

SCHOOL  
OF SIGNALS



AN INTRODUCTION TO THE  
ROYAL AUSTRALIAN CORPS OF SIGNALS

BALCOMBE

# INTRODUCTION

The purpose of this booklet is to present a brief background to the History and Traditions of the Royal Australian Corps of Signals and to give a summary of the Tradesmen required in the present day Corps.

Accordingly the booklet is comprised of two parts—

Part I.—The History and Traditions of the Royal Australian Corps of Signals.

Part II.—The Trade Structure of the Royal Australian Corps of Signals.

# PART I.

## THE HISTORY AND TRADITIONS OF THE ROYAL AUSTRALIAN CORPS OF SIGNALS

### INTRODUCTION

From the earliest times some form of communication has been necessary in war, and many of the present forms of signalling have some counterpart in the dim past. Twenty-two centuries ago the Carthaginians used torches arranged in groups of five, an early form of signalling lamp.

During the battles between Greeks and Persians a polished shield answered the purpose of a crude heliograph, and signals by flags or even smoke date from a remote period. Carrier pigeons to convey messages were used in the time of Solomon, and by the Greeks at the Olympic games.

### THE DESPATCH RIDER

Up to the middle of the nineteenth century, however, the principal method of Communication was undoubtedly the despatch rider. We must remember that even great battles like Waterloo were fought on fronts of two miles or less. Consequently the dashing and gallant A.D.C. is an important and picturesque figure of those days. The Duke of Wellington gained great advantage from his well-mounted orderly officers, whose experience in the hunting field made them very quick across country.

### PHEIDIPPIDES

To go to the really palmy days of the D.R. we must again revert to the Greeks. The prototype of despatch riders was Pheidippides the Athenian, the swiftest runner in all Greece.

Greece was engaged in the sixth century B.C. in a decisive struggle with the great oriental power of Persia. The Victory of the latter would have been an overwhelming calamity to Western civilisation. But the small army of Greeks defeated the hordes of Persia. It became desirable to send the glad news post haste to Athens, twenty-six miles from the battlefield. Pheidippides was chosen, and he completed the journey with unheard of speed. So great had been his exertions that, on delivering the message "Rejoice We have conquered," he fell dead.

### MERCURY

Pheidippides was the greatest despatch rider—the Marathon race has its title from his journey—yet the type and pattern of the true signaller is undoubtedly Mercury, or Hermes.

Mercury was originally the Roman God of commerce and good fortune. When the Romans conquered Greece they adopted the God Hermes, and they, realising he had much in common with their own God of Fortune, brought him in under the name of Mercurius.

Mercury, or rather Hermes, is a versatile and lovable God. He is Lord of the Wise—of the power which brings good luck to man. But above all, he is the messenger of the gods which his dress proclaims him; on his head is the petesús, or felt hat worn by travellers; in his hand is the caduceus or herald's staff. This staff was the symbol of a message and was wound about with white ribbons, signifying peace; the intertwined serpents are a later interpretation of the same idea. The staff conferred immunity, that is, the bearer of the message was

consideration were the introduction of the telephone for forward work in 1907, and the addition of motor cyclist despatch riders to the establishments of Signal units which took place in 1911.

With the outbreak of the Great War, Signals were faced with tremendous problems.

The Signals service had been designed for work with a moving army, to communicate mainly by telegraph for the despatch of all urgent messages. To deal with less urgent messages, motor cyclists, mounted orderlies and cyclists were used as occasion demanded; while packets and letters for administrative services, together with private correspondence of the troops, were handled by the Postal Section of the Royal Engineers, whose activities were outside the sphere of the Signal Service. Not unnaturally, the inability of this branch fully to live up to its responsibilities in this respect, was later responsible for the commencement of the regular DRLS.

The variety of changing situations and the growth of trench warfare increased the need for flexible communications, and it is only by thinking of Signals as being faced with continual fresh difficulties and new problems that one can realise their infinite devotion and resource.

The work grew out of all measure. In the early part of the Great War a hundred messages a day at Corps Headquarters was considered exceptional. By 1918 the average daily number of messages was 4500. These increased difficulties are reflected in the expansion of establishments.

At the beginning of the Boer War, an army of two corps could manage with a Signals establishment of twenty-four officers and 350 men. By 1914 that number had risen to 58 officers and 978 men and at the Armistice a similar Army had a Signals strength of 168 officers and 4380 men. Today this figure is approximately 270 officers and 7000 men.

The finish of World War 1 saw the Signals component of the Engineers larger than its parent. The engineers had sponsored other corps and having seen them through their growing pains had cast them off to fend for themselves. Thus in 1920 the Royal Corps of Signals was formed as a separate corps.

## THE BIRTH OF THE AUSTRALIAN ARMY SIGNALS

### THE BACKGROUND HISTORY

Australia has the unique distinction of having the first regularly formed signal unit in the whole of the British Empire.

In the year 1869 there existed in NSW and VIC a small "Torpedo and Signal Corps." These continued until 1882, when they were disbanded. In 1885 a "Signalling Corps," composed of 1 officer and 12 other ranks, existed in SA, and remained active until 1901.

Before the advent of self contained signal units, the complement of signallers was on a regimental basis, each unit having on its establishment a proportion of regimental signallers. Great attention was paid to the training of these personnel; prizes and badges being awarded to those qualifying at what was known as a Signalling School. Instruction was imparted by a Staff Officer designated "Inspector of Signalling." After the inception of the Commonwealth Forces an

"Aust Corps of Signallers" was formed in 1906. The Corps consisted of 9 Coys and were located as follows:—

Sydney .. .. .	1 Coy
Newcastle .. .. .	1 Coy
Melbourne .. .. .	2 Coys
Brisbane .. .. .	2 Coys
Adelaide .. .. .	1 Coy
Perth	
Fremantle .. .. .	1 Coy
Hobart	
Launceston .. .. .	1 Coy

The Corps remained as a self contained unit until the introduction of universal training in 1911, when it was merged with the Australian Engineers.

In 1912 Signal Tps and Coys formed portion of the Corps of Australian Engineers and were known as the 15th Engr (Sig Tp) or "23rd Engr Sig Coy (Engrs)." The latter designations were retained until 1916, when the term (AE) was substituted for (Engrs), in the title. This continued until the Divisional organisation of 1921, when the terms "Cav Div Sigs," and "Div Sigs," were introduced for the first time, coinciding with this change in nomenclature all signal units separated from the Australian Corps of Engineers and in 1925 the Australian Corps of Signals came into being.

Thus began the evolution of the "Australian Corps of Signals," which reached a total strength of 24,000 men in the Second World War. This has now become a peacetime strength of 215 officers and approximately 1200 other ranks: Whilst its members may be found in many distant parts of the British Commonwealth of Nations, and in all States of the Commonwealth.

### **CORPS MOTTO, INSIGNIA AND TITLE**

With the inception of the "Australian Corps of Signals," distinctive symbols were adopted by the new Corps. The motto "Certa Cito" (Sure and Swift) was chosen as signifying the aim of the signal service—that communications be carried out with maximum speed and certainty.

The insignia adopted by the Corps is an image of "Mercury," the mythological messenger of the Gods, mounted on a globe of the world with a "Boomerang" as its base. Situated above globe and extending to each end of the boomerang is a scroll inscribed with the motto "CERTA CITO." The whole being surmounted with the Imperial Crown.

In November, 1948, His Majesty the late King George VI. approved the grant of the title "Royal" to the Australian Corps of Signals. This title was bestowed by the late King in recognition of the high standard maintained by the Corps during World War II.

### **COLONEL-IN-CHIEF**

The Royal Australian Corps of Signals has the proud distinction of having for its Colonel-in-Chief, Her Royal Highness the Princess Royal, G.B.E.

### **PRINCESS ROYAL TROPHY**

The Princess Royal Trophy, which is a replica of Mercury modelled in silver, was presented to the Australian Corps of Signals by H.E. the Governor General, on behalf of Her Royal Highness, The Princess Royal, at TORQUAY, Victoria, on 6th April, 1940. The Commanding Officer 2nd Cavalry Divisional Signals represented the Corps and received the Trophy. The above unit was the winner of the annual

competition for units of the Australian Corps of Signals for the year 1938-39.

The School of Signals, Balcombe, Victoria, is the present custodian of the trophy.

## **ROYAL CORPS OF SIGNALS**

The Royal Australian Corps of Signals is affiliated with the Royal Corps of Signals of the British Army under Royal Warrant of 5 Aug., 1920. At the conclusion of the 1939-45 War, Her Royal Highness, the Princess Royal, on behalf of the Royal Corps of Signals, presented to a representative of the Australian Corps of Signals a Silver Salver, "as a memento of the splendid co-operation that has existed between the Royal Signals and the Australian Corps of Signals throughout World War II, 1939-45."

## **RESPONSIBILITIES**

The Royal Australian Corps of Signals is a highly technical branch of the army and is responsible for maintaining communications between the various components which constitute the Military Forces.

It has at its disposal equipment for the operation of Wireless, line and message carrying agencies. The development of modern warfare, however, has emphasised the need to maintain a high efficiency in signal equipments of all kinds. To this end, Research and Development Departments are constantly striving to bring to perfection the signal equipment for present, and possible future commitments.

The Corps is now regarded as the foremost authority in the British Commonwealth on the design of technical signal equipment for jungle conditions, and the results of its research and practical experience have been made available to Allied Nations. Similarly, the methods of Allied Nations Signal Corps are being continually studied and adopted when found to be suitable for Australian conditions.

## **CORPS REGIMENTAL MARCHES**

### **(a) Quickmarch "BEGONE DULL CARE."**

Most British Regimental marches have a story behind their selection for their particular Regiment. A story concerning the selection of the R Aust Sigs march has been perpetuated, but although no foundation of fact can be found to substantiate it, it is at least appropriate. Signals are invariably associated with Commanders of units or Army formations. The mere fact of their close association with Senior Officers and the problems of providing them with good communications when required naturally makes the Signaller a worried man. The Signaller allegedly drops his cares and worries as he marches on parade to the tune of his Regimental March "BEGONE DULL CARE."

### **(b) Slow March "HER ROYAL HIGHNESS THE PRINCESS ROYAL."**

This is a special march composed by the Royal Signals Director of Music Major JUDD in honour of the Corps Colonel-in-Chief HRH The Princess Royal.

## **CORPS COLOURS**

The Corps has two sets of colours, one utilised in battle (Tactical Colours) and one for Domestic purposes.

### **(a) Tactical Colours WHITE OVER ROYAL BLUE.**

These colours are used for unit identification signs on vehicles, the marking of Signal Centres and tactical installations. The WHITE symbolises the white of the ribbons wound on the Caduceus of the

God HERMES (The symbol of a messenger) and the BLUE representing the Royal Colours. These colours combined make a striking contrast suitable for easy identification for tactical purposes.

(b) **Domestic Colours.**

For all other purposes the colour of the Corps are—

Light Blue — 3/7 of depth

over

Dark Green — 1/7 of depth

over

Dark Blue — 3/7 of depth

These colours represent the three media of communications, the air, land, and the sea.

### **CORPS FLAG**

The Corps Flag of Royal Australian Signals is made up of the Corps domestic colours with the Corps Insignia (MERCURY) embroidered in gold centrally. The figure of MERCURY invariably faces the hoist or flag staff side.

This flag is flown by Signal units commanded by a Lt. Col. or independent Signal installations.

### **CORPS COLLECT**

The following Collect has been adopted by R Aust Sigs for use on Unit Church Parades and other appropriate occasions where members of the Corps are gathered for religious memorial purposes.

“Almighty God, whose messengers go forth in every age, giving light and understanding, grant that we of the Royal Australian Corps of Signals, who speed the word of man to man, may be swift and sure in sending the message of Thy Truth into all the world. May we serve Thee faithfully and, with the help of Thy Holy Spirit, make such success of our soldierly duties on this Earth, that we may be found worthy to receive the Crown of Life hereafter, through Jesus Christ Our Lord. Amen.”

### **CORPS TOASTS**

Royal Australian Sigs is one of the few Corps in the Armed Services privileged to possess two toasts which are drunk on all formal occasions.

(i) “The Queen.”

(ii) “Our Colonel-in-Chief—The Princess Royal.”

## PART II.

# THE TRADE STRUCTURE OF THE ROYAL AUSTRALIAN CORPS OF SIGNALS

### GROUP "A" TRADES

Star Grading  
3

#### **Line Mechanic**

Installs, adjusts and maintains all types of telephone and telegraph instruments and associated apparatus, terminal apparatus used in the field and permanent line communication systems. Runs and maintains diesel and petrol driven generators; charges and maintains secondary batteries.

Basic Trade Course — 38 weeks duration.

#### **Radio Mechanic**

Tests, locates faults, carries out repairs and installs radio transmitter, receiving and associated equipment. Charges and maintains secondary batteries and locates faults in charging equipment.

Has a fair knowledge of Voice Procedure.

Basic Trade Course — 42 weeks duration.

#### **Telegraph Mechanic**

Adjusts and maintains the electrical and mechanical action of automatic telegraph machines, cipher machines, and auto-ciphering, devices and their associated power supplies. Charges and maintains secondary batteries and locates faults in charging equipment.

Basic Trade Course — 34 weeks duration.

#### **Operator (Keyboard and Cipher)**

Operates automatic telegraph machines including those using perforated tape for transmission and reception of communications. Is required to unpack, set up for working and carry out operators' daily routine maintenance on these equipments. He performs encryption and decryption of messages as required.

Basic Trade Course — 22 weeks duration.

#### **Operator (Keyboard and Wireless)**

Operates automatic telegraph machines including those using perforated tape. Is required to unpack, set up for working and carry out operators' daily routine maintenance on other equipments. In addition he is required to operate associated wireless equipments and be fully conversant with radio teleprinter procedures.

Basic Trade Course — 22 weeks duration.

#### **Operator (Signals)**

Is required to perform the duties of an operator (Wireless and Line). In addition is required to be able to type and carry out special signal security duties.

Basic Trade Course — 32 weeks duration.



## **Operator (Wireless and Line)**

Star Grading

2

Unpacks, connects up, adjusts, operates and repacks field telephones and telegraph instruments, field wireless sets and associated equipments. Manually passes traffic using the International Morse Code in line and radio circuits. Charges batteries using a small charging engine.

Basic Trade Course — 19 weeks duration.

## **GROUP "B" TRADES**

### **Driver/Electrician**

Star Grading

2

Drives a military motor vehicle and is capable of maintaining vehicles. Is able to make minor running repairs to vehicles. Connects up and runs service motors, generators, rotary convertors, transformers and rectifiers. Installs and connects field lighting sets to generators and mains. Operates and maintains IC and CI engines. Charges and maintains batteries.

Basic Trade Course — 26 weeks duration.

### **Line Test Clerk**

2

Installs and maintains all types of line distribution equipment in a signal centre. Carries out routine tests of internal and external telephone and telegraph lines. Localises faults and co-operate with line maintenance parties and distant line test clerks during testing.

Basic Trade Course — 16 weeks duration.

### **Operator (Keyboard)**

2

Operates automatic telegraph machines including equipment utilising perforated tape. Is required to unpack, set up for working and carry out operators' daily maintenance on these equipments. Has a thorough knowledge of Tape Relay Procedures.

Basic Trade Course — 12 weeks duration.

## **GROUP "C" TRADES**

### **Clerk (Signals)**

Star Grading

2

Maintains files of correspondence or other records peculiar to Signals. Operates office duplicating machine. Is able to type. Prepares returns, orders, memoranda, etc., for signature. Has a thorough knowledge of office routine.

Basic Trade Course — 15 weeks duration.

### **Despatch Rider**

2

Drives and maintains service motor cycles and light vehicles — including across country. Sorting and registering of despatches. Experienced in reconnaissance and convoy duties. Has a knowledge of the organisation of field formations.

Basic Trade Course — 15 weeks duration.

**Draughtsman (Signals)**

Prepares working plans, detailed drawing and wiring diagrams from rough sketches and lines of communication systems and equipment, using standard draughting instruments and equipment. Make blue prints, tracings, copies, enlarged and reduced plans and maps.

Basic Trade Course — 13 weeks duration.

**Lineman (Field)**

Works as a member of a team laying, maintaining, recovering and reconditioning field cables in a service communication system. Is able to install, adjust for working, operate and carry out normal maintenance of field telephone and telegraph instruments. May be required to drive a motor vehicle.

Basic Trade Course — 9 weeks duration.

**Lineman (Permanent Line)**

Installs, repairs, and maintains permanent and semi-permanent telephone and telegraph line systems both underground and overhead. Operates heavy line construction equipment such as earth boring machines, etc. Adjusts and installs field telephone and telegraph instruments.

Basic Trade Course — 21 weeks duration.

**Operator (Switchboard)**

Operates telephone switchboard and exchanges. Understands telephone practices sufficiently to be able to report faults. Has a knowledge of organisations and duties of Military Units. Compiles diagrams and records for use at service exchanges. Is able to do routine Signal Centre Clerking and to send and receive messages by Phonogram.

Basic Trade Course — 11 weeks duration.

**Storeman Technical (Signals)**

Receives, stores, issues and identifies ordnance stores of various types. Has a detailed knowledge of storage conditions for each type of store and methods of maintenance and preservation. Understands spare parts lists, catalogues, identification lists and complete equipment schedules. Understands and maintains records pertaining to the issue, receipt and storage of equipment and stores of all kinds.

Basic Trade Course — 10 weeks duration.