will rest temporarily on the smartness of your dress and your behaviour. So we will be judged in the eyes of our own people. Certainly we cannot have our reputations in better hands. I am certain that you will reflect the greatest credit upon the Division.

I shall not be able to go and see you off on the ship because I am

leaving earlier and will be flying there and back and will have left New Zealand before you arrive. I will not forget the work of your Colonel and officers, NCOs and men, and the very great help you have been to us in these last operations. I thank you.

Lieutenant-Colonel Agar, who was relinquishing command of the unit to Major Grant, then addressed the parade:

I wonder if you recognize the significance of the solemn occasion which now confronts us. It is the first occasion on which we have had a full parade of the New Zealand Corps of Signals and at anywhere near such strength. For the reason of the particular system under which we operate, as you know, a full parade of Divisional Signals is a difficult operation. Therefore, it is an important occasion for that reason alone. Another reason for its importance is the pending removal of a large number of experienced personnel from the Corps. Any reorganization is difficult and the removal of long-service personnel will constitute a problem for those left behind.

Besides, the departure of old hands strikes a personal blow in that a large number of friendships must be broken even if only temporarily. I am sure that while the main emotion of those going away will be pleasure and anticipation, they will also feel a wrench at having to leave friends in the unit. And while the most important emotion of those staying behind will undoubtedly be envy of those going home, they will also feel the wrench of parting, even temporarily, from friends.

To judge from the Divisional Commander's remarks this unit has a high reputation and position. It rests with those we leave behind to maintain and enhance that position which they will do without any doubt.

In handing over my command to Major Grant I am also subjected to conflicting emotions. I have been three and three-quarter years with the unit and I feel the parting very deeply. I would like to say farewell to you all individually, particularly those with whom I have had such long

contact, but this is quite impossible. I trust, however, that those so disposed will come and shake me by the hand. I now wish you good-bye en masse, and also wish you every success in the future.

Major Grant replied in a few words. He said:

I am very proud to have been given command of this unit. I hope that we shall be able to work together to rebuild the unit, to re-establish its high reputation and to make it a unit of which we shall be proud.

 $^{^{1}}$ First Army had landed in North Africa on 8 Nov 1942.

² Brig S. H. Crump, CBE, DSO, m.i.d., Bronze Star (US); Lower Hutt; born Wellington, 25 Jan 1889; Regular soldier; NZASC 1915-19; Commander NZASC 2 NZ Div 1940-45; com 2 NZEF (Japan) Jun-Sep 1947; on staff of HQ BCOF and NZ representative on Disposals Board in Japan, 1948-49.

³ The US Air Force later sent an apology.

⁴ Sigmn F. W. A. Benfell; born Reefton, 14 Feb 1918; railway porter; killed in action 20 Mar 1943.

⁵ Sigmn L. C. Feeney; born Wellington, 23 May 1916; lineman; killed in action 21 Mar 1943.

⁶ Lt-Col C. M. Bennett, DSO; Wellington; born Rotorua, 27 Jul 1913; radio announcer; CO 28 (Maori) Bn Nov 1942-Apr 1943; wounded 20 Apr 1943.

⁷ L-Cpl A. W. Forbes; born Wellington, 16 Dec 1914; clerk; killed in action 29 Mar 1943.

⁸ L-Cpl H. D. Pirritt; Heretaunga; born England, 17 Jan 1918; coach painter and mechanic; twice wounded.

- ⁹ Cpl L. H. Cox; Christchurch; born Christchurch, 8 Aug 1918; jointer's apprentice; p.w. 14 Apr 1943.
- ¹⁰ Sigmn A. V. Holder; born Hamilton, 28 Jun 1916; farmer; killed in action 14 Apr 1943.
- ¹¹ Sigmn A. G. Childs; born England, 16 Dec 1919; clerk; died of wounds 15 Apr 1943.
- ¹² Sigmn J. A. M. Wiseman; Dannevirke; born Dannevirke, 11 Mar 1918; P and T cadet.
- ¹³ L-Sgt W. G. Faithfull; Thames; born Kaeo, 29 Jan 1909; motor mechanic.
- ¹⁴ Sgt H. J. Reader; Eketahuna; born London, 25 Jun 1914; telegraphist.
- ¹⁵ Maj A. Ross, MC and bar, m.i.d., Order of Valour (Gk); Dunedin; born Herbert, North Otago, 19 Jul 1911; university lecturer; BM 5 Bde Aug-Dec 1944; four times wounded.
- 16 Lt-Col W. B. Thomas, DSO, MC and bar, m.i.d., Silver Star (US); London; born Nelson, 29 Jun 1918; bank officer; CO 23 Bn 1944-45; twice wounded; wounded and p.w. May 1941; escaped Nov 1941; returned to unit May 1942; Hampshire Regt, 1947-.
- ¹⁷ Lt-Col J. Conolly, DSO, m.i.d.; Auckland; born Waihi, 15 Aug 1908; school-teacher; CO 24 Bn Dec 1942-Feb 1944, Mar-Apr 1944; wounded 21 Jul 1942.
- ¹⁸ Capt R. A. Shaw; Taumarunui; born New Plymouth, 8 Jun 1912; commercial traveller; twice wounded.
- ¹⁹ L-Sgt A. G. Davies, MM; Cambridge; born NZ 21 Dec 1916; P

and T employee.

- ²⁰ Cpl R. B. Miles; Auckland; born Auckland, 1 Jun 1919; student; twice wounded.
- ²¹ L-Cpl R. G. Richards; Dunedin; born Dunedin, 25 Jul 1919; clerk; wounded 20 Apr 1943.
- ²² Sigmn W. J. Franklyn; born NZ 15 Mar 1921; P and T employee; killed in action 21 Apr 1943.
- ²³ On 19 February 1943 General Alexander assumed command of Eighteenth Army Group, which combined First and Eighth Armies, and became responsible for the conduct of operations in Tunisia as Deputy to the Commander-in-Chief (General Eisenhower) of the Allied Expeditionary Force.
- ²⁴ WO II J. P. McConway; Wanganui; born Blenheim, 13 Sep 1914; P and T lineman.

DIVISIONAL SIGNALS

CHAPTER 17 — THE SANGRO AND ORSOGNA

CHAPTER 17 The Sangro and Orsogna

With the departure for New Zealand on 15 June 1943 of the first furlough draft of 6000-odd officers and men of the First, Second and Third Echelons, including Lieutenant-Colonel Agar, several of his senior officers, and a considerable number of experienced warrant officers and senior NCOs, large gaps appeared in the ranks of Divisional Signals. The new commanding officer, Lieutenant-Colonel Grant, cast a speculative eye over the reinforcement resources which the Signal School held. These consisted mainly of the 9th Reinforcements, who had just arrived and already were wilting under the fierce heat of the Egyptian summer.

By the end of July, when the last of the leave parties were returning to Maadi Camp from their excursions to Palestine, Alexandria, and other places where fat paybook balances could be expended in riotous living, the process of refitting and training the Division was in full swing. In the signal sections at the headquarters of field regiments and infantry brigades training commenced with a period of individual instruction to introduce the reinforcements to their tasks in the field. This was followed by section exercises, some of which were carried out in a very realistic manner, particularly those at Headquarters 5 Brigade, where Captain Brennan, who had recently taken over command of K Section from Captain Ingle, 1 and the Brigade Major designed wireless exercises to practise brigade and battalion staffs in the correct use of RT procedure and security devices. At the brigade headquarters level the exercises were confined to the use of the new wireless set No. 22 which was then replacing the No. 11 set. Forward of battalion headquarters the exercises were extended to the use of the wireless set No. 18 and the new infantry set No. 38.

The Division marched ² to Burg el Arab during the third week in September and continued its training in bivouac with a number of brigade exercises. Early in October units began to move to Ikingi Maryut transit camp, only a few miles away, where each was broken up into

drafts in readiness to embark for an officially unknown destination.

Divisional Signals was divided into A and B drafts. A consisted of eight officers and eighty-seven other ranks under the command of Lieutenant-Colonel Grant, and B of six officers and eighty-seven other ranks under Major Pryor, the unit's second-in-command.

Embarkation began at Alexandria early on 5 October. Signals was accommodated with other Divisional Headquarters' troops in two ships, the Reina del Pacifico and the Dunottar Castle. Grant's party was in the Reina del Pacifico, which in peacetime had been a luxury liner sailing in South American waters.

After an uneventful three-day voyage the convoy, with its escort of British and Greek destroyers, crept slowly along the coast of southern Italy and approached the Italian naval base of Taranto. The men crowded to the ships' rails to catch the first glimpses of this once hostile country. Through the quickly widening rifts in the early morning mists they saw the little white cottages nestling at the water's edge and the green country rising beyond. Later, as the ships nosed their way into the inner approaches to the port, a new sight met their eyes, something startlingly reminiscent of the old-worldliness of Canea in Crete, which many of the old hands had seen in 1941. From the sea the old fortress town, with its mellowed buildings in grey stone and its picturesque stone jetties lying in the soft Italian sunlight, gave no hint of the squalor and wartime poverty which lay behind.

The ships anchored in the outer harbour and the troops were disembarked at once and taken ashore in lighters, the men laden with their impedimenta of kitbags, rifles and oddments of cooking gear, field telephones, reels of cable, and numerous other portable and semiportable articles of signal equipment required for a skeleton communications service within the Division until the transport arrived from Egypt in a later convoy.

Both Signals' parties reached the divisional bivouac area on the

north-western outskirts of Taranto shortly after noon after a march of about five miles, which took them around the fringes of the town and along pleasant, leafy lanes where the warm sunlight filtered through the trees and danced in dappled shadow patterns on the yellow dust.

Divisional Headquarters' offices were sited comfortably in a spacious building of white stone, where the lord of the demesne had once reigned over his small army of shepherds, charcoal-burners and other retainers, many of whom, in the stoical manner of Continental peasantry, were still hard at work around the estate, as if the war which had raged about their ears had been only a brief discomfort like a passing thunderstorm or summer shower.

Very soon the area was transfigured from its rural calm to bustling activity. Improvised structures for cooking fires appeared suddenly and began to emit pleasing odours of wood smoke while the cooks prepared a meal of hot bully stew, biscuits and atebrin. Under the olives and in the lee of the low stone walls the men's bivouac tents grew quickly like brown earth barrows on the greensward; this resemblance soon passed, however, as the men's highly developed sense of improvisation transformed the little tents into comfortable dwellings secured against the ravages of all but the most inclement weather. The bivouac of the Colonel's batman, Jack Southberg, ³ surpassed all the others in comfort and amenities; it boasted a paved floor, wooden walls, a rifle rack, a bed and even a fireplace, and was sited strategically near the men's cookhouse.

Very soon, following the scent of fresh prey, Italian hawkers appeared, accompanied by small children who at meal times gathered in large numbers in a sort of supernumerary rank alongside the mess queue and assumed wistful expressions of expectancy which were seldom unrewarded.

The hawkers peddled their wares around the area at extraordinarily cheap rates—magnificent purple grapes swelling with succulence, almonds, walnuts, figs, stuffed olives, almond toffee and even apples. There was wine, too, the crude red wine which graced the tables of the

peasants and which was known from the African days as 'plonk' because of the terrific impact with which it repaid gross appetites. There was also, however, some good bottled wine and cognac and reasonably good supplies of a tolerable vermouth.

Within twenty-four hours of the Division's arrival in its first Italian bivouac, Signals had laid out a skeleton communications system with the small amount of equipment the men had carried from Egypt. There was no wireless except for half a dozen sets mounted in jeeps which had accompanied the divisional advance party, and communications consisted of line which, at first, provided communication only to Headquarters 6 Base Sub-Area in Taranto, Headquarters Divisional Artillery and Headquarters 6 Brigade. Later, when the advance parties of 5 Brigade and 4 Armoured Brigade arrived in the Taranto area the line system was expanded to include their headquarters.

Very soon after the Division's arrival serious interruptions began to occur in these line communications. The first of these, on 12 October, was found to have been caused by the cutting out of fifty yards of cable from the Headquarters Divisional Artillery line. A few days later a gap of four yards was found in the Headquarters 6 Base Sub-Area circuit, and again, on the 20th, 100 yards of cable disappeared from the Headquarters Divisional Artillery circuit. No direct evidence of sabotage was ever disclosed, but the similarity and frequency of the faults led inevitably to a strong suspicion that they were the handiwork of Fascist elements still lingering among the otherwise subdued Italian community.

Early in November the Division began to move northwards to Lucera where, according to the original plan, it was to take up an Eighth Army reserve position to protect the Foggia airfields against possible enemy excursions from the west of Italy or from any infiltration which the enemy might attempt between 5 Corps on the Adriatic coast and 13 Corps in the hills farther inland. But while the move was still in progress the Division was ordered forward to the Eighth Army line on the Sangro,

so that Lucera became merely a staging area.

At this time Eighth Army was approaching the Sangro River, to the north of which the Germans had established a strong winter line with their foremost defences overlooking the river flats. Rome was the immediate Allied objective, in the capture of which Eighth Army's task was to advance to the important lateral road which ran from Pescara on the Adriatic side, through Avezzano in the Apennines, to Rome on the west. On the Tyrrhenian coast Fifth United States Army, which included the British 10 Corps, was already sweeping northwards from the Salerno beachhead through Naples and beyond the Volturno River.

On Eighth Army's front, between the Sangro and the important Pescara- Rome lateral road, the enemy was deployed in considerable strength on the river bluffs and the rugged spurs behind them, where his defences lay at Guardiagrele, Orsogna, Castelfrentano, Mozzagrogna, Fossacesia and Ortona. Early in November the Army Commander, General Montgomery, with a keen appreciation of the enemy's growing resistance and the imminence of bad weather, decided that he had too few troops forward to enable him to keep up the progress of his advance towards Rome. To force the enemy defences at the Sangro he planned to make a narrow bridgehead across the river near the coast with 5 Corps. To enable the Corps to concentrate more densely near the coast for the Sangro attack, the New Zealand Division was ordered up from Lucera to the area between Furci and Gissi, about ten miles inland from the coastal town of Vasto, from where it was to relieve 8 Indian Division, 5 Corps' left formation, around Atessa. The New Zealand Division was to remain under the command of Eighth Army and would occupy a position in the line roughly midway between 5 Corps and 13 Corps in order to create a threat along the road north from Atessa to the Sangro.

The 20th November was the date fixed for the attack on the Sangro defences and, if 5 Corps' assault succeeded, the New Zealand Division was to push northwards across the river opposite Atessa, through Chieti and eventually, if possible, to Avezzano, the centre of the Germans' line. The first New Zealand move occurred on the 11th, when Tactical

Divisional Headquarters left Lucera for the Furci- Gissi area. The same day OC B (cable) Section of 2 New Zealand Divisional Signals went forward to liaise with 8 Indian Divisional Signals in preparation for taking over its line communications. Tactical Divisional Headquarters was joined by Main Headquarters near Gissi on the 14th and, immediately on Main Division's arrival, the Adjutant of Divisional Signals and his opposite number in 8 Indian Divisional Signals reported to the Chief Signal Officer at Headquarters 5 Corps to hatch a wireless deception plot to conceal the relief of the Indians from the enemy intercept service.

When 8 Indian Division moved out, 19 Indian Brigade, 6 Lancers and 3 Field Regiment, Royal Artillery, were to remain under the command of 2 NZ Division. Only Indian troops were to be employed in the line, and 8 Indian Division's wireless links were to be closed down gradually, so that eventually only the forward radio-telephony and wireless-telegraphy nets and the rear radio-telephony link to 5 Corps would remain in operation. The Indian Divisional Signals would continue to operate all links, and no New Zealand sets were to be allowed on the air. This meant that almost all the Division's signal traffic had to be handled by line, which immediately brought innumerable problems not encountered by the desert-trained linemen since the close-country campaigns of 1941 in Greece and Crete.

Throughout the North African campaigns of 1940-43 Signals had developed a highly skilled technique in the provision and maintenance of line communications, which demanded a great flexibility because of frequent and sometimes extensive changes in the order of battle. Distances between important headquarters were often considerable, even though field cables were usually laid on almost direct cross-country routes. These problems were alleviated to a large extent, however, by the complete absence of insulation losses through dampness and the ability of cable-laying and maintenance detachments to traverse desert country in any direction at will.

In Italy, however, Signals soon discovered that all these conditions were considerably modified. Moves of headquarters, for example, were much shorter and less frequent, with the result that the staff required more extensive and stable line communications and placed less reliance on wireless. The emphasis on flexibility decreased considerably, too, because orders of battle became much more stable and impending moves were usually known some time in advance. Although in the mountainous country of Italy the various formation headquarters of the Division were often strung out over a considerable distance along the axis of advance, the desert manoeuvre of despatching formations or battle groups independently on long outflanking movements became almost impossible in Italy, and the problem of providing communications to distant and mobile groups no longer had to be met.

Owing to the difficulties of cross-country movement on the steep hills and soft ground, especially with wheeled vehicles, lines frequently had to be laid along formed roads, with the result that maintenance difficulties multiplied rapidly. Vehicles moving off roads into unit areas, the dumping of ammunition, petrol and engineer stores on the roadside, and tracked vehicles running along the verges were all capable of inflicting severe damage on field cables. Even if the cable itself was not severed, the insulation became stripped, so that earthing faults occurred continuously.

Because it was quite impracticable to erect overhead crossings at every point of potential hazard on a route, the only method of securing lines was to lay them in roadside ditches, where the moisture at once attacked the insulation fabric and thus maintained the incidence of earth faults. Cables laid across country were carefully built on hedges and walls or supported from tree to tree in orchards and vineyards; this kept them out of the mud and helped to make the tracing of faults much easier. This suspension of field cables on low supports, despite their increased susceptibility to bomb blast and shellfire, was essential to preserve the insulation, which quickly deteriorated if left in contact with damp or muddy ground and could not be restored. Large reserves of

cable had to be held farther forward than the usual rear dumps at corps and army signal parks.

Field cable exposed to breakage or strain by the loading of ice or snow on it was suspended from its supports in short spans or secured to trees just clear of the ground, so that it rested on the ground before it became loaded beyond its breaking point. In battalion, field regiment, and brigade areas where transport had to be more widely dispersed, damage to field cable by tracked vehicles could not be prevented unless the lines were laid along tank-proof routes, such as the crests of ridges, and this was usually quite impracticable in forward areas.

Permanent lines, that is, civilian post office circuits and railway communication systems, are often available along axes of advance in close country. In Italy these circuits were augmented very usefully by the presence of high-tension power lines— massive copper conductors erected on huge steel pylons. Except when these power lines had been too severely damaged by shelling and bombing, or where they had been demolished by the retreating enemy, overhead circuits of this sort were of great value. A prerequisite, of course, was that the staff had to be persuaded to site important headquarters along or near the routes followed by the circuits.

Signals must also be aware of the likely axis of advance in time to make detailed reconnaissances and reconstruct permanent-line circuits before headquarters move. Early reconnaissance of future headquarters sites, with a Signals' representative included in the reconnaissance group, is essential if profitable use is to be made of permanent-line circuits soon after the completion of a move.

Signals was able to assess the temporary value of these poled overhead circuits soon after the Division arrived in the Eighth Army area in mid-November, and evolved a line drill to carry communications forward quickly to the headquarters of brigades. First, field cable was laid rapidly along the road to provide immediate communication. Then the poled-line circuit, if not too extensively damaged, was patched with

spans of field cable to provide an alternative circuit, after which a second field cable was carefully laid across country and built back and secured to withstand as many as possible of the known hazards. When this had been done the first cable laid along the road was taken up and the poled line reconstructed with proper materials. Sometimes, if the overhead circuit was subject to damage from shelling or bombing, its aerial conductors were bunched together to form one leg of an earthworking circuit.

It was soon found that 3-ton lorries equipped with mechanical cable-layers could not be used successfully on heavily congested roads. Even the 8-cwt and 15-cwt trucks which B (cable) Section used for maintenance work could not negotiate traffic jams, so that jeeps fitted with No. 3 cable-laying apparatus or drum barrows from which the wheels had been removed became the only vehicles which line parties could use satisfactorily. Besides its ability to tow a trailer on which spare cable could be carried, the jeep was capable of being manoeuvred through seemingly impenetrable masses of congested traffic on the narrow roads.

Wireless difficulties were less troublesome because their effects had been anticipated after the disagreeable experiences with frequency congestion which had occurred on the shortened corps' fronts during the Tunisian campaign. Here, as in Tunisia, little could be done to reduce the effects of mutual interference by large numbers of wireless sets operating in a constricted area. Because the congestion was much worse than it had ever been, however, great care had to be taken in the allotment of frequencies to important nets, such as the G forward RT controls, to ensure that each had as far as possible a widely divergent operating channel from the others. This important precaution was not always confined to the wireless nets within the Division itself; careful checking and observation were needed to ensure that neighbouring formations were not using the same or closely adjacent frequencies. Since this precaution could not be arbitrarily adopted and employed by any one formation signals to the possible detriment and inconvenience

of others, close and amicable liaison between all concerned was essential. This was easily achieved under the auspices of the Chief Signal Officer at Headquarters 5 Corps, although the New Zealanders had not previously met the neighbouring formations, 78 British Division and 8 Indian Division.

On 13 November 5 Field Regiment went forward and by next morning—the day that the New Zealand Division assumed command of 8 Indian Division's sector between Atessa and Casalanguida—was deployed in support of 19 Indian Brigade, midway between the two villages. With the regiment was F Section, which was to provide line and wireless communications on the usual regimental scale, and which contributed its small but important part that afternoon when 28 Battery fired the first New Zealand shots in the Italian campaign.

That same day, the 14th, 4 Field Regiment deployed north of Casalanguida in readiness to bring its guns into action, and the first of 4 Armoured Brigade's units, 19 Armoured Regiment, began to move forward from San Severo to the Furci area. The latter's progress was so hampered by unfavourable road conditions that it did not reach its allotted area until late on the 16th. Later in the day the rest of 4 Armoured Brigade moved forward from San Severo under extremely difficult traffic conditions caused by the slippery roads and rain-sodden ground.

Sixth Infantry Brigade left Lucera early on the 17th for Atessa, where it was to take over the right portion of 19 Indian Brigade's sector, but it was forced to halt en route that night because of the difficult road conditions. It resumed its march next morning, but progress was again slowed up under even worse conditions than those of the previous day. The main obstacle occurred at a river crossing over the Osento, where a difficult deviation and a ford caused such dense traffic congestion that by the afternoon the brigade was wedged almost immovably in a mass of transport and few of its vehicles could move either one way or the other. Although the greater part of the brigade was delayed in this way and did not reach Atessa until the morning of the 19th, Brigade Headquarters

had pressed forward on the 18th and L Section was able to lay out line communications in readiness for the arrival of the battalions. By 10 a.m. on the 19th Headquarters 6 Brigade was in line communication with all three of its battalions by an omnibus circuit of single field cable. To the rear communication with Headquarters 19 Indian Brigade was provided by a metallic pair field cable, and from there to Main Headquarters 2 NZ Division by a poled-line circuit.

Meanwhile, on the 18th, 19 Indian Brigade, supported by tanks of 19 Armoured Regiment and artillery, including the guns of 4 and 5 Field Regiments, had attacked and captured Perano against heavy opposition and with considerable losses. The New Zealand tanks, crossing rough country made soft and treacherous by heavy rain, encountered fire at close range from anti-tank guns well sited in broken ground and, severely handicapped by the lack of communications because of the strict wireless silence still in force in 2 NZ Division, lost four of their number. Had the tanks' crews been able to use their wireless instead of being restricted to hand signals for inter-tank communication, much of the anti-tank gun opposition could have been overcome more easily.

A general attack was planned for the night of 20-21 November, but on the afternoon of the 20th, when preparations were going forward quickly, it was postponed for forty-eight hours because of a rise in the river level. Main Headquarters 2 NZ Division had moved that morning in heavy rain to a new position about two miles east of Atessa and, on arrival there, had considerable difficulty in dispersing its transport on ploughed ground. All that day the men of B (cable) Section worked under extremely trying conditions, but by the evening had succeeded in completing line communications to Headquarters 19 Indian Brigade and Headquarters Divisional Artillery, and by poled-line routes to Tactical Headquarters Eighth Army at Vasto under whose direct command the Division then was. Communication with 6 Brigade was provided through Headquarters 19 Indian Brigade by field cable, and to all three field regiments by the same means through Headquarters Divisional Artillery.

Now that the hope of an unobtrusive approach to the enemy's defences north of the river to stage an unexpected appearance in force had passed unfulfilled, new plans were prepared for a renewal of operations; these envisaged a frontal assault by infantry in force supported by artillery fire. When 6 Brigade's projected crossing of the Sangro—so many times postponed already—was finally abandoned on the 24th, a provisional date for the resumption of operations was appointed by the Army Commander for the night of 26-27 November, but on the 26th the attack was postponed for another twenty-four hours in order that the level of the river might be lower.

On the 27th Signals in both 5 and 6 Brigades laid lines to sites on the southern side of the river where the Engineers were to build bridges. By 9 p.m., nearly six hours before zero hour (which was fixed for 2.45 a.m. on the 28th), K Section had completed line communications to both 21 and 23 Battalions, to Headquarters 6 Brigade by a lateral circuit on the left, and to the bridge site. In addition, visual lamp stations were established at the headquarters of 21 and 23 Battalions; both of these worked back to separate visual terminals at Main Headquarters 5 Brigade.

Wireless communications followed the conventional pattern for an infantry brigade, with the addition of two No. 38 sets on a one-to-one link working between Main Headquarters 5 Brigade and the bridge site, to enable reports on the progress of bridging operations to be passed back quickly to the brigade, and two No. 38 sets at Brigade Headquarters tuned to each battalion's forward control net to enable the brigade staff to obtain early information of the infantry's progress during the battle.

In 6 Brigade line communications followed much the same pattern as those in 5 Brigade, that is, a line to each battalion's starting point on the south bank of the river and one to the bridge site for 6 Brigade's supporting weapons and supplies. The main difference from 5 Brigade's line layout was a signal centre, or forward exchange, which L Section established just north of the Strada Sangritana, a highway south of the

Sangro and about one and a half miles forward of Main Headquarters 6 Brigade and just forward of Headquarters 25 Battalion. From Main Brigade Headquarters three circuits led forward to this signal centre; two were poled lines, and a field-cable circuit which went to 26 Battalion's starting point south of the river was teed-in to one of these; the third consisted of twin field cable throughout its length. From the signal centre two field cables went to 24 and 25 Battalions' starting points near the river bank, and a tee-in on 24 Battalion's circuit led to 6 Brig- ade's bridge site. Another field cable ran from the signal centre to a vantage point near 25 Battalion's headquarters, that is, the site occupied by the battalion before the move to the starting point began. This circuit gave communication with a visual signalling terminal from which communication could be established by signalling lamps with the battalions if required.

L Section's arrangements for wireless communications within 6 Brigade for the operation were unconventional in design. In the first phase of the attack, during the crossing of the river and before the battalions' No. 22 sets—their normal means of wireless communication with Brigade Headquarters—were set up on the northern side of the Sangro, communication was to be by the infantry-type sets, No. 18 and No. 38. The control set —another No. 38—of this temporary net was to be operated by L Section at the bridge site, and information passed back from there by line to Main Headquarters 6 Brigade through the signal centre. At Main Brigade Headquarters the usual No. 22 control set installed in the armoured command vehicle was to be used for communication with another No. 22 set at the bridge site, where a liaison officer could pass back information on the progress of the bridging work. The change to the second phase would merely be a reversion to the normal pattern of wireless communications in an infantry brigade, and would occur as the battalions were able to set up and operate their usual No. 22 set terminals when they reached their objectives or whenever there was a halt in their advance.

This operation, which was the first in which Signals had

encountered a river obstacle while carrying line communications forward, provided an interesting example of the occasional necessity for departing from the long established principle that Divisional Signals are responsible for carrying signal communications forward to the headquarters of infantry battalions, a task that young and inexperienced signal officers, when not pre- occupied with textbook drill, should accept without cavil. For the Sangro crossing both brigades required their Divisional Signals sections to take the battalions' lines forward only as far as the infantry starting points on the south bank of the river; thereafter the cables were to be carried across the stream by the battalions themselves. In 5 Brigade's operation order the point is stated unequivocally: 'Sigs will lay line to point where assaulting battalions cross river, thereafter a unit responsibility.' Sixth Brigade's order merely said that 'battalions will lay line across river and maintain from river forward.'

At Main Headquarters 2 NZ Division, situated two miles east of Atessa, line and wireless communications differed little from the design which had last been used in the closing stages of the North African campaign. The line system was extended to include a forward signal centre, a conventional device which had been put to good use in Tunisia. This centre had been established on 22 November at a point about half-way between Atessa and the Strada Sangritana in readiness for 6 Brigade's projected crossing of the river on the 24th. From Main Divisional Headquarters two circuits, each with superposed Fullerphone telegraph circuits, led forward to the signal centre; another, also with a superposed Fullerphone telegraph circuit, went to Headquarters Divisional Artillery, in the vicinity of Atessa, from where lines led forward to the divisional signal centre, which of course gave an additional circuit to Main Divisional Headquarters, and to the three New Zealand field regiments and 3 Field Regiment, Royal Artillery.

Of the seven circuits radiating forward from the signal centre, two went to Headquarters 19 Indian Brigade on the left of the New Zealand Division, two to 6 Brigade, one to 5 Brigade, another to 6 Field

Regiment, and the seventh to 3 Field Regiment, Royal Artillery. Although only one line was provided between the signal centre and 5 Brigade, an alternative circuit was available through the lateral lines which ran between 5 and 6 Brigades. Of the two circuits which went to both 19 Indian Brigade and 6 Brigade, one was augmented in each case by a superposed Fullerphone telegraph circuit.

This extensive array of line communications was supplemented by a wireless layout of the design which had become by that time almost standard in the Division, the only departure from the now familiar pattern being the rear links which, in the Sangro battle, terminated at Main and Rear Headquarters Eighth Army instead of, as in the normal course of events, at a corps headquarters. At this time the New Zealand Division was under the direct command of Eighth Army while its flanking formations were under the command of 5 and 13 Corps. [See wireless diagram on pp. 410-11.]

At zero hour the infantry of 5 and 6 Brigades crossed their start lines north of the Sangro under a barrage of artillery and Vickers machinegun fire, having waded across the river some time after midnight. In 5 Brigade the K Section operators who manned the No. 22 terminal sets at the battalions' headquarters managed to get them across the river by carrying them and their accessories at shoulder height on stretchers, eight men to a stretcher. In 6 Brigade, however, the L Section operators manhandled their sets themselves and managed to reach the north bank with them undamaged.

In both brigades wireless communications worked smoothly and without interruption, except in 25 Battalion, whose No. 38 set did not establish contact with the control set at the bridge site at any time during the attack; it was not until the battalion reached its final objective some time before dawn and the No. 22 set was set up that wireless communication was finally established with Brigade Headquarters.

Line communications were exceptionally good and suffered few

interruptions except—again in the case of 25 Battalion— when the circuit from Brigade Headquarters was not completed until late in the morning.

Forward of Main Headquarters 2 NZ Division communications to both brigades, both wireless and line, continued throughout the attack without interruption, a satisfying feature being the extent to which the stable line circuit reduced the use of wireless, due in no small measure to the untiring efforts of B (cable) Section.

Soon after dawn on the 30th Headquarters 6 Brigade crossed the river and established its new headquarters near Headquarters 25 Battalion, in the centre of the brigade positions. Soon afterwards L Section's signal centre on the south bank rejoined the headquarters and the lines to 24 and 26 Battalions were readjusted.

Headquarters 5 Brigade and 28 (Maori) Battalion, which had not been committed in the attack, crossed on 1 December. A K Section signal centre, however, had been sent across the river on 30 November; it established its forward exchange near Headquarters 23 Battalion and by the evening of that day was in line communication with both 21 and 23 Battalions.

Main Headquarters 2 NZ Division crossed to the northern side on 2 December and was set up in olive groves astride Route 84, about half a mile north of the river; it remained in this position for the rest of the month.

Meanwhile 5 and 6 Brigades had continued their advance northwards against moderate resistance, and on the 2nd Castelfrentano was occupied by 24 Battalion without opposition. Headquarters 6 Brigade moved forward that day, L Section being allotted billets on the north side of the town.

The whole operation from the crossing of the river until the capture of Castelfrentano, described by a senior officer as 'a satisfactory and surprisingly easy affair', cost little in casualties and equipment and

generally represented a promising but not vividly spectacular debut for the Division in Italy. Signals incurred no losses during the operation, although F Section, attached to 5 Field Regiment, had lost two men two days before the attack began when Signalman King ⁴ was killed instantly and Signalman Maunsell ⁵ wounded by a shell. Maunsell died next day from his injuries.

Because of the ease with which the German defences around Castelfrentano had been overcome, the Division sought to exploit its successes by pressing on towards Orsogna quickly in the hope of clearing out the enemy defences there and spreading out towards San Martino and Guardiagrele. An armoured thrust northwards towards Spaccarelli (about two miles west of Lanciano) and then south-westwards down the Lanciano- Orsogna road, however, was effectively halted by demolitions. In the afternoon of the 2nd 24 Battalion succeeded in cutting the Lanciano- Orsogna road about a mile east of Orsogna. To the south-west of Castelfrentano, where two parallel secondary roads led off to the west and converged two miles east of Guardiagrele, two squadrons of 18 Armoured Regiment, each closely supported by a company of 22 (Motor) Battalion, set off to take Guardiagrele and press on northwards to San Martino.

The 25th Battalion's intentions were to strike directly across country and pass through Orsogna at first light on 3 December and then exploit westwards towards San Martino.

The 18th Armoured Regiment progressed along the two parallel roads towards Guardiagrele against considerable opposition throughout the afternoon and night of the 2nd, and finally succeeded in joining forces at a road junction near the village early next morning. Meanwhile, at two o'clock that morning, Headquarters 22 (Motor) Battalion had moved forward to within half a mile of the road junction; this move lengthened considerably the line communications back to Headquarters 4 Armoured Brigade at San Eusanio, five miles to the east, with the result that the cable sustained extensive damage from shellfire. Communications

between Headquarters 4 Armoured Brigade and 18 Armoured Regiment, on the other hand, were maintained solely by wireless and continued without interruption throughout the action. Similarly, wireless communications between Headquarters 4 Armoured Brigade and elements of 19 Armoured Regiment halted at the bridge demolition to the north near Spaccarelli were stable and continued without disruption.

Soon after Headquarters 6 Brigade had established itself at Castelfrentano early on the afternoon of the 2nd, L Section put out lines to Headquarters 25 Battalion, sited precariously only a hundred yards or so from the eastern fringe of a particularly unhealthy stretch of Route 84 which, being under enemy observation from Orsogna and the Maiella heights to the north-west and west, was continually under shellfire. Near the northern end of this stretch of road, which came to be known throughout the Division as 'The Mad Mile' because of the haste with which vehicles traversed it, stood a shell-torn brickworks, an excellent ranging mark for the enemy gunners.

A line was also taken out to 24 Battalion, which by five o'clock that evening was firmly dug in in positions near Orsogna on the Lanciano road.

Next morning 25 Battalion advanced to Orsogna and at 6 a.m. one of its companies entered the village, only to be forced out later in the morning by enemy infantry supported by tanks. Soon afterwards the battalion withdrew to the general line of 24 Battalion's foremost defence positions, having lost nine of its infantry type No. 38 wireless sets in the fighting in the village. When it reached 24 Battalion's area, L Section extended the latter's line forward and brought both units on to an omnibus circuit.

On 3 December L Section sustained its first casualty in the Italian campaign when Signalman Shanks ⁶ was wounded. He was evacuated to an advanced dressing station, but died four days later at a casualty clearing station.

Meanwhile units of 5 Brigade were completing their defences on a ridge east of Castelfrentano, where they were to provide a firm base for 6 Brigade's attack against Orsogna. On the afternoon of the 2nd K Section, at Headquarters 5 Brigade, still in position just north of the Sangro, sent a signal centre detachment forward to San Nicolino, about a mile to the east of Castelfrentano, from where lines were put out to 21, 23 and 28 Battalions. Next day Headquarters 5 Brigade moved up and joined the signal centre at San Nicolino.

At Main Headquarters 2 NZ Division, after its move across the river, some relaxation was permitted in wireless communications, the forward RT net being closed down on the understanding, of course, that it would be reopened immediately any line failures occurred. The relief was short-lived as 6 Brigade's line failed and remained out of order for most of the night of 2–3 December despite the efforts of B (cable) Section to restore it under heavy shellfire. Next day, on the completion of the move of Headquarters 5 Brigade to San Nicolino, K Section laid a lateral line to Headquarters 6 Brigade at Castelfrentano to restore line communication to Main Divisional Headquarters as quickly as possible.

That afternoon Tactical Headquarters 2 NZ Division went forward to within about a mile and a half south-west of Castelfrentano, and with it went a signal centre which, by 9 a.m. on the 4th, had lines to Headquarters 4 Armoured Brigade at San Eusanio and Headquarters 6 Brigade at Castelfrentano, as well as two circuits back to Main Divisional Headquarters, both with superposed Fullerphone telegraph channels strapped through at the signal centre, one to Headquarters 4 Armoured Brigade and the other to Headquarters 6 Brigade. At this stage neither the signal centre near Castelfrentano nor Main Divisional Headquarters had a direct circuit to Headquarters 5 Brigade, to whom communication was available only by means of the lateral line from Headquarters 6 Brigade and, of course, by wireless from Main Divisional Headquarters.

During the night of the 2nd and even during daylight on the 3rd, K

Section at San Nicolino experienced considerable trouble with line faults, many of which were caused by Italians cutting lengths of cable from the battalions' lines.

The 4th and 5th December passed with active patrolling by 5 and 6 Brigades. By this time 4 Armoured Brigade's double thrust towards Guardiagrele was firmly halted at the road junction east of the village by determined resistance, and 25 Battalion had withdrawn well clear of the approaches to Orsogna, now recognised to be defended in strength.

On the evening of 5 December 2 Parachute Brigade and a considerable number of Royal Artillery and Canadian engineer units came under the command of 2 New Zealand Division. This influx of strength caused an immediate expansion in the divisional signal plan, which by the morning of the 7th included line and wireless communications to Headquarters 2 Parachute Brigade, Headquarters 6 Army Group, Royal Artillery, and 111 Field Regiment, Royal Artillery, and line communications only to 66 and 80 Medium Regiments and 1 Air Landing Light Regiment, all Royal Artillery. No additional signal commitments were undertaken for the remaining attached units, which consisted of an Italian mule pack company under 6 Brigade, the Canadian engineer units under Headquarters New Zealand Engineers, and a heavy anti-aircraft battery, Royal Artillery, under Headquarters Divisional Artillery.

Plans were made on the afternoon of the 6th for another attack on Orsogna, where the German defences were becoming stronger as each day passed. The divisional operation order was issued late that evening: both brigades were to make the assault, 5 Brigade on the right and 6 Brigade on the left, the GOC's intention being to seize Orsogna and the high ground north-east of the town. It was to be a daylight attack, with zero hour set down for 1.30 p.m. on the 7th. This would give the infantry time to attain their objectives before darkness fell, darkness that would discourage the enemy from mounting an early counterattack.

On the afternoon of the 6th Headquarters 5 Brigade moved from San Nicolino to some high ground about a mile north-west of Castelfrentano, and K Section adjusted the battalions' lines on the ground, a signals detachment having moved forward to the new position before Brigade Headquarters.

Headquarters 6 Brigade was to remain at Castelfrentano for the operation, but a small tactical headquarters went forward to 24 Battalion's area an hour before the attack began.

The weather on the 7th was showery and gave poor visibility, a not unmixed blessing because, although it assisted the smoke with which the artillery screened 23 Battalion's advance towards the lower end of Sfasciata Ridge, it also reduced considerably the value of the air support of thirteen fighter-bomber squadrons which were to bomb Orsogna for an hour at the beginning of the attack.

By the middle of the afternoon 23 Battalion had reached its limited objective on Sfasciata, but 28 (Maori) Battalion, which had to advance up the rocky Pascuccio Ridge, encountered opposition and several spirited counter-attacks by armour at the upper end of the spur; it managed to reach its objective, however, and would have been able to hold its ground had its supporting arms and armour been able to reach it through Orsogna, the capture of which had been assigned to 24 Battalion. Because their position on the Orsogna- Ortona road at the top of Pascuccio would be too precarious without their supporting arms when daylight came, the Maoris were withdrawn in the early hours of the 8th.

During 5 Brigade's attack communications between Headquarters 5 Brigade and the battalions were maintained by line, that to 28 Battalion working without interruption until about midnight on the 7th after which contact was continued by means of the No. 22 wireless set.

In 6 Brigade 24 Battalion penetrated into Orsogna, but the tanks of 18 Armoured Regiment, which were to support the infantry in the town,

were halted on the Lanciano- Orsogna road by demolitions fired by the enemy right in the path of the advancing armour. During the evening fierce fighting raged in the town, where elements of 24 Battalion had reached the centre but were unable to advance further without armoured support. The battalion was withdrawn from Orsogna at four o'clock next morning.

Throughout 6 Brigade's attack wireless communication was maintained continuously between Headquarters 6 Brigade and Headquarters 24 Battalion, which had moved to within a mile and a half of the town along the Lanciano road. In general design, the wireless layout was similar to that used at the Sangro crossing: two No. 38 sets at Tactical Headquarters 6 Brigade worked forward to Headquarters 24 Battalion, one of these being netted on to the battalion's forward RT net to companies; the other, which worked forward to Headquarters 24 Battalion, was also in communication with a No. 38 set terminal at Headquarters 28 Battalion on Pascuccio, on 24 Battalion's right. In addition to its forward company terminals, 24 Battalion's forward RT control set worked back to a No. 18 set at a battalion signal centre, where the usual battalion No. 22 terminal set worked back to the brigade forward control No. 22 set at Main Headquarters 6 Brigade. This Main Headquarters No. 22 control set also had terminals at Tactical Headquarters 6 Brigade, the Brigade Commander's reconnaissance vehicle, 6 Field Company, Headquarters 27 (Machine Gun) Battalion, 18 Armoured Regiment, 6 Field Regiment, and 25 and 26 Battalions.

After the withdrawal of 24 and 28 Battalions early on the 8th the only gain that remained from the battle was the footing secured on Sfasciata by 23 Battalion, whose participation in the attack had been the result of a last-minute adjustment in the divisional plan. This lodgment on Sfasciata formed a bridgehead across the gully which ran north-east from Orsogna and made a salient into the enemy's line.

Because it was now obvious that the enemy was determined to hold fast to Orsogna, the divisional policy was changed. Later operations were to be planned to outflank the town from the east by using 23 Battalion's

foothold on Sfasciata to provide access to the Orsogna- Ortona road as soon as tanks and supporting weapons could be brought into the bridgehead.

The next phase in the struggle for Orsogna was to be an attempt by 5 Brigade to cut the Orsogna- Ortona road near the upper end of the Pascuccio Ridge, from which the Maoris had been forced to withdraw on the 8th. Early in the evening of the 10th 23 Battalion was to advance from Sfasciata Ridge with armoured support and seize the road; at dawn next morning 20 Armoured Regiment, with elements of 21 Battalion and 22 (Motor) Battalion, would pass through 23 Battalion's positions and attack along the Orsogna road towards the high ground just north-east of the town. In preparation for the attack K Section established a signal centre near the headquarters of 21 Battalion on San Felice Ridge, near the lower end of Pascuccio spur, on the afternoon of the 9th, and later in the evening laid lines to 21 and 23 Battalions and to 28 Battalion, which was still in the position to which it had withdrawn on the 8th.

Meanwhile, on the 8th, 1 Canadian Division—a 5 Corps formation had launched a full-scale attack against the Germans' Moro River defences on the Adriatic coast and attained its first objectives. Heavy counter-attacks on the 9th, however, forced the Canadians to give ground, but that night they again improved their positions, only to be held up again on the 10th by fierce German resistance. As 5 Brigade's attack for the 10th was intended to secure ground conforming to the Canadians' objectives north of the Moro River, the latter's failure to get forward that day had considerable influence on the New Zealand plans, which were changed from attack to active patrolling in order to hold the enemy in the Orsogna area and so reduce his resistance as much as possible nearer the coast. But on the morning of the 10th more favourable reports came in from the Canadian sector and General Freyberg decided that the attack planned for 5 Brigade might still be made. Patrols sent forward that evening to the Moro River east of Poggiofiorito and to the Orsogna- Ortona road just north of Pascuccio found that the enemy was established there in some force, so 5 Brigade's attack was cancelled. Next afternoon K Section closed its signal centre and returned to Main Headquarters 5 Brigade.

On the night of 13-14 December 17 British Brigade, which had come under the command of 2 NZ Division on the 11th in conformity with an Eighth Army regrouping plan designed to strengthen the army's front, crossed the Moro on the New Zealand right and occupied ground near Poggiofiorito and the lower end of Sfasciata and made contact with 23 Battalion.

The attack by 5 Brigade, planned to take place on the 10th but later cancelled, was now to attempt to secure a bridgehead across the Orsogna- Ortona road and so provide a stepping-off place for the Division to isolate Orsogna by stopping its western approaches. Because 23 Battalion already held a salient on Sfasciata Ridge, the main assault was to be made from there by 5 Brigade, supported on the left by 6 Brigade and on the right by 17 British Brigade.

On the 13th it was decided that the attack should take place on the night of 14-15 December, and after nightfall on the 13th K Section again set up its advanced signal centre on San Felice Ridge; by 8.35 p.m. lines had been laid to both 21 and 23 Battalions, the units engaged in the attack.

All 5 Brigade's communications for the attack were completed by 8.8 p.m. on the 14th. From Main Headquarters 5 Brigade three lines led forward to the signal centre on San Felice; another circuit went to 28 Battalion, which was being held in reserve, and from there another line ran to Rear Headquarters 5 Brigade, still south of the Sangro River. Two other circuits, of which one was strapped through to Main Headquarters 2 NZ Division, went to Headquarters 6 Brigade.

From the San Felice signal centre one line went forward to 21 Battalion and another to 23 Battalion; a lateral circuit, with a tee-in to Tactical Headquarters 2 NZ Division, at the south-western end of San Felice Ridge, led to Headquarters 6 Brigade. Inter-battalion lateral

circuits were laid between 23 and 21 Battalions and between 25 and 23 Battalions.

Wireless communications within 5 Brigade conformed to the same general pattern used in the two previous operations, except that an additional No. 38 set, used as a listening set at Main Headquarters 5 Brigade, was netted on to a No. 38 set lateral link established by battalion signal platoons between 21 and 23 Battalions' headquarters.

In 6 Brigade, because only one battalion (the 25th) was being committed in the attack, communications were on a less extensive scale than those in 5 Brigade. One line led forward from Headquarters 6 Brigade to 25 Battalion; 24 and 26 Battalions were served by one omnibus circuit. Inter-battalion lateral circuits between 24 and 26 Battalions, between 26 and 25 Battalions, and between 25 Battalion and 23 Battalion of 5 Brigade were laid by battalion signal platoons.

Wireless communications were provided on the usual scale for an infantry brigade, that is, a No. 22 control set at Headquarters 6 Brigade working forward to No. 22 terminal sets at each battalion's headquarters, and the usual radio-telephony and wireless-telegraphy links working back to Main Divisional Headquarters. No auxiliary No. 38 net was provided forward of Headquarters 6 Brigade for this operation.

In the meantime, the only changes that had occurred in the communications forward of Main Divisional Headquarters were a line laid by B (cable) Section between Headquarters 6 Brigade and Headquarters 17 Brigade, and the setting up of a divisional signal centre which became on 13 December a test point on the two circuits running forward from Main Divisional Headquarters to Headquarters 6 Brigade.

On the 15th, the day of the attack, the Division passed from under the direct command of Eighth Army to that of 13 Corps, and all rear communications were then switched to terminals at the Corps' formation headquarters.

Fifth Brigade's attack met stubborn resistance and the brigade

suffered considerable losses during the day. By the night of 15-16 December the object of cutting the Orsogna- Ortona road was achieved, but although the brigade had driven a mile-wide salient into the enemy's positions beyond the road, and both flanks were more or less firmly secured, the prospect of further gains was uncertain.

During the battle communications in the brigade worked well, although some trouble was experienced from 'overhearing', which was caused by the wet ground making contacts between the field cables.

Early next morning, the 16th, the Germans counter-attacked heavily from the north-east along the Orsogna- Ortona road. The attack on 23 Battalion was thrown back but that on 21 Battalion was more severe and was beaten off with difficulty. By 6.30 a.m. the enemy was withdrawing towards Poggiofiorito after sustaining heavy casualties.

At 7 a.m. tanks of 20 Armoured Regiment, accompanied by infantry of 28 Battalion, advanced down the road from the cemetery towards Orsogna to attempt to block the western exit of the town. They soon came under anti-tank gun fire at close range from the north of the road and from the direction of Guardiagrele. The enemy fire became heavier and halted the infantry, who lost touch with the tanks when wireless communication between the armour and the infantry, for which arrangements had been made before the battle, failed and could not be restored. The failure of wireless was very properly ascribed to the inadequacy of co-ordinated training between battalion and armoured regiment operators. By noon both armour and infantry had been withdrawn to their former positions.

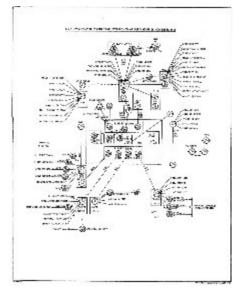
All attempts at exploitation from 5 Brigade's salient ceased after the failure of 20 Regiment and 28 Battalion to break through the defences around Orsogna. The Division was ordered to hold the gains it had made and to adopt a policy of active patrolling, which continued until the 24th, when another attack by 5 Brigade in the Fontegrande area west of the Orsogna- Ortona road was made. This operation, a 13 Corps' conception, had as its object the splitting of the enemy's forces along

the boundary between 5 British Division and 2 NZ Division and the turning of the Orsogna defences from the north. It was to be a three-battalion assault, with 28 Battalion on the left, 26 Battalion—brought under 5 Brigade for the operation—in the centre, and 21 Battalion on the right. The 20th Armoured Regiment was under the command of 5 Brigade, and 6 Brigade was to support the attack with machine-gun and mortar fire from Brecciarola Ridge and was to be prepared to send 24 Battalion into Orsogna if the Germans evacuated it.

K Section laid out line communications for the attack on a scale that would have eclipsed those of many an infantry division in the desert battles of 1942. From Main Headquarters 5 Brigade, still in the same position one mile north-west of Castelfrentano, three field cable circuits, one with a superposed Fullerphone telegraph channel, went forward to a signal centre at the site on San Felice that had been used for the operation on the 14th. One field cable circuit, with a superposed Fullerphone telegraph channel, led from the signal centre to 15 British Brigade on the right of the New Zealand sector; another, also with a superposed Fullerphone channel, went to Main Headquarters 6 Brigade at Castelfrentano. To Main Divisional Headquarters there was only one circuit, a poled-line route strapped through at Main Headquarters 6 Brigade; both terminals were superposed for Fullerphone telegraph working. From Main Headquarters 5 Brigade a field-cable speech circuit ran to Headquarters 23 Battalion at Castelfrentano, which was being held there in reserve in readiness to exploit any success that might attend the brigade's attack.

Forward of the signal centre on San Felice all circuits were constructed of field cable and none had Fullerphone telegraph channels. There was one to each of the three battalions and one to Divisional Tactical Headquarters; another went to Tactical Headquarters 4

Armoured Brigade, near Main



2 NZ DIVISION WIRELESS DIAGRAM ESTABLISHED AT ZERO HOUR 26 NOVEMBER 1943

Headquarters 5 Brigade. In addition, two field cables went off to the left to 24 Battalion, one direct to that battalion's headquarters, the other teed-in to one of 6 Brigade's field-cable circuits leading forward from Main Headquarters 6 Brigade to 24 Battalion.

Lateral circuits were laid between 28 and 26 Battalions, and between 26 and 21 Battalions; a third lateral, a long circuit which ran right across the brigade sector, was laid between 28 and 21 Battalions. At Headquarters 28 Battalion a field cable was laid forward to a tactical headquarters, and a similar arrangement was made at Headquarters 21 Battalion, where a line also went to Headquarters 20 Armoured Regiment. No special circuits were laid in front of 26 Battalion in the centre of the sector, where the lines consisted of the usual battalion circuits to headquarters of companies.

Wireless consisted of the conventional infantry brigade arrangement of a No. 22 control set working forward from Main Headquarters 5 Brigade to No. 22 terminal sets at each battalion's headquarters. In addition, three No. 38 sets at Main Headquarters 5 Brigade were provided to listen in intercept on the forward radio-telephony command nets working forward from each battalion's headquarters to infantry companies.

In 6 Brigade, where one battalion only, the 24th, was to be

committed, wireless and line communications were on a much more modest scale than those of 5 Brigade.

At Main Divisional Headquarters no significant changes had occurred in either line or wireless communications, except that all line circuits to 66 and 80 Medium Regiments, Royal Artillery—no wireless links had been provided to these units—were relinquished soon after the two regiments passed to the command of 13 Corps on the 15th. Headquarters 6 Army Group, Royal Artillery, had also gone to the command of 13 Corps on the 15th, but it remained in line communication with Main Divisional Headquarters until the close of the Orsogna operations later in the month.

On the night of 22-23 December and throughout the day on the 23rd a heavy mist helped to screen the moves of the New Zealand units from enemy observation, but it also had the effect of preventing air support planned for that day.

The barrage opened at 4 a.m. on the 24th for the start of 5 Brigade's attack. The infantry moved forward against stiff resistance in miserably cold weather and in heavy rain showers which impeded the progress of both infantry and armour considerably. Except for a precarious foothold secured by one company across the Arielli stream, the battalions were unable to advance beyond their first objectives because of the heavy fire. Later in the day the plan for exploiting with armour beyond the infantry objectives was abandoned; 6 Brigade was ordered to take over operational command from 5 Brigade and to move up 25 Battalion to relieve 21 Battalion, which had been severely mauled.

Wireless communications between Main Headquarters 5 Brigade and the battalions worked well during the attack, and K Section linemen followed up the advance with field cable and established line communications during the morning with the battalions in their new locations.

That night the enemy fire died away almost completely, and when

Christmas Day dawned quietness reigned all along the front.

Headquarters 6 Brigade moved forward from Castelfrentano early that morning to Spaccarelli and took over control of 5 Brigade's sector. K Section left its cable on the ground when it moved out with Headquarters 5 Brigade, and L Section adjusted its lines to battalions by closing the signal centre on San Felice and extending the circuits back to Headquarters 6 Brigade.

This Christmas Eve battle was the last attempt by the Division to breach the German line in the Orsogna area. With the Italian winter closing down, the weather began to deteriorate quickly, and soon the ground was so sodden with rain that any extensive movement of transport became almost impossible.

Dawn came on Christmas Day with cold and miserable discomfort; the previous day's rain had turned the area into a sea of mud several inches deep, and the air had that harsh tang of icy, penetrating cold that warned even the least weatherwise that snow was imminent.

At Signals' mess at Main Divisional Headquarters, where officers and men ate their Christmas dinner together after the traditional manner of the British Army, the meal was served in the open from the men's mess truck. There was no seating accommodation for either officers or men, who ate their stuffed turkey, peas, cauliflower, potatoes and plum pudding standing about on the straw which had been spread on the ground around the truck to cover the mud. During the dinner General Freyberg visited the mess and, after drinking a mug of beer with the men, spoke a few words of encouragement and praise for their work in the Sangro and Orsogna battles.

Rain fell during the evening and night of New Year's Eve and by midnight the wind was blowing at gale force. Snow began to fall at two o'clock in the morning and by dawn lay a foot deep on the ground. Except for a few who had installed their bedding in the backs of trucks, the men slept in their desert-pattern bivouac tents, beneath which they had dug pits to give themselves headroom, and they were caught in the

most acute discomfort as the tents collapsed under the weight of the snow, which soon drenched their bedding and clothing. In places where only a few inches of snow lay over the mud, the men floundered in icy, watery bogs which flowed in over their boot tops and added to their misery. These conditions were particularly unpleasant for motor-cycle despatch riders; the slush reached in places to the foot-rests of their unstable mounts. Before long, however, after searching nearby buildings for a few square feet of additional space in the already overcrowded rooms, most of the homeless were again under shelter.

The urgent work of repairing the ravages of the storm on the lines radiating out from Main Divisional Headquarters began immediately. A number of the circuits were former civilian poled-line routes, and these had suffered most because temporary repairs in damaged spans had broken down under ice loading. In some places the poles had been brought down by the weight of the snow carried by the spans, so that parts of the circuits were reduced to tangled masses of wire half buried in the snow. Field cable was quickly laid out to bridge the damaged spans, and by that afternoon, after magnificent work by B (cable) Section linemen, all lines were restored.

On 6 January Main Divisional Headquarters moved from its bivouac in the olive groves just to the north of the Sangro, where it had been since early December, to offices and billets in Castelfrentano. The long convoy wound its way up the steep slippery slopes into the town at a wearisome crawl, which slowed to a snail's pace as the leading vehicles entered the village and began to warp their way into the squalid and noisome alleys retreating furtively from the narrow main street, where there was barely room for a three-ton lorry to turn. Frequent sharp bends tried the patience of even the most experienced drivers. The steep grades on the hillsides on which the village was perched added to the hazards of negotiating the heavily-laden vehicles over slippery cobbles and yawning potholes. In these insalubrious alleys, into which otherwise estimable citizens cast their kitchen refuse, and where broods of offspring scampered under the wheels of the trucks and lorries lurching over the

rough pavement, the transport was finally ensconced in the lee of the troops' billets.

A new problem now arose. Living space for soldiers and for the inhabitants, made miserably and pitifully indigent by the ravages of over three years of war, was quite inadequate. But the people were loath to worsen their privations by being driven into the streets and they clung to their homes in passive desperation. The troops, eager to secure the shelter of a roof after the rigours of open-air bivouacs in an Italian winter, were reluctant to evict the unfortunate occupants, so that soldiers and civilians soon lived cheek by jowl in the rooms and narrow passageways of the village houses.

During their stay in the town the New Zealanders' kindliness, seldom more evident than when they were confronted with elderly women and small children in distress, soon discredited the dreadful tales the Germans had spread about their barbarous and rapacious habits. The inhabitants' misgivings were replaced by a lively curiosity in the doings of these strange men, who soon won the confidence of the children with gifts of cake and chocolate. The regimental bootmaker battered away at his last to mend diminutive shoes, while groups of hopeful children, clutching their dilapidated footwear, waited their turn. When, later in the month, Divisional Headquarters moved out of the town in the darkness of a winter's night, some of the families with whom the troops had been billeted sat up long past their usual bedtime to bid them a regretful farewell.

¹ Lt-Col N. R. Ingle, m.i.d.; Marton; born Marton, 8 Nov 1917; clerk; OC D Sec Sigs Jun-Nov 1942, K Sec Jan-May 1943, 2 Coy Jun-Oct 1943, 1 Coy Nov 1943-Jan 1944; OC 3 Coy and 2 i/c Div Sigs Jan-May 1944; CO Div Sigs 28 May-28 Jun 1944; 2 i/c Div Sigs 28 Jun-Sep 1944; now Regular soldier.

² Very few signalmen marched; those who did were with brigade and field regiment sections, and even in these units the proportion was small.

- ³ Sigmn J. Southberg; Waikino; born Waihi, 10 Oct 1906; labourer; wounded 1 Dec 1941.
- ⁴ Sigmn N. S. King; born NZ 10 Nov 1919; contractor; killed in action 25 Nov 1943.
- ⁵ Sigmn H. J. Maunsell; born Ireland, 18 Jan 1916; lineman and truck driver; died of wounds 26 Nov 1943.
- ⁶ Sigmn J. A. Shanks; born Dunedin, 9 Jun 1930; tinshop foreman; died of wounds 7 Dec 1943.

DIVISIONAL SIGNALS

CHAPTER 18 — THE STRUGGLE FOR CASSINO

CHAPTER 18 The Struggle for Cassino

At the end of December 1943 Eighth Army's intentions had been that 2 New Zealand Division should remain in its winter line until the end of January, when it would be withdrawn to the rear for a period of training. But the heavy snowfall of 31 December had caused the Army to revise its plan for driving through Chieti to Rome, and it had been decided that the western flank of the Allied line, where a landing by Fifth Army at Salerno early in September had carried the advance forward to within 30 miles of Naples, presented an easier approach towards the Italian capital.

After the fall of Naples the enemy had withdrawn to his Winter Line, which was a series of well prepared positions laid along the shortest possible line he could contrive across the waist of the Italian peninsula. This line extended from the Garigliano River, which flowed into the Gulf of Gaeta above Naples, through the mountains in the centre to the Sangro River in the east. Behind the Winter Line the main German defensive positions, the Gustav (or Cassino) Line, began in the Gulf of Gaeta, skirted the Garigliano River and continued up the western bank of the Rapido River to the heights above Cassino, which overlooked the entrance to the Liri valley, aptly called the gateway to Rome, still the immediate objective of the Allied armies.

This gateway enjoys tremendous natural advantages for defence. To the south it is flanked by steep mountains which border the western side of the Garigliano River all the way from the sea to where it swings westwards into the Liri valley and becomes the Liri River. ¹ To the east of the town of Cassino, which lies at the foot of the mighty bastion of Monte Cassino in the fork of the Rapido and Liri valleys, the spurs of the Apennines begin to rise into the rugged backbone of the peninsula. Here the terrain over which the Allies had to approach and assault the Liri valley defences was almost completely overlooked from the enemy positions above Cassino and the lofty sentinel tower of Monte Cairo, three and a half miles to the north-west, rising five and a half thousand

feet above the valley floor.

From the Volturno plain in the south Highway 6, one of two principal roads from Naples to Rome, follows a natural corridor through the north-south mountain barrier. Near Mignano this corridor contracts to a defile a mile wide. Just beyond this defile, where the corridor debouches into the Rapido valley, two isolated features, Monte Porchia and Monte Trocchio, lie directly on the flank of the plain which leads across the Rapido River into the Liri valley. Both features had fallen to the Americans, Porchia on 7 January and Trocchio a week later. Thus, by mid-January, the enemy had been thrown out of his Winter Line on the Tyrrhenian side and back into his Gustav Line defences, while Fifth Army had breasted up to the Rapido River, which alone barred the way into the Liri valley.

On 12 January 15 Army Group directed that 2 NZ Division was to be moved to Fifth Army's area on the western side of the peninsula, where it would go into Army Group reserve. Its future employment would depend on the course of Fifth Army's operations on the Rapido River. But the Division was primarily intended to undertake an exploitation role, for which its mobility and capacity for long-range operations were particularly suited; and when an opportunity for such employment could be foreseen, it would be placed under the command of Fifth Army.

The relief of the Division and its move were screened in secrecy. The first warning order, issued on 11 January, said that the Division's positions were to be taken over by 4 Indian Division and that the relief would begin on the 13th.

Except for those units which were still in the forward areas engaged in what was known as the 'casa war', so-called from the line of infantry posts installed in cottages along the front, the Division was placed under a wireless silence beginning early on 12 January. From this date the designation of 2 NZ Division was replaced temporarily by SPADGER FORCE.

After dusk had faded on the evening of the 16th all ranks at

Divisional Headquarters removed distinguishing badges, shoulder titles and any other marks or signs, including the fernleaf insignia on vehicles, which identified them as New Zealanders. Although these measures were ordered and carried out very thoroughly, they were incapable of achieving their purpose. How could any such measures disguise New Zealanders' mannerisms and their speech any more than they might conceal Australian accents or the county dialects of Englishmen? But the men complied with their usual light-hearted irony, some even inquiring facetiously if the engraved letters 'NZ' on their rifle barrels should be obliterated, or the New Zealand stamps removed from the food parcels from home with which nearly every vehicle was liberally provisioned. Others recalled the story—probably apocryphal but told and retold many times in good-natured derision—of the occasion in June 1942 when the Division travelled incognito from Syria to the Western Desert. All badges and distinguishing marks had been removed, but a large van, its sides boldly emblazoned with the words 'New Zealand Patriotic Fund Board', had travelled without any attempt at concealment in the middle of the Divisional Headquarters' convoy.

The first stage of the journey from Castelfrentano to the divisional training area north of the Volturno River near Piedimonte d' Alife was fraught with the usual difficulties of night moves. The trials of the drivers, especially those of the armoured command vehicles, command lorries and three-tonners, began early as the transport wriggled cautiously in the inky darkness out of the crazy labyrinth of Castelfrentano's alleys and formed up in the silent town. The use of lights was not permitted, so that for the first twelve miles the nose-to-tail line of transport inched forward over the ice-encrusted roads, noses bumping fenders and drivers straining their eyes to discern the way in the darkness.

The headquarters' three weeks' stay in the Alife area was extremely pleasant. The camp site in an olive grove, where the ground had a liberal proportion of gravel and thus provided firm standing for the heavier vehicles, commanded a fine view of the green Volturno valley hemmed

in by high mountain ranges. The change in temperature from that on the wintry Adriatic coast was very noticeable; gone were the wintry landscapes and the biting winds, and the first of spring's new growth was bursting forth. Lieutenant-Colonel Pryor, commanding Divisional Signals in the absence of Lieutenant-Colonel Grant, who had gone to New Zealand on furlough, watched the fresh verdure with interest and was heard to remark that even the blast of war could not prevent the oaks from budding in season.

The training programme carried out in the Alife area was not severe and provided ample time for sport. Space was quickly cleared for football grounds, and soon strangely willing fatigue parties were industriously marking out side-lines and erecting goalposts of unsymmetrical proportions hewn from nearby trees.

From 23 January daily leave parties of 300 men from the Division visited the ruins of Pompeii, which was just another ruin to most of the men, although many whose tastes were more than usually cultivated in the architectural and decorative arts were interested in the almost perfect preservation of some of the murals in the houses. Naples, too, which many visited later, failed to arouse much enthusiasm, mainly because of the complete absence of the fleshpots with which Cairo and Alexandria abounded. Here the aesthetes found little to arouse their interest, being offended by the grotesque ornateness of Italian furniture and the hideous gilded interior decorations featuring bedraggled cherubim and cornucopias.

Meanwhile, in the plain below Cassino, 2 United States Corps of Lieutenant-General Clark's Fifth Army had thrust across the Rapido River in a four-battalion attack in an attempt to seize Sant' Angelo and thus open the way westwards along Highway 6 in the Liri valley towards Rome, 85 miles away. Had this attack succeeded, General Clark planned to exploit with the New Zealanders, but the Americans, having crossed the river the previous day, were thrown back on the 23rd by heavy counter-attacks. In the north, in the Rapido valley, attacks by 10 British Corps and the French Expeditionary Corps were also halted after they

had gained a little ground. On the night of 21–22 January, immediately before 2 US Corps' attempt on Sant' Angelo, 6 US Corps landed at Anzio and Nettuno and secured a foothold against slight opposition. The enemy's reaction to this threat to his communications between Rome and his Gustav Line defences was swift: bringing down considerable reinforcements from the north, he contained the Americans within a narrow beachhead.

The Anzio operations having been thus restricted and those against Sant' Angelo frustrated, Fifth Army's point of attack to breach the enemy's main defences was shifted to the north in an attempt to outflank the Gustav Line. By the end of January an American division had reached to within a few hundred yards of the Monastery on the heights above Cassino, but in the face of stubbornly held German defences was unable to make further progress. Below the Monastery another American division had carried the enemy defences on the northern fringes of Cassino, but its progress was halted by German strongpoints in the town.

Because the New Zealanders' task of advancing up the Liri valley demanded, on account of the strongly increased enemy defences, a larger force and therefore a wider organisation than one division could supply, 2 New Zealand Division was expanded into a corps and reinforced by another formation from Eighth Army, 4 Indian Division, which was withdrawn from the Adriatic side and sent to Fifth Army's front. In addition to this accession of strength, New Zealand Corps acquired considerable administrative and artillery reinforcements, which included three field regiments and five medium regiments of Royal Artillery.

To Signals the immediate effect of this expansion was the augmenting of its resources to meet its new commitments by the attachment on 5 February, two days after the formation of New Zealand Corps, of a number of sections and detachments from Royal Signals and the Americans. With this rise in status of Divisional Signals to Corps Signals, a corresponding elevation occurred in the rank and

appointment of its commander, Lieutenant-Colonel Pryor, who became a temporary colonel with the appointment of Chief Signal Officer, New Zealand Corps.

Notwithstanding the welcome given the various detachments of Royal Signals, probably the most interesting newcomers to assist the New Zealanders in their new tasks were the United States Signal Corps' men from Fifth Army. Called privates first class, privates, and other appellations strange to British and Dominion signals units, they brought with them curious trans- Atlantic jargon and signal nomenclature which the New Zealanders took some time to become accustomed to. For a few days the designation 'message Centre Chief' for the familiar Signalmaster caused slight confusion and much amusement, and in B (cable) Section hard-bitten warriors winced when they heard themselves described as 'trouble-shooting teams' and their quad cable as 'spiral four'. On the other hand an American officer was surprised when he heard a New Zealand lineman refer to his 'ground spike' as an earth pin.

The American field rations aroused much curiosity. With typical American generosity, the visitors handed over several cartons of biscuits, some coffee and a tin or two of the coveted bacon and eggs. They in turn were invited to try a tin or two of British bully which, to the stupefaction of the donors, they consumed with great gusto; one even went so far, to the incredulity of a group of New Zealanders, as to pronounce it 'just fine'.

On 4 February an advance party of New Zealand Corps Headquarters and the forward signals group left for a new position a little over a mile north of Mignano to prepare a headquarters area and lay out the beginnings of a signals communication network in readiness for the deployment of the Corps. They were followed next day by Main Headquarters New Zealand Corps and Main Headquarters 2 NZ Division, together with their respective headquarters' signals components. On that day, too, Main Headquarters 6 Brigade moved to a new position one and a half miles south-west of San Vittore, and Main Headquarters 5 Brigade to the south-eastern side of Monte Trocchio. Late that night

Headquarters 4 Armoured Brigade moved up to within one mile southwest of Mignano. Meanwhile the New Zealand artillery, the first complete group from the Division to move up to the Cassino front, had reached previously reconnoitred positions south-east of Monte Trocchio and deployed its guns for action.

New Zealand Corps took over command of the Rapido line south of Cassino on the morning of 6 February. Its boundary to the north with 2 US Corps, which was across the Rapido north of Cassino by this time and had a foothold in the northern precincts of the town, was Highway 6, and to the south, with the British 10 Corps, was along a line running south-eastwards from the railway and reaching the Gari River about two miles north-west of its confluence with the Liri River.

Two attacks by 2 US Corps, one on the 8th and the other on the 11th, having failed to clear the enemy from the heights above Cassino and secure positions commanding the eastern end of the Liri valley, New Zealand Corps put 4 Indian Division into the hills north of Cassino to complete the task which the exhausted Americans were unable to do because of their heavily depleted numbers, the harsh rigours of the weather, and the fierceness of the German counter-attacks. When this had been done and 2 NZ Division had thrown a bridgehead across the Rapido, the stage would be set for an advance westwards up the Liri valley.

In the meantime the line communications system within New Zealand Corps had been building up steadily from its modest beginnings of 6 February, when only one circuit reached out to each of 5 and 6 Brigades, one to Headquarters Divisional Artillery and Headquarters 2 US Corps, and, in a 16-mile-long twisted pair cable, to Rear Headquarters New Zealand Corps. Now, on the 12th, there was an immense network of lines radiating outwards in intricate patterns and combinations of underground cable—part of the Italian civil system—poled-line circuits, metallic circuits of twin twisted cable, and the humble earth return circuits of single field cable.

Two days earlier the shroud of secrecy under which the Division had hidden as SPADGER FORCE had been lifted, but the wireless silence which had been imposed a month before in the Castelfrentano area still remained in force, so that most of the signal traffic within the Corps had still to be passed by line. All this imposed a great burden on the linemen of the signal sections, as much on those with the field regiments as those at brigades. At first, of course, when the Division took up its operational positions along the Rapido, all lines were put out to brigades and regiments by the shortest or most accessible routes in order to establish communications quickly; in such exposed positions, however, they soon began to incur considerable damage from enemy shellfire and the movements of tracked vehicles. Presently, after long hours of gruelling work each day by the mud-spattered and weary linemen, the circuits were built back into more secure places where vehicles could not pass, but enemy fire continued to inflict heavy damage to the cables.

The meagre results of the Americans' attempts to seize the heights above Cassino failed to present an opportunity for the New Zealanders to throw a bridgehead across the Rapido south of the town; similar attempts by the Indians on 15 February and again on the night of the 17th–18th also failed for very much the same reasons, although the Indians were stronger in numbers and not as exhausted as the Americans. Meanwhile, an attack planned for 5 Brigade to capture the railway station and the southern portion of the town on the night of the 13th–14th, in order to allow armour to pass through and gain Highway 6 to the west, was postponed because of the weather, which had made the ground south of the railway sodden and almost completely impassable even to men on foot.

By this time the question of whether the resistance on the heights around the Monastery on Monte Cassino should or should not be reduced by a heavy air assault was being discussed on the higher formation level. It was a difficult and controversial question, in which natural reluctance arose among some senior commanders because of the venerable and

religious associations in which the Monastery was held. At length, however, a decision was reached that an attack should be made in considerable strength. On the morning of 15 February waves of heavy and medium bombers, comprising 250 aircraft, including 150 Super-Fortresses, passed over the heights and rained down their heavy bombs almost continuously from 9 a.m. until after noon. In the intervals between the successive waves of aircraft heavy and medium guns shelled the Monastery. The results were disappointing: although the high explosive wrought enormous destruction, large portions of the lower walls of the massive pile remained intact, and these, together with the surrounding rubble, gave excellent cover for the German defenders to continue their stubborn resistance.

On the night of 17–18 February 5 Brigade attacked the railway station with two companies of 28 (Maori) Battalion. In readiness for this operation K Section on the 11th had established a signal centre on the railway where it passed between the Rapido River and the south-western slopes of Monte Trocchio. This signal centre remained in operation until the attack on the 17th; from it one twisted pair field cable ran to 28 Bat-talion's battle headquarters, which was dug in on the eastern slopes of the railway embankment about two miles north of the signal centre and about a thousand yards east of the station. Three circuits ran back from the signal centre to Main Headquarters 5 Brigade, behind Trocchio, and on one of these a superposed Fullerphone telegraph circuit was strapped through at the signal centre to the battalion's battle headquarters circuit. From Main Headquarters 5 Brigade two circuits went back to the Main Headquarters New Zealand Corps exchange.

Wireless, completely inoperative throughout the Division since 12 January, was freed from its silence at 9 p.m. on 17 February, half an hour before zero. Within 5 Brigade the conventional wireless layout for an infantry brigade was used for the attack. In addition a No. 38 set at the signal centre was netted in intercept to 28 Battalion's forward control net to its infantry companies.

Throughout the attack both wireless and line communications

behind Battle Headquarters 28 Battalion worked well, although numerous faults on the lines between Main New Zealand Corps and Main Headquarters 5 Brigade had been caused by enemy shelling. Although signal communications forward of battalion headquarters are not normally the responsibility of Divisional Signals, K Section had acquired an interest, through its intercept set at the signal centre, in 28 Battalion's forward control net to companies. No line was laid forward of Headquarters 28 Battalion, all communication with the two companies in the attack being entirely by wireless.

Both companies left their forming-up line in the sodden fields south of the railway at 9.30 p.m. and advanced slowly across the waterlogged ground, which was sown plentifully with anti-personnel mines, against machine-gun and mortar fire from the southern portion of Cassino. B Company eventually reached the station yard and, after severe fighting, gained possession of the station itself and an engine house. On the left A Company pproached slowly towards the Hummocks south of the station under fierce fire, but shortly after midnight lost its wireless communication with B Company and with Battalion Headquarters. The engineers, working doggedly to repair enemy demolitions on the railway to allow tanks of 19 Armoured Regiment to reach the town along the track and secure the objectives won by the Maoris, were held up by enemy fire and could not complete their task.

Fierce fighting at the station yard and in the southern outskirts of the town continued throughout the morning and early afternoon of the 18th until, soon after 3 p.m., the Maoris were forced back by a determined German counter-attack supported by mortar and machinegun fire and tanks. At 3.40 p.m. wireless communication failed between Headquarters 28 Battalion and the two companies, with the result that nothing was known of the counter-attack and its success until the first of the Maoris arrived back east of the Rapido stream about 4 p.m.

In this battle K Section sustained no casualties, but G Section, attached to 6 Field Regiment, did not get off so lightly, two of its line

detachment being killed on the 18th while repairing a regimental line. One was Signalman Tankersley ² and the other, the driver of the sections' line truck, Signalman McKeown. ³

Although 5 Brigade's attempt to seize and hold the railway station and the southern part of the town had failed, New Zealand Corps was still to apply pressure on the enemy's defences, mainly to prevent him withdrawing any of his formations to meet the threat of an Allied invasion of southern France. The New Zealanders were instructed to renew their attempts against the town.

Almost insuperable supply difficulties hampered 4 Indian Division's operations against the Monastery from the hills to the north-west, so the idea of attacking from the mountains or from the east, where the enemy's defences were strengthened by demolitions and water obstacles, was abandoned in favour of an assault from the north, where 2 US Corps was still in possession of the northern fringes of the town. The essence of the plan was that 6 Brigade should attack the town from the north and allow 19 Armoured Regiment to follow through past the railway station and open a breach, along Highway 6, in the defences covering the entrance to the Liri valley. Two American armoured formations, Task Forces A and B, were then to pass through with the rest of the New Zealand armour and exploit into the valley.

The date for this operation was fixed tentatively for 24 February, but whether this timing would be followed depended entirely upon the weather. A fine spell was needed to allow the ground in the Liri valley to dry out sufficiently to provide firm going for armour. Good weather was needed also to lift the heavy bombers off their sodden airfields so that they could batter the town before the infantry attacked. For the artillery preparation, which was to precede the actual assault after the bombers had done their worst, the Corps would have, in addition to its own New Zealand guns, those of 2 United States Corps, the French Expeditionary Corps and 10 British Corps, representing the greatest concentration of artillery the New Zealanders had ever had.

The relief of 133 Regiment of 2 US Corps in the northern outskirts of Cassino by 6 Brigade took place during the night of 21-22 February. On the 21st Main Headquarters 6 Brigade moved to a new position opposite Cassino in the Rapido valley and took command of the area from 133 US Regiment. The 19th Armoured Regiment, under the command of 6 Brigade for the forthcoming attack, took up a position nearby. On the 20th, the day before the move of Main Headquarters 6 Brigade, L Section set up a brigade exchange in the command post of 133 Regiment on the western bank of the Rapido north of Cassino; a Tactical Headquarters 6 Brigade was established there, and the exchange was intended to be expanded later to a signal office to serve the brigade's main headquarters.

Sixth Brigade's orders for the attack on the town were issued on the morning of the 23rd, but just after midday, when threatening signs of rain began to appear, word was received from Main Headquarters New Zealand Corps that the operation was postponed for twenty-four hours. That afternoon heavy rain fell and turned the ground into an unmanageable morass. Next day the weather failed completely, and three weeks passed before conditions again became suitable for the launching of the assault, which was to go under the code-name of DICKENS. Everything was then made ready for the attack to commence on 10 March, but only the night before New Zealand Corps learned that bad weather in the south-east had drenched the airfields at Foggia and grounded the heavy bombers.

During the first two weeks of February another Eighth Army formation, 78 Division—the 'battle-axe' people, so-called from the dreadful looking Jack Ketch cleaver depicted on their divisional insignia—arrived at Fifth Army from the Adriatic sector. This division came under the command of New Zealand Corps on 17 February; it was not to take part in the actual assault, but was to be held ready to cross the Rapido on the New Zealanders' left if required to assist exploitation in the Liri valley.

The New Zealand Division's operation order of 23 February for 6 Brigade's attack had reimposed wireless silence throughout the Division, but between then and 15 March it was frequently broken because of shell and mortar fire damage to the field cables.

a part of every operation however completely it might have been planned beforehand, were made. On the 14th, a fine day with a bright and clear sky and the promise of more fair weather to come, Signals at Main Headquarters 2 NZ Division completed an extensive programme of relaying the forward lines and building them back into places of safety from the tracks and wheels of transport.

Never before—except perhaps during No. 1 Company's employment as a Corps Signals in General Wavell's campaign in the Western Desert in 1940—had such a vast and complex system of line communications come within the responsibility of New Zealand Signals. From the Main New Zealand Corps' exchange, the nerve centre of the immense network, twenty-eight circuits, twelve of them provided with superposed telegraph channels, radiated outwards—forward to the infantry brigades and artillery formations, to other corps and divisional formations on either flank, and to the administrative headquarters in the rear. Of these twenty-eight circuits, Tactical Headquarters 2 NZ Division, which opened near Cervaro on the eastern side of the Rapido valley on the morning of the 15th, had two, 5 Brigade two, and 6 Brigade one. From Tactical Headquarters 2 NZ Division, in its turn, one circuit ran to each of the two infantry brigades and another to Headquarters Divisional Artillery, from which other lines went to the three New Zealand field regiments, one Royal Artillery regiment and Headquarters 2 Army Group, Royal Artillery.

Main Headquarters 6 Brigade had three circuits to its Tactical Headquarters, situated on the western bank of the Rapido just north of Cassino, and from there, in addition to the usual lines to the brigade's battalions assembled north of the town in readiness for the attack, two

lateral lines ran to Headquarters 5 Indian Brigade on the heights to the north-west of the Monastery.

Wireless communications assumed the usual pattern employed in 2 NZ Division, but were considerably expanded in two important respects. The first was the establishment of the numerous control sets of a corps headquarters working forward to its divisional formations, in this case 78 British Division, 4 Indian Division, and 142 Regimental Combat Team (an American force consisting of an infantry regiment, an artillery battalion, some engineers and a medical company). There were no wireless links to Main Headquarters 2 NZ Division, which was sited in the same area as its parent corps' headquarters. The second cause of expansion was the inclusion at Headquarters New Zealand Divisional Artillery of an additional control set working forward from the headquarters of the CCRA New Zealand Corps to the CRAs at 4 Indian and 78 British Divisions and to Headquarters 2 Army Group, Royal Artillery. In addition, the New Zealand CRA's usual wireless net working forward to regiments had grown to almost unmanageable proportions with the addition of out-stations at a Headquarters Divisional Artillery observation post and an American anti-aircraft group, together with another seven sets installed in regimental commanders' reconnaissance vehicles which were able to switch at will on 'flick' frequencies to the control set at Headquarters Divisional Artillery. [See wireless diagram on pp. 444-5.]

In 5 and 6 Brigades wireless communications followed the usual pattern for an infantry brigade, with the addition in each case of No. 22 set out-stations at signal centres. In 6 Brigade two No. 38 intercept sets, one at Main Headquarters 6 Brigade and the other at the signal centre on the western bank of the Rapido, were tuned to a lateral wireless net between 24, 25 and 26 Battalions. At Tactical Headquarters 6 Brigade, on the same site as the signal centre, a No. 38 set was netted, also for intercept purposes, to the control set at Headquarters 25 Battalion, which worked forward to infantry companies; another, at Main Headquarters 6 Brigade, performed a similar function on 26 Battalion's

forward company net.

At 8.30 a.m. on 15 March the prelude to DICKENS began with a massive air bombardment, which at intervals of between ten and twenty minutes until noon continued to rain destruction on Cassino and the slopes of Monte Cassino on the western outskirts of the town. In the three and a half hours of aerial assault more than 500 heavy and medium bombers of the American Strategic and Tactical Air Forces dropped over 1000 tons of bombs in an area of less than one square mile. While the heavies and mediums were pounding the town into rubble, hundreds of Boston bombers and lighter aircraft of the Desert Air Force and the American 12th Air Support Command attacked enemy positions in the south and south-west of the town. Although most of the bombs fell squarely upon the town and among the defences along the lower slopes of Monte Cassino, some fell wide, and one of these damaged a 6 Brigade B Echelon line at San Michele.

On the tick of noon, barely before the last group of bombers had vanished in the sky to the south-east, the black smoke from their last stick of bombs still eddying up from the ruins of the battered town, the eastern slopes of Monte Cassino blossomed into hundreds of fleecy puffs of smoke where the first shells from over 600 British, New Zealand, Indian, Free French and American guns opened the artillery concentration.

Half an hour later men of 25 Battalion moved off from the northern outskirts of the town on their advance towards their right-angled objective which, commencing at Castle Hill above the north-western corner of the town, ran south for 400 yards to the Continental Hotel in the south-west and then swung east for 600 yards to a road junction on the eastern boundary. Outside this angle lay the southern and south-western fringes of Cassino, with buildings more scattered towards the railway station and the point, farther west, where Highway 6 swung suddenly westwards into the entrance to the Liri valley.

At once the advancing infantry met difficulties. The bombardment

had left great sprawling masses of rubble and masonry across the streets, which were plentifully pitted with yawning bomb craters, so that the squadron of 19 Armoured Regiment tanks accompanying the initial attack was unable to get beyond the northern fringes of the town, and even the infantrymen on foot had difficulty in maintaining their advance through the ruins.

Unexpectedly heavy resistance was encountered in the south-west corner of the town, where a strongpoint in the Continental Hotel, in the centre of the German line along the base of Monte Cassino, halted 25 Battalion. By the evening, however, the battalion had captured Castle Hill, and later that night it handed this feature over to 5 Indian Brigade and continued on towards the southern limits of its objective.

About the time that Castle Hill fell to 25 Battalion, 26 Battalion crossed the Rapido at the north-eastern end of the town and, accompanied by the rest of 19 Armoured Regiment, moved towards the brigade's second objective, which was a semi-circular line starting at a road junction south of the town, where Highway 6 turned west towards the Liri valley, and swinging round to join the Gari River nearly a thousand yards to the south-east.

But 26 Battalion also had considerable difficulty in making its way among the heaped rubble and yawning chasms left in the streets by the air bombardment. Finally it was pinned down by heavy machine-gun fire on a line running from the Botanical Gardens to the point where Highway 6 entered Cassino from the east. Soon after the battalion's attack had begun the progress of 19 Armoured Regiment's tanks was effectively halted in the northern part of the town by huge bomb craters and demolitions.

Early in the advance communications within 26 Battalion became very unreliable, and it was not until about 10 p.m., when the battalion signallers laid lines from Battalion Headquarters to the forward companies, that they were fully restored.

Soon after dusk heavy rain began to fall and this added immeasurably to the trials of the attackers, who so far had reached only the first objective. Bomb craters soon began to fill with water and into these the men stumbled as they groped in the inky darkness through the fallen masonry and twisted girders. Inevitably, of course, the No. 38 sets became inoperative from immersion in water when their bearers took cover from fire or fell headlong into the rain-filled craters. Moreover, some of the operators had removed the centre and top sections of the sets' aerials because of sniping and also to enable them to clamber more easily through the crumbling debris; this had the effect of reducing the sets' signal levels to an almost unworkable strength. Together with the failure of those sets which had become sodden, this soon rendered the battal- ion's internal wireless communications almost completely ineffective.

In the rear, however, communications were much more stable throughout the attack, all lines from Main Headquarters New Zealand Corps' exchange to both infantry brigades, and those between Main Headquarters 6 Brigade and its Tactical Headquarters, being maintained satisfactorily. Wireless communications between Main Headquarters 2 NZ Division and the brigades were also maintained without serious interruption.

At Main Divisional Headquarters considerable use was made of intercept sets by the General Staff Intelligence, who obtained a good deal of early information on the fighting in the town by listening on the squadron nets of 19 Armoured Regiment. Similarly, at both Main Headquarters 6 Brigade and the signal centre at Tactical Headquarters 6 Brigade, numerous reports were obtained by interception on the battalions' forward company nets, and these reports were passed back immediately by telephone to Main Headquarters 2 NZ Division.

On the second day of the attack bitter fighting continued in the town, especially in the south-western corner, where the Continental Hotel remained the principal centre of resistance. Very early in the

morning contact had been re-established by battalion signallers between all elements of 25 Battalion, but when dawn broke new difficulties arose. Because a number of the battalion's No. 38 sets had become waterlogged during the night and were therefore quite useless, line communications assumed a greater importance. But these were very difficult to maintain in working order in the light of day; enemy shelling cut the cable, and where it lay across the broken rubble its insulation quickly became frayed and allowed earth faults to occur. Wherever tanks moved, their tracks ground the wire into the stony debris and tore it to pieces.

By this time, too, the lines back to Tactical Headquarters 6 Brigade from the headquarters of battalions had been extensively damaged by shell and mortar fire, and the work of the maintenance parties from L Section and the battalions' signal platoons was seriously hampered by enemy snipers. Lurking on the ground floors of ruined buildings and in cellar entrances and other vantage points, they fired quickly and accurately on any movement in the open.

To the rear both line and wireless communications with Main Headquarters 2 NZ Division and Main New Zealand Corps worked well, although there were several cases of frequency congestion during the day. These were quickly remedied.

The battalion signallers operating No. 38 sets evolved a fresh method to conceal them from enemy snipers, who had immediately singled out anyone seen carrying a wireless set. Instead of being carried uncovered in front, the sets were shifted to haversacks slung at the operators' sides, and the rod aerials were discarded and replaced by ground aerials, which consisted of ten to fifteen feet of wire trailed on the ground behind the operators.

Early on the 17th, the third day of the fighting, enemy counterattacks against New Zealand and Indian gains on the lower slopes of Monte Cassino achieved some temporary success, but by the evening all the ground lost had been retaken. The day's fighting resulted in a noticeable weakening in the enemy's resistance, but when night fell his

strongpoints in the south-west around the Continental Hotel were still holding out.

That morning 26 Battalion, supported by artillery and tanks of 19 Armoured Regiment, began an attack from the lines of 25 Battalion's objective of the 15th, and by noon the armour had reached the railway station. The infantry moved into the station area early in the afternoon and later reached and secured the Hummocks, about 300 yards to the south. Heavy enemy shelling caused considerable damage to brigade lines during the day, but wireless communications remained quite stable.

On the 18th bitter fighting continued around the Continental Hotel area and near the Hotel des Roses, some distance to the south on Highway 6. During the previous night some enemy had infiltrated between the railway station and the Hummocks in 26 Battalion's newly won positions. Wireless communications, probably because of night conditions which have an unusually pronounced effect on signals from low-powered sets, were very unreliable at the time, and as lines were still in bad disrepair from shell and mortar fire, the situation was confused. Eventually 26 Battalion ejected the enemy party from this position.

Between Main Headquarters 2 NZ Division and the brigades, wireless and line communications remained satisfactory throughout the 18th. In Main Headquarters 6 Brigade's area, however, heavy enemy shelling caused major disruptions to line communications. Most lines were cut and the lead-in cable to Main Brigade Headquarters' exchange was damaged. L Section's signal office truck also sustained extensive damage. Soon, however, new lines were laid to both 24 Battalion—which had now been committed to the battle in the town—and to 25 Battalion.

That night 28 Battalion of 5 Brigade passed under the command of 6 Brigade and was given the task of eliminating resistance along the lower slopes of Monte Cassino between the Continental Hotel and Castle Hill. The Maoris commenced their attack from the Botanical Gardens area three hours before dawn on the 19th and at first made good progress in

spite of heavy small-arms and machine-gun fire. At dawn they had reached Highway 6 and were only a few yards from the enemy's main strongpoint in the Continental Hotel, but here their progress was halted by the German paratroops' stubborn resistance. Several other posts in the area were cleared out, but at the end of that day's fighting the Continental Hotel and other strongpoints facing 25 Battalion farther to the north were still holding out as determinedly as ever.

On the 19th 5 Brigade was committed to the battle for Cassino. Brigade Headquarters moved that night from its position near Monte Trocchio to a location a few hundred yards south of Highway 6 and two miles east of the town. Earlier in the day, at 2 p.m., K Section had set up a forward signal office at this new site in readiness to carry line communications forward to Headquarters 28 Battalion in Cassino. The line party set off that afternoon, laying cable from a layer fitted in a jeep; by 5 p.m. they were laying the last 300 yards of the circuit, but shell and mortar fire had already cut to ribbons that part already laid, and when they eventually reached the Maoris' Tactical Headquarters the line was dead.

The task of reaching the battalion in the town had been particularly difficult and hazardous because the route along which the cable was laid, Highway 6, was under direct observation from the heights above Cassino, and the enemy put down a continuous and concentrated fire along the whole route. As the ground on both sides of Highway 6 was sodden and impassable to wheeled vehicles, Captain Brennan and his small party of linemen were forced to follow the road. When they reached the bridge across the Rapido the shelling was so heavy that Brennan instructed his men to take what cover they could find while he crossed the river and reconnoitred the rest of the route. With complete disregard for his own safety, he sought out the best route for the line, made his way back to the bridge and led his party forward to Tactical Headquarters 28 Battalion.

Having terminated the line there, tested it and found it disconnected, the party returned along the route to find the breaks and

repair them. To do so they had to stand on open and exposed ground under continuous fire, and it was while they were thus employed that the first casualty occurred, Signalman Spring ⁴ being wounded by a shell splinter. One of his companions, Signalman Miln, ⁵ immediately went for medical assistance, and having brought it, went on with his work of repairing the cable. He had worked his way back into the town when he was himself severely wounded by shell splinters, as a result of which he lost an arm.

Next morning Brennan continued his efforts to restore the circuit, but was forced to take cover with his line party. In the afternoon the attempt was resumed and the last half mile of the line in the town completely relaid. When the party reached Tactical Headquarters 28 Battalion, communication was established with Headquarters 5 Brigade, but it lasted for exactly a minute and a half before a shell or mortar bomb tore a gap in the cable somewhere along the circuit. Still more attempts were made to restore the line that night but without success, and finally the Brigade Commander told Brennan to abandon the task.

These sustained efforts to get this line through to the Maoris were vitally important because of the difficulties being experienced at the time with wireless communications. Of the sets with the battalion, including the No. 22 terminal set working back to Headquarters 5 Brigade, those that had not been damaged in the fighting were being operated from cellars and other cover in an area subjected to some of the fiercest fire ever experienced by the brigade, with the result that there was insufficient head room for their vertical rod aerials. This caused the sets' signal strengths to fall off to a level which would have been barely sufficient to provide a stable circuit even under the most favourable conditions. In an attempt to help improve wireless working conditions in the battalion area, Brennan went forward again into Cassino, where he supervised the operation of some of the sets.

Altogether he made three trips into the town by day and three by night, on each occasion along a route raked by heavy fire.

For these hardy though ineffectual attempts to carry line communication to the Maoris, and for Brennan's efforts to improve wireless communications, three immediate awards for gallantry were made, Brennan receiving the MC and Signalmen Miln and Spring the MM.

Throughout the day on the 19th both line and wireless communications in the rear between Main Divisional Headquarters and the brigades continued to be satisfactory, but that night, during heavy harassing fire, which was the first long-range shelling Divisional Headquarters had experienced since its arrival in Italy, considerable damage was inflicted on several important operational line circuits. The first to go was 6 Brig- ade's line, which failed half an hour before midnight; it was followed almost immediately by a 5 Brigade line and, within a few minutes, by one of the Tactical Headquarters 2 NZ Division circuits. Twenty minutes later all the Tactical Divisional Headquarters' circuits were gone, and also those to 78 Division; and in the interval 6 Brigade's line had not been restored.

The shelling also caused an abnormal number of casualties, two men being killed by shell splinters and ten others wounded in Signals' lines. Of the two that died, Signalman Lyttle ⁶ was killed in his sleep; the other was an attached driver from Royal Signals.

During the night of 19-20 March the Corps' front was reorganised, 5 Brigade taking over the whole of the town north of Highway 6 and 6 Brigade assuming responsibility for the area between Highway 6 and the railway station and the Hummocks.

In the rearward area line and wireless communications between Main Headquarters 2 NZ Division and the headquarters of the brigades continued to be satisfactory, but early in the afternoon the GOC (Major-General Parkinson ⁷ called from Tactical Headquarters 2 NZ Division and asked for a second line to be laid between that headquarters and 5 Brigade Headquarters' new location on Highway 6 east of the town. This line was completed shortly before 5 p.m.

Within 5 Brigade, however, communications were not so satisfactory. At 8.10 a.m. Tactical Divisional Headquarters reported that Headquarters 5 Brigade had no communication with its battalions and that 28 Battalion was out of touch with its infantry companies.

That night 21 Battalion was given the task of attacking through the Continental Hotel area and pushing up the slopes of Monte Cassino to make contact with a company of 24 Battalion isolated on Point 202, a rocky feature about midway between the Monastery and Highway 6. The 24th Battalion was to follow up and take over the hotel area while 21 Battalion pushed on up the hill. Simultaneously with 21 Battalion's attack, 23 and 28 Battalions were to press forward to the western edge of the town. An important point in the plan for this concerted attack was that the CO 21 Battalion would assess the progress of his advance and call 24 Battalion forward when he thought the time opportune for it to come up; to do this he would transmit the code word HENRIETTA by wireless as the signal for 24 Battalion to move forward into the Continental Hotel area. Unfortunately Headquarters 5 Brigade lost wireless communication with 21 Battalion at 11 p.m., so that no news of the battalion's progress could be obtained, and it was not until another No. 22 set was taken to Headquarters 21 Battalion by a liaison officer later that night that communication was restored. In the event, however, 21 Battalion had encountered very stiff opposition and by nine o'clock next morning had reached only to within 100 yards of Highway 6 south of the Continental Hotel.

Early on the morning of the 22nd the enemy made another determined counter-attack against Castle Hill, but this failed, like his earlier attempts, and he withdrew after suffering heavy losses. In the town fierce fighting continued throughout the day, although there was some slackening of the usual heavy shell and mortar fire in the afternoon. Towards evening visibility in the battle area closed down to only a few yards because of the dense smoke which overhung the town. The 22nd was a bad day, too, for line communications; not only battalions' lines but those running back from brigades to Main New

Zealand Corps' exchange were extensively damaged by shellfire.

During the night of 22-23 March there was comparative quiet, but at daylight bitter fighting flared up again in the Continental Hotel area, although in other parts of the town the enemy's activity appeared to diminish as the day wore on. Severe damage to line circuits in the rear and in front of brigades, however, still occurred at brief intervals. At one stage during the early afternoon both lines from the Main New Zealand Corps' exchange to Headquarters 5 Brigade, and all but one of those to Tactical Headquarters 2 NZ Division, were damaged within half an hour.

On the 23rd the decision was taken to discontinue the offensive on the Corps' front and to hold the gains already won. This was confirmed the following day in the Corps' operation order, which stated that the enemy had succeeded in reinforcing his strongpoints on Monte Cassino and in the town. The Corps' policy, therefore, would be one of defence, troops being thinned out in Cassino and the front mined and wired against enemy incursions. In the interests of security all wireless traffic was to be reduced to the barest possible minimum and an extensive system of telephone communications built up.

Tactical Headquarters 2 NZ Division, near Cervaro, closed down during the morning of the 25th and the GOC and his staff returned to Main Headquarters; Signals' telephone centre, however, stayed to operate the exchange, which was required to provide the alternative line circuits to 5 and 6 Brigades.

Thus the Division's part in the battle for Cassino ended with substantial gains; although the gateway into the Liri valley and the route to Rome was still closed, nine-tenths of Cassino was now in Allied hands, a firm bridgehead had been established over the Rapido and a secure foothold obtained on Monte Cassino, where the Indians remained in possession of Castle Hill.

After being absent on furlough since 29 December 1943, Lieutenant-Colonel Grant assumed on 19 March the appointment of Chief Signal Officer and the command of the New Zealand Corps of Signals, with the temporary rank of colonel. Having commanded Divisional Signals during Grant's absence, and later, when the Division became a corps in February, having been appointed Chief Signal Officer New Zealand Corps with the rank of temporary colonel, Pryor now retained the



ITALY MAP No.2

command of Divisional Signals and reverted to his former temporary rank of lieutenant-colonel. Between 29 December and 27 March (the day after New Zealand Corps was disbanded and became a divisional formation again) the appointment of second-in-command of Divisional Signals was filled by Major Ingle. On 27 March Grant became CO Divisional Signals again and Pryor reverted to his appointment of second-in-command with the rank of major.

The 27th was also the day on which the various Royal Signals and American Signal Corps detachments left the Division and returned to their own formations and units. Lieutenant-Colonel Grant marked the occasion with a valedictory notice in routine orders in which he expressed his thanks and those of the unit for the co-operation and excellent work of the visitors during their stay with New Zealand Corps Signals.

With the disbanding of New Zealand Corps towards the end of March

and the transfer of responsibility for the Liri valley and Cassino sectors from Fifth Army to Eighth Army, regrouping of the Allied forces in Italy began on a large scale. In Eighth Army, which had taken over the greater part of the Allied line across the waist of Italy, plans for the renewal of the offensive were already in the making. Fifth Army retained responsibility for the Anzio beachhead and the area south of the Liri River.

When March ended 2 NZ Division had already passed to the command of 13 Corps and was being relieved in the Cassino sector by 6 British Armoured Division in preparation to join 10 British Corps, under whose command it was to take over a portion of the Apennine sector at the northern end of the Rapido valley. On the right of 10 Corps' Apennine line the Adriatic sector was thinly held by 5 British Corps; on the left, covering Cassino, was 2 Polish Corps, and on its left again, at the south-western end of Eighth Army's line, 13 Corps extended to the portal of the Liri valley.

On 7 April, while the relief of 2 NZ Division by 6 Armoured Division was still incomplete, a forward signals party left Main Divisional Headquarters at Mignano for the new divisional area at Montequila, where line communications were to be laid out in preparation for the headquarters' arrival next day. Early on the 8th the divisional communications at Mignano were handed over to 6 Armoured Division, and shortly after midday Main Divisional Headquarters reopened at Montequila.

Between 8 and 14 April arrangements for the relief of 4 British Division in the Apennine sector by the New Zealand Division were completed; a forward signals party from Main Headquarters 2 NZ Division had left on the 12th for Casale, the headquarters' new site, and established a signal office there. It assumed control of the divisional communications on the morning of the 13th, at the same time that the signal office at Montequila closed.

During the 14th all line detachments at Main Divisional

Headquarters at Casale were kept very busy laying and rerouting lines to complete the divisional communications network in preparation for the relief of 4 Division, which took place next day, when 2 NZ Division assumed command of the sector and came under the command of 10 Corps.

During the night of 15-16 April considerable difficulty occurred in maintaining wireless communications with 5 and 6 Brigades because of the screening effect of high hills around the valley. Next day the divisional forward radio-telephony control set was manhandled to the top of a high peak overlooking the Rapido valley, and from there a remote-control line was run to the G operations office at Main Headquarters below. A detachment of operators worked the set on the hilltop and the task of supplying them with rations and newly charged batteries fell to the unit's daily duty men; after the long and arduous climb laden with the dead weight of the heavy batteries, they soon began to appreciate the meaning of the term 'fatigue party'.

In the meantime, on 3 April, 5 Brigade had moved up from Mignano and relieved 6 Brigade in the Cassino sector. Headquarters 5 Brigade was established at San Michele, where K Section took over the brigade communications from L Section, which left with Headquarters 6 Brigade for a rest area near Venafro, in the upper Volturno valley.

After a short rest in pleasant surroundings in the Volturno valley, 6 Brigade moved on 12 April into the Monte Croce area, on the left of the 10 Corps' line, and took over from a brigade of 2 Polish Corps. It stayed there until the 20th, when it was in turn relieved by 2 Independent Paratroop Brigade and moved to the Montequila rest area, where it stayed until it relieved 5 Brigade in the Terelle sector at the end of the month.

The early days of May saw the completion of the Allies' major regrouping plan in preparation for the co-ordinated assault by Eighth and Fifth Armies to force the crossing of the Rapido River and breach the Gustav Line. In the operation, which was to go under the code name

HONKER, 2 NZ Division had only a holding role, except for the Divisional Artillery, which was to give supporting fire for the Poles' attack against Monastery Hill. The divisional line ran from the Monte Croce area in the north to Monte Castellone in the south and was divided into three subsectors, of which the northern was held by 2 Independent Paratroop Brigade, the centre by a Canadian brigade—later replaced by a South African motor brigade recently arrived from Egypt—and the southern sector, known as the Terelle or Belvedere sector, by 5 and 6 Brigades in turn. On the left of the New Zealand line the heights from Monte Castellone to the ground facing the Germans' Monastery defences were held by 2 Polish Corps.

In the preparations for the battle which was to turn the enemy out of his Gustav Line defences and open the way to Rome, there were no special signal problems in the Division, except perhaps in 6 Brigade in the Terelle sector adjacent to 2 Polish Corps, where a New Zealand liaison officer provided with a wireless set was stationed at the Polish headquarters to provide communication with 6 Brigade should line communications fail. In addition an English-speaking Pole equipped with a wireless set was sent by Headquarters 2 Polish Brigade to Main Headquarters 2 NZ Division.

When Honker opened shortly before midnight on 11 May, 6 Brigade was holding the Terelle sub-sector and 5 Brigade was lying in reserve at the Volturno valley rest area. Fourth Armoured Brigade, except for one or two small detachments, was resting at Pietramelara.

Sixth Brigade, from its Terelle positions, had a grandstand view of the artillery concentration which opened the attack for the Poles opposite Monte Cassino. They saw the front below them burst into flame and, as they watched the flashes rippling along the front, the incessant thudding of the guns echoed and re-echoed among the crags of the broken country about them.

The Poles met strong and vigorous resistance to their advance against Monte Cassino and suffered heavy casualties. After several days

of fierce fighting they were back on their original line and regrouping in preparation for a second attack.

When the Poles' second attack began on the morning of the 17th it immediately achieved good progress, and the next day they linked up with British troops from Cassino on Monastery Hill. The Union Jack and Polish flag were run up over the ruined Monastery, which no longer barred the way into the Liri valley. Other ingredients for a resounding victory were lacking because the enemy, threatened from the rear by an unexpected and successful drive by French forces of Fifth Army from the northern end of the Liri valley, had withdrawn during the night, leaving only a few men to fall prisoner to the Poles.

When British troops entered Cassino that same day they found that the enemy had already decamped, and the town fell almost without a shot being fired.

¹ The Garigliano flows to the sea from the confluence of the Liri and Gari rivers; the Gari is joined by the Rapido south of Cassino.

² Sigmn A. R. Tankersley, m.i.d.; born Masterton, 21 Apr 1915; shop assistant; wounded 21 Apr 1943; killed in action 18 Feb 1944.

³ Sigmn C. H. McKeown; born NZ 23 Mar 1908; cheese maker; killed in action 18 Feb 1944.

⁴ L-Sgt M. Spring, MM; Walton; born Eketahuna, 4 Feb 1912; lineman; wounded 20 Mar 1944.

⁵ Cpl R. E. Miln, MM; Te Kuiti; born Christchurch, 28 Oct 1918; farmer; wounded 20 Mar 1944.

⁶ Sigmn M. Lyttle; born Australia, 29 Nov 1908; labourer;

wounded 13 Dec 1941; killed in action 19 Mar 1944.

⁷ Maj-Gen G. B. Parkinson, CBE, DSO and bar, m.i.d., Legion of Merit (US); Christchurch; born Wellington, 5 Nov 1896; Regular soldier; NZ Fd Arty, 1 NZEF, 1917-19; CO 4 Fd Regt Jan 1940-Aug 1941; comd 1 Army Tank Bde 1941-42 and 7 Inf Bde Gp (in NZ) 1942; 6 Bde Apr 1943-Jun 1944; comd 2 NZ Div 3-27 Mar 1944; CRA 2 NZ Div, Jun-Aug 1944; comd 6 Bde Aug 1944-Jun 1945; QMG, Army HQ, Jan-Sep 1946; NZ Military Liaison Officer, London, 1946-49; Commandant, Southern Military District, 1949-51. Maj-Gen Kippenberger commanded 2 NZ Div from 9 February until he was wounded on 2 March; he was succeeded by Parkinson until NZ Corps was disbanded and Lt-Gen Freyberg resumed command of 2 NZ Div on 27 March.

DIVISIONAL SIGNALS

CHAPTER 19 — THE ADVANCE TO THE ARNO

CHAPTER 19 The Advance to the Arno

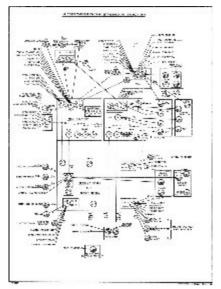
B_Y 25 May the advance up the Liri valley was well under way and leading elements of Eighth Army were on a line which extended south-westwards from the left of 6 Brigade's Terelle sector to Villa Santa Lucia, and thence westwards almost to Aquino, just short of where Highway 82 swept north through Arce and Sora to Avezzano.

Meanwhile, in the Terelle sector, where 5 Brigade had relieved 6 Brigade on 18 May, heavy but haphazard shelling on the night of the 25th gave the first hint that the enemy was about to withdraw from the Apennine front. Throughout the following day demolitions were heard and observed, so 5 Brigade sent out patrols and tanks to test the enemy's strength. These continued their advance during the night and at first light occupied the village of Terelle. Fifth Brigade then began to advance northwards on Atina from Belmonte and made good progress, but 6 Brigade, moving on a converging course from the Volturno valley through San Biagio towards the same objective, was delayed by extensive demolitions.

Fifth Brigade occupied Atina on 28 May and, continuing its steady advance northwards, was in firm possession of the village of Brocco, two miles south-east of Sora, by the evening of the 30th. It was on this day that a K Section soldier, Signalman Hope, ¹ died of wounds, the first casualty that Signals had suffered since 20 March during the battle for Cassino.

Next day infantry of 28 (Maori) Battalion, supported by tanks of 18 Armoured Regiment, entered Sora, where for a time they met considerable enemy mortar fire, but within a few hours the village was cleared.

During the ten days since the infantry brigades had begun their advance northwards from the Terelle sector, most of



NZ CORPS WIRELESS DIAGRAM ESTABLISHED ON 15 MARCH 1944

Divisional Signals' sections maintained their communications under mobile conditions with little recourse to line circuits.

About the beginning of June, while Main Headquarters 2 NZ Division was at Atina, A (wireless) Section operated its No. 299 set—a 400-watt equipment—as the control set of a wireless net for an airborne operation. A detachment of paratroops about sixty strong from 2 Independent Paratroop Brigade was landed behind the enemy lines, 15 miles in advance of 5 Brigade's foremost positions, in an attempt to cut off the enemy's rearguard or to force him to withdraw too quickly to carry out his demolition plans for holding up 5 Brigade.

Besides the control set at the New Zealand headquarters, there were two other sets on the net, one with the paratroop force and the other at the airborne base of 2 Independent Paratroop Brigade, south of Salerno. Three other sets, including one at Main Headquarters 10 Corps and another at Main Headquarters Eighth Army, listened on the net but were not permitted to transmit any signals.

A Section's control set opened communication with the Salerno airborne base at almost maximum signal strength early in the evening of 1 June; soon afterwards the Douglas transports appeared from the south and, accompanied by a strong escort of fighter aircraft, passed over Main Headquarters 2 NZ Division. The troops watched them fly

away to the north and circle over the target area. After the landing no signals were heard from the paratroops until about an hour after midnight, when test reports were exchanged at good signal strength. Throughout the morning of 2 June communications were maintained at a little less than maximum signal strength, although the paratroops had reported that they were unable to erect proper aerials during daylight hours.

Early that afternoon communication with the force was suddenly lost. It was never restored, although a continuous watch was kept throughout the next three days and frequent calls made. During 2 and 3 June several messages were transmitted to the paratroops in F procedure—a method of transmission in which each word or group of a message is sent twice at a deliberate and slow rate of sending—but no replies were received. On the evening of the 4th, as a last resort, a No. 22 set and batteries were dropped in the landing area, but nothing further was heard from the paratroops. Attempts at communication were abandoned next day and the net closed down.

After Sora the advance continued in the upper Liri valley, but at a slower rate because of stiffening resistance, and Balsorano did not fall until the Divisional Cavalry entered it on 6 June. From there the chase was taken over by 6 Brigade, which met only slight resistance and infrequent delays from mines and demolitions. The brigade entered Avezzano, on the lateral highway between Rome and Pesaro on the Adriatic side, on the 9th.

Rome had fallen on 4 June to Allied forces advancing up the western littoral of the peninsula. Active operations, at least so far as the New Zealand Division was concerned, came to an end for a spell, and on the 11th formations and units began to concentrate in the Sora area.

At midnight on the 4th the Division passed from the command of 10 Corps into Eighth Army reserve, whereupon all wireless communications with 10 Corps except one wireless-telegraphy circuit ceased and were transferred to Main Headquarters Eighth Army nets. Almost immediately

difficulties appeared—those curious difficulties that seemed always to occur whenever the Division retired to a rear area and attempted to switch its wireless communications from its own parent corps' headquarters to another corps or army formation. That afternoon a message had been received instructing the Division to come up on the Eighth Army net, but although A (wireless) Section's operators identified the net readily enough at the appointed time, they failed to attract the attention of the Eighth Army control set.

While the Division was still at Sora, Divisional Signals received a message from the Chief Signal Officer, Eighth Army, in which he conveyed an appreciative message from General Leese about the work of Signals in Eighth Army throughout the fighting for the Gustav Line. The CSO wrote:

I have had a very kind letter from the Army Commander expressing his thanks and appreciation for the line organization throughout the Army. He mentions especially the artillery communications and the success with which lines were kept through during periods of heavy fighting and traffic. Will you please indicate to the officers and men concerned my pleasure at having received such a letter from the Army Commander and my pride in their achievements which made it possible for him to write it.

On 13 June Main Headquarters 2 NZ Division and Headquarters 5 Brigade moved to a concentration area at Arce, and were followed next day by 4 and 5 Field Regiments, with E and F Sections attached, and an advance party of L Section from Headquarters 6 Brigade. Headquarters 6 Brigade arrived on the 15th. Headquarters 4 Armoured Brigade had moved on the 13th to Arpino, five miles to the north-east of Arce.

By 15 June all formations and units of the Division were concentrated in the Arce area, in quiet and extremely pleasant surroundings, and the usual sports competitions began. Much useful training was also carried out, of course, and most units contrived to strike a nice balance between work and play. One of the most attractive

features of the rest period was the system of day leave to Rome, where one of the city's best hotels—the Quirinale—had been made into a New Zealand club. Other leave parties visited Naples, and some went to the beautiful island of Ischia, a few miles off the coast from Naples.

During the stay at Arce line circuits within the Division were short and easily maintained. There was one line to Eighth Army and one wireless-telegraphy channel; the line, however, was a very poor speech circuit, and as it had no superposed telegraph channel, most of the traffic for Headquarters Eighth Army had to be cleared by wireless telegraphy, or, when the congestion became too great, by special despatch rider. This state of affairs continued for several days until 18 June, when the GOC, concerned at the mounting delays to traffic between the two headquarters, ordered that a one-to-one wireless circuit should be set up. Accordingly, a No. 299 set manned by New Zealand operators was sent off to Headquarters Eighth Army, and communication between the two terminals on this circuit was established early on the 19th.

Lieutenant-Colonel Grant returned from hospital on 27 June and resumed command of Divisional Signals next day. He had been admitted to 2 NZ General Hospital on 28 May to undergo an operation, and as the next senior officer, Major Pryor, had left ten days before on furlough to the United Kingdom, command of the unit had passed to Major Ingle, then second-in-command and OC No. 3 Company. This was an unusual distinction for Ingle, who was then only twenty-six years of age and one of the youngest lieutenant-colonels in the Division. He had had only a little over two years' service with Divisional Signals, having been transferred to the Signal School from 19 Battalion late in 1941. He had been posted to Divisional Signals in Syria in early 1942, equipped only with the knowledge gained from two courses of instruction, one at the New Zealand Signal School and the other at the Middle East Signal School at Digla, near Maadi, and with no experience of Signals in the field. During the fighting in the Alamein Line in mid-1942 he had commanded D (operating) Section at Main Headquarters 2 NZ Division—a task considered to be one of the most difficult and exacting in the unit. Later, during the battles in Tunisia at the end of the North African campaign, he had commanded with considerable ability K Section at Headquarters 5 Brigade and had won a generous measure of praise for his work from the Brigade Commander.

Early in July preparations began for the Division's next move, which was to take it northwards for the task of clearing a route for a British armoured advance through a line of strongly defended posts south of Arezzo. These posts, which were sited on heavily wooded ridges and peaks overlooking the Allied lines of approach from the south, formed the outpost line for the enemy's main line of defence, the Gothic Line, which spanned the peninsula from coast to coast north of Florence.

The usual security precautions, now almost inseparable from plans for moves of the Division to newoperational areas, included the stripping of all titles and badges, the obliteration of fernleaf emblems, and the formation of a deception headquarters which would simulate the presence of a divisional formation at the old site at Arce by transmitting dummy cipher traffic on a special wireless net set up there for the purpose.

Main and Rear Headquarters of the Division moved off from Arce in pouring rain a few minutes after midnight on 10 July, and by 9.30 a.m. had reached the divisional staging area at Civita Castellana on Highway 3, 25 miles north of Rome. A forward signals party had already arrived there on the 9th, and by the time Main Divisional Headquarters arrived had laid out line communications to Headquarters 6 Brigade, an advance party from Headquarters 5 Brigade, and to Headquarters Divisional Artillery, and had joined up circuits from Main Headquarters Eighth Army and from Main Headquarters 13 Corps, under whose command the Division had now come.

Early next morning 6 Brigade left the staging area for the divisional concentration area south of Lake Trasimene. It was followed next day, the 12th, by Divisional Headquarters and 5 Brigade, the former going to

a site near Cortona, north of the lake, and 5 Brigade remaining for the time being at Panicale, south of the lake. In the meantime 6 Brigade had moved farther north in readiness for an operational task against the enemy outpost line screening Arezzo from the south, and by late evening on the 12th Main Headquarters 6 Brigade was established in the vicinity of Castiglion Fiorentino.

Fourth Armoured Brigade left the Arce area very early on the morning of the 13th and, passing around the outskirts of Rome just as dawn was breaking, arrived about breakfast time at the staging area at Civita Castellana. It moved on again soon after midnight and, early in the morning of the 14th, established its main headquarters in a pleasant site among oak trees about half a mile off the road near Piegaro, eight miles south of Lake Trasimene.

Fifth Brigade had moved up closer to Cortona the previous day, the day on which 6 Brigade commenced its attack against Monte Castiglion Maggio and Monte Cavadenti, the foremost enemy positions, which fell into New Zealand hands without much trouble. Farther to the northwest, however, two other high features, Monte Lignano and Monte Camurcina, were more strongly defended, and it was not until early on the 15th that the first fell to 25 Battalion. Twenty-four hours later a two-battalion attack was thrown against Camurcina and another feature, from both of which, however, the enemy had withdrawn, leaving the way clear to Arezzo. At daylight on the 16th tanks of 6 Armoured Division passed through the head of the valley and entered the town, which was also found to be clear of enemy troops.

That day 6 Brigade was withdrawn to a rear area a few miles southwest of Castiglion Fiorentino and the Division again went into reserve. Eighth Army's advance was by now thrusting north-westwards across the plains of Tuscany, between the mountains on the east and the line of the River Arno which skirted Highway 69 between Arezzo and Florence.

At this stage the Corps Commander changed his thrust line from the right to the left of the front, where he planned to drive through to the

south-west of Florence, which had been declared an open city because of its traditional associations as a repository of the world's priceless art treasures. The New Zealand Division and 6 South African Armoured Division were chosen for this task, and on 21 July Main Headquarters 2 NZ Division moved to Castellina, a little over ten miles to the north of Siena. A forward signals party had already laid lines to Headquarters Divisional Artillery and to 5 Brigade, which was then in position a few miles north-west of Castellina preparing to relieve troops of the French Moroccan Division in the San Donato area. Next day two other New Zealand formations moved into the Siena area, 4 Armoured Brigade taking up a position five miles to the north of the town and 6 Brigade a little farther to the north-west.

The New Zealand Division was to seize a crossing over the Arno River at the town of Signa, eight miles west of Florence and within the semicircular fringe of hills which was the German Paula Line, one of two subsidiary lines of defence forward of the main enemy defences in the Gothic Line north of the city. Fifth Brigade was to make the initial advance northward from the San Donato area against the first of these subsidiary defences, the Olga Line. On 5 Brigade's right, 6 South African Armoured Division was to advance through the valley of the Greve River along the line of Route 2 and drive on to Florence itself.

Fifth Brigade began its advance towards the Pesa River valley and Highway 2 on 22 July against strenuous resistance, but continued to make satisfactory progress despite counter-attacks until the first halt occurred on the 26th at San Casciano, where the enemy attempted to stem the advance. That night, however, 21 Battalion pushed in an attack along a ridge to the west of the town; the ridge overlooked the Pesa River to the north. A tremendous weight of artillery and mortar fire was put down on the town in support of 21 Battalion's attack. As the infantry approached the enemy withdrew, relinquishing the western flank of his Olga Line, and fell back on to his Paula defences.

While 5 Brigade's infantry was thus reducing the enemy's resistance in the Olga Line and pressing on towards the inner defences south-west

of Florence, Brigade Headquarters had moved up to within a few miles south-west of San Casciano, which infantry of 22 (Motor) Battalion of 4 Armoured Brigade entered on the 27th, almost unopposed except for some fire from German snipers in the outskirts of the town. During the headquarters' successive moves on the 23rd north to Cortine, near San Donate, then beyond Tavarnelle next day, and to the San Casciano area the following day, K Section, assisted by two B (cable) Section detachments on loan from Signals at Main Divisional Headquarters, encountered considerable difficulty in maintaining its lines along the axis of advance because of the damage inflicted on cables by tracked and wheeled transport. Despite an almost complete lack of sleep and few opportunities to snatch even a few bites of food, linemen and despatch riders worked tirelessly for the first few days of the advance. It was not until the 26th that the continual damage caused to forward lines by tanks and carriers began to lessen, thus giving the tired men a wellearned rest.

Sixth Brigade had moved up from the Siena area to San Donato on the 24th, and to San Casciano the following day. L Section laid a line from Brigade Headquarters westwards to a road junction near the village of Montespertoli on the 26th and established a signal centre there in readiness for the brig- ade's attack, which was to strike north next day to secure a crossing over the Pesa River at the town of Cerbaia, overlooked from the north-east and north by strong enemy defences on the heights of La Romola and San Michele. After securing its Cerbaia bridgehead, the brigade attacked again early on the morning of the 28th towards these two villages, but was compelled to withdraw in the face of strong counter-attacks.

During 6 Brigade's advance on the 27th to seize the river crossing, L Section extended Brigade Headquarters' lines forward to 24, 25 and 26 Battalions as they advanced, but heavy enemy shelling caused numerous faults throughout the day. Wireless communications to all three battalions continued to be satisfactory until the evening. Then, owing to night effects on transmission and the long distance which then

intervened between the battalions and Brigade Headquarters near San Casciano, signal strengths began to fall off rapidly and communications soon became unstable. Two sets were sent out to intermediate points to serve as manual relay stations, with the result that traffic, retransmitted by the relay stations, was again resumed at workable signal strengths.

In the brigade's attack from the river crossing towards the heights to the north-east this arrangement continued to provide stable wireless communications, but line communications were not nearly so satisfactory except to 26 Battalion; heavy enemy shelling and the movement of tanks in the vicinity of the headquarters of 24 and 25 Battalions damaged the lines to such an extent that communications were never properly established.

At the same time that 6 Brigade was attacking north-eastwards from the Cerbaia crossing, 22 (Motor) Battalion and 20 Armoured Regiment attacked from the direction of San Casciano towards a high, steep ridge on which stood the village of Faltignano, but their progress was halted by artillery fire and they were forced to withdraw into the valley south of the ridge.

Although 4 Armoured Brigade's principal means of communication during this attack was by wireless, the usual lines were provided to the units under command. These circuits included one which ran from Main Brigade Headquarters, a few miles south of San Casciano, to 22 (Motor) Battalion's rear headquarters north of the town, and then continued forward to the southern slopes of Faltignano Ridge, where the battalion's tactical headquarters shared the line terminal with Headquarters 20 Armoured Regiment.

Back at Main Headquarters 4 Armoured Brigade, 4 Signal Squadron's signal office was sited in a stable in a substantial stone building; this gave excellent protection from the intermittent shelling which fell on San Casciano and the brigade area throughout the day. All around the headquarters area the 25-pounders of the New Zealand field regiments

and those of 142 Self-Propelled Regiment, Royal Artillery, which was under the command of 4 Armoured Brigade at the time, roared incessantly in support of the attack against Faltignano. Conditions in the stable were so difficult because of the ceaseless clamour that the operators had to strain their ears to receive incoming signals.

On the 24th Main Headquarters 2 NZ Division had moved up from Castellina to a new location close to San Donato; at this time 5 Brigade was fighting its way forward towards San Casciano and there was an unusually heavy volume of traffic on the circuits leading forward from Main Divisional Headquarters. The men of B (cable) Section were again pressed almost to the limits of their ingenuity and endurance as they strove to extend the main artery forward behind the advance and to maintain existing lines in working order.

Enemy shelling caused some of the damage sustained by most lines, but the movement of tracked vehicles was also responsible for widespread disruption. Wireless also had its troubles: owing to the restricted number of frequencies within the Division—an old problem—overlapping occurred on most nets, with the inevitable result that frequency congestion soon made several circuits difficult to operate satisfactorily.

On the afternoon of 25 July a forward signals party left the Main Headquarters at San Donato for Tavarnelle, six miles south of San Casciano on Highway 2. By early evening it had installed a forward exchange and established line communication to 5 Brigade, 6 Brigade, 4 Armoured Brigade, Headquarters Divisional Artillery, Headquarters 13 Corps, and Rear Headquarters 2 NZ Division, and was ready to take over the divisional communications when the Main Headquarters closed at San Donato next day and moved to the new area.

The last few days of July brought heavy fighting on both flanks of the New Zealand line, which both 5 and 6 Brigades strove to carry forward against the enemy-held high ground north of the bend in the Pesa River where it swings north-westwards at Cerbaia. On the left 6 Brigade eventually won a hard-fought two-day battle for the hilltop village of San Michele, a battle which became an epic of New Zealand arms in the Italian campaign. On the right 23 and 28 Battalions of 5 Brigade captured Faltignano Ridge on the 30th after furious fighting. Between the two, La Romola Ridge fell to 22 (Motor) Battalion.

The last day of the month found the infantry clearing out the last remnants of resistance along the high ground of Faltignano, La Romola and San Michele, and making preparations to press on towards La Poggiona Ridge to the north, where a line of crests formed the last barrier of the Paula Line in front of Florence. In the valley of the Greve South African tanks inched slowly forward along Highway 2 as the New Zealand brigades cleared the high ground above them on their left.

The battle which was to end with the fall of Florence began shortly before midnight on 1 August with a three-brigade assault against La Poggiona Ridge, which overlooked the Arno plain west of Florence. The enemy resisted strongly and for two days hard fighting raged for possession of the ridge. Early on the morning of the 3rd 5 Brigade infantry passed around the eastern end of the feature, which was now firmly in the hands of the New Zealanders.

The enemy's resistance began to collapse quickly as he relinquished his positions south of the Arno, and the battle for the Paula Line was over. Early on the morning of 4 August the South African armour, which up to this stage had been able to make only slight progress through the Greve valley, entered Florence. Some hours later a New Zealand column of infantry, armour and engineers entered the south-western outskirts of the city, to be accorded a tumultuous welcome by civilian crowds. But the joyful festivities of the Florentines and the responses of the soldiers were suddenly interrupted in a most ill-mannered fashion by enemy snipers and machine-gunners on the northern side of the Arno, where that part of the city still remained in German hands.

On 7 August 2 New Zealand Division relieved 8 Indian Division to the west of Florence, and on the 16th it in turn was relieved by 85 Division

of Fifth Army and withdrew to Castellina under the command of Eighth Army.

¹ Sigmn W. Hope; born England, 22 Sep 1911; P and T research officer; died of wounds 30 May 1944.

DIVISIONAL SIGNALS

CHAPTER 20 — THE GOTHIC LINE

CHAPTER 20 The Gothic Line

M ILD Tuscan weather, balmy and invigorating, pervaded the divisional rest area in the wooded Chianti hill district a few miles above the historic mediaeval town of Siena. Here the Division had been withdrawn from the Arno positions south-west of Florence in mid-August. It passed to the command of Eighth Army on 17 August and remained at Castellina until the 25th, when a general exodus to a new operational area on the Adriatic coast began.

Details of the security measures for the move to the Adriatic coast were published on 22 August, and in due course appeared in a 2 NZ Division signal instruction. Besides the usual precautions which applied to all formations and units, including the removal of all New Zealand titles and badges and the obliteration of fernleaf signs, there were detailed instructions for the operation of a deception wireless network designed to conceal the departure of the Division from the Castellina area.

Main Divisional Headquarters moved out on the evening of 26 August and travelled throughout the night to the staging area at Foligno, where it lay up during the next day, continuing its march in the evening to Iesi, the divisional concentration area, where it arrived early on the 28th. Iesi lies about 15 miles inland from the Adriatic port of Ancona and a little over 200 miles by road from the rest area at Castellina.

Both 5 and 6 Brigades left the Castellina area on the 27th and staged at Foligno; 6 Brigade stayed for a shorter spell than 5 Brigade and arrived at Iesi early in the afternoon of the 28th. Fifth Brigade stayed throughout the 28th at Foligno and resumed its march late that night, arriving at Iesi early next morning.

Fourth Armoured Brigade did not leave Castellina until the 28th; after resting that night at Foligno it continued on to Iesi, where it arrived late in the afternoon of the 29th.

At this stage in the Italian campaign the enemy had fallen back to the south-western fringes of his main Apennine positions or Gothic Line.

It was the Allied Command's intention to force the enemy out of these positions and drive forward to the lower reaches of the Po River, the primary object being to inflict the greatest possible losses on the German forces. There were to be two drives, one in the centre north of Florence, where much ostentatious preparation by Fifth Army was planned to deceive the enemy into the belief that a major offensive was to be expected there, and an all-out offensive by Eighth Army on the Adriatic sector, with the object of exploiting to the general line between Bologna and Ferrara in the Po valley.

The Gothic Line, or the Green Line as it was called by the German High Command, followed the barrier of the Apennines which sweep diagonally across the peninsula in a south-easterly direction from the west coast south of La Spezia almost to the small port of Pesaro on the Adriatic. Except for a narrow coastal strip from Pesaro to Rimini, between the Apennine foothills and the sea, the mountains isolate the flat country of northern Italy from the rest of the peninsula. Thus they provided the enemy with a natural 200-mile-long bastion with which to protect the Po valley. The only other point in the whole length of the Gothic Line which promised an opportunity for penetration was a narrow and precipitous pass between Florence and Bologna. Here Fifth Army was to prepare an attack which would be launched as soon as the enemy's centre was sufficiently weakened by the withdrawal of reserves to meet the threat of Eighth Army's drive on the Adriatic coast. Fifth Army's attack, which it was expected would be ready to be launched when Eighth Army's attack was five days old, was designed to carry the Americans through the German Apennine defences on the general line between Florence and Bologna.

Eighth Army's plans for the offensive—produced as early as 13 August—were for a concerted attack by three corps: 2 Polish Corps, a numerically weak formation, on the coastal sector; 1 Canadian Corps in

the centre on a narrow front, where a series of difficult ridges in the Apennine foothills stretched to within a few miles of Pesaro; and 5 British Corps on the left, in considerable strength and on a wide front, with the task of advancing northwards on an axis to the west of Rimini towards Bologna and Ferrara. The New Zealand Division was to remain in Army reserve in readiness to take up its traditional role of pursuit and exploitation as a fast-moving force once the main assault had achieved its first objective, the crossing of the Marecchia River at Rimini, and had gained a foothold on the fringes of the Lombardy Plain.

The enemy was apparently not aware of the Allied regrouping and Eighth Army's offensive gained complete surprise; it was not until the 28th, when leading elements of 1 Canadian Division were still making good progress towards his Foglia River defences, that he realised a dangerous situation was developing quickly on the Adriatic sector. Despite his rapid transfer of the main weight of his reserves from the central sector to the Adriatic to meet this threat, and a series of stubborn delaying actions at several points, the enemy was forced back across the Foglia on the 29th. That night British armoured cars under the command of 2 Polish Corps entered the outskirts of Pesaro, the eastern anchor of the German defence system; next day, however, fierce counter-attacks by enemy paratroops drove them out again.

During the last days of August and the first of September the New Zealand Division waited at Iesi for news of its task. The time waiting for the order to move was spent in the usual nicely proportioned programme of training and recreation. Many bathing parties were attracted to the warm waters of the Adriatic beaches.

Although it was generally understood in the Division that there would probably be no large-scale move forward from Iesi until 7 or 8 September, the Divisional Artillery was ordered on 29 August to support 1 Canadian Division in the central sector of Eighth Army's front. Shortly after noon next day Headquarters Divisional Artillery and the three New Zealand field regiments went forward to Saltara, and that afternoon came under the command of 1 Canadian Corps. Next night,

the 31st, 5 and 6 Field Regiments deployed their guns for action near Monte Ciccardo, about 20 miles to the north-west of Saltara, but by the morning of 2 September the enemy troops opposite 1 Canadian Division were beyond the reach of their guns, and that night both regiments returned to the Divisional Artillery's concentration area at Saltara.

On 31 August 4 Field Regiment, which was to support 46 British Division on the right of 5 Corps' sector, left Saltara and moved to a position near a small village called Montanaro; it did not reach its deployment area near Petriano on the upper reaches of the Apsa River until 2 September, however, and returned to Saltara next day.

During this brief period spent by the New Zealand guns in the attack on the Gothic Line defences, the three signal sections attached to the field regiments encountered no special problems; both wireless and line circuits between regimental headquarters and batteries worked smoothly and without interruption.

By the end of the first week in September the enemy had recovered a little from his initial reverses and seized the opportunity afforded by a pause in the Canadians' attack to readjust his positions north of the Conca River. Here, just to the north of the river, which reached the sea barely three miles above Cattolica, the Coriano feature, one of a series of spurs pointing north from a ridge towards Rimini, formed an outpost of his main defences between Rimini and San Fortunato, a spur which thrust into the coastal plain opposite Rimini.

Early in the month heavy rain had saturated the ground and caused the many streams running down from the Apennines to rise quickly; these conditions, combined with a gradually stiffening enemy resistance, brought about a general condition of stalemate along the whole of the Canadian Corps' front.

On 5 September Main Headquarters 2 NZ Division moved from Iesi to a new position near the coast about seven miles below Fano, eight miles to the north-west of which lay Pesaro. In its Army reserve role the

Division enjoyed stable signal communications. There was no wireless, the silence which had been imposed in the last week of August being still in force, but good reliable line circuits to Headquarters Eighth Army, Headquarters Divisional Artillery, the two infantry brigades and the armoured brigade provided all that was needed at this time.

A week later, on 13 September, both Main and Rear Divisional Headquarters moved up to the vicinity of Gradara, near the concentration area of 6 Brigade, which had been ordered forward to a position in the rear of 1 Canadian Division when 2 NZ Division came under the command of 1 Canadian Corps on the 10th. Both 5 Brigade and 4 Armoured Brigade remained in the Fano area.

A renewal of the offensive was planned by 1 Canadian Corps to break out through the German defences between the Coriano spur and Rimini, and force an entrance into the plain below Bologna and Ferrara by establishing a bridgehead over the Marecchia River, which enters the sea at Rimini. The attack was planned in eight phases, of which the last was to be the reduction of the San Fortunato spur defences opposite Rimini and the crossing of the Marecchia. This river, a sprawling delta of many channels at its mouth, formed the last obstacle between Eighth Army and the northern plain, which the New Zealanders were to enter through the Canadians' Marecchia bridgehead to exploit towards Ravenna, 30 miles farther north.

The Canadian attack commenced on the 14th but made only slow progress against the strong German defences, of which the main concentrations were placed around the Fortunato spur to cover Rimini, the Marecchia River, and the approaches to the plains beyond. On the right of 1 Canadian Corps' front, in the coastal sector, 3 Greek Mountain Brigade, with elements of New Zealand armour and infantry, attacked and captured Monaldini and Monticelli. Early next day the Greeks pushed on to the Marano River and attacked the enemy defences along the southern edge of the Rimini airfield.

The attack by 1 Canadian Division against Fortunato on the 18th

did not fare well; there were heavy casualties in armour and infantry, and it was not until the night of 18-19 September that a bridgehead was established across the Ausa River. The Canadians pressed forward slowly on the Fortunato ridge, however, and two nights later the Germans began to withdraw behind the Marecchia. On the Canadians' right 3 Greek Mountain Brigade and the New Zealanders entered Rimini early on the morning of the 21st. That day the Canadians established their Marecchia bridgehead, and this marked the end of the first phase of Eighth Army's offensive to break through into the Po valley.

Wireless silence was still in force within the Division, except for those links in the three field regiments in the Riccione area where the New Zealand guns were still employed in support of the Canadians, so that all communications between Headquarters 2 NZ Division, the brigades, and the administrative services were handled by an extensive system of line circuits.

Although wireless silence was still being observed, every circuit was manned in listening watches and could be brought at a few minutes' notice into full operational use. In the wireless layout the particular operational needs of the moment were met as the tactical situation changed by the simple expedient of adding circuits to or removing them from a basically standard wireless plan, of which the control sets at Main and Rear Divisional Headquarters and the headquarters of brigades provided the foundation. The number of out-stations varied widely from time to time; the permanent members, those at the headquarters of regiments and battalions, remained more or less constant, but were augmented by terminal stations at units which came under the command of the Division for a particular operational task and were for the time being on one of its wireless nets.

Sometimes this sudden accession of numbers to a net caused a slight unbalance, and operators on the control sets were hard put to deal adequately with the large numbers of terminal sets. This happened most frequently on the CRA's forward command net, where the appearance of several attached field and medium regiments sometimes raised the number of out-stations almost beyond manageable proportions. Such was the case on 19 September, the day after Main Divisional Headquarters, 6 Brigade, and 4 Armoured Brigade moved forward from the Gradara area to new locations just south of Riccione in preparation for the Division's attack through the Canadians' Marecchia bridgehead. The wireless diagram drafted for this operation showed no fewer than twenty terminal stations on the Headquarters Divisional Artillery forward command net.

On the rest of the divisional forward command nets there were few important changes from the now familiar arrangements which had been in use, with one or two small but important modifications made from time to time to meet unusual tactical needs, since early 1942. Indeed, the foundations for the present wireless communication system in the Division had first been laid during the Libyan campaign in late 1941, when the staff was persuaded that in a moving battle command could best be exercised if orders and information were passed between Divisional Headquarters and infantry brigades by radio telephony, modified by a system of prearranged codes to conceal commanders' immediate intentions from the enemy's intercept services.

This was the beginning of new methods of communication which—after a few months when the irritation of staff officers confronted with the unfamiliar jargon of RT codes gradually passed away—almost completely supplanted the old clumsy method of transmitting operational messages in cipher by Morse telegraphy.

Of the various operational groups of wireless stations, the most important was the forward radio-telephony command net with its control set installed in the armoured command vehicle No. 1, ¹ where the GSO 1, the Division's senior staff officer, was able to speak at will with subordinate stations at the headquarters of the armoured brigade, the infantry brigades, Divisional Cavalry, and the armoured reconnaissance group (usually a squadron of Divisional Cavalry, but sometimes an armoured car regiment temporarily under the command of the Division).

Also in constant wireless communication with Main Divisional Headquarters on the forward RT command net was Tactical Headquarters, where the GOC in his tank, accompanied by his protective troop of armour, moved about between the brigades and other forward elements of the Division, or directed the battle by line and wireless communication from some observation point in advance of Main Headquarters.

The remaining operational nets controlled from Main Headquarters included the CRA's command net—second only in importance to the forward RT command net—and the CRE's command net to his field companies of engineers, which worked well forward on their hazardous tasks of clearing mines and building bridges for the armour and infantry.

Another essential net working forward from Main Divisional Headquarters was the wireless-telegraphy group, which provided communication by enciphered messages for the transmission of administrative and other non-operational traffic between Main Headquarters and the Division's forward elements—in fact, all those formations already represented on the forward RT command net. Also netted on this group was the Deputy Assistant Quartermaster-General's set at Rear Divisional Headquarters.

Hard by the control set of the WT net in the Main Headquarters' area stood the office vehicle of the Assistant Adjutant and Quartermaster-General, the Division's chief administrative officer, whose wireless set provided communication with the heads of services through the DAQMG's control set at Rear Headquarters, which worked also to the B Echelons of infantry brigades and the DAQMG of the armoured brigade. Elsewhere in the Rear Headquarters' area other wireless nets worked to units and sub-units from the headquarters of the various services. These included the control set of the Assistant Director of Medical Services, which provided communication to field ambulances and the divisional casualty clearing station; a set at the headquarters of the Commander Electrical and Mechanical Engineers, which worked to divisional and

brigade workshops and the armoured brigade's recovery section; and a set at the headquarters of the Commander Army Service Corps (installed in an unarmoured command vehicle like those of the ADMS and CREME), which gave communication to ammunition points, the divisional supply units, tank transporter companies, and the two reserve mechanical transport companies.

To complete the divisional system of wireless communication there remained only the various rear links to the next higher formation, which in this case, when the Division was about to re-enter an operational role under the Canadians' command, was Headquarters 1 Canadian Corps. At Main Headquarters 2 NZ Division were two of these rear links to Corps: a radio-telephony and a wireless-telegraphy circuit. Both these sets at Main Headquarters were terminal stations on the Corps' forward RT and WT command nets, and were in lateral wireless communication with terminal stations at 1 Canadian Division, 5 Canadian Armoured Division, and 4 British Division. At Rear Headquarters 2 NZ Division other rear links were maintained to administrative, medical, electrical and mechanical engineer, and supply and transport services at Rear Headquarters 1 Canadian Corps.

Forward of Main Divisional Headquarters, wireless communications between the headquarters of field regiments and their batteries, and between the headquarters of brigades and their battalions and armoured regiments, were arranged in a similar pattern but on a much more modest scale.

From the foregoing the reader will readily understand how the Division's wireless communication system remained very much the same in basic design throughout a campaign, or even successive campaigns, and that it was modified only in detail to meet the needs of changing tactical situations.

In line communications, which remain the primary means of communication in a division despite the high degree of organisation and training that goes into the provision and maintenance of wireless, the design is much more susceptible to rapid change as new tactical situations develop. In mobile operations or during a pursuit, for example, the scale must necessarily be modest and usually consists of a few 'local' lines at Main Divisional Headquarters to the more important offices, and seldom more than one circuit, connected to a main artery laid along the axis of advance, to the headquarters of leading formations. In defensive positions, however, the line network builds up very rapidly and becomes an extensive array of direct and lateral circuits. In such a situation a conventional part of the network is the provision of a signal centre some distance forward of the Division's Main Headquarters. Between these two points several circuits are usually laid, and these constitute the main artery, although the individual lines are along different routes to reduce the danger of damage to cables by shell and mortar fire and the movement of tracked vehicles. From the signal centre, where a ten or twelve-line switchboard is usually installed, direct and lateral lines fan out to brigades and supporting arms. This arrangement of providing forward signal centres achieved considerable economy in the field cable and the human energy expended by linemen—who, according to the graphic definition of Jock Vincent, Signals' indomitable one-time Adjutant, 'must be able to sweat blood'!

And sweat they did! Even when the front was static and headquarters remained in one position for days or even weeks at a time, they were never still. Laying new circuits, replacing and repairing existing ones, and building them back constantly along their routes to make them more secure against damage from the enemy's shells and the wheels and tracks of their own transport; manhandling their heavily laden cable vehicles by brute strength over almost impassable patches of storm-sodden ground, or, when the wheels spun unresistingly in the soft earth, lugging the heavy cable drums over rock-strewn slopes; tracing faults in the open under observed enemy fire, or stumbling over broken ground or along swollen water- courses in darkness in search of cable breaks: all these were part of the normal activities of a lineman's waking hours; and even when he slept he was likely to be rudely awakened for a task for which no maintenance detachments were available, all probably

having been sent off on earlier cable faults.

Then, when the headquarters moved and some of the other tradesmen earned a brief respite from their normal labours, the linemen still worked on. While clerks, orderlies and cooks reclined on their baggage in the backs of office trucks and three-tonners and exchanged blasphemies about the Italian weather, the lack of beer and other hardy annuals of conversation, B (cable) Section had split up into several groups. Some remained behind in the old area to recover cable, often laid out in circuits several miles long over broken country; others were speeding forward to overtake brigades in readiness to lay and maintain new circuits back to Main Divisional Headquarters when they halted; and others were laying lines to whatever formations and units had already halted.

While the Canadian attack was moving towards its last two phases to capture the Fortunato spur and reach the northern bank of the Marecchia, considerable movement was taking place in 2 New Zealand Division. Fifth Brigade moved up to Gradara on the 16th and joined Main Divisional Headquarters and 6 Brigade there. On the morning of the 20th a forward signal office and two line detachments from K Section moved to within a short distance of a village called Casalecchio, four miles south of Rimini; Brigade Headquarters and the main signal office followed a few hours later, and that evening a signal centre was established four miles to the north-west, near the eastern branch of the Ausa River and quite close to the lying-up areas of 21 and 28 Battalions and 18 Armoured Regiment, which were to lead the New Zealand attack across the Marecchia.

Because of the heavy rain which had turned the ground into a morass, and the dense traffic on the narrow roads, the K Section line detachment, assisted by one from B (cable) Section, encountered great difficulties in laying and maintaining lines forward to the battalions. At this time 5 Brigade had many more line circuits than were usually provided in an infantry brigade, with the result that K Section's cable resources and line detachments, assisted though they were by the B

(cable) Section men, were taxed to the limit of their capacity. Besides the usual lines to battalions there were circuits to Divisional Tactical Headquarters and Headquarters Divisional Artillery, both the responsibility of K Section, and an omnibus circuit which served 7 Field Company, an advanced dressing station and an anti-tank battery in the brigade area. That afternoon a second B Section detachment was sent forward from Main Divisional Headquarters to lend a hand.

At dawn on the 22nd 5 Brigade attacked from the Canadians' Marecchia bridgehead, elements of 28 Battalion having passed through during the night. Farther to the right, near Celle, not far from the north-western outskirts of Rimini, 21 Battalion also moved forward from the bridgehead to carry the advance into the plain. On the coastal strip 22 (Motor) Battalion was up to the Fossa Turchetta, towards which it had attacked during the night.

When 5 Brigade had moved up to the Gradara area on the 16th, 6 Brigade was already preparing to move forward from there to the vicinity of Riccione, seven miles to the north-west. OC L Section, Captain Stenberg, ² left that evening with a line detachment for the new headquarters' location, from which he laid line communications to the battalions' positions south of the Marano River. The departure of Headquarters 6 Brigade for this new headquarters' site, timed for next day, was postponed and did not take place until the morning of the 18th.

It was on the 20th that the Division's original plan for 6 Brigade to lead the New Zealand attack through the Marecchia bridgehead was changed and the task given instead to 5 Brigade, so that 6 Brigade did not move forward from Riccione until the 22nd, when 5 Brigade was already across the river and advancing northwards. The Divisional Artillery, which since the 10th had been continuously under the command of 1 Canadian Corps, assisting the Canadians' advance northwards and the capture of the Fortunato ridge with supporting fire, returned to the Division on the 19th. Next day all three field regiments

left the Riccione area and deployed their guns a few miles south of Rimini in readiness to support the Division's attack north of the Marecchia.

On the morning of the 21st 5 Field Regiment, which was to support 5 Brigade's advance right up to the brigade's final objective on the Fontanaccia stream, four miles to the north-west of the Marecchia crossings, moved to a new location near the south-western outskirts of Rimini. By this time, because of the heavy rain which quickly turned the ground into an almost impassable quagmire, movement of transport had become very difficult. While the gun crews laboured in miserably cold conditions to drag their 25-pounders into the gun areas, and the ammunition lorries floundered slowly forward through the mud, F Section laid out its battery lines and fire control circuits with the greatest difficulty. To protect their cable as much as possible from the traffic which traversed the area by any route which offered firmer ground, the linemen often had to erect their cable above vehicle height.

Main Divisional Headquarters left the Gradara area and moved to a new location a few miles to the south of Riccione just before midday on the 18th. A forward signals party had reached the new area earlier in the day, so that Main Headquarters, a very short time after its arrival, had line communication forward to all formations except 5 Brigade, which at that stage was still at Gradara, but which had communication through Rear Divisional Headquarters.

Next day, the 19th, was the busiest that Signals at Main Divisional Headquarters had experienced since the Division arrived in the Adriatic sector at the end of August. The setting of frequencies on all sets of the divisional wireless nets—changed from time to time for security reasons by the issue of new blocks of frequencies by Eighth Army—was a tedious task which occupied the greater part of the time of A Section at Main Headquarters and R Section at Rear Headquarters; at this particular time it was all the more so because of the strict month-old wireless silence which precluded even the few cautious test calls usually permitted to gauge the accuracy of settings.

While the wireless sections were engrossed with these tasks, B (cable) Section was hard at it laying out new circuits and adjusting existing ones to conform to a new line plan published the previous day in readiness for the coming attack. This plan included four very important circuits: from Headquarters 5 Brigade, from Divisional Main Headquarters, from Headquarters Divisional Artillery, and from Main Headquarters 1 Canadian Corps, all terminated at a tactical headquarters located well forward of Main Headquarters. Early that evening, while this line construction and reconstruction work was still incomplete, rain began to fall again, and very soon interruptions to line communications occurred at more and more frequent intervals. By midnight communications were so badly disrupted by earthing faults and damage to cable from the movement of transport in the forward areas that all detachments of B (cable) Section at Main Headquarters and H Section at Headquarters Divisional Artillery were engaged in tracing and repairing faults, and none was available for laying new circuits had they been wanted at that time.

At 1 a.m. a D (operating) Section detachment sent to operate a forward signal office arrived at Tactical Divisional Headquarters and set up its switchboard, but the line from Main Headquarters was through for only very brief intervals, despite the efforts of a B Section maintenance detachment to keep it intact. Very shortly afterwards communication from Main Headquarters to both Headquarters Divisional Artillery and Headquarters 5 Brigade failed too, and was not restored until over six hours later. During this period, of course, Tactical Divisional Headquarters was out of touch with all New Zealand formations, and in communication only with Headquarters 1 Canadian Corps.

Soon after midday that day, the 21st, Main Headquarters began to move forward to a new site just north of the Marano River; it arrived early in the evening after a very wet, muddy and unpleasant trip. Throughout the move wireless worked perfectly, but in the new area, because of the incidence of faults which showed no signs of easing, line

communications were far from satisfactory.

 $^{^1}$ Known as ACV 1.

² Capt J. W. Stenberg; Wellington; born NZ 25 Jan 1922; student; OC L and R Secs Sigs Sep-Oct 1944, H Sec Feb-Jul 1945; Regular soldier.

DIVISIONAL SIGNALS

CHAPTER 21 — INTO THE PLAINS

CHAPTER 21 Into the Plains

THE 22nd September saw the beginning of a month's hard fighting against a stubborn enemy who carried out a skilful and controlled withdrawal on ground that was completely flat, interlaced in a close pattern of small streams and canalised rivers—with stopbanks rising in places to a height of forty feet and thus presenting almost insurmountable tank obstacles—and plentifully studded with dozens of stone and brick farm buildings, cottages and villages, which the Germans used as strongpoints and snipers' posts, and which often could be cleared only by hand-to-hand fighting.

This country was vastly different from that part of the Italian peninsula over which the Division had fought. When 5 Brigade and the tanks of 4 Armoured Brigade broke out onto the Romagna plain north of the Marecchia, hopes of a swift pursuit to the north with the armour crowding closely on the heels of a fleeing enemy were quickly dispelled.

In the area south of Ravenna, which was the Division's objective in the pursuit phase and which lies about 30 miles north of Rimini, the extent of canalisation is unequalled anywhere in Europe except in Holland, and it was impossible for armour to move more than a mile in any direction without encountering a formidable obstacle. These canals, or more properly, canalised rivers and waterways, were the result of reclamation methods that had been in use in this part of Italy since the twelfth century. They confined the streams between high floodbanks to obtain a rapid flow to the sea when the rivers were in spate and thus prevent flooding of the low-lying marshlands.

The soil and sub-soil of the Romagna plain and in most places in the Po valley is a mixture of a little gravel and much clay, which in dry weather becomes pulverised into a thick choking dust that rises in a dense pall to obscure the vision and impede movement. In autumn, which begins towards the end of September, the weather changes from

the widespread thunder- storms of late summer to brief periods of heavy rain, and as October passes into November conditions become extremely cold and disagreeable. Brief though these October rains are, they account for the highest monthly average rainfall, and despite the spells of warm sunny weather with which they alternate, turn the ground into a semi-glutinous morass in which vehicles settle immovably and infantry flounder to their ankle tops.

Although the New Zealand attack met considerable resistance along the line of the railway north of Celle, which lies just beyond the junction of Routes 9 and 16, the advance continued steadily to the village of Orsoleto.

During 24 and 25 September the enemy fought hard along the line of the Fontanaccia River, but he was forced to withdraw north of the Uso River on the night of the 25th, after having been severely mauled by artillery fire and air bombardment. Next day 6 Brigade crossed the Usobelieved to be the Rubicon of historic fame-and advanced slowly towards the Fiumicino River against only moderate resistance.

On the night of the 27th 5 Brigade took over again and continued the approach towards the Fiumicino, but next day the weather broke and heavy rain fell during the afternoon and night, with the result that on the 29th operations were temporarily suspended because of the almost impossible ground conditions in the forward areas. It was not until 11 October that the infantry crossed the Fiumicino and entered Gatteo, a battered and shell-torn town about a mile beyond the river in the direction of Cesena.

The advance continued next day against moderate resistance, 28 (Maori) Battalion reaching the Scolo Rigossa north-east of the town of Gambettola during the afternoon. But that night the Maoris suffered a setback when they tried to capture the village of Sant' Angelo, which the enemy was holding forward of the Rigossa.

Activity on the 14th was confined to artillery exchanges, but during

the night the Maoris again attacked and this time captured Sant' Angelo, a mile and a half to the north of Gatteo, from which harassing fire had worried the brigade's right for several days. The enemy withdrew from the Rigossa and next day 5 Brigade crossed it, entered Gambettola, and began to push on towards the Pisciatello River. Bulgarno was taken by 21 Battalion on the 16th and Ruffio fell to 23 Battalion next day.

Sixth Brigade relieved 5 Brigade on the night of 17-18 October and attacked across the Pisciatello next night to secure a bridgehead through which 4 Armoured Brigade passed two regiments of tanks during the morning of the 19th. Both 18 and 20 Armoured Regiments sustained tank losses, but wrested three more miles of ground from the enemy before he recovered from his surprise at finding armour instead of infantry heading the assault. Next day the armour swung westwards towards the Savio River and by nightfall was firing on enemy strongpoints on the western side of the river north of Cesena.

Throughout the 21st and 22nd 4 Armoured Brigade was engaged in clearing out enemy remnants still east of the river. On the 23rd—the second anniversary of the Battle of Alamein—the command of the New Zealand sector on the Savio passed to 5 Canadian Armoured Division, and 2 New Zealand Division, except for the Divisional Artillery, which remained under the command of 1 Canadian Corps, moved back to rest areas at Fabriano, Matelica and Castelraimondo, where it was under the command of Eighth Army.

During the initial stages of 5 Brigade's attack on 22 September numerous faults, most of them caused by enemy shelling and mortaring, occurred on 21 and 28 Battalions' lines working back to Headquarters 5 Brigade. Wireless, however, worked smoothly and without interruption.

On the 30th, during the stalemate before the Fiumicino, 5 Brigade's line system had grown rapidly into an intricate network of circuits that was almost beyond the capacity of K

Sec-tion's

line detachments to maintain satisfactorily. Besides one line each to 21 and 23 Battalions, which occupied positions close to the southern bank of the river, there were no fewer than three direct circuits to the reserve battalion, 28 (Maori) Battalion, which was preparing to take over the brigade's right from



American signal wires on Route 6, Cassino



Adjusting an exchange relay at Cassino. A. B. Smith is the instrument mechanic

Adjusting an exchange relay at Cassino. A. B. Smith is the instrument mechanic



H. L. Willacy adjusting a wireless set

H. L. Willacy adjusting a wireless set

O. C. Chapman and K. G. Brown charging batteries



O. C. Chapman and K. G. Brown charging batteries



A brew of tea for W. R. Collins, R. S. Dick, N. A. MacDonald, K. G. Winstanley and H. A. G. Hill of L Section at 6 Infantry Brigade beadquarters

A brew of tea for W. R. Collins, R. S. Dick, N. A. MacDonald, K. G. Winstanley and H. A. G. Hill of L Section at 6 Infantry Brigade headquarters



Securing a line to a tree, Atina-Belmonte area



J. T. Thorne transmitting

J. T. Thorne transmitting



Paying out cable on the advance at Atina—A. D. Reynolds and J. G. Bond

Paying out cable on the advance at Atina—A. D. Reynolds and J. G. Bond

21 Battalion that night. There were direct lines to Main Headquarters 4 Armoured Brigade, Headquarters 3 Greek Mountain Brigade, on the brigade's right nearer the coast, Headquarters Divisional artillery, and of course the usual rear line to Main Divisional Headquarters. Finally, an omnibus circuit served 20 Armoured Regiment and a Royal Artillery unit, 24 (Self-Propelled) Field Regiment.

Main Divisional Headquarters had no direct contact with its artillery headquarters or the Greeks because of the large number of faults in the cable caused by enemy fire and the movement of vehicles in the forward areas. K Section's signal office detachment, therefore, was taxed to the

limit switching telephone connections and clearing 'through'
Fullerphone traffic, which at times reached a much higher level than a
brigade signal section is normally expected to handle.

By the end of the first week in October, however, the line plan had assumed a more normal aspect, with one circuit forward to each of the battalions and one to the rear to Main Divisional Headquarters. But this respite was short-lived. On the 10th, when extensive regrouping took place in 1 Canadian Corps— with 2 NZ Division in the centre of the Corps' front, Cumberland Force, comprising Canadian, New Zealand and Greek units on the right, and 1 Canadian Division on the left astride Route 9—5 Brigade's circuits began to multiply rapidly, and by the early morning of the 11th, when the advance against the Fiumicino was resumed, the system had again grown to almost unmanageable proportions.

From 23 September, when 6 Brigade first entered the battle north of the Marecchia and passed through 5 Brigade to continue the advance to the Uso and Fiumicino rivers, L Section's signal problems were much the same as those encountered by K Section, except that it did not have to provide and maintain line circuits to so many attached and supporting units. Throughout the advance line faults occurred frequently, some through damage to cable by enemy fire and the movements of tracked and wheeled vehicles, and many through 'earths' where the cable lay on rain-drenched ground, particularly during the stalemate pause in front of the Fiumicino, when cold and disagreeable gales blew in off the Adriatic and rain fell in torrential downpours. At this stage, however, 6 Brigade, having been relieved on the line of the Fiumicino by 5 Brigade on the 27th, was quartered in houses and buildings to the south and east of the Uso River and thus escaped most of the discomfort.

On 5 October, when 6 Brigade took over from 5 Brigade, L Section sent an advanced detachment forward to the headquarters' new location, about midway between Route 16 and the Uso and six miles north-west of Rimini, and by mid-afternoon had completed all line circuits between the three battalions and the new headquarters' site. By this time the bad

weather had abated a little, and for the next few days line communications remained stable with few faults or interruptions. Again, when 6 Brigade relieved 5 Brigade on the 17th for the attack across the Pisciatello, communications worked well, particularly wireless. At no time until the brigade reached the Savio was the headquarters out of touch with its battalions or supporting arms.

At the beginning of the Division's advance north of the Marecchia on 22 September Headquarters 4 Armoured Brigade, with 4 Signal Squadron attached, was located in Rimini, where the men were quartered in buildings. Although the squadron's signal office detachment was kept very busy dealing with a brisk flow of traffic, the line party's tasks were negligible compared with those of K and L Sections, most of the circuits being lateral lines laid and maintained by B (cable) Section from Main Divisional Headquarters.

When Main Headquarters 4 Armoured Brigade moved up to Viserba on the 24th, in the wake of the advance of its armour and 22 (Motor) Battalion along the coastal sector, Rear Headquarters came up to Rimini and set up its signal office in a building there. Main Headquarters moved again on the 27th, this time to a site on the left of Route 16 and about three and a half miles north-west of Viserba. That night most men of the squadron slept in the open, but next day, when a strong gale blew in from the sea and brought with it a twelve-hour spell of heavy rain, even the hardiest of them abandoned all ideas of braving the rigours of an Italian autumn and quickly sought shelter. One of the first results which the rain brought was an outbreak of earth-leakage faults on the line to 5 Brigade, which at that time was the headquarters' only outlet, apart from wireless, to Main Divisional Headquarters. These faults continued to give considerable trouble until the weather began to clear a few days later.

On the 16th Main Divisional Headquarters moved to the outskirts of Gambettola, which had fallen to 5 Brigade only the previous day. When 18 and 20 Armoured Regiments, with 22 (Motor) Battalion in support,

sallied out from 6 Brigade's Pisciatello bridgehead on the morning of the 19th, they had only wireless communication with Main Headquarters 4 Armoured Brigade, but next afternoon, when the armour and 26 Battalion of 6 Brigade reached the Savio, lines were quickly put out to both regiments and to 22 Battalion, as well as to Headquarters 6 Brigade and Divisional Cavalry, and were in working order by early evening.

In the Divisional Artillery, whose guns provided harassing and supporting fire during each successive stage of the New Zealand advance from the Marecchia to the Savio, the provision of communications from Headquarters Divisional Artillery to the headquarters of the field regiments by H Section, and those within the regiments themselves by E, F and G Sections, presented no special problems beyond the usual incidence of faults on line circuits caused by the sodden ground, and damage to cable by enemy fire and the movements of vehicles.

Communications in artillery formations and field regiments conform very closely to a standard layout and therefore vary little, if at all, from day to day. From Headquarters Divisional Artillery lines go out to the regimental headquarters, and usually there are also lateral circuits between the three regiments, although this depends largely on their deployment in relation to the location of Headquarters Divisional Artillery. Similarly at regimental headquarters, lines run out to battery headquarters, or command posts, which in turn are inter-connected by lateral circuits. Then there is the circuit known as the 'fire control omnibus circuit', which passes through each command post and returns to the regimental headquarters. The gun position and observation-post lines which run forward from battery command posts are laid and maintained by regimental signallers and are not the responsibility of Divisional Signals.

Wireless communications follow a similar pattern. From Headquarters Divisional Artillery the CRA's control set works forward to terminal sets at the three regimental headquarters, and from there other control sets provide communication to the battery command posts, where the terminal sets are manned by battery signallers and not by

Divisional Signals' operators.

When the New Zealand attack opened on 22 September, Main Divisional Headquarters was still several miles south of Rimini, with line communications of considerable complexity working forward to the armoured brigade, the two infantry brigades and their supporting arms. There was a welcome spell of fine weather at this time, and this aided the linemen considerably in the maintenance of circuits, which were surprisingly stable considering the number of units on the move in the forward areas. After the initial stages of the advance had passed on 23 September and until the return of inclement weather brought operations temporarily to a halt south and east of the Fiumicino River, the line plan lost much of its former intricacy and rarely consisted of more than three or four main lines forward. Throughout the advance wireless worked exceptionally well and without any serious interruptions whatever.

During the pause at the Fiumicino River, however, the line layout began to build up again into an intricate array of main-line and lateral circuits, and although the advance was resumed on 11 October, continued on this scale until the 20th, when Main Headquarters reached Ruffio after a succession of moves up the coastal road from Rimini to a little beyond Viserba, then westwards across the Uso and Fiumicino rivers and north-westwards through San Mauro and Gatteo.

From Ruffio to the Division's next destination in the valley of the Esino River, where the towns of Fabriano, Matelica, Camerino and San Severino nestle beneath the mountains, unscathed by the war which had rolled northwards on both sides of them, was a long journey, so the Divisional Headquarters convoy, in which Main and Rear Headquarters travelled together, set off soon after breakfast on 23 October. The journey south was uneventful until the landscape began to change as the long line of vehicles wound its way into steep and precipitous country. As the convoy climbed higher occasional wisps and tatters of mist and cloud swirled down over the roadway, with now and then a fine

drizzle which swept into the backs of lorries. The route led on through upland districts and innumerable small villages perched precariously on the steep hillsides. At the end of the journey the column rolled into the town of Matelica where Divisional Headquarters was to remain for the next four weeks.

A large building about fifty yards from the main square of the town was selected as Signals' headquarters, and the rest of the men settled down in a large disused tannery which had once been used as an Italian barracks. Here, without any fuss or bother, they at once made themselves as comfortable as possible. The locals displayed the usual hospitality of Italian villagers, who are warm-hearted people and generous to a fault within their narrow means. Very soon groups of soldiers were drawing up their chairs at family firesides, sipping appreciatively at the vino bianco or vermouth which Momma had brought forth from the little curtained alcove in the corner, and chatting airily with the grizzled, unshaven, but genial Poppa in the kitchen Italian which was the lingua franca between soldier and peasant. In the background, where the flickering candle- light half hid their presence, the children listened wide-eyed and open-mouthed to the strange accents of these weather- beaten warriors who made themselves at home with such ease. Among the older children were shy and maidenly girls, graceful as daffodils, who flitted about nervously helping their mother dispense hospitality.

Although line and despatch-rider communications were provided between Divisional Headquarters and the outlying brigades— 4 Armoured Brigade at Fabriano, 5 Brigade at Camerino and 6 Brigade at Castelraimondo—these duties were not onerous, and plenty of time was available for a thorough overhaul of transport and equipment. There was a generous allotment of leave to Rome and Florence, which allowed most officers of the unit to have at least three days in one or other of these places. Only five other ranks were permitted Florence leave at any one time, and it was not until later in the month that an allocation was obtained for forty to visit a leave camp near Rome. Some of the out-

section commanders, however, were able to arrange for their men to stay at a leave centre at Riccione under arrangements made by the formations and units to which they were attached. So that the remainder of the other ranks might obtain a spell, a personal arrangement was made by Lieutenant-Colonel Grant with the Signals' representative at Allied Military Government headquarters at Aquila for parties, each of twenty men commanded by an officer, to be billeted there for periods of two clear days.

During the month there was a steady influx of newcomers to the unit, including eight from the Reinforcement Transit Camp and Advanced Base, to offset the normal rate of wastage caused by men falling sick or being transferred to out-sections. In the month's fighting during the Division's advance from Rimini to the Savio, Signals had incurred no fatal casualties. A week before the attack from the Marecchia on 22 September, however, 4 Signal Squadron lost one man, Signalman White, ¹ who was killed in action while attached to 20 Armoured Regiment.

On 17 November the Divisional Artillery left the Fabriano area and came under the command of 5 British Corps. By the early morning of the 18th E, F, G and H Sections had reached Forli and had taken over the communications of 56 (London) Divisional Artillery, which the New Zealand regiments were relieving. The move of the rest of the Division began on the 24th, when Main and Rear Divisional Headquarters and 5 and 6 Brigades left the Matelica, Camerino and Castelraimondo areas for Forli. Fourth Armoured Brigade followed on the 27th.

After a brief spell at San Vittore, the divisional assembly area a few miles south-west of Cesena, Main Headquarters arrived in the vicinity of Forli on the 26th and took up its position a little to the north-west of the town. A forward signals party had gone ahead early that morning to the new headquarters' site and laid out line communications to Headquarters Divisional Artillery, only a few hundred yards away between the railway and Route 9, to 5 Brigade, four miles to the northeast midway between the Montone and Lamone rivers, and to 6 Brigade,

near the railway three miles to the north-west. These preparations were in readiness for the relief of 4 British Division by 2 NZ Division, which was to take place that evening as a result of a regrouping plan in 5 Corps. The relief took place as planned at 7 p.m. and immediately all wireless nets in the Division opened up for a brief period, exchanged netting calls and test calls, and then closed down again. At the time the relief took place heavy rain was falling and conditions were far from pleasant, especially for the linemen, but fortunately there were very few interruptions on any of the line circuits.

During the spell the Division spent in the Matelica-Fabriano rest area the enemy had continued his withdrawal in the hills south of Forli, moving back slowly and easily in the rain which kept aircraft away and held off ground pursuit by 5 Corps. During the October fighting east of the Savio, 5 Corps had been operating on the left of 1 Canadian Corps. By 5 November troops of 4 and 46 British Divisions lay on a line between Grisignano and the Forli airfield. On the night of the 8th-9th the enemy fell back to the Montone River, the next of the many natural anti-tank obstacles which abound in the Po valley. His new defences were called the Gerda Line, which ran from the sea along the line of the Uniti River immediately below Ravenna, joined the Montone River, and continued along its west bank to the point just north of Route 9 where it swung sharply south-east towards Forli. From this point, where the Cosina stream provided an obstacle strengthened by the enemy with minor defences, the Gerda Line continued southwards to Castel-Jacio, eight miles south of Faenza. From the pattern of his defences it was easy to see that the enemy intended to hold fast to Bologna and thus keep Fifth and Eighth Armies separated by the Apennines while he himself made use of the best lateral road communications in Italy.

On the Montone-Cosina line against which Eighth Army opened an offensive on 20 November with air bombardments, the enemy resisted stubbornly, but by the 23rd he was showing signs of weakening. Next day he went back behind the line of the Lamone River, which intersects Route 9 where it passes almost through the eastern outskirts of Faenza.

This was the situation on 27 November when 5 and 6 Brigades began to probe the Lamone defences from their positions north of Route 9. But the enemy held the far bank in considerable strength, with strongly defended posts, bristling with automatic weapons, at intervals of only a few hundred yards. Rain brought the river up and the ground became saturated.

On the night of 10-11 December 5 Brigade was switched from north of Route 9 to a new position in 46 British Division's bridgehead, a little over a mile from the south-western outskirts of Faenza. At the same time 6 Brigade extended its line southwards and closed up to the line of the river to dominate the west bank with fire and subsequently to link up with 5 Brigade. These moves brought trouble to the linemen of B (cable) Section because, with the switch of 5 Brigade from the right to the extreme left of the divisional sector, where the route lay along narrow tracks and one-way roads, the brigade lines had to be virtually reconstructed. To conserve cable and reduce maintenance, a signal centre was established at Tactical Headquarters 2 NZ Division, which was located at the village of Belvedere, about two and a half miles south of Faenza.

An hour before midnight on the 14th 450 guns opened the barrage for a New Zealand attack directed between Faenza and the little village of Celle, two and a half miles to the west. Throughout the night the attack progressed steadily. At first light the left battalion, the 22nd, had reached its objective, but on the right and in the centre, where the enemy put up stiffer resistance, bitter fighting continued during the day. Early on the 16th there were signs that the enemy was withdrawing from Faenza. By this time one of 6 Brigade's battalions had come through on the right of 5 Brigade, Divisional Cavalry had crossed the blown bridge at the eastern approaches to the town, and a brigade of 10 Indian Division, the 43rd Gurkhas—now under command of 2 NZ Division—went forward to clear Faenza. The final attack was made against moderate opposition, and by early morning on the 17th the town was reported clear of the enemy, whose main forces had withdrawn

behind the Senio, although he still held several deep salients east of the river.

For 5 Brigade's attack on the 14th, K Section had no fewer than eleven main-line circuits in one of the most comprehensive line layouts it had attempted in the Italian campaign. Wireless communications had undergone a similar expansion. On the forward radio-telephony command net controlled from the armoured command vehicle at Brigade Headquarters there were fourteen terminal stations, of which the more important, apart from those at the three battalions, were at 4 and 5 Field Regiments and 18 Armoured Regiment.

In the regrouping which had taken place on the 10th, 6 Brigade had moved south of Route 9 and Brigade Headquarters had been established early in the afternoon a few hundred yards below Route 9 and a little over a mile from the eastern outskirts of Faenza. Before the brigade's move L Section already had a line layout which, for complexity and multiplicity of circuits, had been at least equal to, if not greater than, that provided later by K Section in 5 Brigade for the attack against Celle. During the preparations for 6 Brigade's move to its new positions, however, the system had grown even more intricate; at the new site of Main Headquarters 6 Brigade, which had been represented by an L Section signal centre from early on the 10th until the brigade staff actually arrived in the afternoon, twelve main-line circuits were terminated on the brigade's exchange switchboard. At Rear Headquarters 6 Brigade, in the area north of Route 9 about to be vacated by the brigade, there were seven main-line circuits. Throughout the next few days L Section had a great deal of difficulty in maintaining this unusually large number of circuits, most of the line faults being caused by damage to cable from enemy fire. On the 12th a detachment from B (cable) Section was sent from Main Divisional Headquarters to assist in maintaining the lines.

On the morning of the 14th the section second-in-command and two linemen went forward to 24 Battalion's area, just west of the Marzeno River and two miles below Faenza, and laid a line to 28 Battalion, where

a tactical headquarters' signal office for 6 Brigade was established that evening. Two days later this signal office moved over the Lamone in the wake of 5 Brigade's attack towards Celle and set up its exchange near Prince's Cross, an important crossroads a mile and a half south-west of Faenza, with lines forward to 20 Armoured Regiment, 24 and 25 Battalions, and 43 Gurkha Lorried Infantry Brigade, of which one battalion was at the time under the command of 6 Brigade. Meanwhile, in the rear, the three Main Division lines running forward along Route 9 to Main Headquarters 6 Brigade were being extended towards the Lamone on the eastern approaches to Faenza. Early in the morning of the 17th a line detachment under OC L Section, Captain O'Hara, extended these three lines across the river into the town.

On the morning of the 17th, when Faenza was reported to be clear of the enemy, it was decided that Main Divisional Headquarters should move into the town. There appears to have been no special tactical significance in this move, which was probably intended to secure good billets for the Divisional Headquarters' troops. It created an unusual tactical situation, because when the headquarters opened in Faenza it was some distance—at least a mile—ahead of the two infantry brigades' headquarters on the axis of advance. Indeed, when the Divisional Headquarters' reconnaissance party and the forward signals detachment crossed the Lindell bridge, a few hundred yards upstream from the blown bridge on Route 9 at the eastern entrance to the town, enemy snipers were still active in Faenza.

Main Divisional Headquarters moved in soon after lunch and set up its offices in the centre of the town, which by evening was teeming with tanks and troops. Resistance continued stubbornly along the railway at the northern end of the town, only 800 yards from Main Headquarters, several determined counter-attacks being driven off by Gurkha infantry late in the evening in the area between the railway and the Scolo Cerchia, a canal about 500 yards farther to the north. Eventually the Gurkhas had to withdraw to the line of the railway, leaving patrols on the canal, and by 10.30 p.m. the headquarters of 2/8 and 2/10 Gurkha

Battalions were established at each end of a tree-lined avenue at the western end of the town and less than half a mile from the Main Divisional Headquarters. A little later G staff instructed that a line from each of these headquarters should be brought in to Main Headquarters and terminated on the Main Division switchboard. Within half an hour after midnight, however, 2/8 Gurkhas had its own line through to 43 Gurkha Brigade, and one was being laid quickly from 2/10 Gurkhas.

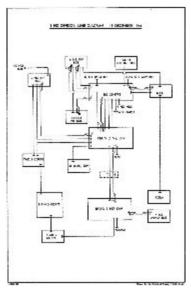
Throughout the rest of that turbulent night a steady rain of shell and mortar fire from the enemy defences between the railway and the Scolo Cerchia, and other German positions to the north-east towards the Lamone, fell on the town. At 5 a.m. on the 18th orders were given that Main Divisional Headquarters would move out of Faenza back across the Lamone, and two hours later it was located just off Route 9 on a side road leading to the metalled road which the Engineers had built along the top of the Lamone's eastern stopbank to the Lindell bridge. On leaving the town with Main Headquarters, Signals had left its Main Divisional signal office detachment behind in the unit's comfortable billets as a signal centre. This detachment was nominally in the charge of the orderly-room sergeant, Sergeant Savage ²— a task which he combined with a second duty, suspected of being the more important of the two, of holding fast to the billets until the unit's return.

Throughout that day Main Headquarters fell under enemy shellfire, which severely damaged the lines running forward to the signal centre in Faenza. Extra lines were run across the Lamone into the town, but these also sustained considerable damage from enemy fire and contributed little or no improvement to communications. All control wireless sets were in touch with their terminal sets at brigades and were manned in a continuous listening watch, but the staff was curiously reluctant to use them, whether from fear of infringing security measures, disclosing the headquarters' location, or for some other reason not known.

That day Headquarters 6 Brigade moved into the western end of Faenza, following Headquarters Divisional Artillery which had moved

into the town the day before. At the latter headquarters on the 18th an H Section cook, Signalman Scott, ³ was killed by an enemy shell.

The Division's last operation of 1944 began on 19 December with an attack northwards on a two-brigade front to clear the enemy from the eastern side of the Senio in the Faenza sector and open up Route 9 west of the town. The 43rd Gurkha



2 NZ Division Line Diagram 19 December 1944

Lorried Infantry Brigade, still under the command of 2 NZ Division, was on the right of the advance, and 6 Brigade on the left, with 5 Brigade contributing a diversion with fire from supporting arms against targets west of the Senio.

The line communications plan differed only slightly from that already in use on the 18th after the move of Main Divisional Headquarters from Faenza. In 6 Brigade L Section encountered no special difficulties with line or wireless during the attack. Wireless, particularly, worked very smoothly, and interruptions to line circuits were no more numerous than might have been expected from the desultory to slightly brisk retaliatory fire, except on the left flank of 26 Battalion on the brigade's left, where severe harassing fire was encountered.

Supported by a very heavy artillery bombardment, both brigades reached their objectives against only moderate resistance, the enemy having withdrawn most of his forces across the Senio before the attack commenced.

During the morning of the 20th Main Divisional Headquarters moved back into Faenza and reoccupied the billets it had hurriedly but reluctantly left two days before. By this time the headquarters of 4 Armoured Brigade and 5 Brigade were also established in the town, so Main Division's main-line circuits were satisfyingly short and easy to maintain, which enabled the linemen of B (cable) Section to get a little more rest than they had had since the Division came to the Forli area a month before.

About this time the Intelligence branch of Divisional Headquarters published a translation of a captured enemy document which set out twenty-five reasons for the failure of a German counter-attack in strength against 46 British Division south-west of Faenza on 9 December. Of these reasons, six ascribed the failure to signal communication defects which 2 NZ Divisional Signals—having learned similar lessons in the African campaigns of 1941 and 1942—would have described as crude and elementary. One point, stated brusquely and unequivocally, was that 'signal nets were quite inadequate and poorly organised'. Another was that adjutants were left without communication with their commanders and could not report or take action, or even get into contact with companies. The document also said that commanders, in the absence of line communications, did not make use of lateral wireless links. So much for the vaunted efficiency of German signal battalions, which was supposed to match the excellence of captured enemy wireless sets so often ardently admired by New Zealand signal electricians and radio mechanics.

Christmas Day passed in the traditional manner of the British Army; the various commanders made their rounds of the men's messes and spoke to the troops of the year's fortunes of battle and of what lay before them in the New Year. In Signals at Main Divisional Headquarters the usual practice of the officers serving men at their Christmas dinner was varied on this occasion; several officers took over duty shifts in the signal office and wireless stations for two hours to allow the duty men to attend the dinner and eat with their fellows.

That night the enemy continued his harassing fire of the divisional area, and many shells and bombs from marauding aircraft fell in the town. The troops snatched intervals of sleep between the heavy detonations. A 500-kilogram bomb pierced the roof of the building in which Divisional Headquarters was housed, struck obliquely through several floors, and buried itself unexploded in the street. Less than fifty yards from where it struck, several staff caravans, including the one in which General Freyberg was sleeping, stood in the courtyard of the building. Accounts of the circumstances of the discovery of the unexploded bomb in the early hours of Boxing Day vary. One states that a drunk lineman of Royal Signals, making an uncertain but singularly carefree progress along the dark street, stumbled over its tail protruding from the cobbles. In any case, whatever way it was discovered, the General's ADC was awakened soon afterwards by a ring on his telephone and informed by the duty officer of a Royal Artillery regiment that a bomb had fallen in the street nearby. The ADC wasn't very interested and said so in as many words. Why was he awakened in the middle of the night, he asked, merely because a bomb or a shell, or for that matter, several bombs or shells, had fallen in the street? What was so very unusual, he continued, in the odd shell or bomb falling in the town during the night? And so on, and so on. The duty officer, seizing the opportunity while the ADC paused to draw breath, replied that the bomb had not yet exploded and was only twenty yards from where the ADC was sleeping. This put a different complexion on the matter, but the ADC did not stop to discuss it, having decided that he now had a closer interest in the incident.

A little later, about five in the morning, a warning order received at unit headquarters from G Branch stated—not unexpectedly—that the

Divisional Headquarters would move out of Faenza as soon as possible and that the Divisional Headquarters' reconnaissance group was about to set off to find a new headquarters' site east of the town. This move did not take place until the 28th, however, when the headquarters moved back along Route 9 and took up a position about two miles down the road towards Forli, where the troops were billeted in farm-houses and cottages.

In a very short time the men transformed their bare billets into reasonably comfortable quarters, the most important improvement being a number of earthenware stoves manufactured by a gentleman called Becchi, who in his hurried departure had gone away without a large number of them.

These 'liberated' stoves fitted the needs of the men very well, but because of some initial difficulties in their installation, several days passed before the windows of billets stopped sprouting ungainly lengths of stovepipe. Fuel was scarce, so it was not long before an improvised oil drip-feed contrivance using Dieseline was introduced. This new-pattern stove generated great heat, but had two serious disadvantages, both caused by imperfect combustion of the diesel oil vapour. The stoves purred softly like a den of contented tigers, but at regular intervals, after a slight hiccough, the purring would stop abruptly. This was the signal for all in the room to take cover. Then, just as suddenly but much more disconcertingly, the 'ignition' started up again and the accumulated vapour exploded with a roar. The second defect was that large accumulations of soot gathered in the stovepipes, which had to be cleaned out daily—a filthy and most unpleasant task.

New Year's Day came and went in uncomfortable winter conditions, with snow lying thick on the ground. The linemen of B (cable) Section, if no one else did, acclaimed the snow as a blessing in disguise. Whereas the mud and sodden ground of a few weeks ago had seriously disrupted line communications, the snow under which the cable was buried, sometimes to a depth of several feet, behaved as an excellent insulator and caused no earthing faults. But when lines had to be lifted and cable

recovered, the linemen changed their tune. Sometimes the dense packing of snow under which the lines lay in some places refused to give way to strenuous pulling, and only the vigorous use of picks and shovels would release the cable.

At the beginning of the month all lines were on the ground, and it was decided that some air-line routes should be built as alternative circuits to the brigades and to Rear Divisional Headquarters in Forli. These air-line circuits proved their worth when the thaw set in and the ground cable circuits began to give frequent trouble from earthing faults.

Early in January a new establishment for Divisional Signals, notified by Divisional Headquarters as having become effective from 1 November 1944, brought about a major reorganisation in the unit. Although Nos. 2 and 3 Companies were unaffected, there were important changes in the unit headquarters' organisation, which acquired a new component called the Security Section, and in No. 1 Company, where several sections changed their designations and a new section, N Section, was added to handle the control set at Headquarters New Zealand Engineers for the engineers' wireless communications. B became the new designation letter for the Rear Divisional Headquarters' wireless organisation, formerly known as R Section, and the old B (cable) Section became C Section. In D (operating) Section, henceforth to be known as O Section, the despatch riders were divorced from the operators and signal clerks and became a new component called D Section.

With the formation at Forli on 20 January of 9 Infantry Brigade, which consisted of 22 Battalion, Divisional Cavalry and 27 (Machine Gun) Battalion, a new infantry brigade signal section, J Section—the second of that name—was created. The nucleus of this new section, which consisted of a sergeant and twelve other ranks under the command of Captain Rollet, ⁴ marched out to join Headquarters 9 Infantry Brigade on the 24th, and was gradually built up in the ensuing weeks to the strength of a complete infantry brigade signal section.

Signals' first fatal casualty in 1945 occurred early in January when Signalman Tomlinson, ⁵ of L Section, died of wounds inflicted by an enemy shell.

On the 16th Lieutenant-Colonel Grant, who had left New Zealand in 1940 with the First Echelon and who was regarded by all ranks of the unit as a kindly and understanding commander, particularly since his term as Commanding Officer after the departure of the first furlough draft in June 1943, paid a farewell visit to all out-sections before leaving for the United Kingdom, where he was to give a series of lectures at a Royal Signals officer cadet training unit. Most of the old hands and not a few of the more recent reinforcements watched with sincere regret the departure of 'Old Bob'—or 'Sea Biscuit', as he was popularly known among the men because of his curious gait, which resembled that of the well-known racehorse of that name. He marched out from the unit on the 17th and was succeeded in command of Divisional Signals by Major Foubister.

Only a month earlier another senior officer who was widely respected in the unit for his consistently courteous manner in his dealings with all ranks, even the lowliest signalman, and for his calm and manly demeanour under fire, left the unit for Advanced Base on the first stage of his return to New Zealand. This was Major Pryor, another First Echelon officer, who since the Crete campaign in 1941 had temporarily commanded the unit for varying periods during the absence of successive commanding officers through sickness, furlough and other reasons. Many watched him go with keen regret—Geoffrey Pryor, the immaculate, the impeccable, the imperturbable; who was never heard to split an infinitive, confuse his pronouns, leave a participle hanging in the air or in any other way treat his mother tongue with disrespect, or to tell a coarse story or sing a bawdy song; the tidiest of mortals in his personal habits and the most painstakingly conscientious and industrious of officers.

Pryor's careful habits of speech and dress and equable temperament

betrayed his English birth. He had come to New Zealand as a child and had grown up into a passable New Zealander, although no one would describe him as a rugged colonial individualist. If he was not a gentleman, then there was none in the whole Division. As Divisional Signals watched his going, subalterns—and senior officers who had once been subalterns— and sergeants and men remembered pensively how they had joked about him with their cronies and called him 'Auntie' and other such names, in which there had been no real malice but only admiration, which they could express only in banter.

February was a mild month, with hardly any rain and consequently little trouble on line circuits from dampness. Nor were there many faults from enemy shelling, so that line communications continued without serious interruption. Early in the month J Section, which had joined 9 Brigade at Forli late in January, moved with Brigade Headquarters to Fabriano and began training. By the end of the month it was working smoothly with almost a full complement of men, equipment and transport.

On 3 March a forward signals party left for Matelica, to which the Division was about to return for a period of rest and training. The whole signal communications layout in the Divis- ion's sector of the Faenza area was handed over complete to Signals of 5 Kresowa Division, 2 Polish Corps, on 6 March, the day 2 NZ Division relinquished command of the sector.

Back in Matelica and Fabriano, the men were quartered in their former billets. They were soon off on visits to Italian family hearths to see Poppa and Momma again and to renew acquaintance with the vino alcove behind the curtain in the corner. The officers sought out their former messroom, but were met by the owner with an exorbitant claim of several thousand lire for damages alleged to have been caused during some frolic- some parties in November.

Throughout the month the weather was very mild. An extensive programme of training in signal office organisation and wireless and line

communications was carried out, and all vehicles and technical equipment were thoroughly overhauled.

On 15 March the newly formed 9 Infantry Brigade carried out a two-day exercise to test its training. Its signal section, filled almost completely to establishment by reinforcements and transfers of tradesmen from other sections of Divisional Signals, fulfilled all that might reasonably be expected, and a good deal more, from an infantry brigade signals section—as a good J Section should.

On the morning of 30 March a forward signals party of twenty-four other ranks under OC O (operating) Section left Matelica for the new Main Headquarters' site north-west of Faenza and a mile and a half east of the Senio River. By 3 p.m. they had established a signal office there, and by the time Main Headquarters arrived at the new location in the early hours of the 31st, had laid out a considerable part of the line-communications system, which by noon included circuits to Headquarters 5 Kresowa Division, 78 British Division and Main Headquarters 5 Corps, to whose command 2 NZ Division passed early next day.

At this time the enemy had seven divisions in the line opposite Eighth Army, and having appreciated that the main Allied effort would be made along the Route 9 axis, had placed some of his best formations there. Against the enemy line Eighth Army was deployed between Lake Comacchio and the Apennines, with 5 Corps on the right, 2 Polish Corps astride Route 9, and 10 and 13 Corps, in that order, on the left towards the Apennine foothills. The New Zealand Division lay on the left of 5 Corps' sector, with 78 British Division immediately to its right. To its left was 3 Carpathian Division of 2 Polish Corps.

In the divisional sector 5 Brigade was forward on the right and 6 Brigade on the left, both engaged in patrol activity. By 11 p.m. on 3 April, three days after the Division's arrival on the Senio, 6 Brigade had gained possession of the eastern floodbank in its sector. In 5 Brigade's sector, however, the New Zealand infantry occupied one slope of the

near floodbank and the enemy the other. They exchanged grenades by lobbing them over the crest of the floodbank, and altogether it was a most uncomfortable place and quite unsuitable for observation—or as an official report aptly puts it, it 'permitted cautious examination of the other bank but denied physical examination of the river'.

Eighth Army's outline plan for BUCKLAND—the code-name for the operation to force the enemy's Senio defences and exploit northwards against Bologna and Ferrara—was that 2 Polish Corps, 2 New Zealand Division and 8 Indian Division should launch simultaneous assaults against the Senio positions, and having forced the river, should attack and cross the Santerno, the next river obstacle. Before the main attack, all troops were to be withdrawn to a safety line east of the river to enable the enemy's river positions and rear areas as far back as the Santerno to be thoroughly softened by air and artillery bombardment. D-day was fixed for 9 April, provided the weather permitted the bombing programme to be carried out, and H-hour, when the infantry was to cross the river, at 7.20 p.m., one hour before darkness fell.

General Freyberg's plan was for the New Zealand Division to attack behind an artillery barrage on a two-brigade front and penetrate beyond the Senio to a depth of 4000 yards. The attack was then to continue in three phases and culminate in an assault crossing of the Santerno.

As D-day drew near, the Division's nudged the enemy out of his remaining positions east of the river and occupied the eastern floodbank along the whole of the divisional front.

During the period between the Division's arrival on the Senio and the opening of the offensive, Signals brought into use a jamming device designed to prevent enemy line-intercept units —whose presence on the front had been suspected for some time and only recently confirmed—from eavesdropping on staff conversations on line circuits in the Division. This was the culmination of a series of experiments and field trials by OC 4 Signal Squadron, Major John Shirley—an inveterate seeker after new and highly unorthodox methods of improving signal

communications—and a band of enthusiastic helpers, mainly instrument mechanics of 4 Signal Squadron, of whom Peter Glasson, ⁶ the squadron's technical maintenance officer, was the first to put the idea to a practical test.

Forli area—Main Headquarters 4 Armoured Brigade was at Faenza and Rear Headquarters in winter quarters at Forli. The speech level on the lines between the two headquarters was poor owing to low line-to-earth resistance between the field cable and the sodden ground. Glasson complained about this to Staff-Sergeant Barton, 7 the squadron's Foreman of Signals, who was at Rear Headquarters, and asked if he could design and build an amplifier for the telephone instruments used on the circuits.

Barton, who was not at all hopeful of the chances of improving the speech-level characteristics of the lines, first turned his attention to the design of a repeating device to be inserted in the line, but this was a failure because of the lack of balance in the circuit. He then designed a simple valve amplifier, of which two of the most essential features were that it had to be automatic in operation and capable of easy use by the brigade staff. This amplifier, constructed by the instrument mechanics of P Troop, switched on automatically when the handset of the telephone F was lifted from its cradle and amplified incoming speech. Outgoing speech was amplified by the operation of a relay controlled by the Pressel switch on the handset; this relay also kept the transmitted speech at a level sufficient to avoid the danger of inductive interference to adjacent circuits.

Soon after the instrument was installed, Glasson, who was at Main Headquarters at Faenza, noticed that he could hear conversations from other circuits in the neighbourhood. Assisted by Sergeant Boyd, ⁸ another NCO of 4 Squadron, he connected a length of field cable to the instrument, laid the cable out on the ground in the general direction of the enemy's front, and earthed its far end. They listened on the telephone and were astonished at the number of conversations on other

circuits they could overhear at fair speech level. None of these conversations came from enemy circuits, but Glasson and Boyd had no difficulty in identifying most of them as coming from New Zealand units, mainly infantry. After they had been listening in this way for several days, reception was suddenly blotted out by what Glasson thought sounded like ignition interference from a battery-charging engine somewhere in the area. This immediately suggested to him that, if a similar noise could be injected into the ground along the front, it would effectively counteract any German line-intercept units, some of which were suspected of operating in the Faenza sector.

At this stage Glasson reported his observations to Major Shirley, who immediately took all further experiments into his own hands; later developments culminated in the construction of a high-gain amplifier of good signal stability housed in a spandau ammunition box.

When the first field trials were made—the day before the Division left the Faenza sector for Matelica—Shirley was commanding 4 Signal Squadron. By keeping an ear tuned for snippets of information that might have a special significance for Signals, he had learned from Intelligence sources that the enemy was believed to be using linetelephony intercept sections (Horch- trupps), which consisted of three or four signallers and an interpreter to note down any telephone conversations overheard. One of these sections was captured in February, and information extracted from the prisoners under interrogation indicated that they were still experimenting when captured and had achieved no worthwhile results. This information of enemy signal methods was meagre enough, but was sufficient to send the eager Shirley off on a series of field trials, for which conditions at this time were almost perfect. It was a period of static war, with the opposing forces facing each other across the Senio and only a few hundred yards apart. In the New Zealand sector Barton's telephoneamplifier was now in use on several circuits, especially those between widely separated headquarters, and of course generated much stronger earth currents on earth- return circuits than ordinary field telephones

would have done.

After securing permission from Main Divisional Headquarters and Headquarters 5 Brigade, Shirley took the intercept-amplifier to a 28 Battalion post near the eastern floodbank of the Senio and installed it with its 'pick-up' wires or 'antennae' extending over ground known to be traversed often by enemy patrols. The method of installation and operation was simple: the long pick-up wires were merely run out in the direction of enemy positions, their far ends earthed with ordinary earthpins, and the other ends connected to the detector, which, with its amplifier, used four thermionic valves. There were no dials to manipulate and only one knob, the volume control.

Shirley and his men kept watch all night, but were unable to identify any of the speech they heard as unmistakably German. New Zealand and Polish speech was received at loud-speaker strength throughout the watch, especially after spells of sporadic enemy shellfire, and Shirley was dismayed at the lack of security disclosed in the conversations he overheard. He estimated that five listening posts equipped with apparatus similar to his and sited intelligently along the front of the New Zealand sector would discover that the area was about to be taken over by Poles and that the New Zealanders were being withdrawn. He also estimated that the detector-amplifier had an approximate range of 300 yards, that is, from the earthed ends of the pick-up wires to the line circuit on which he was eavesdropping.

The results of an analysis of Shirley's report of his trials were, firstly, that the G staff at Main Divisional Headquarters was considerably agitated at the lack of security disclosed in telephone conversations and, secondly, that Signals, with the permission of Main Divisional Headquarters and the Chief Signal Officer Eighth Army, began work on a plan suggested by Shirley—and Glasson's early observations of ignition interference—that several oscillators coupled to valve amplifiers should be constructed and used to superimpose a jamming 'tone' over the whole of the New Zealand sector, thus preventing the enemy's intercept sections from picking up induced earth currents and listening to

conversations.

When the Division reached its new Senio positions at the end of March, Shirley and one of his instrument mechanics, Corporal Sutherland, 9 who was primarily responsible for the design and construction of the oscillators under Shirley's direction, went forward into 5 and 6 Brigades' sectors and installed eight oscillators close up to the eastern floodbank at intervals of about 800 yards. The earthed ends of the radiator wires, which were between 100 and 200 yards long and fanned out from the oscillator in a V pattern, were grounded on the floodbank itself. Three of the instruments were installed in this way across the front of 5 Brigade's sector, and five across 6 Brigade's. The task took twelve hours to complete.

The first results were surprisingly good. The jamming tones did not interfere unduly with speech on New Zealand circuits; this was not their purpose, which was to smother the earth currents by which the enemy interceptors listened to telephone conversations. A British intercept unit on the right of the New Zealand sector had a cable thrown across the river to the enemy side by a Piat bomb with an earth-pin attached, and reported that signals picked up on its line-intercept receiver had been completely blotted out by a loud howling sound from the New Zealand oscillators. Later this intercept unit moved farther over to the right into 78 Division's sector, no doubt so that its members could carry on with their work in peace. Probably they carried news of the New Zealand invention with them, for presently the Technical Maintenance Officer of 78 Divisional Signals arrived hotfoot to seek details of the oscillators so that he could construct some for use on his division's sector.

On 6 April a prisoner taken at an enemy forward observation post opposite 21 Battalion's sector confirmed that the Germans were using line-intercept units, of which one, to his certain knowledge, had arrived on the Senio opposite the New Zealanders on the 2nd. This unit, which consisted of two corporals and two men, of whom the latter spoke good English, began its work on the night of 3-4 April and immediately

obtained some results. The prisoner had heard one of the men tell a German officer that a new 'subscriber' had come on the line and that he had heard the words 'whisky and beer issue' used. Fifth Brigade, which was the closest Allied position to the point where the intercept set was reported to be installed, stoutly denied that it had been guilty of this security indiscretion and brought proof to show that it had had no whisky for a month!

Throughout the preparations for the opening of the New Zealand attack in the BUCKLAND offensive, the oscillators installed across the sectors of 5 and 6 Brigades continued to be used to prevent the enemy from eavesdropping. When the Division crossed the Senio on 9 April they were withdrawn and packed away; they were not used again because their employment while the Division fought in a mobile role was impracticable.

¹ Sigmn S. White; born NZ 28 Oct 1914; picture-theatre operator; killed in action 16 Sep 1944.

² S-Sgt J. F. H. Savage; Carterton; school-teacher; born Nelson, 30 Sep 1912.

³ Sigmn F. A. Scott; born Napier, 25 Oct 1915; butcher; killed in action 18 Dec 1944.

⁴ Capt L. A. F. Rollet; Wellington; born Wellington, 27 Sep 1919; mechanician; OC J Sec Sigs 1945.

⁵ Sigmn T. W. Tomlinson; born NZ 21 Jun 1918; clerk; died of wounds 4 Jan 1945.

⁶ Lt P. R. Glasson; Tuakau; born Hastings, 21 Jun 1917; wireless student.

⁷ 2 Lt F. L. Barton; Auckland; born Auckland, 25 Mar 1922;

junior mechanician.

⁸ Sgt S. B. Boyd, m.i.d.; Dunedin; born Auckland, 25 Nov 1915; warehouseman.

⁹ Cpl K. G. L. Sutherland, m.i.d.; Pukekohe; born Pirongia, 6 Mar 1908; electrician.

DIVISIONAL SIGNALS

CHAPTER 22 — THE FINAL OFFENSIVE

CHAPTER 22 The Final Offensive

THE 9th April dawned warm and clear with a light westerly breeze, which removed all fears that a change in the weather might prevent the heavy air bombardment that was to precede the attack. As noon drew near the sky remained almost cloudless and the day grew warmer. A little before 2 p.m. the first flight of heavy bombers appeared from the east and began to discharge their loads of fragmentation bombs on the enemy positions behind the Senio. More and more aircraft continued to arrive, and the sound of their bombs swelled into an earth-shaking roar as successive waves of bombers ran in over their targets. Then, an hour later, the infantry fell back from the floodbank to a safety line while the guns put their curtain of fire along the line of the river. After playing along the river for a time, the barrage began to lift forward in six steps—the 'Dragnet' method—and then switched suddenly back to the river line. The bombardment continued, with pauses of ten minutes in which fighter-bombers swooped in and raked the enemy side of the river with machine-gun and cannon fire, until shortly before H-hour (7.20 p.m.).

By this time the Crocodile and Wasp flame-throwers and the leading infantry companies with their kapok bridges had closed up to within 200 yards of the river. A few minutes before H-hour, just as the last rounds of the artillery bombardment fell on the river line, the fighter-bombers came in again, this time in a dummy run to force the heads of the enemy down while the infantry and flame-throwers thrust forward. Then, suddenly, spurts of flame appeared along the whole of the divisional front, snaked lazily towards the floodbanks, and lobbed clumsily over onto the river line in great searing gouts of fire that charred the ground on the western floodbank and utterly demoralised the enemy troops crouching in their dugouts.

Within five minutes of the start of the assault leading elements of the forward companies were across the river and on the enemy stopbank, where only scattered resistance was encountered. By this time the artillery barrage was falling on its opening line 400 yards beyond the river, where it paused to allow the infantry to close up before lifting forward.

Heavy and medium bombers resumed their attacks on enemy positions on the 10th, after which 5 and 6 Brigades, supported by tanks and artillery concentrations, advanced against light spandau and mortar fire until, early in the evening, they had reached a lateral road just short of the Santerno River and only two and a half miles south-east of Massa Lombarda. By early morning on the 11th both brigades were in possession of shallow bridgeheads on the western side of the Santerno, and at first light on the 12th were striking beyond the river. The advance went ahead against heavy resistance, and at midnight Massa Lombarda was occupied.

On the Division's right and left, 78 British Division and the Poles had drawn abreast, and the first phase of the offensive was complete. While these operations were in progress, 56 (London) Division, on the right of 5 Corps, successfully carried out an amphibious assault across the flooded areas south of Lake Comacchio and landed a brigade near Menate, thus outflanking the enemy's Reno line which covered the approaches to the Argenta Gap on the western side of Lake Comacchio. The Londoners caught the enemy napping and Menate and Longastrino fell on 11 April. At this stage, when 56 Division was sitting in the entrance to the Argenta Gap and 78 Division, the New Zealanders, and the Poles were lying on a wide arc through Massa Lombarda, Fifth Army had not yet launched its attack against Bologna. On the morning of the 14th when it did so, Eighth Army had already closed up to the Sillaro River on a broad front.

In the early hours of the 14th 6 Brigade, which had side- stepped to the right to relieve 5 Brigade the previous day, and 9 Brigade, which had come through on the left of the New Zealand front simultaneously with 5 Brigade's relief, pushed on behind a heavy artillery barrage in an attempt to seize a bridgehead across the Sillaro. The first to cross was 24 Battalion of 6 Brigade, followed soon afterwards by the Divisional

Cavalry Battalion, a favourable augury for 9 Brigade, which was entering its first full-scale attack. All that day 6 Brigade and Divisional Cavalry clung tenaciously to their footholds on the far stopbank, while the German 278 Division strove desperately to throw them back across the river. Soon after sunset 22 Battalion got across the river for the second time that day and hung on grimly, despite the enemy's efforts to push it back.

Throughout the 15th the Sillaro battle continued with fierce counter-attacks by the enemy, who fought strongly in an effort to cover the relief of some of his formations which had been severely mauled on other parts of the front. The two New Zealand brigades not only succeeded in holding against the attacks but managed to enlarge their bridgeheads.

An advance of several thousand yards was made on the 16th, and by the evening of the following day leading elements of 2 NZ Division had reached the line of the Gaiana Canal against failing resistance. The far bank, however, was strongly held, and after an unsuccessful attempt by the Gurkhas of 43 Brigade to rush it, a pause occurred in the advance to enable preparations to be made for a set-piece attack.

At 9.30 p.m. next evening, the 18th, a tremendous artillery barrage from nearly 200 guns rent the night with its thunder; half an hour later spurts of flame along the line of the canal showed where the flame-throwers had again come into action, throwing their searing fire along the west bank, where the ardent and fanatical paratroops of 12 Parachute (Sturm) Regiment—old and bitter opponents of the New Zealanders in the Crete battles of 1941—crouched in their defences to meet the infantry onslaught.

Ninth Brigade and 43 Gurkha Brigade pressed forward and carried the Gaiana Canal, and by early evening of the 19th leading elements of 22 Battalion and Divisional Cavalry were on the Canalozzo, a mile and a half south-east of Budrio. On the left of the New Zealand front 43 Gurkha Brigade, which had suffered very heavy casualties from mortar

and spandau fire, was relieved by 6 Brigade, and on the right 9 Brigade was relieved by 5 Brigade.

On the evening of the 20th the enemy began a hurried retreat to the Po River, a decision forced on the German commander by the pressure north of the Gaiana line, where both the New Zealanders and the Poles, farther to the left, were advancing swiftly towards the Idice, the last river obstacle before Bologna. Fifth Army had cut Route 9 west of Bologna on the afternoon of the 18th, whereupon the enemy had begun to withdraw a considerable portion of his forces hurriedly northwards; this was in effect the signal for the retreat of the German Fourteenth Army.

When the New Zealanders and the Poles pressed on on the 20th, they found that the Idice, the much publicised Genghis Khan Line, built as the last inner defence line for Bologna, was only lightly held.

Nevertheless the enemy put up a fierce resistance, but by midnight this was overcome. A short pause ensued while the Engineers caught up with their bridges. The advance was resumed next day, when the Poles entered Bologna without much difficulty. The New Zealanders encountered only isolated rearguard opposition until they neared the Reno.

Ferrara fell to 8 Indian Division on 24 April, and by noon that day all organised resistance west of the city was at an end; this brought to a close the first phase of Eighth Army's offensive —the seizure of the general line lying between Ferrara and Bologna.

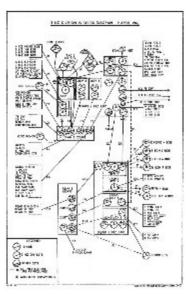
At this stage Eighth Army's formations were disposed with 5 Corps on the right along the Po and facing northwards on a front of fifty miles; 13 Corps on its left was halted, with 10 Indian Division facing north on the line of the Reno and 2 NZ Division facing north-west on the Reno with forward elements across the river; to the south the Poles were halted east and north of Bologna, which, however, now lay in Fifth Army's sector.

Only 5 Corps, which was holding an extensive front, was now in a position to press the pursuit, the immediate battle having passed beyond the reach of 13 and 10 Corps and the Poles. At this stage 13 Corps was given command of the sector immediately west of Ferrara. Eighth Army's task was now to turn north-east, breach the enemy's Venetian line on the Adige, and seize Padua. Of the two possible routes available as an axis of advance, the westerly one, which lies through Ficarolo, Trecenta, Badia and Este, was chosen because of more favourable tactical considerations.

Thirteenth Corps began the crossing of the Po on a two-divisional front on 24 April and met practically no opposition. The 6th British Armoured Division crossed at Stienta and the New Zealand Division at Gaiba without much difficulty. After a short pause, during which the two bridgeheads were merged into one and the river bridged by the New Zealand Engineers, both divisions pressed on through isolated and disorganised groups of enemy, few of whom attempted any serious resistance. The New Zealanders reached the Adige on the afternoon of the 26th and by dawn next day had a firm footing on the far side of the river. The 6th British Armoured Division reached the river in the evening. Farther to the right 5 Corps' bridgehead across the Po had been secured simultaneously with that of 13 Corps on the 24th, and the two formations took up the pursuit in company.

A review of the signal communications in 2 NZ Division in the final offensive which drove the enemy into the hinterland of the Italian peninsula, and in less than a month played a major part in bringing him to capitulation in the Mediterranean theatre, can best be related to three distinct phases of the campaign: first, the move of the Division, with all its attendant aspects of security and deception measures to deceive the enemy, from the Matelica- Fabriano- Camerino area to its new positions on the Senio; second, the preparations for the Senio crossing assault and the breakthrough; and third, the exploitation phase, which quickly developed into a rapid pursuit when the enemy's resistance began to melt rapidly away.

Signals' main preoccupation in the Division's preparations for the move from the Matelica area to its operational positions was the planning and carrying out of a comprehensive wireless deception scheme which had two main objects: to conceal the move, and to suggest, not too obviously, to the enemy intercept and intelligence services that a portion of the Division was under the command of 10 Corps on a part of Eighth Army's front south-west of Faenza and far removed from its actual position under 5 Corps north of Faenza. On D-minus-15 day a wireless link was opened to Headquarters 10 Corps to give the appearance that the New Zealand Division had passed to



2 NZ DIVISION WIRELESS DIAGRAM 9 APRIL 1945

the command of that Corps; the set that operated this link at Matelica remained there until D-day (9 April) passing dummy traffic which had been carefully estimated to simulate normal traffic levels.

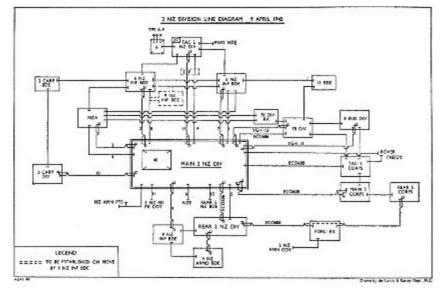
When the Division moved out on 31 March for its new Senio positions, a strict wireless silence was clamped down on all divisional nets and was not lifted until thirty minutes before H-hour on 9 April, a period of ten days. Then, on 8 April, a number of Divisional Artillery subunits, comprising in all nine guns and attended by three forward observation officers, each equipped with wireless sets, moved into an area in 10 Corps' sector occupied by an Italian formation, and proceeded, with the aid of directions given by the forward observation

officers in radio telephony, to simulate the registration of the guns on targets opposite that sector.

Finally, when the Division moved into the Senio positions and took over the sector occupied by a brigade of 78 British Division, the wireless sets of the British brigade remained in the area and continued to transmit traffic as before.

The extent to which these measures deceived the enemy was never disclosed, but it is known that he was aware on 7 April that the New Zealanders had taken over the sector from 78 Division. This information may have been obtained by his line-intercept units, but it is more probable that it was disclosed by the capture of three New Zealand infantrymen on 5 April by a neat little cutting-out attack against a post on the eastern floodbank of the river.

In the Senio assault and breakthrough phase the Division successfully crossed eight rivers. Of these, the first four—the Senio, Santerno, Sillaro and Gaiana—were defended in considerable strength, and the New Zealand assaults developed into 'set-piece' attacks involving the provision of extensive line communications. The Idice, Reno, Po and Adige, however, were not defended in any appreciable strength, but because of the natural obstacles they offered, the Division was more or less forced into semi-static positions before each—except the Idice—so that communications, particularly line communications, which had been ruthlessly stripped to bare essentials in the advances between the river obstacles, built up fairly quickly into



2 NZ DIVISION LINE DIAGRAM 9 APRIL 1945



A device for twisting cable



Near Castiglione during the action for Lignano

Near Castiglione during the action for Lignano



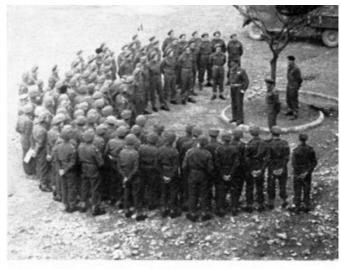
Signal unit headquarters, Castellina-from a painting by J. Figgins

Signal unit headquarters, Castellina—from a painting by J. Figgins



A telephone in Faenza ruins

A telephone in Faenza ruins



General Freyberg's farewell visit, Florence, 15 November 1945

General Freyberg's farewell visit, Florence, 15 November 1945



Lt-Col S. F. Allen
Lt-Col S. F. Allen

UNIT COMMANDERS



Lt-Col G. L. Agar Lt-Col G. L. Agar



Lt-Col R. L. C. Grant Lt-Col R. L. C. Grant



Lt-Col C. G. Pryor Lt- Col C. G. Pryor



Lt-Col N. R. Ingle
Lt-Col N. R. Ingle



Lt-Col R. W. Foubister
Lt-Col R. W. Foubister

the extensive systems usually employed for full-scale assaults.

When the Division took over from 11 Infantry Brigade of 78 Division on the Senio at the beginning of April, the line network grew rapidly. This represented an enormous amount of work for C (cable) Section, although many of the circuits had been taken over on the ground from the British brigade.

For the break-out stage from the Senio position, the line plan provided for two lines to be laid from rear to front along the divisional axis of advance, the front ends working to the forward brigades—usually two—and the rearward portion working to Rear Headquarters 2 NZ Division, Headquarters 4 Armoured Brigade, and the formations held in reserve. Except for one or two minor and unimportant defects, this plan worked well. Detachments of C (cable) Section were attached to the signal sections of both forward infantry brigades to assist them to extend brigade lines forward along brigade axes right up to the headquarters of battalions, and sometimes even beyond.

Both brigade signal sections were well drilled in this method of carrying lines forward, particularly L Section at Headquarters 6 Brigade, where line communications to battalions were maintained almost continuously without interruption, despite advances of sometimes five miles a day. This L Section drill was simple and methodical. The section

commander, armed with early information from the brigade staff and ordinary common sense, was able with surprising accuracy to anticipate moves of both Brigade Headquarters and the battalions. He had his section divided evenly into two parties: the forward signals group, which was in a constant state of readiness to move at fifteen minutes' notice, and the closing group, which remained at Brigade Headquarters' old site until it had settled into its new position. The forward signals group, usually led by the section commander himself, included the section sergeant, a lance-corporal operator, a signalman operator, an electrician and a line detachment; it was equipped with two ten-line universal-call switchboards, six telephones and enough twisted cable to provide the local lines within Brigade Headquarters' area. The subaltern second-incommand usually remained behind with the closing group.

As soon as firm information of a move of Brigade Headquarters was known, the forward signals party went to the new location, usually in company with the Brigade Headquarters' reconnaissance party, established a signal centre on arrival, and ran two trunk lines back to the old headquarters' site. In the usual run of events existing lines between Brigade Headquarters and the battalions were used for this purpose. The method of carrying line forward to the headquarters of the battalions varied according to the circumstances. For example, if a battalion headquarters was making a daylight move to a known location, the L Section cable detachment might follow up some distance behind or accompany the headquarters, laying its cable as it moved. But if the battalion was making a night move to an undetermined location, the usual arrangement was for the cable detachment to join the headquarters in good time before the move began and accompany it on the march. Immediately the headquarters halted a line was laid back to Brigade Headquarters.

In mobile operations forward battalions were often connected to a single trunk or 'omnibus' circuit. Battalion signallers were never asked to lay line back to Brigade Headquarters unless the run of cable was very short. Civil poled lines and power lines were not used during the advance

at all because few were intact where there had been fierce fighting in the areas between the enemy defences on successive river lines, and when the advance entered areas where little damage had been done, the speed of the pursuit prevented adequate reconnaissance and reconstruction of poled circuits.

In 6 Brigade line faults were not very frequent during the advance, most of them being caused by enemy shellfire and the movements of tracked vehicles. Often the L Section linemen had great difficulty in raising cables sufficiently high at overhead crossings to give adequate clearance for massive bridging equipment. In the later stages of the advance inductive interference from high-tension power circuits rendered many earth-working lines completely useless, and metallic circuits had to be provided.

Wireless in the brigade worked extremely well and at times was almost as efficient and stable as a telephone service. There was some trouble on occasions from frequency congestion between the brigade's nets and those of its neighbouring formations; some of these frequency clashes were investigated, and it seemed to the L Section operators that the Indians and Poles were tuning slightly to one or the other side of their allotted frequencies to find a clear spot on the band on which to operate comfortably. No doubt amongst themselves the Indians and Poles accused the New Zealanders with equal vehemence, so on balance the overall blame was probably fairly evenly apportioned.

In 5 Brigade K Section found at the beginning of the offensive that the staff was more than ever 'line communication minded', so that when the advance began to gather speed the linemen were hard put to it to provide circuits to meet changing day-to- day needs. As the brigade's advance neared the Po and began to accelerate, the staff had more and more recourse to wireless.

K Section's method of carrying line communications forward to successive locations of Brigade Headquarters was similar in most respects to that employed in 6 Brigade by L Section. K Section's main problem, however, was the provision of continuous line communications to the headquarters of battalions, which sometimes moved several times in one day. With each move a battalion established a tactical headquarters, and a drill for taking lines forward was evolved in which K Section linemen and the battalion signallers assumed approximately equal responsibility. The battalion signallers would lay line forward to the tactical headquarters and be responsible for its maintenance until in due course the tactical headquarters became the main headquarters, at which point K Section took over total responsibility for the circuit.

For the Po crossing the K Section linemen laid single cable (weighted) from a boat, from which it sank to the bed of the river. This provided very satisfactory communication, but as it was in use for only fourteen hours, no proper observation of the resistance of its insulation fabric to water was possible.

In the early stages of the advance from the Senio wireless was not used in 5 Brigade with nearly the same easy facility as line communication, mainly because staff officers were prone to 'microphone shyness' and, because of the long period of static conditions in which wireless had been used only for occasional test calls between operators on the brigade forward command net, had lost a good deal of their former familiarity with the procedure and security precautions. But this was merely a matter of practice and before long a very marked improvement was noticeable.

When 9 Infantry Brigade arrived on the Senio its attached signal section, the new J Section, was as yet untried in battle as a team, but it was tremendously enthusiastic and eager to show its paces. It was well up to strength in equipment, transport and men, and during its training period in the Fabriano area had developed an excellent team spirit.

At the time the offensive opened and during the initial stages of the advance, 9 Brigade was employed as the reserve brigade and used line communications extensively and wireless hardly at all. This placed a fairly heavy burden on the J Section linemen, and presently they also

evolved a drill to lighten their responsibilities. Whenever Brigade Headquarters halted at a fresh location one line, or perhaps two, was quickly run out, and all battalions were connected in 'omnibus'. By the time this had been done the section commander usually had a better idea of the likely duration of the headquarters' stay in that particular place and could then start to plan and lay individual circuits to battalions by the method most economical in cable and time.

Sometimes Brigade Headquarters moved at very short notice, and frequently it travelled a considerable distance before it halted again. J Section then found that it was often impossible to recover all the cable laid out in the old position, and as a result demands for additional supplies from Divisional Headquarters Signals were frequently considerably in excess of normal wastage.

In fair weather J Section laid a good deal of its cable in roadside ditches to reduce the number of faults from damage by tracked vehicles. Surprisingly enough, faults from this cause continued to occur with irritating regularity, and linemen tried hard to imagine how carriers and tanks could possibly fish lines out of ditches and chew them to pieces in their tracks.

During the early stages of the advance, when 9 Brigade moved along in the wake of the other two brigades, the J Section linemen found that it was imperative to label their lines at very frequent intervals because of the large amount of disused cable lying about on the ground.

Throughout the operation wireless in 9 Brigade behaved very satisfactorily, principally because the ranges between the control set and terminal sets on the forward command net were never very great. These terminal stations varied between twelve and fifteen in number at different stages of the advance, and when there was no line communication between Headquarters 9 Brigade and the battalions—a state of affairs which occurred with increasing frequency as the advance developed into pursuit—much traffic passed over the net, particularly between the headquarters of battalions and the reconnaissance sets

mounted in the battalion commanders' jeeps. These were No. 22 sets and were part of the brigade forward command net, being in effect extensions of the battalions' headquarters terminal sets, whose call signs they used in conjunction with an affix letter or number, usually the latter.

Of all the signal sections none were harder worked than those of the Divisional Artillery, particularly H Section at Headquarters Divisional Artillery, whose forward exchange alone had twelve main lines. Of these, three went forward to the New Zealand regiments and four back to Headquarters Divisional Artillery; the others served regiments and batteries—including two medium regiments of Royal Artillery—which were under the command of New Zealand Divisional Artillery at the time.

There was a considerable amount of frequency congestion between different artillery wireless nets and this at first caused appreciable delays in the transmission of traffic. At first the usual cause—illicit off-frequency operating by offending stations —was suspected, but on several code signs being traced to their 'registered owners', it was found that the interfering sets belonged to neighbouring formations and that they were operating on their allotted frequencies, which were separated by only a few kilocycles from those of the New Zealand artillery nets. Representations were made to Corps Headquarters, of course, but as nothing much could be done about it at short notice, the various control set operators shared the air in a happy spirit of compromise, and in this way managed to shift their traffic with surprisingly short delays.

Less than thirty-six hours after the assault began against the enemy's Senio positions, the first move of Main Divisional Headquarters took place early on the morning of 11 April, when it crossed the river and took up a new position about a mile from Cotignola, where a forward signals party, which had gone ahead the evening before, had already laid out circuits to the armoured and infantry brigades and to Headquarters Divisional Artillery. From then onwards the headquarters rarely stayed more than two or three days in one position. These moves were carried out very smoothly; on nearly every occasion a forward signals party

went forward some time earlier than the main group of the headquarters and prepared communications at the new site.

Later, as the speed of the advance increased and the distances between river obstacles grew longer, the linemen of C (cable) Section had ever-increasing difficulty in keeping lines forward to brigades. Whenever this occurred, with the brigades pressing forward as rapidly as possible towards the next river line and Main Divisional Headquarters half a field behind in the hunt, attempts to keep cable up to brigades were usually abandoned, the G staff being content if lines were run out again when the headquarters halted before the next river obstacle.

The laying of cables across the rivers—which, except for the Po and the Adige, are by New Zealand standards mere creeks— presented no special difficulties. For the crossing of the Po and the Adige, rubber-sheathed quad cable was laid across the pontoons of the Engineers' bridge. At the Po another quad was submerged on the bed of the river, but as the headquarters moved on again soon afterwards, it was in use for too short a time for its circuit performance to be properly observed.

The most prolific cause of faults and of most delays in getting cable forward to brigades was divisional transport blocking the narrow, often one-way roads and lanes; frequently this held up cable-laying and fault detachments for hours at a stretch. Attempts to find cross-country cable routes were seldom successful because of the canals and small streams which intersected the country at frequent intervals and which were impassable even to jeep detachments.

Despite Lieutenant-Colonel Foubister's fears that his modest reserve of cable would soon be exhausted, no serious shortages occurred during the whole of the operation. About a quarter of the cable run out on the ground was recovered, and adequate supplies of new cable came forward regularly from Corps Headquarters.

A corps' signal detachment, consisting of a sergeant and twelve rank and file of Royal Signals, was attached to Divisional Signals throughout the operation; its task was to extend the 13 Corps' line forward as Main Divisional Headquarters moved.

Wireless communications between Main Division and its subordinate formations worked smoothly and without any serious hitch throughout the advance, and became the main means of communication when the brigades so outstripped Main Headquarters that line communications could not be kept forward to them.

Throughout the final offensive, which ended in the streets of Trieste less than a month after the crossing of the Senio, Divisional Signals' casualties were astonishingly light. There was one bad day, the 13th and a Friday—when Main Divisional Headquarters halted on the eastern outskirts of Massa Lombarda and took up its position in an orchard. The morning was fine and balmy and the surroundings equally pleasing. Soon after the headquarters' arrival most of the men set to work—a little more industriously than usual, it seemed—to dig spacious slit trenches. They were warned, perhaps, by some premonition, or more likely by the sound of incessant shellfire, mostly outgoing, which echoed all about the town as the infantry pressed towards the Sillaro. About noon the enemy shelling started. The sound of his guns was flat and distant, but with a sinister note that made men pause at their tasks and cock their ears apprehensively towards the north-west. Three distinctly separate reports could be heard each time the enemy guns fired —three flams on a distant drum. There was an interval of quiet for a time; then, about 2 p.m., came the three curiously muffled reports again. The shells fell on the orchard and, detonating among the branches of the trees, strewed their fragments around the headquarters' area. There were many casualties, of which Signals' share was one killed and eleven, including two senior officers, wounded. The man killed was Signalman Peddie, ¹ who took shelter when the enemy guns were heard, but was killed instantly where he lay in his slit trench when splinters fell from the trees above. Lance-Corporal Brambley, 2 who had crawled beneath the front of a nearby truck, was struck in the legs, which were protruding into the open. One leg was smashed to pulp and later had to be

amputaated.

The afternoon of 26 April found Main Divisional Headquarters and Signals in an orchard north of the Po River and more than half-way to the Adige. Here they waited until the early afternoon of the 28th, when they moved off again and crossed the Adige. There was a short pause that afternoon, and then a long swift move lasting most of the night brought the headquarters to the outskirts of Padua, where 9 Brigade, in the vanguard of the advance, was already probing into the city. Next day, a Sunday, Padua was in New Zealand hands. Very early that morning a signal office was opened in the city. Line communications were almost non-existent because of the speed of 9 Brigade's advance, and wireless was the main means of communication.

In Padua John Shirley leaped into the limelight again. Since his serious work with line-intercept experiments on the Senio, he had played another of his pranks. An American Public Relations team which was to make a commentary on a heavy bomber operation had taken up an observation position on the top floor of a building in which a signal office was already established on a lower floor. As the aircraft came over in wave after wave the commentator described the scene into his microphone for 'the folks at home'. After a time he said, 'Now, folks, I'm going to lower the mike outside the building so that you can hear our ships going over....' He lowered away and the microphone stopped outside the window through which Shirley was gazing. The latter never failed to grasp quickly the potentialities of a situation like this. He grabbed the microphone and took up the patter in a very fair imitation of an American broadcast: 'There they go, folks! They're running in over the target now. Uh-huh! There's one of our ships down. And another! And another! Goddam! There's another one down....' Up on the top floor the Americans remained completely oblivious of the liberties that were being taken with their recording gear, but in the signal office Shirley's men were convulsed with laughter. One version of the story, probably incorrect, relates that the illicit interpolation remained undiscovered by the Public Relations men and was not found until the recording reached

the Office of War Information in America some weeks later.

At Padua Shirley was bent on more serious business. He had got wind of a German prisoner who was reported to have worked with a line-intercept unit in Cassino during the heavy fighting there a year ago, and he haunted the 'I' office so as to be on hand to hear the prisoner's interrogation. There was some delay in bringing the German, who was still in partisan hands, into Divisional Headquarters, so the 'I' officer suggested to Shirley, who was fidgeting about with ill-concealed impatience, that he should get an escort and go into Padua and collect the prisoner and some others, said to include some generals. Shirley set off in high glee and in due course returned in triumph, standing outside the turret of a Sherman tank and brandishing a tommy gun in a most business-like manner. The outside of the tank was festooned with four senior German officers, including General von Alten, a number of wild brigand-like partisans, and several New Zealand infantrymen.

That same afternoon, a little after midday, the armoured cars of 12 Lancers entered Venice, only a few jumps behind a small adventurous party from 5 Field Regiment consisting of the commanding officer (Lieutenant-Colonel Sawyers 3), a regimental despatch rider (Gunner Daglish ⁴), and a driver-operator of F Section, Lance-Corporal Frazer, ⁵ who operated the wireless set in Sawyers' Dingo scout car. This party had set off while the Division was still on the southern outskirts of Padua, had passed through the city, where sporadic fighting between enemy groups and 9 Brigade—with considerable and enthusiastic assistance from Italian partisans—was still going on, and raced far ahead to the east towards Mestre, where a vast concrete causeway leads off from the mainland to the city of Venice. At Mestre they saw the first signs of enemy resistance. Leaving 12 Lancers to deal with this, Sawyers and his two men turned off along the causeway. Presently they met a small car, containing eight men all armed to the teeth, coming towards them from the direction of Venice. Sawyers sent a pistol shot over their heads, whereupon they dropped their weapons and raised their hands. The partisans, as they turned out to be, on discovering that the

Colonel's party was friendly, turned their car about and led them triumphantly into Venice. They entered the Piazzale Roma soon after midday, to find it utterly deserted, but loud shouts of 'Liberatori!' and 'Inglese!' from the escort soon brought the crowds thronging into the streets, waving flags and plying Sawyers and his men with gifts of flowers and wine.

Soon afterwards a telephone message was brought from a British liaison officer who had been dropped in the city by parachute several days previously. After expressing the officer's satisfaction that an Allied party had reached the city, the message stated that he was sending a launch to take them to his headquarters. The news spread like wildfire, and soon a delirious crowd lined the Grand Canal. In due course Sawyers and his two companions reached the Hotel Danieli—later to be turned into a New Zealand club—where the British officer and a battery of cameras awaited them. A great throng before the hotel clamoured for speeches from the 'liberators'. The Colonel, Frazer, and Daglish delivered their few words from the balcony amid cries of 'Viva liberatori!' and 'Bravo!' Meanwhile the British officer had produced useful information about routes and enemy dispositions, which was sent off by Frazer on the Dingo's wireless set.

Long before the crowd's voices had become hoarse from shouting 'Bravo' and 'Viva liberatori', Sawyers and his party had left the city and gained the main road, in time to join the Division as it swept forward towards the Piave.

On 30 April 9 Brigade crossed the Piave, the last obstacle in the battle of the rivers. Twenty miles farther to the east, 12 Lancers had found a bridge intact across the Tagliamento River, and the way to Trieste was open. The Division sped forward on 1 May and, crossing the Tagliamento and Isonzo rivers by bridges which the enemy had failed to destroy, entered Monfalcone in the afternoon. Crowds of armed men and women of the partisan movement filled the streets and dozens of posters—' Zivio Tito', ' Zivio Stalin', and ' Tukay je Jugoslavia' (This is Yugoslavia)—flaunted their nine points of the law from the walls of

buildings. For this area was in the possession of the Yugoslav partisans under the control of Marshal Tito who were awaiting the arrival of the Fourth Yugoslav Army, which had entered Trieste that day and was expected to occupy the territory westwards as far as the Isonzo.

On 2 May 9 Brigade pressed on along the coast road and, after clearing out several enemy positions, entered Trieste in the afternoon. That evening news came in a statement by General Alexander that the German forces in Italian had surrendered unconditionally. The long arduous Italian campaign was over at last, but the news was received by the New Zealand troops without demonstration, despite the elation which had borne them forward in the headlong pursuit during the last few days. It was not the sort of peace they had dreamed of in the far-off desert days or even in the early stages of the Italian campaign, when the picture had promised to be so much brighter; rather it was an armed and uneasy truce in a strange new political scene heavily charged with tension. The German enemy was gone now, caged in captivity, but in his place appeared a powerful, suspicious, unwilling and truculent ally, the Yugoslav, who resented the British share in the prize he claimed as his alone—the Italian partisan movement had been summarily put out of business as soon as the Fourth Yugoslav Army had reached Trieste.

In the city, where the Yugoslavs had set up and were already operating a civil administration, the summary arrest of all Italians opposed to the Slovene occupation continued. This was an inevitable outcome of the political wranglings which had torn north-eastern Italy since the First World War, prior to which the territory had been part of the old Austro-Hungarian Empire, and large numbers of Slovenes had been implanted there to counter-balance the predominant Italian influence. Naturally enough, when the two provinces became part of Italy after the Peace Treaty, the Fascist government sought to reverse the process and ousted the Slovenes. Distrust between the two races grew apace, mainly because of the harsh treatment meted out to the Slovenes and the Fascist prohibition against their holding administrative posts.

Such was the uneasy background of the Allied occupation of Trieste in 1945. Throughout the early days of May tension mounted quickly and soon assumed a hair-trigger expectancy. At various points throughout the city armed sentries, both New Zealand and Yugoslav, were posted within a few yards of one another and eyed each other with cautious and frankly suspicious sidelong glances. In a similar atmosphere of distrust and suspicion New Zealand and Yugoslav patrols passed along the waterfront, on opposite sides of the streets, set of countenance and ready in an instant to meet any hostile act.

By this time the people of Trieste, regaining some of their composure, had come into the streets again. As each day passed they waited patiently to see what new ideological regime was to be thrust upon them.

In mid-May the situation moved to a climax with the exchange of diplomatic notes between the British and American Governments and Marshal Tito. An unfavourable reaction from the Marshal to the Allied proposals or, more correctly, bald statements of their intention to administer the disputed areas by Allied Military Government, brought the next move, this time by Field Marshal Alexander, who on the 19th issued a statement, a sort of order of the day to all Allied troops in the Mediterranean, to the effect that it was the duty of the Allies to maintain trusteeship over disputed territories until their final disposal was determined at the Peace Conference. The Field Marshal added, for good measure, some comparisons of the methods of conquest of Hitler, Mussolini, and the Japanese leaders with those of Tito. This, of course, provoked spirited denials from the Yugoslav Marshal. But the deadlock had begun to loosen and, by the 21st, several important areas, including the southern Carinthian district of Austria, had been evacuated by the Yugoslavs, whose leaders eventually agreed to the establishment of Allied Military Government.

In Trieste, however, the tension remained, although about the middle of May the strained relations between Allied and Yugoslav troops

eased a little, only to worsen a few days later with demonstrations and propaganda outbursts directed against alleged British injustices to the Yugoslav cause.

¹ Sigmn J. A. Peddie; born NZ 24 Jan 1913; freezing worker; killed in action 13 Apr 1945.

² L-Cpl R. H. Brambley; Auckland; born Auckland, 15 Nov 1911; shipping clerk; wounded 13 Apr 1945.

³ Lt-Col C. H. Sawyers, DSO, m.i.d.; Auckland; born Australia, 17 Feb 1905; sales manager; CO 14 Lt AA Regt Dec 1943; CO 5 Fd Regt 15 Aug-12 Oct 1944, 30 Nov 1944-1 May 1945.

⁴ Gnr J. Daglish; Christchurch; born England, 6 Jan 1922; flourmill hand.

⁵ L-Cpl J. R. Frazer; Wellington; born Dunedin, 19 Oct 1920; clerk.

CHAPTER 23 — REPATRIATION

CHAPTER 23 Repatriation

Throughout June 1945 2 New Zealand Division continued as a garrison formation in the Trieste area. Apart from the provision of routine communications, there was little signals activity. Early in the month tension in the city eased considerably with the signing of an agreement in which the Yugoslav forces agreed to withdraw from Trieste. Staff approval was given Signals to close wireless links to the brigades, which hitherto had been kept open to meet any sudden operational necessity.

About the middle of the month seventy-five all ranks of the 7th Reinforcements were withdrawn from the unit and sent off to a transit camp at Forli on the first stage of their journey to New Zealand in the Waikato replacement draft.

During the period between 22 July and 3 August the Division moved back to the Lake Trasimene area, where it remained until early in October. It was there that the Division was to be reorganised as a two-brigade formation to fight against the Japanese in the Far East as part of a British Commonwealth force, but the unconditional surrender of Japan on 14 August brought these plans to an end. Immediately—indeed, actually before the Japanese surrender was announced—negotiations began between the Dominions Office in London and the New Zealand Government for the provision of a New Zealand contingent in a British Commonwealth occupation force for Japan.

During August one officer and 179 other ranks of the 8th Reinforcements were withdrawn from the unit and transferred to the Tekapo replacement draft for return to New Zealand. They were followed on 26 September by 105 other ranks of the 9th Reinforcements who marched out to the Aparima replacement draft.

Early in October the Division moved into winter quarters in the Florence area, where, on the 11th, single men of the 13th 14th, and 15th Reinforcements were transferred to the Signal Company of

Jayforce, the brigade group that was to go to the Far East as part of the British occupation force. Two weeks earlier the New Zealand Government had directed—although no official announcement had yet been made—that only single men from these reinforcements were to be posted to the brigade, although men from earlier reinforcements might volunteer for service with the force. Those who had arrived in the Central Mediterranean theatre with the 13th, 14th, and 15th Reinforcements, but had been reclassified as earlier reinforcements because of former service with 3 New Zealand Division in the Pacific, were not eligible for the brigade.

In Signals, however, there were too few single men from these three latest reinforcement drafts to fill the establishment of Jayforce Signal Company, and the volunteers—there were twenty-one, including one officer and one sergeant—did not suffice to fill the gap, so some from earlier reinforcements were detailed to complete the Signal Company establishment. This party totalled fifteen all ranks and consisted of two captains, three subalterns, one corporal and nine lance-corporals, all of whom were posted to the new signal company because of their special abilities or experience.

The commander of Jayforce Signal Company was Major Missen, an officer with whom volunteering was becoming a habit. In the first place, he was a volunteer who had left New Zealand in 1940 with the Third Echelon. Much later, when he had completed three months' furlough in New Zealand—this was at a fairly late stage of the war, when reinforcements going to the Middle East and Central Mediterranean were no longer furlough men but replacement drafts—he was told that his return to 2 NZEF had been specially requested. The senior staff officer who told Missen this suggested in an inferential sort of way that Missen might decline the invitation, and drew an immediate retort from the latter that he had signed up for the duration and one year after and intended to see it through. So back Missen went to Italy. Now, acutely aware of the lack of key men for the new signal company, he came forward again. In August 1946, when Jayforce was relieved by a

volunteer force recruited in New Zealand, he remained because there was nobody suitable to take over his command.

Jayforce was organised in the Florence area within the framework of 9 Infantry Brigade, from which those who were ineligible for the occupation force were transferred to units in other formations. The organisation of the signal company, of course, was built up from the nucleus provided by the eligibles of J Section Signals attached to Headquarters 9 Infantry Brigade, and by the end of October was completed to the authorised establishment of three officers, one warrant officer, one staff-sergeant, two sergeants and seventy other ranks. The company's transport totalled thirty vehicles, of which nine were signal vehicles.

In Divisional Signals numbers had grown less and less. When the unit sat down to Christmas dinner the total muster was six officers—all wearing self-conscious expressions as they served the men—and fifty-two other ranks. They represented the 11th and 12th Reinforcements and the married men of the 13th, 14th and 15th, the 10th having gone earlier in the month to join the Pokeno repatriation draft at Advanced Base.

The remnant of Divisional Signals left the Florence area on 11 January 1946 for Bari. All signal communications to New Zealand units in Florence then became the responsibility of 9 Infantry Brigade Signal Company, which since 1 December had been constituted as an independent unit. On 17 January, when the affairs of Divisional Signals were finally wound up, Lieutenant-Colonel Foubister applied to Headquarters 2 NZEF for his unit to be disbanded. It was a simple request, put as the last paragraph of his letter of application, which also dealt with the disposal of equipment, the regimental fund account, pay, and similar matters. It said: 'May 2 NZ DIV SIGNALS be disbanded, please.'

That day Foubister set out to rejoin the remnant of his unit at Advanced Base, where they awaited their return journey to New Zealand.

On 22 February there appeared in 2 NZEF Orders, under the heading '13/46 Organization—Disbandment of Units', the titles of eight units; among them was 2 NZ Divisional Signals, and its date of disbandment was 23 February 1946.

On 19 February 9 Infantry Brigade Signal Company embarked on the Strathmore at Naples; two days later the ship sailed for the Far East with 2 NZEF (Japan), as the force was officially known from the day of embarkation. The journey was uneventful except that five other ranks of Signals were disembarked at Singapore and evacuated to hospital there with sickness. On 19 March the ship arrived at Kure. The troops disembarked next day and moved to Chofu, where Headquarters 2 NZEF (Japan) was established.

The force was relieved five months later by a volunteer brigade recruited in New Zealand, and sailed for New Zealand on the *Chitral* on 22 August 1946. In this last repatriation draft of 2 NZEF were one officer and sixty other ranks of Signals.

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ROLL OF HONOUR

Roll of Honour

KILLED IN ACTION

KILLED IN ACTION				
Capt N. W. Laugesen	22 July 1942			
Lt D. C. H. Cooper	4 July 1942			
Cpl J. D. Melville	27 May 1941			
L-Cpl R. B. Anderson	4 July 1942			
L-Cpl A. W. Forbes	29 March 1943			
L-Cpl W. J. Hornsey	25 November 1941			
L-Cpl E. J. Matthews	27 June 1942			
L-Cpl A. G. Rush	25 November 1941			
Sigmn L. J. Bartlett	1 December 1941			
Sigmn F. W. A. Benfell	20 March 1943			
Sigmn D. P. Bennett	1 December 1941			
Sigmn R. M. Bradley	27 April 1941			
Sigmn J. C. Clark	25 November 1941			
Sigmn I. W. Dale	26 June 1942			
Sigmn P. A. Donnelly	28 May 1941			
Sigmn J. S. Durling	14 December 1941			
Sigmn A. A. Edwards	1 December 1941			
Sigmn L. C. Feeney	21 March 1943			
Sigmn W. J. Franklyn	21 April 1943			
Sigmn J. J. V. Gordon	23 November 1941			
Sigmn R. W. Harvey	18 July 1942			
Sigmn A. V. Holder	14 April 1943			
Sigmn E. K. Jebb	1 December 1941			
Sigmn A. T. Kelly	28 May 1941			
Sigmn N. S. King	25 November 1943			
Sigmn G. S. Lorimer	24 October 1942			
Sigmn M. Lyttle	19 March 1944			
Sigmn A. D. McGregor	27 June 1942			
Sigmn R. J. MacF. McEwan	27 June 1942			
Sigmn D. I. McKenzie	3 September 1942			

9-8	
Sigmn C. H. McKeown	18 February 1944
Sigmn J. T. Mason	15 July 1942
Sigmn S. S. Pearmine	25 November 1941
Sigmn J. A. Peddie	13 April 1945
Sigmn J. P. Rennie	27 May 1941
Sigmn R. L. Sarjeant	27 June 1942
Sigmn F. A. Scott	18 December 1944
Sigmn A. R. Tankersley	18 February 1944
Sigmn H. G. C. Walden	15 July 1942
Sigmn L. A. Wells	23 November 1941
Sigmn S. White	16 September 1944
Sigmn A. W. Yates	4 July 1942
DIED OF WO	DUNDS
Capt T, M. Paterson	16 July 1942
2 Lt W. F. Stevenson	27 November 1941
Sgt B. A. Ratcliffe	27 June 1942
L-Sgt T. Edwards	26 November 1941
Sigmn J. C. Bain	9 July 1942
Sigmn D. Benton	27 June 1942
Sigmn H. McG. Carter	24 October 1942
Sigmn A. G. Childs	15 April 1943
Sigmn G. T. Davies	30 April 1941
Sigmn H. T. French	27 June 1942
Sigmn K. M. Hodge	27 June 1942
Sigmn W. Hope	30 May 1944
Sigmn J. N. Jocelyn	18 July 1942
Sigmn T. L. Johnston	27 November 1941
Sigmn W. Lewis	27 June 1942
Sigmn H. McCann	24 October 1942
Sigmn L. McDonald	25 October 1942
Sigmn A. C. Martin	19 April 1941
Sigmn H. J. Maunsell	26 November 1943
Sigmn C. E. Russell	17 July 1942
Sigmn J. A. Shanks	7 December 1943
Sigmn J. J. Slattery	27 March 1943
Sigmn T. W. Tomlinson	4 January 1945

Sigmn E. W. McKenzie 27 June 1942

KILLED OR DIED WHILE PRISONERS OF WAR

Sgt W. R. Thompson	29 December 1942
L-Cpl R. Sycamore	1 September 1942
Sigmn B. V. Ashe	12 March 1944
Sigmn G. C. Darroch	22 December 1943
Sigmn I. C. De La Mare	17 August 1942
Sigmn J. Eddy	22 September 1941
Sigmn M. J. Riddell	12 December 1944

Sigmn W. G. White 17 August 1942

DIED ON ACTIVE SERVICE				
*Capt J. Feeney	5 December 1941			
Lt A. G. Hultquist	1 November 1941			
2 Lt A. Schdroski	24 July 1945			
L-Sgt F. J. Mclvor	14 May 1943			
L-Cpl A. J. Robson	6 July 1944			
Sigmn J. Blakeway	18 July 1941			
Sigmn I. L. Gough	29 June 1940			
Sigmn A. J. Green	3 June 1943			
Sigmn C. L. Knight	21 April 1941			
Sigmn J. E. Manoah	11 October 1940			
Sigmn F. E. Mayne	13 December 1943			
Sigmn D. W. Monaghan	27 January 1944			
* Sigmn R. S. Perry	5 December 1941			
Sigmn R. G. Rawson	22 February 1943			
Sigmn A. E. Roycroft	6 June 1943			

^{*} Died when the Chakdina was sunk off Tobruk.

SUMMARY OF CASUALTIES

Summary of Casualties

	Killed	l	Wounded		Prisoners of War		
	Offrs	ORs	: Offrs	ORs	Offrs	ORs	TOTAL
Greece	_	3	1	10	1	23	38
Crete	_	4	_	4	-	31	39
Libya 1941	1	13	4	21	2	17	58
Egypt 1942	3	25	3	67	2	40	140
Tripolitania and Tunisia	-	7	1	29	_	1	38
Italy	_	11	7	67	_	_	85
	_	—	_	_	_	_	_
TOTAL	4	63	16	198	5	112	398

The killed include men who were killed in action or who died of wounds; the prisoners of war include those who were wounded before capture. Three officers and twelve other ranks who died on active service and eight other ranks who were killed or who died as prisoners of war are not included in the above summary.

HONOURS AND AWARDS

Honours and Awards

DISTINGUISHED SERVICE ORDER

Lt-Col G. L. Agar, OBE

OFFICER OF THE ORDER OF THE BRITISH EMPIRE

Lt-Col S. F. Allen

Lt-Col R. W. Foubister

Lt-Col R. L. C. Grant

Maj G. L. Agar

Maj C. G. Pryor

MEMBER OF THE ORDER OF THE BRITISH EMPIRE

Maj A. E. Smith

Capt J. F. W. Tonge

MILITARY CROSS

Capt P. J. Brennan

Capt E. L. J. Marshall

2 Lt R. A. Baker

MILITARY MEDAL

Sgt J. W. Bateman

L-Sgt F. J. McIvor

Cpl C. O. Barron

Cpl L. J. Bartlett

Cpl M. A. Chapman

Cpl A. G. Davies

Cpl N. Gordon

Cpl A. P. Horne

Cpl K. Oates

L-Cpl K. E. Twomey

Sigmn J. A. Gaze

Sigmn L. A. Lyon

Sigmn R. E. Miln

Sigmn D. C. Mundy

Sigmn G. J. Nilsen (and bar)

Sigmn G. M. A. Redgrave

Sigmn M. Spring

Sigmn C. Baugh

BRITISH EMPIRE MEDAL

Sgt J. McKenzie

Sgt R. E. E. Miller

Sgt H. L. Smith

L-Sgt J. W. Johnston

MENTIONED IN DESPATCHES

Lt-Col G. L. Agar

Maj C. R. Ambury

Maj R. L. C. Grant (2)

Maj A. D. Lawless

Maj E. L. J. Marshall

Maj C. G. Pryor

Maj J. Vincent

Capt C. A. Borman (2)

Capt K. Douglas

Capt R. W. Foubister

Capt N. R. Ingle

Capt S. N. McKenzie

Capt V. P. Missen

Capt A. D. Moran

Capt R. E. O'Hara

Capt T. M. Paterson

Capt T. K. S. Sidey

Capt J. D. Snow

Lt I. B. Compton

Lt D. C. H. Cooper

Lt L. A. Murtagh

Lt J. H. Newcombe

Lt D. D. Whitehead

2 Lt T. G. Healy (2)

2 Lt J. McKee

WO I J. A. Murphy

WO II T. C. Forrester

WO II J. R. P. Murphy

WO II W. W. Nisbett

Sgt H. M. P. Baker

Sgt J. W. Bateman

Sgt S. B. Boyd

Sgt F. Eadie

Sgt J. P. Grant (2)

Sgt H. W. Johnson

Sgt D. R. Pointon

Sgt C. Smith

Sgt H. L. Smith

Sgt V. S. Tankard

L-Sgt C. F. Collins

L-Sgt E. T. Ouston

L-Sgt J. McK. Toms

Cpl R. A. Baker

Cpl L. J. Carnham

Cpl A. C. Fitzgerald

Cpl A. D. P. Fry

Cpl J. J. Knowles

Cpl R. G. McKenzie

Cpl H. D. Mulhern

Cpl G. J. Smith

Cpl P. Smith

Cpl K. G. L. Sutherland

Cpl T. J. Warner

L-Cpl J. Brady

L-Cpl T. Edwards

L-Cpl G. B. Johnston

L-Cpl W. J. R. Munro

L-Cpl K. W. Prime

L-Cpl W. J. Pritchard

L-Cpl F. H. Thompson

L-Cpl E. J. Wilton (2)

Sigmn F. Amos

Sigmn J. M. Anderson

Sigmn F. G. Attrill

Sigmn H. C. Beilby

Sigmn C. G. Burt

Sigmn A. R. A. Butterworth

Sigmn A. E. Cross

Sigmn J. A. Edgecombe

Sigmn A. R. Ferguson

Sigmn A. C. Francis

Sigmn K. H. Goodin

Sigmn R. M. Green

Sigmn N. H. Henry

Sigmn L. H. Hunter

Sigmn A. T. Jacobs

Sigmn W. T. Johnson

Sigmn M. F. Knight

Sigmn G. J. McGowan

Sigmn T. E. Mathieson

Sigmn R. W. Minett

Sigmn H. Ngamoki

Sigmn A. W. Provan (2) Sigmn A. R. L. Saunders Sigmn A. G. Sinton Sigmn G. H. Smith Sigmn R. H. Steers Sigmn A. R. Tankersley Sigmn A. C. Taylor Sigmn V. R. Williams Sigmn G. R. Wilmer Sigmn E. R. McL. Wingate Sigmn E. G. Wood Sigmn A. Q. Yanko Sigmn P. R. Yansen **COMMENDATION CARD** Sigmn A. W. Provan **ACT OF GALLANTRY** * Sigmn J. H. Penney ORDER OF THE PHOENIX SILVER CROSS †

Capt L. J. Froude

Sigmn L. J. Knox

distinguished service medal (Greek) †

- * Notified in divisional routine orders and directed by the GOC to be recorded on Penney's regimental conduct sheet.
- † Conferred by the King of Greece.
- † Conferred by the King of Greece.

COMMANDING OFFICERS

Commanding Officers

Lt-Col S. F. Allen

The commanding officers of the New Zealand Corps of Signals 2 NZEF, which comprised 2 New Zealand Divisional Signals, Signal School Base, Base Signal Company, 6 New Zealand Divisional Signals (at 2 NZEF Base) and T Air Support Control Section, were:

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Lt-Col S. F. Allen 5 Jan 1940-27 Sep 1941
Lt-Col G. L. Agar 27 Sep 1941-4 Jun 1943
Lt-Col R. L. C. Grant 4 Jun 1943-29 Dec 1943
Lt-Col C. G. Pryor 29 Dec 1943-19 Mar 1944
Lt-Col R. L. C. Grant 19 Mar 1944-17 Jan 1945
Lt-Col R. W. Foubister 17 Jan 1945-23 Feb 1946
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From 9 February to 19 March 1944 Pryor held the appointment of Chief Signal Officer New Zealand Corps (at Cassino) with the temporary rank of Colonel, and from 19 to 27 March 1944 Grant held this appointment, also with the temporary rank of Colonel.

The commanding officers of 2 New Zealand Divisional Signals were:

5 Jan 1940-27 Sep 1941

Lt-Col G. L. Agar	27 Sep 1941-21 Sep 1942
Lt-Col R. L. C. Grant	21 Sep 1942-26 Nov 1942
Lt-Col G. L. Agar	26 Nov 1942-4 Jun 1943
Lt-Col R. L. C. Grant	4 Jun 1943-29 Dec 1943
Lt-Col C. G. Pryor	29 Dec 1943-27 Mar 1944
Lt-Col R. L. C. Grant	27 Mar 1944-28 May 1944
Lt-Col N. R. Ingle	28 May 1944-28 Jun 1944
Lt-Col R. L. C. Grant	28 Jun 1944-17 Jan 1945
Lt-Col R. W. Foubister	17 Jan 1945-23 Feb 1946

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