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INFANTRY TRAINING

Part I: THE INFANTRY BATTALION

1944

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PREPARATORY NOTE

Infantry Training Pamphlets will replace Infantry Training, 1937. They are produced in different parts, each dealing with a particular aspect of Infantry Training.

Part I —The Infantry Battalion.

Part II —(In abeyance).

Part III —The Rifle Company.

Part IV —The Mortar Platoon.

Part V —The Carrier Platoon.

Part VI —The Anti-tank Platoon.

Part VII —The Pioneer Platoon.

Part VIII—Fieldcraft, Battle Drill, Section and Platoon Tactics.

The eight parts must be read in conjunction, since they are interdependent, and, to some extent, overlap. The tactical handling of infantry will alter as the result of experience in battle. As time goes on some sections of Infantry Training Pamphlets will become out of date. Infantry Training Memoranda will therefore be published by the War Office from time to time, to give the latest developments in teaching, and to keep the various parts up to date.

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INFANTRY TRAINING

PART I

THE INFANTRY BATTALION

Introduction

1. Part I of Infantry Training deals with the organization and tactics of the battalion as a whole. It will be the guide on which all the other parts are based, and it is therefore important that the other parts should be studied in close relation to it. The detailed handling of companies and platoons is dealt with in these other parts.

2. Part I deals first with the organization and administration of the battalion. It then goes on to the handling of the battalion in battle. Organization and administration have been put first because of their important effect on tactics. To quote from the lectures by Field Marshal Lord Wavell on "The Good General":—"Unfortunately in most military books, strategy and tactics are emphasized at the expense of the administrative factors. . . . I should like you always to bear in mind, when you study military history or military events, the importance of this administrative factor, because it is where most critics and many generals go wrong."

SECTION 1.—INFANTRY WEAPONS

1. The principal infantry weapons are the rifle and light machine gun. In addition we have mortars of different calibres, grenades, machine carbines, medium machine guns, anti-tank guns and P.I.A.Ts., and 20 mm. A.A. guns.

The characteristics of all these weapons are given in Small Arms Training. The large number of different types, most of which must be known by the average soldier, make the infantry one of the most highly technical arms in the Army.

2. Infantry front line fighting requires a high degree of skill—higher than any other kind of combat. In battle the infantry task is to close with the enemy forces on the ground and destroy them. This task means movement. The enemy will do everything they can by fire and by the use of obstacles, natural or artificial, to prevent this movement. They will choose positions to prevent us taking advantage of the cover provided by ground. It will therefore be vital for our troops to have a superiority of fire at the right time and place in order to keep the enemy's heads down, and so to make movement possible.

3. There are two forms of warfare that we may meet. So far the fighting in this war has been very mobile. But there have been occasions, usually following an advance by either side, when both forces have settled down into some form of position warfare, with strongly defended positions and obstacles. To break down the enemy defences in the latter type the concentrated fire of weapons with a comparatively high trajectory—guns, howitzers, and mortars—is required, as well as the greatest possible fire from low trajectory weapons. The more mobile warfare becomes the more important is the fire of the low trajectory weapons at short ranges to give close support to the rifeman up to the last possible moment of the assault, after the high trajectory weapons have lifted, or even ceased. It is the task of the infantry to build up superiority of fire with their own supporting weapons at this stage of the battle.

4. In order to get the best use out of all infantry weapons for this purpose, we require the highest possible standard of training both of commanders who have to fit the fire of the different weapons into a common plan, and of the soldiers who have to use them. This standard means team-work, which will come only as the result of practice.

But experience has shown that team-work will come more easily if we have throughout the army a common "drill", which can be applied quickly and efficiently by all ranks, and which can be practised by them until its application to varying conditions becomes a second nature.

5. The accepted "drills" for this purpose are given in the different parts of Infantry Training. They must be studied and practised by all ranks. At the same time all commanders must remember that a drill is nothing more than a framework on which to build up a tactical plan. Any attempt to apply drills rigidly, and to avoid the careful thought and planning that every tactical action, however small, requires, will lead to failure.

SECTION 2.—ORGANIZATION

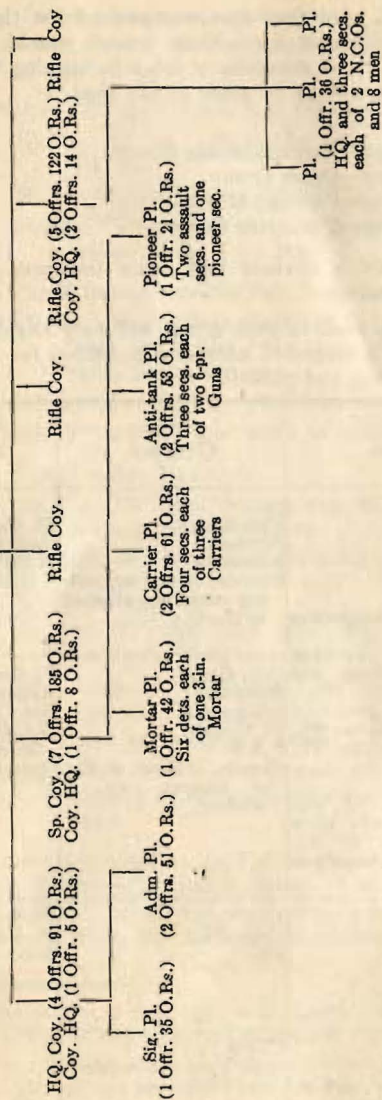
6. The organization of the infantry battalion is given in the Table on page 3.

SECTION 3.—CONTROL

7. Every unit must have a well-defined system of control to relieve the commanding officer from having to deal with unnecessary detail during an action. Every headquarters must have a "drill" to open up as soon as the unit is to come into action, so that, even if the commander is away for the time being, a start can be made on the preparations for battle. This rule applies equally to company and platoon headquarters as to the battalion.

ORGANIZATION OF THE INFANTRY BATTALION

BN. HQ. (5 Offrs. 45 O.Rs.)



PERSONNEL		WEAPONS		SUMMARY		TRANSPORT	
Offrs.	36	L. M. Gs. .303 in.	63	Bicycles	27	Carriers Loyd	12
Other Ranks	809	P.I.A.T.	23	Motor cycles	33	Carriers universal	19
		3-in. Mortar	6	Cars, 4-str.	1	Carriers universal fitted for 3-in. Mortar	7
		2-in. Mortar	26	Cars, 2-str.	3	Trailer, 15-cwt., 2-wheeled	1
		6 prs.	6	Cars, 6-cwt.	8	180 gallons water	
				Trucks, 15-cwt., office	1		
				Trucks, 15-cwt., personnel	1		
				Trucks, 15-cwt., G.S.	26		
				Lorries, 3-ton, G.S.	13		

NOTE.—All totals include attached R.A.M.C., R.E.M.E., R.A.O.C. and A.C.C. personnel.

8. Every unit should have four groups organized for this purpose. The individuals who normally form these groups should be known by every one so as to avoid unnecessary delay in forming them when required. Additions can always be made at the time.

These groups are:—

"R" Group—Reconnaissance Group.

"O" Group—Order Group.

"F" Group—Fighting Group.

"T" Group—Transport Group.

(NOTE.—It is obvious that some transport will be in all Groups.)

9. The individuals to work in each group will vary slightly in each unit. The following is a suggested normal composition for each group in the battalion, company, and platoon.

Group	Battalion	Company	Platoon
"R"	C.O. I.O. Sig. Offr. 2 D.Rs. 1 Sig. (W/T set). Comds. of any supporting arms.	Coy. Comd. Batman. 2 Runners. Comds. of any supporting weapons allotted to the Coy.	Pl. Comd. Batman. N.C.O. i.c. Mortar.
"O"	As for "R" Group and Adj't. Coy. Comds. Pl. Comds. of Mortar Pl., Carrier Pl., A. tk. Pl., Pioneer Pl. M.O. (NOTE.—Comds. of supporting arms will often go to their own "O" Gp. leaving L.Os. to represent them.)	Coy. Comd. Batman. 2 Runners. Pl. Comds. C.S.M. Comds. of dets. of Pls. of support Coy. if allotted.	Pl. Comd. Batman. Sec. Comds. N.C.O. i.c. Mortar. Orderly.
"F"	2 i.c. Bn. Bn. H.Q. Sig. Pl. Pls. of Sp. Coy. Rifle Coys. "F" Echelon Tpt.	2 i.c. Coy. Coy. H.Q. Pls.	Pl. Sgt. Pl. H.Q. Secs.
"T"	T.O. "A" Echelon Tpt. Men of H.Q. Coy. not required in "F" Group.	C.Q.M.Ss. Coy. Tpt. not required in "F" Group.	

10. Drill for reconnaissance and orders

The following "drill" for reconnaissance and orders within the battalion is suggested:—

(a) *Battalion "R" gp. attends Bde. "Orders"*

(i) Bn. "O" gp. ordered by adjt. to a RV near to Bde. "O" gp.

(ii) Bn. "T" gp. ordered by the 2 IC Bn. to prepare for action.

(iii) Bn. "T" gp. moved to an assembly area by T.O. under orders of the 2 IC Bn.

(b) *Bn. Comd. having received Bde. Orders meets his own "O" gp.*

(i) Bn. Comd. allots areas for Coy. recce. and an RV and time for orders. He then goes with his "R" gp. to make his own recce.

(ii) I.O. gives "O" gp. all information and marks maps.

(iii) "F" and "T" gps. move to assembly positions.

(c) *Bn. Comd. makes his recce.*

(i) Coy. "R" gps., having had all information from I.O., make preliminary recce.

(ii) Adj't. or I.O. arranges opening of Bn. H.Q.

(d) *Bn. "O" gp. assembles*

(i) Coy "O" gps. move up under previous orders to be handy for their commanders.

(ii) Comds. of supporting arms, having been told the Bn. Comd's. plan, go to their own "O" gps. to give orders.

(iii) Comd. gives out his orders.

(iv) Comd. tells Coy. Comds. where they can meet the Comds. of any supporting arms or weapons allotted to them.

This process will then be applied in principle to the reconnaissance and orders of companies and platoons. Like all "drills" it must be used with common sense, and must always be adapted to the actual conditions with which the various commanders are faced.

11. Reconnaissance

(a) A battalion commander will hardly ever have all the time he would like for reconnaissance. He must remember that his company and platoon commanders require time to look at the ground in detail, and he must make this time for them.

- (b) He should learn to select view points from the map, and he must restrict himself to the use of one, or at the most two. A great deal of time can be wasted by movement from one view point to another in an attempt to get the best.
- (c) Before setting off he must:—
- (i) Be clear about the object of the reconnaissance.
 - (ii) Calculate the time available, working back from zero hour and allowing time for company and platoon reconnaissances.
 - (iii) Arrange to keep in touch either by R.T., D.R., or R.Vs. with his headquarters in case of any change of plan.

Orders

12. (a) It may often be necessary to issue warning orders from the map, if necessary, and so to save a good deal of time. But the use of the map can never, inside a battalion, replace personal reconnaissance by the commander.
- (b) A warning order will be issued, as soon as anything is known about the type of operation, R.V. for "O" gp. assembly area for bn., and some time before which the bn. will not have to move or assemble.
- (c) Orders may often have to be issued through liaison officers, and this practice will apply particularly to brigade orders. Officers must be practised in taking down and passing on verbal orders for this purpose.
- (d) Inside a battalion, written operation orders should rarely, if ever, be necessary.
- (e) "O" groups can be divided into those who must see the ground before or during orders, and those who need not see it until later, but who can remain under cover and listen (e.g. orderlies and intelligence N.C.Os. or men).
- (f) The position for giving out orders must be carefully chosen, and all movements up to and away from it strictly controlled. Everybody must have their maps folded and note books and pencils ready before they move up to it.
13. (a) Orders should be given in the recognized sequence:—

- (i) Information—enemy.
own troops.
- (ii) Intention.
- (iii) Method.
- (iv) Administration.
- (v) Intercommunication, including the position of H.Q.

- (b) *Intention*.—This must be crystal clear. Care must be taken that only one well-defined intention is given. The test will be whether the "method" actually carries out the expressed intention. The use of the word "and" in the "Intention" should therefore be looked upon with suspicion. There is, however, no harm in the commander giving some indication of his future purpose to follow a success in his immediate intention.

If for any reason written orders are being issued the commander will write the "intention" himself.

- (c) *Method*.—Commanders of sub-units should be trained to take down their notes on orders in the form of a sketch or diagram. This is a simple and easy means of taking notes in a way in which they can be understood by other people.

Where a zero hour is fixed beforehand all timings may be given in the actual clock hours and minutes. The effect of any later alteration of zero hour must then be remembered. If zero hour depends on the time orders are finished or on the time required by sub-unit commanders to get their preparations made, timings must be given in the form of Z plus or Z minus. Zero hour must be given out at the end of orders, or even later by message, if it cannot be decided at once. In the latter event ample time must be allowed for the message to reach everybody concerned, and a time before which zero hour will not be must be given.

- (d) *Administration*.—This should only touch on points that will actually affect the immediate operation (e.g. arrangements for ammunition supply or medical arrangements). Commanders should resist the temptation to put in unnecessary details.

(e) Intercommunication

- (i) A standard set of light signals will often be found useful. Everybody knows them and understands them. But the enemy will also learn to recognize them, so they must be changed from time to time.

- (ii) Light signals might include:—

Indication of zero hour.
The capture of successive objectives.
End of artillery and mortar concentrations.
Indication of targets.
S.O.S. signal.

NOTE.—The enemy makes a practice of sending up similar light signals to ours to create confusion.

- (iii) The position and line of movement of battalion headquarters must always be given.

Organization of headquarters

14. (a) Headquarters will always be so chosen that, where possible, they are concealed from air observation. They should be in a place where M.T. can get reasonably near.
 - (b) As soon as the original lay-out is decided, an alternative position must be chosen, reconnoitred, and planned.
 - (c) Headquarters should not be moved more often than is absolutely necessary.
15. (a) Every headquarters should be organized into an office area, a rest area, and a transport area. The size or use of these areas will vary in different situations, but they should always be included in the lay-out. Headquarters should be clearly marked with signs by day, and with a lamp by night.
 - (b) There should be a standard drill and lay-out for each of these areas so that reconnaissance parties can easily get them organized on any site. This will also make it easier for main parties to take up their duties quickly on arrival.
 - (c) Only those officers, men, and vehicles necessary for the machinery of command will be allowed at battalion headquarters. All others will remain farther in rear. The distance at which they remain from battalion headquarters may vary from a few hundred yards to several miles, according to the tactical situation.
 - (d) Every officer, W.O. and N.C.O. at battalion headquarters should know the normal lay-out. The individual who will usually organize it may vary in different situations and different units. He should be definitely detailed for the job, and he should always have the advice and help of a Signals representative. The original choice of the position for battalion headquarters must be influenced very much by what is suitable for communications.
16. (a) Immediately a move is completed every company and each platoon of the support company must report its new position to battalion headquarters. Battalion headquarters must equally report its own changes of position to brigade.
 - (b) This report may be made by wireless using the map reference code. If time allows, two orderlies should be sent from a battalion, one of whom will remain at the superior headquarters whilst the other returns.
 - (c) When a battalion headquarters moves, an orderly should be left at the old position for a stated time so as to direct on anyone arriving there.

17. Local protection

- (a) At all times, whether in or out of action, all commanders, from the section commander upwards, are responsible for the security against surprise and the immediate safety of the men under their command. They must see to it personally that arrangements are made for protection against attack from the air or from the ground.
- (b) These arrangements should include a warning signal, the use and provision of cover and obstacles, and having weapons, and the men to use them, ready to open fire at once.
- (c) When a unit halts, whether for a few minutes or for a long time, on the road or in billets or bivouacs, commanders must choose positions for all-round defence, and detail their men to them.

18. A.A. defence

- (a) At least one combined air and gas sentry will be required all the time by each company and each headquarters during operations. If platoons are widely scattered one may be wanted for each platoon.
- (b) At least one L.M.G. should be ready for action in a concealed position by day in each battalion and company headquarters.
- (c) Everyone must know what he is to do in an enemy air attack. This action should be actually practised before nightfall. At night no lights or smoking should be allowed out of doors.
- (d) When a unit reaches a position where it is to stay, or halts for the night or a similar period, every sub-unit must dig trenches for itself.

SECTION 4.—COMMUNICATIONS

19. Orderlies and D.Rs.

- (a) All ranks must help orderlies and D.Rs. to find the headquarters or individual for whom they have a message. The identity of such orderlies or D.Rs. should first be checked.
- (b) The motor cycle park at any headquarters should not be less than 100 yds. away. All individuals riding motor cycles will dismount there and will run or walk the rest of the way. Motor cycles must not be started up or run closer to headquarters than this distance.
- (c) An orderly with a message for a particular officer will make his presence known by calling loudly: "Message for . . .".

He will not wait until someone asks what he wants, even if he sees that the officer is busy.

- (d) Before going back to his own headquarters an orderly or D.R. will always call at the signal office and ask if there is anything to go back. This rule also applies to a L.O. He should not be kept waiting for more than a minute or two.

20. Messages

- (a) Messages are sent out by a signal office in the order in which they are handed in, unless they have a "priority" franking.
- (b) The rules for the use of "priority" messages are published in F.S.P.B., Part I, Pamphlet No. 4.

21. Contact

- (a) Every unit and sub-unit is responsible for keeping touch with the troops on its left. This responsibility does not absolve it from the duty of trying to make contact with troops on its right, should they be out of touch.
- (b) Every unit is responsible for communication forward from its own headquarters.
- (c) Units and sub-units in rear should keep themselves in touch with what is going on in units in front by means of liaison officers or patrols.

22. Wireless discipline

- (a) Wireless will never be used if any other means of communication will do equally well. Strict economy in the use of wireless keeps the air free for important messages.
- (b) When the battalion starts to get ready for action constant "watch" will be kept on all sets.
- (c) All ranks using wireless must know and keep to the correct signal procedure. They must be trained to think constantly about security, and to use the different means of keeping it.
- (d) Failure of a set must be reported to battalion headquarters at once by the quickest method.
- (e) All messages whether WT or RT must be as short as possible. Anyone using RT should note down what he wants to say, and keep his notes in front of him while speaking.

SECTION 5.—INTELLIGENCE

23. General employment

- (a) The battalion intelligence section must be looked upon as a complete sub-unit under its own commander. The I.O.

should be told what is required of him and then be left to carry out his task like any other sub-unit commander.

- (b) The intelligence section is weak in numbers. Its men should be highly trained. Commanders must choose the tasks for them very carefully, in order to make the best use of them.
- (c) The intelligence section should be used as the eyes and ears of the battalion commander. He will usually be too busy to watch and listen for what is going on. The section must be trained to carry out these duties for him.
- (d) Their tasks will include:—
 - (i) The collection of all information from all sources about the ground, the enemy, and the forward troops of the battalion and of units on its flanks.
 - (ii) Providing the commanding officer with a means of watching the progress of the fighting.
 - (iii) Carrying out reconnaissances for a special purpose.
 - (iv) Passing on all useful information quickly to brigade headquarters, to companies, and to flanking units, by means of messages and intelligence reports.
- (e) The intelligence section must be trained in the habits and minor tactics of the enemy, so that they can piece together the different bits of information into a picture which will have a useful meaning for the commanding officer.

They must be trained to observe and read what is going on in back areas as well as in the front line. Such observation can only be made through actual practice in training periods.

24. The intelligence officer

- (a) In addition to handling his section, the I.O. has to act in some measure as a staff officer to his commander. He will often act as understudy to the adjutant in action, and should be able to interchange duties with him.
- (b) As he may accompany the battalion commander to brigade Orders he must be trained to be familiar with the handling of the battalion, to take notes quickly and clearly, and to pass on to others the information so gained.
- (c) The I.O. or, in his absence, the intelligence sergeant must be at battalion headquarters to organize the intelligence work there.

25. The intelligence section

- (a) Observation is one of the most important duties of the men of the section. They must be trained in the choice of O.Ps.

and how to conceal them. They must also know how to make out clear and concise reports. Their map reading must be accurate.

- (b) The use of wireless for communication from O.P.s. to battalion headquarters must be looked upon as normal, and the men must be trained in RT.

26. Reports

The information required in the different types of reports to be sent in is given in Appendix A.

Whilst these reports are a particular task of the intelligence section, all commanders must be on the watch the whole time to collect and send in as quickly as possible the material on which the reports can be built up. It cannot be said too often or too emphatically that the collection and sending back of all useful information is an important duty of every soldier.

SECTION 6.—MOVEMENT

27. March discipline

- (a) March discipline is the best means of ensuring that troops, whether on foot or in M.T., move from one place to another in the quickest time with the least fatigue. It must be an important part of all movement.
- (b) Rules for march discipline are laid down in M.T.P. 47.* These must be known by all ranks, and commanders must insist on exact obedience to them.
- (c) Every effort must be made to keep roads and tracks as clear as possible for the free movement of traffic. All commanders must watch this point and must issue orders appropriate for the purpose.
- (d) Particular attention must be paid to clearing the road at halts, to concealment, and to the proper and sensible spacing of vehicles.
- (e) A detailed plan for protection against air attack must be made for every move. It must be clear and must be known to all ranks.

28. Movement by march route

- (a) The formations in which marching troops move will vary according to the kind of roads used and to traffic conditions.
- (b) Sub-units must move with gaps between them. The advantages and disadvantages of moving in formed bodies or dispersed must be considered before orders are given out.

*Under revision

- (c) When immediate ground attack by the enemy is unlikely, as much of the transport as possible will move in one group in the rear of the battalion.
- (d) If contact with the enemy is likely then the "A1" Echelon vehicles at least must move with their own sub-units. There must be a clear gap of at least 40 yards in front of each vehicle.
- (e) When moving in rear of troops transport will, when possible, move by bounds from one concealed parking area to another. These areas must be reconnoitred in advance by an officer or N.C.O. from the transport group.
- (f) All marching troops will halt each hour for ten minutes before the clock hour.
- (g) At these halts all troops and vehicles will clear the road and get under cover where possible.
- (h) If there is no cover, or if vehicles are unable to clear the road, every effort will be made to keep a free passage along the road, and to get concealment by dispersing vehicles.

Movement by M.T.

29. For a successful move by M.T., good organization, good traffic control, and good march discipline are necessary.
30. (a) Unit transport must be so reduced that no unnecessary vehicle is taken with the fighting part of the battalion.
- (b) Battalions will always have at least one platoon, under an officer, trained and practised in traffic control duties.
- (c) Battalions will also be practised in movement in column by groups of from six to twelve vehicles under a definite commander, and in the control of such a column by the use of all available motor cyclists.
31. (a) A definite drill will be practised in each unit for:—
 - (i) giving out orders to drivers;
 - (ii) the action of drivers in mounting and starting their vehicles;
 - (iii) action at halts, for control and for passing through traffic on;
 - (iv) protection at halts;
 - (v) maintenance at halts.
- (b) Units should have a drill prepared and practised for embussing on the "platform" system, where all troops embus in turn at one point, or else for embussing in a dispersed column.

- (c) They must also be trained in debussing for moving on by march route, or, in emergency, for action.
32. (a) Details of the route will be given to all drivers, preferably on a route card.
- (b) Every driver will have one man beside him who will be responsible for following the route on the map, if there is one, and for helping the driver in keeping to the correct route. This man will also be responsible for traffic control at halts.
- (c) An A.A. sentry, who must be frequently relieved because of strain, will be posted in each troop carrying vehicle.
- (d) One man must look out to the rear to keep touch with and signal to the vehicle following.
33. (a) All columns in M.T. movement will halt for the ten minutes before every even clock hour, except when tanks are in the column when the halt will be for twenty minutes.
- (b) Troops must debus, but will keep under cover. The orders for debussing will be given by the senior officer or N.C.O. in the vehicle.
- In no circumstances will troops ever debus without an order.
- (c) A.A. and A tk. protection, as ordered previously by the battalion commander, will be put out, and camouflage nets taken into use.
- (d) If a column halts for longer than a minute or two at other times than at routine halts, it is the duty of each sub-unit commander to find out the reason. Very often drivers, when tired, fall asleep at a sudden check, and gaps are made in the column. If the halt is due to some obstacle the commander who finds it will do what he can to get rid of it or to find a way round. He should at the same time send back details to his immediate commander in rear and to the nearest traffic control post.
- (e) When possible, an officer or N.C.O. on a motor cycle should ride about a mile ahead of the battalion to give early warning of checks or obstacles.

SECTION 7.—ADMINISTRATION

Transport

34. The demands of fast moving warfare make administration depend on a flexible system of transport. We have already seen battalions engaged one month in desert warfare and within a few weeks fighting in close mountainous country. Commanders of all grades must know how

to improvise and adapt their administration to the needs of the moment.

35. (a) First line transport consists of two echelons:—

- (i) "*A*" Echelon—all vehicles of headquarters and units required with, or to be readily available to join, units in battle.

"A" Echelon may be further divided into:—

"A1" Echelon (sometimes called "F" Echelon).—That transport which is wanted to carry stores and equipment actually required in the immediate fighting.

"A2" Echelon.—That transport which is required to carry equipment and stores that will be wanted during the battle but at a later stage.

- (ii) "*B*" Echelon.—Transport carrying stores and equipment that will not be required until there is a pause in the actual fighting.

- (b) A 1 Echelon will be controlled by the battalion commander. A 2 Echelon may be controlled by the battalion commander, but is more likely to be controlled by the brigade commander. B Echelon will be controlled by the brigade or divisional commander and may often be from 15 to 25 miles behind the forward fighting.

36. The detail of transport in the different echelons will vary from battle to battle. The battalion commander is responsible for laying down generally what each echelon is to have. He must remember that the more he can keep the forward area clear of transport the better, especially when roads are few or narrow.

37. It is the duty of officers and N.C.Os. in charge of motor transport in the different echelons to see that they have ample petrol at all times. Besides such spare petrol as vehicles may carry, there is a petrol vehicle in each battalion. The transport officer or sergeant is responsible for keeping supplies replenished on this vehicle from the divisional petrol points.

38. (a) Every officer or N.C.O. in charge of motor transport is responsible for seeing that daily maintenance tasks are carried out even during battle. The harder the conditions, the more will drivers tend to neglect these tasks. The good order of its vehicles has a great influence on the fighting efficiency of a battalion, and clear orders and strict discipline are necessary.

- (b) Every officer or N.C.O. in charge of a vehicle that becomes a casualty will see that a report is made to battalion headquarters as soon as possible. If the contents are urgent for the battle he will arrange to get them forward by hand.

(c) If a vehicle becomes a casualty the battalion transport officer or N.C.O.s. will see if it can be mended within battalion resources. If not, they will report the casualty to the brigade L.A.D.

(d) All reports of vehicle casualties MUST include an accurate map reference.

39. Officers or N.C.O.s. in charge of battalion A2 or B echelons must keep constant personal touch with battalion headquarters and with the progress of the battle regarding transport.

Ammunition

40. Reports on ammunition requirements are an automatic part of battle drill for platoons and companies, and the company and battalion commanders must always be looking ahead to make sure that they can keep the supply going.

Company commanders, through their C.S.M.s., must not be content to wait for accurate reports before starting to send up ammunition to refill. It is better that there should be too much ammunition than too little.

41. (a) Similarly the battalion commander, through his R.S.M. or an officer or N.C.O. detailed for the job, must always be trying to foresee and meet ammunition expenditure.

(b) Transport provided for ammunition is usually 3-ton lorries on which a mixture of all types is carried. Some form of shuttle service must be improvised within the battalion to take forward smaller quantities of the kinds wanted.

(c) The officer, warrant officer, or N.C.O. in charge must see that demands are made on the divisional ammunition point in sufficient time to keep stocks up to probable requirements.

Food

42. One of the most difficult problems facing the battalion commander in battle is to get his men fed at the right moment, particularly with hot food. Whilst men can go for long periods without food, and are trained to do so, a battalion commander must never rely on their doing so. He and his staff must always be looking for an opportunity to feed the men.

43. If cooking vehicles can be placed under company control the men are more likely to get fed, since company commanders can often seize an opportunity for feeding, which would be lost if vehicles have to be called up from the rear. This arrangement will not however always be possible.

44. (a) It is important that a supply of hot food should be "on tap" whenever possible. Unless cooking can be done in vehicles on the move this requirement will mean careful handling of the

battalion transport to ensure that all cooking can be done in daylight and under cover.

(b) Battalion commanders should be ready to have food partially prepared and cooked in a form in which it can easily be completed by the men in their mess tins.

45. Every platoon should have in its own or company transport equipment and supplies with which to make a hot drink for the men at any time.

46. (a) The quartermaster is responsible for getting rations daily from the divisional R.A.S.C., probably from a supply point, though rations may often be brought up to B Echelon transport.

(b) He should have a drill for the quick distribution of the rations drawn, and for doing all that he can to simplify the preparation of food within the battalion.

Casualties

47. The process of reporting casualties is laid down in F.S.P.B., Part I, Pamphlet No. 13.

The reporting of casualties is also a part of platoon and company consolidation drill (see Infantry Training, Parts III and VIII).*

48. (a) Men engaged in fighting should never allow themselves to be distracted from the job in hand to attend to casualties. Walking wounded, who can look after themselves, may also help their comrades more seriously hurt.

(b) It is the duty of the battalion stretcher bearers, helped by walking wounded, and by R.A.M.C. detachments, to get casualties back to the R.A.P.

49. The R.A.P. should be placed somewhere near battalion headquarters so that everyone will know where to look for it.

Fit men and walking wounded who have had their wounds dressed should not be allowed to loiter round the R.A.P.

50. The Regimental M.O. is responsible for deciding which casualties must be carried back, and which are to be directed to Walking Wounded Collecting Posts where they will find transport.

51. Casualties should never take ammunition back with them. This should be collected and kept under company or platoon orders.

Baggage

52. Since infantry should always go into battle as light as conditions allow, the handling of their personal equipment and effects must be planned. Battalion commanders must arrange for the stores

* Under issue.

necessary for the re-organization and comfort of their troops to be brought to them in pauses in the battle.

53. The problem of carrying equipment and personal effects removed from the man to lighten his load must always be solved by improvisation. Battalions should have standard ways of carrying these effects, and should practise them.

Battalion commanders must also watch for opportunities when the men may have their greatcoats and even blankets according to weather conditions. The arrangements necessary for this purpose require considerable flexibility, not only in the original distribution of the transport in echelons, but also in re-distribution during the course of a battle.

SECTION 8.—BATTALION TACTICS

Outline

54. The operations of war may be divided into "Attack", "Defence" and "Withdrawal."

"Attack" includes:—

- (a) The approach to the enemy.
- (b) First contact with the enemy.
- (c) The main attack.

"Defence" includes:—

- (d) Defence of a hastily organized position.
- (e) Defence of a prepared position.

55. Whatever the operation there will always be one part of it in which success is vital to the whole. This is known as the "main effort."

The commander must always make up his mind where his "main effort" is going to be. He must then concentrate as much fire power and physical effort as possible to ensure its success.

Under present conditions the main effort is usually confined to a narrow part of the front. Greater fire power can thus be concentrated in its support.

56. (a) Since a battalion is the smallest infantry organization that can arrange for a concentration of support weapons of different kinds it will be unusual for companies or platoons to have to fight entirely on their own.

(b) The tactical handling of companies and platoons should therefore be studied as part of a battalion plan. The drills devised for them must fit easily into the battalion picture. It will then be found that, if these drills are known to all ranks and their part in the battalion plan is understood, company and platoon commanders will have no difficulty

in fitting them to the rare occasions when they find themselves on their own.

Internal tactics

57. Inside the battalion the commander has a number of different weapons to help him in carrying out his plan. All infantry commanders must learn the use of these weapons, and the best way of combining them to meet different problems. For these purposes they must have a very fair knowledge of the role of each sub-unit, company, or support platoon, and of the difficulties that may prevent them from giving their best performance.

58. (a) The details of each sub-unit and the drills which they are taught are given in Parts III-VIII of Infantry Training.[†] The process of combining the different weapons to meet different types of action are dealt with in the next few chapters.

(b) A company commander may at any time find himself given one or more detachments of the different support platoons to command. The way in which they should be used will not differ in principle from their general use in the battalion. All officers must make a study of the tactical handling of the battalion.

Outside support

59. The battalion cannot normally by itself win an important action. It needs the help of other arms—tanks, artillery, and sappers—to get to its objective. Detachments of these arms may be placed either under command, or in support, of a battalion commander at any time. Battalion tactics cannot therefore be learnt without some study of the effects of these other arms, and of what can be expected of them.

NOTE.—Briefly the difference between "under command" and "in support" is that units "under command" can be moved about at the discretion of the commander, whilst those "in support" cannot.

60. It is unlikely that detachments of other arms will be placed "under command" of infantry company commanders. Tanks may occasionally be placed "in support". But any company may find itself at any time having to work in very closely with detachments or officers of other arms. All officers must therefore know what help they can expect from these arms and what sort of help they themselves can give in return.

* Parts IV, V, and VI have been published, and the remainder are in preparation or under issue.

Information

61. Any tactical plan must depend for its success on information. Information will not come of itself; commanders of all ranks must always be on the look out for it, and must try every possible source.

62. Each arm wants rather a different kind of information. Since infantry are usually in the front edge of the battle they have opportunities of collecting information that other arms may not have. Infantry commanders must learn what sort of information other arms want, and must get the habit of including it in their own reports.

63. Battles can only be won by every part of the fighting forces working closely together, looking for every possible way of helping each other, and realizing that they are fighting together for the same purpose. There is no room on the battlefield for jealousies, selfishness, or the "one-track" mind.

SECTION 9.—THE APPROACH—ADVANCED GUARDS

The approach

64. The approach to the enemy takes place—

- (a) at the beginning of a campaign;
- (b) during encircling movements round a flank;
- (c) during pursuit.

65. In all these operations movement may be covered by any available mobile troops. These go ahead to find out where the enemy is, and what he is doing, and to give warning of any resistance against which our force may be coming.

Their business is to get information and to clear away minor troubles.

66. These mobile troops have to move quickly and over wide distances. They cannot be expected to find or deal with all enemy parties in the area, though they should find any strong enemy position.

Moreover, as they get nearer to the enemy, they will probably seize areas of ground that will be important for the protection of the forces behind. They cannot hold these themselves and do their other jobs.

67. Advanced guards

- (a) Every force, whether moving behind covering troops or not, will therefore have an advanced guard whose duty will be—
 - (i) to protect the force from interference by enemy whom the covering troops have overlooked or by-passed;

- (ii) to get further information about the enemy;
- (iii) to prevent the enemy from getting information about our advance;
- (iv) to release the covering troops from important tactical ground which they have seized.

(b) If no covering troops are out in front advanced guards will also have to carry out the duties usually given to covering troops.

(c) An advanced guard should be a force of all arms. It is divided into—

- (i) advanced guard mobile troops (if allotted);
- (ii) vanguard;
- (iii) main guard.

Vanguard

68. The vanguard is detailed and a commander appointed by the advanced guard commander from the troops under his command.

69. (a) The vanguard will usually be based on a force of infantry not less than one rifle company.

(b) The advanced guard commander in detailing the vanguard will always have to decide whether to give it detachments of carriers, mortars, and anti-tank guns. It may often be a good plan to put a F.O.O. from any available artillery to move in the vanguard, so that its commander can get immediate artillery support.

70. The vanguard commander who will usually be a comparatively junior officer should be told how far ahead of the main body the vanguard is to move. He will be told what are the important tactical features he must gain before successive halts, and he should be given some idea of what action he is to take on meeting the enemy.

71. (a) A vanguard will move in sufficient depth to make sure of its own protection. The vanguard commander will normally send out a "point," or small protective detachment of not less than one platoon, to move in advance of the vanguard, and to give warning of the presence of enemy.

(b) The vanguard commander will move well forward in his party so that he can take immediate action in an emergency.

(c) He will be careful not to disperse his force too early by sub-allotting detachments given to him for his support. He must remember that with only a small body of troops under his

command, success will depend largely on keeping as much as he can in his own hand with which to hit the enemy.

72. The main guard

The main guard is the striking force in the hands of the advanced guard commander who must be careful to keep it as strong as possible so that he can act effectively.

Action of the advanced guard

73. (a) The advanced guard commander must know the intentions of the commander of the force, so that he can act in accordance with them.

(b) He is detailed by name by the force commander, and the troops placed under his command must be clearly stated. In particular he must know what orders have been given to any covering troops working ahead of him. He must also know the route, starting point, and time of start of the main body.

(c) Having got this information the advanced guard commander will usually be given a free hand to make his plan in the way he thinks best.

74. Advanced guard H.Q. must be well forward in the main guard. The commander may even move with his "R" group in or immediately behind the vanguard, but he must avoid interfering with the vanguard commander.

75. The advanced guard must be in a position to protect the movement of the main body by the time that the head of the latter crosses the starting point. The distance it will be in front of this starting point must obviously vary according to the ground and information about the enemy.

76. The advanced guard commander will lay down the successive tactical bounds to be made good. The times at which the advanced guard will halt will be governed by these bounds and by the tactical situation. It will not be tied to the regulation halts.

77. (a) The first duty of the advanced guard is protection of the main body. The advanced guard commander will be ready to deal with packets of enemy who have not been found by the covering troops.

(b) When the latter are held up it is unlikely that the advanced guard commander will at that stage have all the information that he wants. He must gain closer contact with the enemy, and drive in or infiltrate between their protective troops. In this way he can get the information and ground which the force commander must have before he can make his attack.

(c) This will demand the support of all arms and the advanced guard must include detachments or the support of artillery, and of the brigade support group with their greater range and hitting power.

(d) It will usually include reconnaissance parties (and, perhaps, detachments) of R.E. to deal rapidly with problems of roads, bridges, minefields, and other obstacles.

78. (a) If tanks are allotted to the advanced guard they will usually move by bounds in the gap between the advanced guard and the main body. The commander will move with the advanced guard commander.

(b) If the tanks are used to overcome resistance they will be put back in their normal position as soon as their task is finished.

Building up

79. In all advanced guard operations the commander must be careful to hold the balance between checking the impetus of rapid forward movement and allowing a series of attacks to be made in insufficient strength.

80. Once any part of the advanced guard is committed to action, each superior commander must try and build up his plan on the action already taken, so as to avoid unnecessary delay in the onward movement. It is the art of taking full advantage of what has already happened or been planned that will lead to the rapid disintegration of enemy resistance.

SECTION 10.—THE ATTACK

Types of attack

81. Once the enemy shows signs of putting up resistance in strength too great for the advanced guard to deal with, battalion commanders must be prepared for the attack.

82. (a) The enemy may be holding temporary positions which have not been properly prepared or fortified. His object will usually then be to hold our forces long enough to give him time to organize an attack himself, or else to strengthen the defences of a prepared position behind.

(b) In areas where the enemy has decided to stand and fight our forces may expect to find entrenched positions, often strengthened by concrete and other works, and strongly protected by natural and artificial obstacles.

(c) With both types of position they must be prepared for him to counter-attack quickly and vigorously if the slightest opportunity offers.

83. (a) The difference between the types of attacks to deal with these two situations is usually one of time and of control. Where the position has been hastily prepared and occupied time is an all-important factor. Whilst preparations must be thorough and sufficient time must be allowed for these, the whole weight of the force required against more highly organized defences will not be necessary.

(b) When the enemy is occupying a strongly fortified position commanders must realize that time is then required to "soften" the defences, to make preparations for the attack, and to apply a heavy and methodical programme of bombardment to blast a path that their troops can take with the least loss to themselves. The attack will usually be part of a brigade or divisional plan.

The plan

84. (a) Before any attack is put in, information about the enemy must be as complete as possible. This information will be got from the orders and reports issued by higher commanders, by liaison, by patrols, and by personal reconnaissance.

(b) From this information and from his knowledge of enemy tactics, the battalion commander should be able to picture the strength of the enemy opposition, and how it is probably distributed on the ground.

85. With this information the battalion commander must make his plan. His final objectives will usually be laid down for him. He may have to choose his immediate objectives and any stages leading up to them.

86. (a) In any attack against an unbroken enemy and against organized opposition where tanks can be used, a battalion commander must choose his objectives so that his forward troops are never long without anti-tank defence. Anti-tank weapons should be able to arrive within a quarter of an hour of the objective being captured.

(b) If obstacles such as minefields or deep ditches are found, they must be made intermediate objectives and bridged before any further advance is made.

87. Having decided on the objectives the battalion commander must study how he can deceive and surprise the enemy.

He must make the fullest use of ground to conceal movement and to let the infantry weapons give the greatest possible covering fire. All available dead ground and cover must be used, even if it is under the enemy's defensive fire.

88. Attacks on the enemy's flanks or rear have usually a better chance of success than those from the front. In spite of the principle of all round defence there is a natural tendency for positions to be sited in the first place to guard the front. This is particularly the case with "reverse slope" positions, which are far more vulnerable from the flanks.

Nevertheless all attacks on a locality sited for all round defence must become "frontal" in the last stages. They will therefore require very strong supporting fire to help them at this stage. This support can often only be given by infantry weapons.

The fire plan

89. A fire plan to cover movement is a vital part of any attack. Very often the major part of a fire plan, in so far as artillery, heavy mortar and M.M.Gs. are concerned, will be laid down by the formation commander.

90. (a) The battalion commander must know what the brigade or divisional fire plan is for his own front. He must work out a careful plan to fit in the fire from the weapons at his own disposal. In particular he is responsible for providing the greatest possible close intimate support during the later stages of the attack.

(b) He may order certain companies to give supporting fire, whilst others are detailed as the "main effort" for the assault.

91. (a) Units or sub-units who are ordered to neutralize by fire the locality to be attacked are known as "fire companies" or "fire platoons." Their job is to keep the defenders under heavy fire and to draw the enemy's defensive fire upon themselves whilst the movement of the "main effort" is going on. During the assault the fire of the "fire companies" will be thickened by some fire from the "main effort" companies.

(b) At the same time they must seize every opportunity themselves of edging forward and getting as close to the enemy as possible. They must always be trying to get to positions from which surprise fire from unexpected directions may be brought against the enemy. They are responsible for providing the necessary covering fire for their own movement.

92. Under cover of overwhelming fire from all weapons which the battalion commander can make available, the main effort will be made at the point where tactical success is vital. The companies making the main effort will be clearly detailed by the battalion commander.

Stages of the attack

93. Troops attacking will normally go through some or all of the following stages:—

- (a) Assembly positions, to which the battalion move up during the reconnaissance and order phase.
- (b) Forming up place (F.U.P.), where the battalion shakes out into its formation for the attack.
- (c) The fire fight and assault during which fire superiority over the enemy is won, and assaulting troops move as close to the enemy as possible.
- (d) Close quarter fighting.
- (e) Consolidation, during which units and sub-units prepare to meet counter attack and make the necessary preparations for going on.

94. The move to the assembly position has been dealt with in para. 10. Full use must be made of cover to conceal both movement and assembly.

95. (a) From the F.U.P. the battalion should be able to move straight into the assault. The "main effort" companies will be put into position so that they can easily move off whether the attack is on one ("single axis") or two ("double axis") lines of advance. These must be clearly laid down in orders.
- (b) If the F.U.P. is likely to be under view from the enemy, smoke should be used to hide the movement to it and the forming up. The smoke screen must go on whilst the movement lasts, but it need only be sufficient to produce a haze to cover the movement of troops. The time for it must be given in orders.

96. The fire fight and assault

- (a) The object of the fire fight will be to prevent, by an overwhelming superiority of fire, any attempt by the enemy to interfere with the assault.
- (b) According to the strength or weakness of the enemy's defences it may be necessary to open this fight at varying periods before the assault. But usually the shorter the time before the assault that the covering fire begins, the greater will be the surprise effect.
- (c) Concentrations of artillery and mortar fire should be brought down on the enemy's locality as the assault begins. They should be timed to lift just before the assaulting troops

reach the objective. If possible, arrangements should be made to indicate the end of the concentrations. Coloured smoke is recommended as a signal for this purpose.

- (d) A fire plan must be flexible. If it is part of a barrage covering the front of a division or corps it may be comparatively rigid, but some of the superimposed guns will usually be made available for unforeseen targets. With a quick fire plan arranged to cover a small scale attack it may be possible to make it so flexible, that it can be varied by the F.O.Os. to meet changing situations on the ground.
- (e) At night or in smoke, fog or mist a quick fire plan can be modified by the infantry commander direct, either by the use of wireless or by a signal arranged beforehand. The commander arranging a fire plan must always state definitely in his orders what method is to be adopted.
- (f) As the artillery and mortar fire lifts, the sound of increasing small arms fire should be heard on the battlefield, because all infantry weapons are brought into play to take the assaulting troops on to their objective.
- (g) Orders for the attack may mean that the main effort companies must move to a forward position from which the final assault can be launched. If the ground between that position and the enemy has not been previously reconnoitred, fresh orders will be necessary at that point. These orders will be given by the officer commanding the actual assault.
- (h) If more than one company is in the main effort, the battalion commander should usually direct the assault, having made his fire plan and set it going. He may appoint a "main effort commander" to co-ordinate on the objective and he must give him the necessary communications for control.

97. Close quarter fighting

- (a) The final assault must be made with dash and determination. Infantry once launched into the assault must keep on the move. Once they halt and lie down it may be difficult to start them again in the way intended. This statement does not however mean that assaulting troops should not provide their own covering fire to help on their movement. Timing, to keep pace with the artillery support and to avoid arriving too early and so having to go to ground, must be carefully thought out and checked.
- (b) Since the enemy will always counter attack as soon as possible after our objective has been taken, the assaulting

troops should move through the objectives to positions from which they can protect its occupation by other companies or platoons detailed for the purpose.

- (c) As the early arrival of anti-tank guns is of the greatest importance, the timing of movement from bound to bound will often be controlled by the speed at which these weapons can be brought up.

Consolidation

98. (a) All commanders must have firmly in their minds a determination to get on. When an objective is taken the infantry commanders must at once reorganize:—

(i) To meet counter-attack, which must always be expected at once.

(ii) To prepare for a further advance.

(iii) To check casualties, and supply ammunition so as to be ready for further action.

- (b) Troops to hold the objective by fire, and, in particular, anti-tank guns, will move up at the earliest possible moment. Special detachments of troops will be detailed to mop up any parties of enemy who have been over-run. This is a most important task which must never be forgotten or overlooked.

99. In his orders for the attack the battalion commander should lay down:—

(a) Temporary sectors for which companies will be responsible until a fresh plan can be made on the spot.

(b) Sectors for infantry and artillery anti-tank guns.

(c) Troops for protecting the consolidation, occupying the position, and mopping up.

(d) Arrangements for the supply of ammunition, tools, and other stores, and for their transport.

(e) Arrangements for the move forward of essential vehicles.

100. Attacks on a narrow front will always leave exposed flanks, and a commander must be ready to detail troops to protect them. Carrier-mortar groups (*see* Part V) are very suitable for this purpose.

Orders

101. Warning orders.—*See* para. 12

Unless the warning order is kept short it will not be out in time to be of use. The officers concerned will base their administrative preparations on the information contained in it.

102. **Operation order.**—If the unit is well trained and has a good "drill," operation orders can be given out in a very short time. Tactical terms which have a common meaning for everyone can be used instead of detailed explanations. But a commander must be perfectly sure that everyone understands the order. If the battalion training and drill are not of a high standard the commander must expand his orders accordingly.

103. The following are points that may have to be covered in orders:—

(a) Information about the enemy and our own troops. (*See* para. 13.)

(b) Troops under command or in support for the operation.

(c) Intention. (*See* para. 13 (b)).

(d) Frontages, objectives, and axes of advance, together with any restrictions on the movement of sub-units.

(e) F.U.P.

(f) Start line and time of start.

(g) Troops on the flanks and flank protection.

(h) Details of the fire plan.

(i) Restrictions on the use of smoke.

(j) General scheme for intercommunication, including liaison and points of junction with flank unit.

104. As far as possible all directions for the use of ground, including start lines, objectives, and axes of advance, should be given by features clearly recognizable on the ground. Indication of such features will help to some extent to avoid six figure map references, which always cause delay.

105. Companies and sub-units should be given a general direction of advance, and a compass bearing by which they can check. The axis of advance of one company will always be chosen as the "centre line" or guiding line for the battalion.

106. The battalion commander should lay down whether troops are to form up and halt on the start line, or whether they should time their arrival on it so as to cross it at zero hour. In either event a forming up place, under cover, must be chosen. Whenever possible infantry must be launched into the attack square to their objective.

107. The pace of the advance will vary with the ground but will rarely be more than 100 yds. in two minutes against opposition.

The support company

108. A battalion commander will usually find it best to issue orders to the support platoon commanders himself. The company commander of the support company will listen in to the orders and will supervise their execution, and help in the administrative arrangements for the platoons.

109. The uses of the weapons of the support company are given in detail in the subsequent parts of Infantry Training. The following general principles must be remembered:—

- (a) *Carrier platoon*.—This is primarily a mobile reserve of fire power in the hands of the battalion commander. Carriers cannot be used effectively as armoured or scout cars, or as light tanks. They have considerable fire power which should be used from ground positions where the battalion commander can most effectively influence the battle.
- (b) *Mortar platoon*.—The 3-in. mortar was designed for the intimate support of the leading infantry. It will often be found advisable to place a "section" of two mortars under command of a vanguard company.
The concentration of the fire of two or more mortars during an attack may often prove decisive. For this purpose, they may be organized into "sections" of two mortars which will best be controlled by the mortar officer from one O.P. Fire can then be switched from target to target, as opportunity offers.
- (c) *Anti-tank platoon*.—This is primarily for the immediate anti-tank defence of the battalion as a whole. The battalion commander must do everything he can to make sure that the anti-tank guns are kept well forward in the battle, so that they are available to beat off counter attacks. When the fighting stabilizes, the fire of the infantry anti-tank guns will usually be required to fit into a brigade plan for anti-tank defence.
- (d) *Pioneer assault platoon*.—The offensive role of this platoon must never be overlooked. Its special training in explosives and mine clearance makes it particularly valuable well forward in the battle.

Reserves

110. The battalion commander must always have a reserve ready to hand. It will usually include one or more rifle companies with detachments of the support company. As soon as he commits his reserve into action he must at once start collecting another from companies and platoons no longer so actively engaged in the fighting.

Control

111. The battalion commander will always find it difficult to control his sub-units once they are committed to the attack. Wireless and D.R.s. will be the main means of exercising this control. The battalion commander must be able to control his battalion as a conductor controls his orchestra, bringing one part or another into play to give a harmonious effect to the whole.

112. Every commander, whether of the battalion, company or platoon, must place himself where he can best influence the fighting of his unit. Once the attack is launched his main influence will be the use of his reserves. His position should therefore be far enough forward to enable him to get the earliest possible information about the battle without losing the immediate control of his reserves.

113. The battalion commander should take a lot of trouble to keep his signal officer informed about his intention and particularly about any proposed move or regrouping of troops. The more the signal officer can plan ahead the more effective control is likely to be.

Co-operation between artillery and infantry

114. There are three main rules for co-operation:—

- (a) Artillery must have accurate information about our own troops.
- (b) Artillery must have good observation.
- (c) Artillery must have good communications.

115. Infantry are mainly responsible for ensuring the first of these. In order to do so they must keep the closest touch with the artillery at all times. An R.A. representative should always be with the headquarters of the battalion or company to whom support is being given.

116. Infantry can materially assist in getting good observation for artillery by choosing lines of advance that include good O.P.s. and by giving the necessary protection. Infantry commanders should also realize that invaluable information usually lies ready to their hand at artillery O.P.s.

117. Infantry must be ready at all times to use their own No. 18 sets for communication with an F.O.O., so as to economize in artillery personnel and communications. They will also be prepared to help in carrying artillery wireless sets across country that vehicles cannot tackle.

118. Junior infantry commanders must be prepared to indicate targets to the artillery on their No. 18 sets and to give simple corrections to ranging shots.

Infantry and tank co-operation

119. It is essential that infantry and tank commanders working in co-operation should have a thorough practical knowledge of the teaching laid down in Army Training Instruction No. 2 of 1943.

120. In a combined infantry and tank attack the force is divided into three echelons.

- (a) The assault echelon.
- (b) The support echelon.
- (c) The reserve echelon.

The composition of each will vary according to the nature of the ground and of the enemy position, the minefield situation, and the type and weight of artillery support available.

121. Reconnaissance may not always allow a commander to find out if there are minefields sufficient to stop an attack with tanks in the assault echelon. In many attacks unsuspected minefields will be found, and a fresh decision and a fresh plan for the use of tanks may have to be made.

The assault echelon

122. (a) This will be made up of infantry without tanks when the attack crosses known minefields. The infantry, supported by all available artillery fire and by engineers, must bridge the minefield and make gaps for anti-tank guns and tanks to pass through.
- (b) The echelon might consist of tanks alone only when, because of the kind of fighting or the type of enemy, there are not likely to be mines about. Such occasions may happen in the encounter battle or during the later stages of a successful attack. When tanks are used alone their task is to punch a hole in the enemy position.
- (c) The assault echelon will contain both tanks and infantry when infantry may be required to capture an objective if the tanks are held up by unsuspected obstacles. This will be the most frequent use of the combined arms. Infantry as well as tanks will then get the fullest support from the artillery, which will move at infantry speed. The infantry will also be close to the objective when the artillery lifts. It may mean that the support of the attack by small arms fire will be restricted. On the other hand infantry will be able to take over from the tanks on the objective at the earliest possible moment.
- (d) If a tank is knocked out or is unable to reach the objective and its weapons are intact, it will continue to support the infantry by fire until either the objective has been captured or its ammunition has been used up.

- (e) The assault echelon should move straight forward to the objective, ignoring enemy infantry and machine guns in forward positions, which must be dealt with by the support echelon. The assault echelon will deal with any anti-tank guns that may be found between the start line and the objective.

123. In the encounter battle or when the ground demands it infantry and tanks may have to attack from different directions. The infantry should usually start from nearer to the objective than the tanks. A converging attack may also take place if the enemy has penetrated into a defended area of ours, but it must then be part of a pre-arranged and rehearsed counter-attack.

Action of assault echelon on the objective

124. If tanks alone are used in the assault echelon, they should reach the objective as the artillery concentration lifts. It may be possible for them to move into the concentration to deal with the anti-tank gun crews and put the guns out of action. This will be their preliminary task. The quicker the tanks get on to the guns the better, while the crews are still suffering from the effects of bombardment, and may be caught in their shelters. Tanks will give each other mutual support in this task.

125. Their second and main task is to dominate the objective so as to allow the infantry to get on to it, hold it, and mop it up. The tanks must therefore engage any enemy who may be delaying the advance of the infantry.

Support Echelon

126. (a) The infantry with the support echelon will watch their opportunity to push forward, protected by tanks in that echelon, and to help knock out any anti-tank guns still in action.
- (b) The action of the support echelon will be the same whatever the composition of the assault echelon. It is their task to push forward, mopping up any enemy overrun by the assault echelon, and to consolidate on the objective, if necessary providing a protective screen forward if there is no infantry in the assault echelon for this purpose.
- (c) When infantry tanks are available for co-operation with infantry in an attack, a proportion will almost always be with the support echelon. Such tanks will move behind the supporting infantry ready to move up and deal with any small arms opposition that is holding up the advance. After clearing up such a situation the tanks will again take up their position behind the supporting infantry, where they can best keep watch for unexpected opposition.

127. The infantry carrier platoon can use its mobility to push forward to protect the flanks of the advance or to help hold the objective by fire until the infantry have dealt with enemy weapon slits on it. Both carriers and infantry must feel their way forward, remembering that tanks need their help as soon as possible. Carriers should not be exposed to the danger of close attack by enemy in weapon slits which have not been mopped up.

128. (a) The allotment of tanks must obviously vary in each battle. One squadron of tanks will often be working with a battalion on a frontage of two forward companies. Liaison between the tank squadron commander and the infantry company commander has always proved difficult. The solution must lie in a well-thought-out plan for liaison to meet the actual situation.

(b) The tank squadron will be handled by its commander according to the ground on the whole of his front. Infantry companies must not expect to find their supporting tanks always beside them, and liaison and wireless communication are doubly important.

(c) When one squadron of tanks is working with a battalion of infantry, a suggested means of liaison is:—

(i) Battalion commander with squadron commander.

(ii) Forward company commanders with squadron second in command and reconnaissance officer.

(iii) Platoon commander with troop leaders.

129. Paras. 119-128 refer to infantry tanks operating with infantry divisions. On occasions cruiser tanks will operate with infantry divisions. Owing to their lesser armour, their employment, especially in the deliberate attack, will be largely confined to fire support, to dealing with any enemy attempt at interference, and to counter-attack.

SECTION 11.—DEFENCE

Outline of defence

130. The principles of defence are dealt with in M.T.P. No. 3, 1943.

131. (a) Experience in fighting has proved that any attempt at defence in line will not stand up against the weight of a modern attack. Brigade frontages may vary from one or two thousand yards up to 10 or 12 miles.

(b) The commander of any defensive operation must therefore be expert at choosing the ground that controls the area for which he is responsible. He must plan to hold that ground at all costs, but he must also be able to counter-attack with a strong mobile force against any enemy who may penetrate into his position.

(c) The defence must be made up of defended localities manned by a brigade, or even by a battalion, with supporting arms. These localities must control the most important ways through the area. They must be organized to resist strong enemy attacks from any side, and the garrisons must be capable of striking at the enemy whenever a good opportunity offers.

132. Penetration by the enemy into a defended area must be accepted as normal. The plan of the defence must aim at leading the enemy into areas where he can most effectively be destroyed.

133. Defended localities in tank country will be built up on the plan for anti-tank defence. In making any plan involving defence the commander must have his anti-tank plan clear in his head from the very start.

134. Commanders must remember that, even when the force as a whole is attacking, there will always be periods of defence during pauses in the advance. The plan for these requires just as much careful thought as when the whole force is on the defensive.

Principles of defence

135. **Fire.**—The fire of all available weapons must be used to harass the enemy, to drive him into areas where he can be destroyed, and to prevent him from approaching defended localities. The plan of defence will therefore be in terms of fire rather than of men.

136. **Surprise.**—Defence depends chiefly on concealment to surprise the enemy. This factor must be given full weight in the conflict between the requirements for concealment and the desire for observation. The proper use of reverse slope positions and the holding of fire until the crucial moment need careful study.

137. **Depth.**—As penetration of a defended area is accepted depth in defence is necessary to prevent the enemy taking advantage of such penetration.

138. **Information.**—The defending commander must have early and up-to-date information about what the enemy is doing. Continual reconnaissance and active patrolling are necessary. The enemy must be kept under constant observation by forward infantry posts and by artillery and infantry intelligence O.Ps. Small pieces of information, which seem unimportant in themselves, may give higher commanders the clue to the enemy's intentions. All items of intelligence must be passed back at once.

139. **Determination.**—In the end it is the determination of the individual soldier that will decide the fight. All round defence must be accepted literally and acted upon as long as there are two men left, who must if necessary fight back to back.

140. **Mobility.**—Penetration must be dealt with before it becomes dangerous. In every defended locality part of the garrison will be held ready to move out at short notice to destroy the enemy.

Organization of defence

141. The occupation of a defended area will usually be protected by covering troops detailed by the divisional or higher commander, usually from the mobile troops at his disposal.

142. Whether covering troops are out or not a defended area will be protected by outposts or battle patrols. These are described in Sec. 12.

143. The main defended localities to be prepared will be laid down by the divisional or higher commander. In order to give depth to the position it is probable that artillery, engineers, and other divisional troops will have to occupy defended localities in the back areas of the defence.

144. In European warfare an isolated battalion locality may be too weak to remain intact for a long period. It will therefore be quite usual for the defence to be based on brigade localities, arranged if possible to support each other by small arms and anti-tank gun fire. A defended locality of whatever size will be built up on a series of smaller defended localities occupied by units and sub-units.

Obstacles

145. Obstacles in themselves offer no particular difficulty to a determined enemy. It is the development and use of the obstacles by a determined defending force that make them effective.

146. Obstacles may be natural or artificial. The best possible use of them must be made to turn the enemy penetration into areas where he will come under the full force of the fire of the defence and may then be destroyed by counter-attack.

147. Obstacles must be so chosen and sited or used that they do not interfere with the free movement of our own troops detailed for counter-attack.

148. They will be used as a means of diverting and disorganizing an enemy's thrusts rather than of stopping them.

149. No obstacle will be effective unless it is adequately covered by fire.

150. Minefields are the quickest form of artificial obstacle. They have the advantage that they can be laid where they are wanted to fit in with other defences. They can be rapidly set up, and can often be concealed from the enemy and so be used as a means of surprise.

151. Dummy minefields make difficulties for the enemy even though they will not stop him. He has always to treat them with respect until he has found out what they are. Dummy minefields are therefore best laid inside our own positions, out of the way of enemy patrols.

152. Mines will be used:—

- (a) defensively for the protection of localities against assault;
- (b) tactically to divert and disorganize enemy penetration. They will usually be laid on a divisional plan, linked with the anti-tank lay-out and the counter-attack plan.

153. All arms must be prepared to lay minefields. But the laying must be firmly controlled and must immediately be charted and marked. Copies of the charts must be handed to the next higher headquarters and to incoming units.

154. Infantry in defence

In addition to holding localities the tasks of infantry in defence are:—

- (a) Provision of outposts or battle patrols (*see* Sec. 12).
- (b) Provision of reconnaissance and fighting patrols, and patrolling by night and in fog between localities (*see* Sec. 14).
- (c) The destruction of tanks that may have penetrated the position.
- (d) Counter-attack, either alone or in co-operation with other arms.

The battalion in defence

155. (a) In defence a battalion commander will be told what part of the brigade locality is his responsibility, what ground he is to hold, and for which part of the anti-tank defence he is responsible.

- (b) If the frontage is too wide to allow brigade localities he must still expect to be given the position of the locality that he is to hold within fairly definite limits. The formation commander will dictate the tactical features that are to be held.

156. The battalion commander must also know in addition to the normal information about the enemy and his own troops:—

- (a) The intention of his superior commander.
- (b) The area allotted to his battalion.
- (c) The time by which the position is to be occupied.
- (d) Whether the outposts or battle patrols to protect the occupation of the position are to be provided by his own battalion.

- (e) The outpost position being held and the degree of resistance being offered there.
- (f) The allotment of supporting fire by artillery or the weapons of the brigade support group, and the extent to which any of these are under his orders.
- (g) The outline plan of anti-tank defence.
- (h) Digging policy and the allotment of mines, tools, and wire.

157. In reconnoitring for his positions the battalion commander must think in terms of:—

- (a) His major anti-tank weapons and their allotment to the tasks given to him.
- (b) The brigade medium machine gun fire plan and any particular adjustments necessary to secure positions from which this plan can be carried out.
- (c) His carrier platoon and allotment of tasks, which will help him to an economical use of his companies.

158. He must study the ground from the enemy's point of view, looking for:—

- (a) Concealed approaches which the enemy may use and from what ground his battalion can cover them.
- (b) Lines suitable for enemy attack.
- (c) Areas suitable for counter-attack.

159. Recent operations have emphasized the great advantage given to the defence by reverse slope positions. These allow proper concealment from observation and so from fire. Reserves can be moved at will behind them, and the defenders can surprise the enemy.

160. Every use must be made of minor tactical features and accidents of ground to give the infantry the advantage of reverse slope positions. The forward defences, making use of these, should give protection to the commanding ground which is wanted for observation.

161. In holding reverse slope positions troops should avoid the crests, which are always subject to enemy fire. They must prevent the enemy taking these crests by carefully planned cross fire from anti-tank guns and medium and light machine guns in positions which give them cover to their own front. Reverse slope positions should be well down from the crest line, and must be protected from immediate surprise by O.P.s. and listening posts.

162. The ground between localities must be under continual observation by O.P.s., patrols, and listening posts, so that no penetration can take place without the defence knowing about it.

163. The fire of all arms must be withheld until the enemy are in the position most favourable to their destruction. Any tendency for individuals or sub-units to fire before this moment arrives must be prevented by careful planning, clear orders, and strict discipline.

164. The battalion commander's plan

In his plan of defence the battalion commander must consider:—

- (a) The situation on the flanks and the effect of this on the battalion disposition.
- (b) The outline of the anti-tank defence plan, including mines.
- (c) The fire plan, to include the fire of all supporting weapons.
- (d) The localities to be held, their allotment to companies, and the area of responsibility for each company.
- (e) The size and position of his reserve, with the probable direction of any counter-attacks likely to be required.
- (f) Priority of work, and allotment of tools, materials, and working parties.
- (g) Ammunition supply and the building up of reserves inside localities.
- (h) Medical arrangements.
- (i) Orders regarding food, water, sanitation, greatcoats, and transport.
- (j) Light signals.
- (k) Methods of liaison with artillery and flanking units.
- (l) Patrol policy.

Defences

165. Infantry are responsible for siting, organizing, and making their own defences. Materials and minor help will be supplied by the R.E., who, on such occasions, work under the command or in support of the infantry commander.

166. Companies have their own tools, but additional stores and tools, particularly cutting tools, will be required. These should be foreseen by brigade and battalion commanders so that they will be available at short notice.

167. In every position the digging of shelter slits and weapon pits to provide cover for every man in the battalion will be the automatic first task of the troops. Commanders of all grades must make the best use of the available time to ensure that these pits are so sited that sub-units can carry out their allotted fire task from them. The next step will be the digging of alternative slits and emplacements.

168. The extent to which the defences of any locality are to be improved and increased will be laid down by the higher commander. At first, concealment will be a matter of good discipline and careful camouflage. If the position is held for long these precautions will be helped out by deception.

Deception

169. Concealment in defence helps to evade accurate air attack, and denies to the enemy detailed knowledge necessary to his ground attack. The enemy will often be able to foresee where defences are likely to be. If he is denied information by good concealment he will study the position from the ground and by photographic reconnaissance from the air, which concealment alone can rarely withstand.

170. The aim of tactical camouflage is not merely to escape detection by concealment, but also to give the enemy false ideas and to stop further searching. In his appreciation the commander must consider what the enemy is likely to know or foresee, and then work out a false picture to convey to him. Time will always limit the amount of false work that can be done.

171. Dummy localities in the forward area will be ordered by the higher commander as part of a definite plan of deception. Concealment on a flank where enemy penetration is to be encouraged should be complete, and a controlled display of false strength should be arranged in areas in which the enemy is not wanted.

172. A battalion will build and keep up its own dummy defences. A real minefield should be concealed on rough ground keeping closely to the ground pattern. When time permits, it should be laid by night, on foot, without the use of vehicles. The anti-tank guns covering it must be inside concealed infantry localities. After the enemy attack has come in attention can be drawn away from real positions by dummy flashes and movement.

173. A dummy minefield should have a proportion of live mines along the enemy edge. Reasonable attention should be drawn to it by indifferent siting and moderately concealed wire. The apparent strength of anti-tank guns covering it may be increased by dummy positions. Reconnoitring enemy tanks should be engaged at long range by the real guns present.

174. Dummy positions should not be in a proportion of more than half the real positions. The intention should be to give a picture of weakness rather than strength. Dummy positions should be sited to keep the real positions outside the zone of air attack. Platoons and patrols in the outpost zone may build dummy positions if approved by

the commander detailing troops for these protective duties. Otherwise a dummy locality will normally be of company size.

175. If the dummy position is to appear real and serve its purpose the following points must be watched:—

- (a) The dummy must be reconnoitred either before or at the same time as the real one.
- (b) Marks on the ground must appear at a reasonable rate so that they do not arouse suspicion by their suddenness.
- (c) Every detail of the real counterpart need not be repeated. A few indications will suggest the larger work.
- (d) There must be real signs of life, and men must be detailed to live in the dummies.

The best dummy is one which is partly or wholly occupied and a plan for withdrawal, which aims at maintaining a lively activity until the enemy's reconnaissance ends, should be rehearsed.

176. Dummy weapon pits should be indifferently sited, with one or two well dug for occupation, and some bad tracking between posts. Dummy pits need only be shallow, with spoil brought from real positions to make them more conspicuous.

177. As the enemy's knowledge of our methods of deception increases his observation will become more keen. The tactics of deception and the detailed construction of dummy posts must keep that one step ahead which is essential to success.

The fire plan

- 178. (a) The fire of all weapons will be combined so as to have the maximum fire effect on all likely approaches or assembly areas which the enemy may use, subject to the need for gaining surprise by withholding fire until the latest possible moment.
- (b) In addition, the fire plan must be arranged to destroy the enemy when he has been shepherded into the "killing ground" and to support our own counter-attacks.
- (c) It must be realized that, given proper support, it is comparatively easy to take any position. The difficulty is to hold it. In order to prevent the enemy from doing so it should be a normal part of the commander's fire plan to bring fire down on any of his own positions should the enemy take them. This result cannot be guaranteed without registration and practice, and commanders must arrange to clear localities for these purposes.

179. (a) Artillery defensive fire tasks for hastily prepared positions will be chosen in the first instance by battalion commanders. As soon as time allows these tasks will be sorted out and co-ordinated by brigade and divisional commanders, until the whole defensive fire plan is a divisional one.

(b) Brigade and battalion commanders will use their own supporting weapons to cover any vital gaps in the divisional fire plan.

Counter-attack

180. If the enemy is successful anywhere, the sooner he can be counter-attacked the easier it will be to catch him disorganized and unprepared. The commander of any locality, however small, must have a plan for an immediate counter-attack by the troops at his disposal, should the enemy get inside his locality.

181. This plan must not be haphazard. It must be carefully worked out and rehearsed in every particular for every situation. The supporting fire must be planned and known and signals for it arranged. It is essential that every individual should know and should have rehearsed his part in it.

182. In local counter-attacks tanks are likely to be decisive. They will be supported by infantry from the localities from which the tanks come. Such counter-attacks will be part of the brigade or divisional plan, and must equally be worked out and rehearsed in detail.

183. For counter-attacks against enemy tanks the best results will come from a commander using his own tanks in close co-operation with his anti-tank guns.

SECTION 12.—OUTPOSTS AND BATTLE PATROLS

Introduction

184. The general tactical policy on the subject of outposts and battle patrols is contained in M.T.P. No.3.

Every force must provide for its own protection. Outposts and patrols are protective detachments, and the factors governing their provision must be considered in relation to the overriding principle that will always influence the commander when deciding whether or not to form a detachment—the principle of economy of force.

185. Before considering outposts and battle patrols separately, it is necessary to understand the circumstances in which it is possible to establish an outpost line.

When a defended area is prepared out of contact with the enemy, no difficulty arises. In practice, however, a defensive position is seldom selected at leisure. It is usually taken up as the last stage of an attack or an advance when the leading troops are already in contact with the enemy. The choice of defended localities is then limited, and leading troops simply dig in wherever they find themselves, making the best use of the ground they are on. If no man's land is narrow, it will not be possible to push outposts forward.

186. The forward defended localities thus formed are improved and obstacles constructed, the aim being to organize the defended area on the lines set out in Sec. 11. If the commander's plan is one which involves protracted defence, a continuous line of obstacles is formed in front of the defended localities, and further defences may be constructed in depth. In this event the troops in the original forward positions may be thinned out until this line is held by the minimum number of men with a high proportion of automatic and anti-tank weapons.

187. This line will then become the outpost line. It will, unless the commander orders the outposts to withdraw, be held by its garrison to the last man and the last round, in order to break up the enemy's attack and to assist his defeat and destruction by the troops in the main defended area. The commander may, however, require the outposts only to delay the enemy's attack until he has had time to complete his measures of defence, including the positioning of reserves, after which he would order their withdrawal.

Outposts

188. The commander of a defended area (usually a corps or divisional commander) will lay down whether a definite outpost line is to be occupied or not. The decision will depend on:—

- (a) *Availability of troops.*—If the formation occupying the defended area has to cover an extended frontage, it may not be possible to spare troops to furnish outposts without unduly weakening the main position.
- (b) *The existence or provision of an obstacle, natural or artificial.*—An outpost line will not be occupied without such an obstacle, since outpost troops will be relatively thin on the ground and yet will be required to offer a considerable degree of resistance.
- (c) *Ground.*—An outpost line should be at such a distance ahead of the main defended area that the enemy cannot gain ground observation over the latter until he has captured the former. When, therefore, the enemy already holds dominating ground that permits such observation, it will be unusual to establish an outpost line.

189. The commander of the defended area will lay down the general line to be held by, and the proportion of troops to be allotted as, outposts. He will also lay down boundaries between which his subordinate defended area (or locality) commanders will be responsible for furnishing the outpost troops.

190. Outposts will withdraw only under the orders of the commander of the defended area concerned. Arrangements and routes for withdrawal must be known to everyone concerned beforehand.

191. The infantry for outposts will normally be provided by detailing complete sub-units from designated defended localities. This system will cause the minimum interference with the preparation of the brigade defences and the minimum dislocation to the defensive plan in the event of the outposts being overrun. The commander of a battalion finding outpost troops should bear in mind, when preparing the plan of defence for his locality, that the commander of the defended area may not see fit to order the withdrawal of outposts.

192. Once the outpost line is established, outpost sub-units should be controlled through the battalions providing them, but it will be normal for one officer detailed by the brigade or divisional commander to co-ordinate the dispositions of sub-units, to arrange mutual support on sub-unit flanks, and to be responsible for the details of artillery support.

193. The task of outposts, who will be so disposed as to deny the enemy close reconnaissance of the main defended area, will be to delay the enemy and force him to mount an attack on the outpost line, thus acting as a cushion in front of the main defences. In order to execute this task, the outposts will gain the maximum information of the strength and direction of the enemy advance, and this information will be passed back in the normal way to battalion headquarters. In addition, arrangements should be made for early information direct from outpost sub-units to brigade headquarters, by at least establishing a forward report centre in the outpost line with wireless communication to brigade headquarters. Resources may even permit the allotment by brigade of a wireless set to each outpost sub-unit, in which event the forward report centre will be unnecessary and the passage of information will be proportionately speeded up.

194. The infantry of the outposts must be provided with anti-tank guns, and, if possible, M.M.G. support also. F.O.Os. with the outposts will control artillery support, most of which will be given by guns in the main defended area, though it may be necessary for a proportion of the artillery to occupy temporary forward positions. The maximum artillery support will be afforded to the outposts, but they will not normally include tanks.

195. By day, the outpost battle must be fought by sub-unit commanders independently, though they will of course afford each other the maximum mutual support. By night outpost commanders will usually put out standing patrols on the most probable enemy lines of approach. But in order to prevent local penetration assistance should be given from the main defended area by the provision of fighting and reconnaissance patrols covering the area between the outposts and the main defences, and traversing the gaps between outposts.

196. Outpost commanders must be fed with all available information about the enemy. If covering troops are out in front, their plan for withdrawal must be known to outpost commanders, who will be kept continuously informed of their movements.

Battle patrols

197. If no suitable obstacle exists and resources do not permit the construction of an adequate artificial obstacle, or if sufficient troops are not available to enable an outpost line to be established, no attempt will be made to provide a cushion in front of the main defences.

198. Instead, battle patrols will be furnished from defended localities. Their tasks will be to obtain information of the strength and direction of impending enemy attack, and to deny to the enemy unimpeded approach to the localities from which they are furnished.

199. Battle patrols will consist of detachments of infantry, including carriers and mortars. They may be accompanied by F.O.Os. controlling supporting fire as for outposts.

200. The role of battle patrols is essentially mobile, but each patrol will normally, wherever it is settled temporarily, establish for itself a firm base, secure against surprise attack by small enemy detachments from any direction. Since the task of the battle patrol is to gain information, facilities for observation over likely lines of enemy approach will be the primary consideration in the selection of such positions, from which small reconnaissance patrols will be sent out as necessary.

201. To fulfil their task of gaining information, battle patrols will be prepared to fight enemy reconnaissance troops. They will, however, as far as possible avoid becoming seriously involved with other enemy troops, though aggressive action will often be the best means of assuring their own security shortly before and during withdrawal.

202. Each battle patrol will be withdrawn, independently of others, under the orders of, or under circumstances defined by, the

locality commander providing it. Owing to the fact that observation is an essential in the position of each battle patrol, the withdrawal of one will not prejudice the security of the others. The arrangements and route for withdrawal of each battle patrol must be known to all concerned beforehand.

203. Battle patrols must be given all available information about the enemy, and must know the movements, and plan for withdrawal, of any covering troops that may have been provided.

SECTION 13.—WITHDRAWAL

System of withdrawal

204. When a force withdraws, the object of the commander will be to occupy without interference a position from which he can stop the enemy finally, and can organize a renewed attack when the time comes for him to do so.

205. He will withdraw under cover of a series of defended positions on each of which he will fight to delay the enemy and to make him waste his strength. These positions will be occupied by rearguards, varying in number according to the frontage on which the withdrawal is taking place.

206. Infantry will be the basis of all rearguards, but, in order to prevent the use of unnecessarily large numbers, they will be strongly supported by artillery, engineers, and by the brigade support group.

207. If the enemy is not following up the withdrawal closely a screen of mobile troops may be left out to prevent him making close contact with the rearguards too quickly.

208. The stages of a withdrawal will be:—

- (a) Reconnaissance and preparation of routes back.
- (b) Occupation of an intermediate position, if enemy pressure makes it necessary.
- (c) Thinning out forward positions.
- (d) Abandonment of forward positions.
- (e) Occupation of a position in rear.
- (f) Abandonment of intermediate positions.

Rearguards

209. Rearguards will be ready to leap-frog back from one position to another, and to delay the enemy on each. As they will be comparatively weak for their frontage they must rely a good deal on surprise and concealment for their effect.

210. Having once engaged and delayed the enemy on one position the main guard will be ready to go back to its next position which should have been previously reconnoitred by representatives from the battalion, the companies, and supporting arms.

211. Rear parties will remain on each position to cover the withdrawal of the main guard and to hold off the enemy until the next position is secure. These rear parties will be made up in much the same way as patrols in an outpost zone and their method of fighting, up to the time of withdrawal, will be much the same.

212. The withdrawal of the main guard should be done at night. Rear parties may have to wait until daylight, but it is better that they should withdraw just before daylight if possible. Rear parties should move in transport—the main guard should be provided with transport for its marching troops if possible.

The battalion in withdrawal

213. A battalion commander detailed to provide a rearguard must know:—

- (a) all available information about the enemy and our own troops;
- (b) the successive positions to be occupied, and for how long they are to be held;
- (c) the other arms allotted to support him.

214. (a) The withdrawal of rearguards is controlled by the formation commander responsible for the sector on which the force is withdrawing. He will lay down the successive positions which are to be held.

- (b) He can control the time of withdrawal by laying down
 - (i) the time up till which the enemy is to be prevented from occupying a position; and in certain cases,
 - (ii) the time before which our own troops must not start to withdraw.

215. The battalion commander may have to decide on intermediate positions which he must hold to ensure the safety of his own troops.

216. Since the enemy may use mobile and airborne troops in his attempt to interfere with a withdrawal, a rearguard must be prepared to find flank protection and even an advanced guard as well as rear parties.

Selection of a rearguard position

217. In choosing a rearguard position a battalion commander must try to show as strong a front as possible and to make sure of good covered lines of withdrawal. Since the position is not to be held

in great strength or for a long time, depth is not so important. Depth is actually given by the succession of positions to be held.

218. Localities in the forward positions will be organized on the same lines as localities in defence, though the defences will not be so strongly prepared. The important point is that they should cover main lines of approach.

219. The enemy may try to use his tanks boldly. Concealment and the use of obstacles must be studied carefully. Anti-tank guns should be sited so that they can open fire at longer ranges than those normal to defence.

220. Generally speaking the best rearguard positions are those from which use can be made of the longer ranges of all weapons so that the enemy can be made to deploy as early as possible. Medium machine guns will be of especial use for this purpose.

Occupation of successive positions

221. Positions should be far enough apart to force the enemy to move his artillery for each successive attack. With a force of all arms positions should not usually be less than two miles apart.

222. While one position is being occupied reconnaissance parties from each rifle company and from the platoons of the support company should be sent back, generally under the second in command of the battalion, to prepare the next. Representatives of supporting arms should accompany them. These parties must be prepared to guide the battalion into its new positions when it withdraws.

223. If possible, the main guard, or at least a part of it, should be sent back to occupy the next position before the previous one is abandoned. The result will be that there will be a firm base behind which rear parties can reorganize.

Action of rear parties

224. The company or companies providing rear parties will be given orders regarding the time that they are to be clear of their position. This will depend on:—

- (a) the orders given to the battalion commander,
- (b) the time required to clear the main guard,
- (c) the time required to finish any demolitions.

225. (a) The commander of a rear party should start to thin out troops from the position, so that at the last moment he has only a few left to clear. He must at the same time be careful not to leave himself so short of troops under his own hand that he cannot check a determined rush by the enemy.

- (b) He must make the fullest use of any mobility. Carriers and carrier-mortar groups are therefore particularly useful for rear parties.
- (c) He should have a F.O.O. so that he can get quick support from artillery firing at long range. He should also have, when possible, supporting fire from medium machine guns on intermediate positions.
- (d) The rear party commander must be ready to occupy intermediate positions with his own troops to cover his withdrawal. Such positions will only be held long enough to give the last troops, whose retirement will usually be at speed, time to collect and reorganize before continuing the withdrawal. Close fighting should be avoided.
- (e) A rear party should always be given a rendezvous under cover of other troops where it can collect and reorganize.
- (f) The enemy must be kept in ignorance of the start of the withdrawal as long as possible. Success will depend upon the care with which unobserved withdrawal from the position has been prepared.

Counter-attack

226. A rearguard may have to counter-attack:—

- (a) to cover a withdrawal so as to create a favourable opportunity for the rearguard to slip away;
- (b) to delay the enemy by taking advantage of an opportunity to strike at him and impose caution;
- (c) to free a part of the rearguard which has become too closely involved.

227. The objective of such counter-attacks must be limited, and the attack should be supported by all the fire available.

228. A battalion commander should make use of deception, skilfully laid ambushes, mines, and minor demolitions, in fighting a rearguard action. In fact, anything that may help to surprise the enemy, to delay him, or to make him cautious, is of value.

Orders

229. Battalion orders should include:—

- (a) Clear information about the general plan of withdrawal, so that every sub-unit commander understands what his part in that plan is.
- (b) A clear statement, by reference to recognizable ground features, of the ground to be held and of the next position to be occupied.

- (c) Any intermediate positions to be held and the troops who are to occupy them.
- (d) The composition and task of the rear parties.
- (e) The time at which "thinning out" may start.
- (f) The time EITHER
 - (i) before which the enemy are not to be allowed on to a position
 - OR
 - (ii) by which a position is to be clear of our own troops
 - OR
 - (iii) by which all our own troops are to be behind a given line in rear of the position.
- (g) A rendezvous for rear parties.
- (h) The fire plan, and the time of withdrawal of supporting arms.
- (i) Lines of withdrawal.
- (j) Definite orders about the blowing of any demolitions as part of the plan of withdrawal.

230. Battalion headquarters should be behind the position next for occupation. The battalion commander will, however, often remain forward himself until the actual withdrawal is obviously going smoothly.

231. Battalion orders should not cover more than the withdrawal from one position to another.

Administration

232. Careful administrative arrangements are absolutely vital to success in withdrawal. The battalion commander must always give those responsible for administration the earliest possible information so that they can get on with the job.

233. All transport which is not actually wanted for the fighting must be cleared well before the withdrawal begins.

SECTION 14.—PATROLLING

234. Patrolling has become of increasing importance in all operations. Every battalion commander must always be on the look out to see that he does not miss any opportunity for the use of patrols.

235. Patrols may be:—

- (a) Reconnaissance patrols (including patrols for liaison).
- (b) Fighting patrols.

Reconnaissance patrols and liaison patrols are very similar, the object of the former being to get information about the enemy and of the latter about our own troops, either forward or to a flank.

236. Liaison patrols will be automatic on the part of all infantry units in an area of operations.

237. (a) Liaison and reconnaissance patrols will usually consist of an officer and from three to five men.

(b) Fighting patrols will be not less than one officer and 20 men, and may be as large as a company.

238. Reconnaissance and fighting patrols must be prepared to go out and be independent for two or three days if conditions allow. Special attention must therefore be paid to planning their administration and communications. They must travel light.

239. The following rules will be observed in ordering reconnaissance and fighting patrols:—

- (a) The general policy will be laid down by the corps or divisional commander, who may order specific patrols.
- (b) The main authority for executive orders on patrols will usually be the brigade commander. A suggested *pro forma* for the issue of such orders is given on page 52.
- (c) Orders for night patrols should reach the unit by 0900 hrs. on the morning before the patrol has to operate, so that it can study the ground by daylight.
- (d) Brigade commanders will lay down patrol boundaries between units, and a forward battalion patrol line, within which a battalion can order patrols for its own local protection without reference to brigade. Patrols forward of this line must be authorized by the brigade commander, who will warn all units likely to be affected.
- (e) The object of every patrol must be clearly stated and known to all members of the patrol. For reconnaissance patrols a simple direct question will usually be best.
- (f) Every patrol will have a carefully chosen "escape man" or body of men, who must at all costs get back if the patrol is surprised or ambushed. A patrol which just disappears is a sign of bad battalion arrangements.

240. Fighting patrols may require fire cover from artillery, mortars, and medium machine guns. Sometimes a strong advanced base may have to be set up from which the patrol can work, and from which the necessary cover can be given.

PATROL PRO FORMA

PATROLS FOR X INF. BDE. PERIOD 6/7 JUN. SECRET

	"A" Bn.	"B" Bn.	"C" Bn.
1. NATURE.....	1. Recce.	1.	1. Fighting.
2. OBJECT.....	2. Determine if enemy occupy fm. 432109.	2.	2. Clear gap in enemy minefield area 2345.
3. TASKS.....	3. (a) Observe from area pt. 157. (b) If no enemy seen, fm. will be searched.	3.	3. (a) Clear track from X-tracks 231456-rd. and track junc. 229450. (b) Determine if X rds. 234567 is mined.
4. TIME (a) OUT.... (b) IN.....	4. (a) 2200 hrs. 6 Jun. (b) By 2300 hrs. 7 Jun.	4. (a) NIL (b)	4. (a) 1930 hrs. 6 Jun. (b) 0300 hrs. 7 Jun.
5. ROUTE (a) OUT.. (b) IN	5. (a) Not within 1,000 yds. of main rd. TUNIS-MEDJEZ-EL-BAB. (b) As for route out.	5. (a) (b)	5. (a) Rd. and Track junc. 2345 thence S.W. along track. (b) Return via rd. and track junc. 2246.
6. ADDITIONAL Sp. or Tps.	6. NIL.	6.	6. One sub-sec. X Fd. Coy. F.O.O. Y. Fd. Regt. with one bty. on call.
7. SPECIAL REMARKS	7. NIL.	7. Arty. are harassing in area 2345 from 0200-0400 hrs. 7 Jun.	7. Enemy interference will be resisted until both tasks are completed.
8. RESULTS RE- QUIRED AT THIS H.Q. BY:—	8. 0200 hrs. 8 Jun.	8. NIL.	8. 0500 hrs. 7 Jun.

TIME OF SIGNATURE—1430 hrs.
DATE —6 Jun. 43.

APPENDIX "A"

REPORTS

Maj.
B.M. X. Inf. Bde.

1. **Situation reports.**—When the battalion is fighting, a short report should be sent by companies to battalion headquarters as often as possible giving the situation on their front and their intentions. C.S.Ms. will be responsible.

This report will be given in a standard form:—

- Enemy situation and action and casualties inflicted on him.
- Company situation and action, and of other own troops in the neighbourhood, and casualties suffered.
- Company commander's immediate intention and proposed method of carrying it out.

(d) **Administration.**—Own requirements of water, rations, ammunition, petrol, tools, explosives, and other stores.

(e) **Intercommunication.**—Own H.Q. location and proposed moves, and means of communication with own headquarters and neighbouring headquarters.

2. **Hostile bombing and shelling reports.**—The following letter code will be used for shelling or bombing reports. The message will be preceded by the code word BOMREP in the case of bombing reports and SHELREP in the case of shelling reports.

All incidents of bombing and shelling must be reported at once in the following manner:—

- Time from.
- Time to.
- Map reference of observer.
- Area being shelled or bombed.
- Number and nature of guns or aircraft.
- Number and nature of shells or bombs.
- Damage done.
- Bearing to flash or sound (for shelling only).

Example of a bombing report:—BOMREP A 1930 B 1940 C 654123 D Village 702153 E 10 Ju. 87 F 20X50 lb. G Heavy; on fire.

3. Air intelligence

(a) Air intelligence which should be forwarded in situation reports includes:—

- Particulars of enemy air raids, i.e. tactics employed, numbers of and nature of bombs dropped, size of craters, location of any "duds."
- Signals made by enemy aircraft.
- Spray attacks, tactics employed, type of aircraft used (if known), nature of spray.

(b) The following should be reported immediately:—

- Map reference and description of enemy aircraft crashing inside our own lines. A list of equipment salvaged and action taken about enemy pilots and airmen should be given.
- Casualties to our own or allied aircraft. If the aircraft falls in our own lines, the senior officer on the spot will help the crew and mount a guard on the aircraft with orders to allow no one but R.A.F. (or allied air force) personnel to approach it.

(c) The following information about enemy parachute troops will be reported immediately:—

- (i) Number of troop carriers used.
- (ii) Number of troops dropped.
- (iii) Direction of flight.
- (iv) Time and place of descent.
- (v) Action taken or proposed by own troops.

4. **Mines and demolitions.**—A detailed record will be kept of all our own minefields, booby traps and demolitions both actual and planned. (*See Infantry Training, Part VII, The Pioneer Platoon*).*

* In preparation.

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