

Cat No 0301

Crown Copyright Reserved

Code No. 7014

RESTRICTED

The information given in this document is not to be communicated, either directly or indirectly, to the Press or to any person not authorized to receive it.

26
U.S. Publications
1554



SIGNAL TRAINING
(ALL ARMS)

SIGNAL TACTICS
Part IV

**The Armoured Regiment and the
Armoured Car Regiment—1946**

PAMPHLET No. 10

By Command of
the Army Council

Lieut. B. B. M. D.

THE WAR OFFICE,
8th February, 1946.

Printed under the Authority of HIS MAJESTY'S STATIONERY OFFICE by ADQ Press

Prefatory Note

Signal Training (All Arms) is dealt with in ten pamphlets, the titles of which are shown below :—

PHAMPHLET NO.	TITLE
1.	Signalling Codes
2.	Visual Signalling
3.	Electricity and Line Signalling
4.	Wireless Signalling
5.	Procedure for Morse Telegraphy, Line Telephony and Visual Signalling
6.	Procedure for Transmitting Artillery Fire Orders
7.	RT Procedure
8.	Signal Office Working
9.	Training
10.	Signal Tactics :— Part II.—The Infantry Battalion Part IV.—The Armoured Regiment and the Armoured Car Regiment

Chapters and sections are numbered separately in each pamphlet.

CONTENTS

Prefatory Note	...	...	...	Cover ii
Distribution	...	...	...	Page 2

CHAPTER 1.—PRINCIPLES OF ARMOURD COMMUNICATIONS

SEC.	PAGE
1. General	3
2. Signal requirements in the regiment	3
3. How these requirements are met	4

CHAPTER 2.—ORGANIZATION AND DUTIES OF SIGNAL PERSONNEL

4. The Royal Signals troop	5
5. Regimental signals	8

CHAPTER 3.—WIRELESS NETS IN REGIMENTS

6. General	10
7. The regimental net	10
8. Squadron nets	11

CHAPTER 4.—CO-OPERATION WITH THE INFANTRY

9. General	13
10. Tactical	13
11. Typical methods of providing communication	14

CHAPTER 5.—SUPPORTING ARMS

12. General	16
13. Royal Artillery	16
14. The Motor Battalion	16
15. Royal Engineers	17

CHAPTER 6.—MISCELLANEOUS

16. Security	18
17. Maintenance	18
18. Batteries and battery charging	18
19. Relief operators	19
20. Other means of communication	19

SIGNAL TRAINING (ALL ARMS)

PAMPHLET No. 10

SIGNAL TACTICS

PART IV—THE ARMoured REGIMENT AND THE ARMoured CAR REGIMENT

DISTRIBUTION

1. Field Units (except as below)	...	1 per coy or equivalent
Armd Units	...	1 per officer
2. Training Units and Establishments	...	1 per instructor and student
(a) RMC	...	25
(b) Australian Staff College	...	25
(c) Army School of Signals	...	5
(d) Central Signal Training Depot	...	25
(e) Army School of AFV	...	5
(f) OCTU	...	5
3. Staffs	...	5
(a) Signal Officer-in-Chief	...	5
(b) G (Armd)	...	50
4. Reserve	...	...

CHAPTER 1

Principles of Armoured Communications

Section 1.—GENERAL

1. In actions that involve armoured formations, events move so rapidly and situations are created and changed so quickly that the chain of communication between formations and to supporting arms must be continually maintained. The regimental commander must always be in touch with his squadron leaders and with the commanders of other arms that are supporting, or being supported by, the regiment. Effective control of the regiment also demands that the regimental commander has an up-to-date knowledge of messages passed between the forward elements of his regiment.

2. The role of the Royal Armoured Corps is essentially mobile, and under mobile conditions wireless is the only means of communication that meets the requirements noted in para. 1 above. Wireless is therefore the principal means of communication used in the Royal Armoured Corps. Alternative means are little used but may be encountered, particularly in static conditions. Their employment is dealt with in Sec. 20.

Section 2.—SIGNAL REQUIREMENTS IN THE REGIMENT

1. Wireless communication is normally maintained by RT. WT may be used if sets are out of RT range, or in conditions of atmospheric disturbance. This is seldom the case in armoured regiments, but in armoured car regiments the necessity often arises. A proportion of the regimental operators, therefore, particularly of armoured car regiments, should be good WT operators.

2. Communication is required:—

- (a) From the regimental commander to squadron leaders, the regimental rece troop, echelon commanders and certain key men.
- (b) From squadron leaders to their troop leaders.
- (c) Between the tanks of regimental and squadron headquarters.
- (d) Between the tanks of a troop.
- (e) Between the members of each tank crew.
- (f) With supporting arms, or arms which the regiment is supporting.
- (g) With brigade headquarters or other immediately higher formation, on both operational and administrative links.

Section 3.—HOW THESE REQUIREMENTS ARE MET

1. All tanks and most other "A" vehicles in the regiment are equipped with one wireless set; control tanks and certain other vehicles have two sets. A few "B" vehicles in the echelon are also equipped with wireless.

2. The wireless set used provides three facilities:—

- (a) "A" set sender/receiver (long range wireless).
- (b) "B" set sender/receiver (short range wireless).
- (c) "IC" system (telephone intercommunication).

The set is designed to provide clear speech on all three systems above the noise of a moving AFV.

3. The "A" set gives communication between the regimental commander, rece troop, echelon commanders, the key men of HQ squadron, squadron leaders, and troop leaders. The "A" set also provides the rear link to the next higher formation. This link is manned by R. Signals operators, although the set is often carried in a regimental AFV.

4. The "B" set gives communication between the tanks of a troop, and between the tanks of regimental and squadron headquarters. This communication is possible on the "A" set as well, but is undesirable because it would hinder the passing of more important messages on squadron or regimental nets.

5. The "IC" system gives communication between the members of each tank crew, via the wireless harness and the wireless set. This communication is so vital that an alternative emergency crew control is usually provided for use if the "IC" system fails to function.

6. Communication with supporting arms or with arms that the regiment is supporting is dealt with in Chapters 4 and 5.

CHAPTER 2

Organization and Duties of Signal Personnel

Section 4.—THE ROYAL SIGNALS TROOP

1. A R. Signals troop belonging to the armoured divisional signals is attached to the regiment for first line maintenance and repairs, battery charging, and rear link operating.

2. The brigade signal officer is normally responsible for the technical training of the troop, postings and promotions within the troop, and the replacement of technical stores. He must work in the closest co-operation with the regimental signalling officer and be prepared to advise and assist him, and to keep him informed of the latest relevant information. The division of duties is a matter for arrangement between the brigade signal officer and the signalling officer, and if possible they must be laid down in writing for the information of all concerned. It is the joint responsibility of these officers to devise, in conjunction with REME and RAOC, a sound plan for the repair, replacement and evacuation of faulty signal equipment.

3. A R. Signals serjeant commands the troop. He is responsible to the brigade signal officer for the efficient functioning of the troop and the operation of the rear link to brigade. He is also responsible to the regimental signalling officer for the general efficiency of his troop, the repair of signal equipment, advice on vehicle battery charging and technical matters of operators' maintenance. This dual responsibility requires a NCO of tact and resourcefulness, and the efficiency of the regimental communications as a whole depends largely upon his abilities in this direction. The best NCO available should therefore be selected for this duty. He must have a knowledge of workshops practice or wireless operating. His corporal should be selected for competence in either one of these trades with which he himself may be unfamiliar.

4. The troop serjeant should, in addition to meeting the general requirements mentioned above, carry out the following duties:—

- (a) Arrange with the regimental signalling officer a plan for battery charging, and ensure that these arrangements are carried out and that spare charged batteries are always available.
- (b) Ensure the proper execution of the plan for repair, replacement and evacuation of signal equipment. He can very greatly assist in the working of this plan by close liaison with the SQMS and foreman of signals of the brigade signal squadron.

- (c) Co-operate closely with the regimental signalling serjeant in all signal matters.
- (d) Attend all wireless set inspections in all squadrons.
- (e) Supervise the work of the mechanics at the regimental A echelon.
- (f) Give the very closest supervision to the operation of the regimental rear link.

5. Squadron radio mechanics are attached to headquarters of each fighting squadron. When battery charging is carried out centrally at regimental headquarters (see Sec. 18) the regimental radio mechanics are responsible for this duty under the direct supervision of the troop signal officer and sergeant. When battery charging is done at squadron level of armoured car and recon regiments the squadron radio mechanics must undertake this work in addition to their normal maintenance duties noted in para. 6. In this case, help in watching batteries on charge is obtained from the driver mechanics of the charging detachment. The squadron radio mechanic should never travel behind A echelon and should always come up and report to the squadron leader when the squadron harbours. By liaison with regimental electricians he must discover if the vehicle batteries of AFVs are being properly tested and maintained. Vehicle batteries of AFVs are maintained under the supervision of regimental electricians, but if the batteries are faulty the wireless equipment will obviously fail. Reports of inefficiency in this direction should be made to the regimental signalling officer through the troop sergeant.

6. In addition to fulfilling the above commitments the squadron radio mechanics should carry out the following duties, as far as time permits:—

- (a) Attend all maintenance parades and assist the squadron signalling NCO in the supervision of maintenance routines.
- (b) Carry out all repairs that are within the scope of the tools and materials at their disposal.
- (c) Attend and assist all periodical inspections, and check the sets that come up in replacement tanks.

7. The radio mechanics at regimental headquarters travel and work in the troop workshop vehicle in A echelon. They are equipped to deal with bigger repairs than the squadron radio mechanics can take on. The regiment holds a number of spare wireless sets for the immediate replacement of casualties, and some at least of these must be carried by the regimental signal troop headquarters. Any asset that is beyond the repair of the squadron radio mechanic is handed to them, and an immediate replacement made by them if

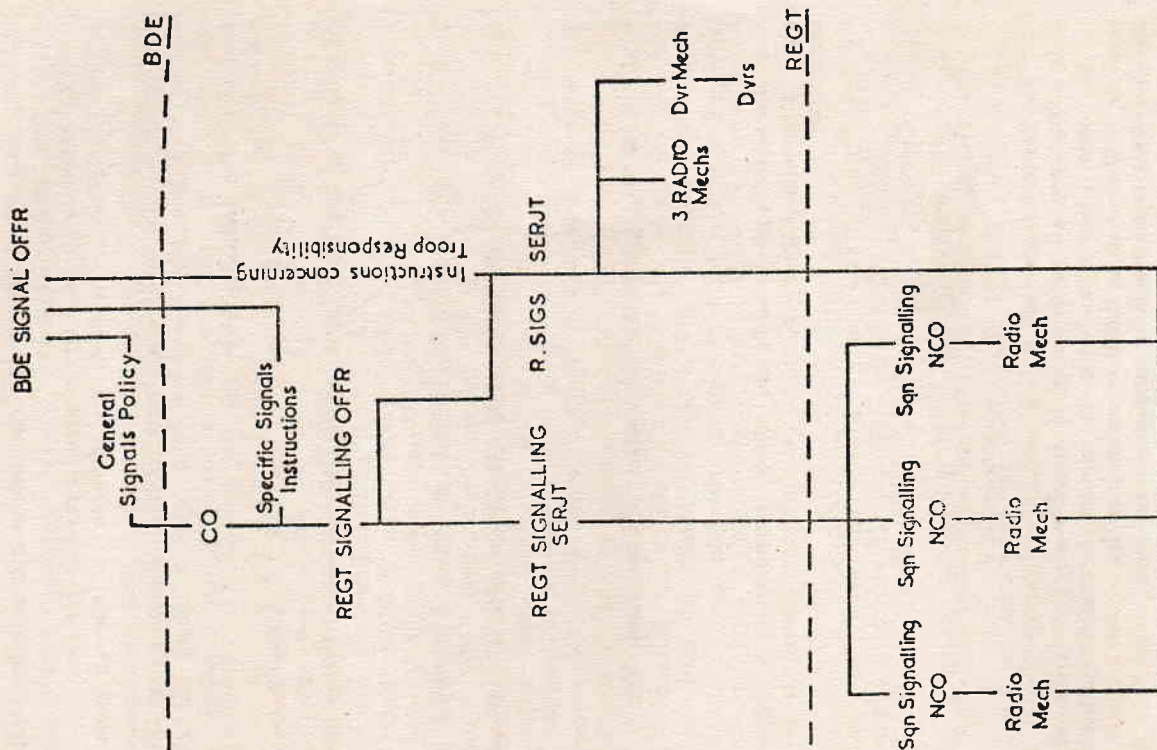


Fig. 1.—Chain of Responsibility.