CHAPTER VI

TACTICAL ADMINISTRATION

Section 1. Administration in the Attack.

In previous chapters the broad principles governing movement and maintenance have been dealt with primarily in their strategical aspects, and in their application to the lines of communication of an army in the field. In the present chapter the tactical aspect of military administration will be considered in its application to the troops in contact with the enemy, and when engaged in battle.

We will take first the question of administrative preparations for an attack. These can best be considered in four stages:—

- (a) Reconnaissance;
- (b) The formation of the administrative plan;
- (c) The detailed preparation prior to the attack;
- (d) The maintenance of administrative services during and subsequent to the actual attack.

As regards the first of these, reconnaissance is every bit as essential in the case of administrative preparations as it is for tactical purposes; with this difference only, that the administrative reconnaissance must cover much more ground. The administrative officer requires to see not only the ground on the front of attack and as much of the ground in the possession of the enemy, over which the attack is to go, as the tactical situation admits, but he must also reconnoitre the back areas behind the actual front of attack over which the administrative services will be functioning.

This reconnaissance can conveniently be divided into two parts: a general reconnaissance of the whole area by the senior administrative officer concerned; and a

detailed reconnaissance for special purposes made by subordinate officers under the direction of their immediate chief. Thus, if we take the case of a division for purposes of example, the A.A. & Q.M.G. would carry out the general reconnaissance of the whole area from the front held by our troops back to a depth of, say, ten thousand yards, and he would include a study of as much of the ground in possession of the enemy as it was possible to see from one or two selected observation posts. In this reconnaissance the A.A. & Q.M.G. would note particularly the general condition of the roads, and their suitability for use by horsed and mechanical transport, their width, surface, gradients and to what extent they were screened from observation by the enemy from the ground and from the air. He would note the nature and type of villages and buildings, and form an opinion as to the accommodation possibilities of them. He would look for suitable parking places for mechanical transport, general areas suitable for wagon lines and transport of all kinds, bearing always in mind the question of cover from air observation.

The water supply of the area for man and beast would command his particular attention, suitable sites for water points, the use of which would not impede traffic, might be selected. Localities for dumping ammunition, supplies, engineer stores and water would be looked for, both with reference to the attack in question, and also with regard to a subsequent advance.

Traffic control problems would also need consideration with special regard to dealing with civilian population and refugees should this question arise.

Medical and veterinary arrangements would likewise be considered, as the A.A. & Q.M.G. must be in a position to decide in the best interests of everyone, between the possibly conflicting requirements of all the services represented in the division.

The very extent of this reconnaissance in conjunction with the time factor precludes the possibility of detailed work at this stage, but for efficient co-ordination it is

essential for the A.A. & Q.M.G. to have this picture of the whole area clear in his own mind.

For the details he can use his D.A.Q.M.G. and D.A.A.G., to investigate and settle what is necessary, to locate exactly the sites for dumps for various administrative requirements, to do the detailed allotment of available accommodation, etc., in conjunction with the units or individuals primarily concerned.

The method of making these reconnaissances is exactly the same as in any other form of reconnaissance. First of all, be quite clear in your own mind what you want to see, and from a study of the map know where you expect to find it, and then go and look for it.

This reconnaissance can never be dispensed with, even when relieving other formations already in occupation of an area; different people's views of the same thing vary enormously. Between "handing over" and "taking over" there is a great gulf fixed; you must go and see for yourself.

The reconnaissance made, we can get on with the

formation of the administrative plan.

The administrative plan is not a separate thing in itself, it is a definite part of the commander's plan, built up as the result of the reconnaissance and so as to fit in with the tactical requirements of the situation. Based on the reconnaissance the framework is constructed upon which the main services-ammunition, supplies, medical, engineer, etc.—will work. As the tactical plan develops in detail so will the administrative plan, as particular requirements are disclosed; when ready the whole is included in the form of administrative instructions issued in conjunction with the operation order on which they are based. This plan as contained in the administrative instructions, must provide for :-

(i) Producing all the material necessities required for the battle, such as food, water, ammunition, petrol, medical stores, etc., etc., and distributing them to the places where they

are wanted.

(ii) Maintaining the supply of these various commodities throughout the battle and when the advance continues as the result of the success of the attack.

Administrative instructions will vary in accordance with the nature of the operation in progress, and according to the formation by which they are issued. In some cases, a short paragraph included in the operation order will suffice, in others elaborate instructions may have to be issued separately from the operation order.

The various items that may require consideration in framing administrative instructions for operations are summarized in Appendix 5. This is a comprehensive list, many items in which would not be required in any given set of circumstances; each case must be dealt with on its merits and in accordance with the tactical conditions of the particular operation.

It is well to remember, however, that any attack, other than a purely encounter battle, is almost certain to require more ammunition than is carried in the field echelons immediately at disposal. In consequence, arrangements for providing the extra quantities required must be set on foot at the earliest moment. The limitations imposed by roads, distance and carrying capacity of available transport in connection with ammunition supply, may well be the determining factor in the timing of the attack.

Again taking the case of a division in an attack, for purposes of illustration, the administrative orders will normally require that the following items should be dealt with:—

- Ammunition for Artillery and S.A.A.: Amounts to be dumped, and transport arrangements.
- Supplies, including water: meeting points, or advanced rendezvous.
- Baggage and greatcoats: distribution or disposal.

- 4. Engineer stores for the attack and for consolidation: means of transport.
 5. Medical arrangements: positions of dressing
- stations.
- 6. Veterinary arrangements: position of mobile veterinary section.
- 7. Ordnance services: position of mobile workshops.
- 8. Provost services: stragglers, posts and prisoners of war.
 9. Civilians: disposal of refugees.

If it is found necessary to elaborate any of these subjects beyond a few words, then the situation certainly calls for the issue of administrative instructions, separate from the operation orders which should never be encumbered with a mass of administrative detail.

The more mobile the operations the less, speaking generally, are the administrative requirements. When more static conditions, involving elaborately prepared attacks occur, the essential administrative preparations tend to become very extensive. They may then include the formation of large dumps of the various commodities required, such as ammunition of all kinds, supplies, engineer stores, water, camouflage material, provision of extra accommodation, etc., etc.

In this connection the necessity for secrecy will demand most careful consideration. The growing size of dumps, an increase of transport moving in an area, the provision of additional hospital accommodation, or increased activity generally in back areas, will afford valuable information to the enemy of the intention of a commander. This calls for the careful concealment and camouflage of all new dumps or work, and may necessitate all movement of troops and transport being confined to the hours of darkness. It is easy enough to say this, but it adds a considerable complication to administrative preparation; it takes more time and requires very careful and detailed staff work to avoid mistakes and loss of time which may be very serious.

In this detailed preparation work the task of the staff is first of all to arrange a programme of work; this programme should show clearly:—

- (i) The work to be done in order of priority.
- (ii) Who is responsible for the work and what labour is available for doing it.
- (iii) Special precautions for secrecy and arrangements for camouflage where necessary; instructions as to working by daylight or at night.
- (iv) Dates when work is to begin and by when it must be finished.

When any considerable dumping of ammunition or stores is required, careful calculations have to be made and additional transport has to be arranged for. In such cases the programmes of work should show the transport allotted and the sources from which it is to be provided.

In war you are always working against time, and even if plans are made well in advance, it is generally inadvisable for reasons of secrecy to make any obvious preparations until the latest possible moment. This applies particularly to such things as erecting extra hospital accommodation, putting up sign boards and notices, collecting large dumps of reserve stores, and so on. All this necessitates much thought, calculation and co-ordination by the staff to ensure the smooth working of all the services in co-operation when the word "go" is given.

As shown above, the administrative plan when formed is given effect to by means of the administrative instructions. But there are certain items which must be considered when making the plan which will not be included in the orders, these orders being confined to the actual operations in contemplation. The responsible administrative officer must, however, always be prepared for sudden changes which may occur. Such changes may be brought about by an alteration in

direction, a re-allotment of boundaries, other formations coming in on a flank and requiring road facilities formerly at his disposal, and, finally, by the possibility of failure and subsequent withdrawal. Arrangements to deal with such cases will not appear in orders, but they must be foreseen and thought out in advance.

The administrative plan having been formed and the detailed arrangements completed, the battle is the proof of the pudding. It will show whether the administrative plan was sound and the administrative preparations complete.

If congestion of traffic occurs; if stragglers are not collected and dealt with; if ammunition, food or water do not materialize when and where required; if barbed wire and tools are not forthcoming when wanted; then there has to some extent been administrative failure. This may result in tactical or strategical failure. The tactical or strategical plan must be administratively sound in the first instance, and the detailed administrative arrangements must also be complete, or sooner or later failure will result. A few instances from the Great War may be quoted in support of this contention:—

- Generals Rennenkampf and Samsonoff attempted to advance into East Prussia in 1914 without waiting for their administrative arrangements to be completed; the starvation which resulted contributed materially to their defeat, and caused misery and suffering to their troops.
- (2) General Townshend's force in Mesopotamia outran the possibilities of maintenance; largely from this cause it was compelled to surrender at Kut.
- (3) The Turks were defeated at the Battle of Rumani, but pursuit was brought to a standstill by lack of water, and the Turks escaped.
- (4) The German 22nd Corps failed to arrive in time on the battle-field of Gumbinnen, because

traffic control had been neglected and the roads were blocked with refugees. The result of this was a strategical success for the Russians.

(5) Two divisions of cavalry failed to join von Francois at the Battle of the Masurian Lakes, because the roads through the Lotzen Gap were blocked by the administrative services of the 27th Corps. In consequence the German attack failed.

In battle unforeseen situations almost invariably do arise; a commander holds a reserve partly to deal with such eventualities. In the case of administrative requirements, the reserve which is most generally needed is one of transport, and the responsible administrative officer will be well advised to keep such a reserve in hand; it is the solution of most difficulties which are likely to occur. The location and probable employment of this reserve will be indicated by reconnaissance in the first instance, and later by close administrative liaison with formations and units throughout the progress of an operation.

A reserve of this nature is particularly necessary for the satisfactory maintenance of administrative services during the pursuit which we hope will follow our successful attack. It is of the highest importance that in their pursuit the troops should not be hampered in any way by a shortage of ammunition, supplies or water, nor their movements be encumbered by wounded or prisoners-of-war. This calls for careful arrangements prior to the attack. As soon as the advance begins, ammunition, water, engineer stores and supplies should be got moving, too, on a pre-arranged and organized plan, fully co-ordinated with troop movements. armoured fighting vehicles must not be brought to a standstill for lack of petrol, or our guns silenced for lack of ammunition, or the men themselves exhausted for lack of water; these essential needs must be sent forward, but in getting them up we must not block the

roads required for our reserve troops, as in the case of von Francois' cavalry at the Masurian Lakes in the example quoted above.

The successful maintenance of the pursuit, until such time as the enemy is driven from the field, depends very largely on administration; but in this there must be the closest possible co-operation with tactical requirements.

Tactical and administrative considerations are complementary to one another—there must be no water-tight compartments. With due regard to the requirements of secrecy, all concerned in administrative arrangements must be kept fully informed of the situation. A few moments' thought will show the importance of this point.

The dumping of ammunition takes much time and thought; this may well affect the hour at which an attack can be launched.

The correct timing of the movements of transport, combined with efficient traffic control, will prevent troop movements being interfered with, as happened at the Battle of Loos.

Medical arrangements take time to make; if unusually heavy demands are likely to be made on the Medical Service, the responsible officer must be informed in sufficient time to enable the necessary organization to be prepared; this was not done at first in Gallipoli nor in Mesopotamia.

The tactical action of artillery may destroy roads required for transport at a later stage, thus calling for special organization for the provision of engineer stores and road-making material. The Ypres salient is an example of this.

Requirements as regards accommodation, rest and comfort of the troops prior to an attack must be balanced against the demands of secrecy. The strategical concentration prior to the first Battle of Cambrai illustrates this point. On the other hand, administrative preparations which may be observed from the air, or

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reported by agents, can be used to mislead the enemy, and thus assist in obtaining surprise.

Our administrative arrangements should aim at establishing a feeling of confidence amongst the troops that their administrative needs will always be met, in spite of apparently the most adverse conditions in the front line. The amount of actual preparation possible, prior to an attack, will of course depend upon the time available. But the smooth working of supply and evacuation services will depend very largely on the skilful organization of the area by the administrative staff. The correct location of administrative units with regard to existing communications, cover and water, and adequate provision for the organization of traffic, are matters of the highest importance; but most important of all is the training of administrative units and services themselves to ensure the automatic working of maintenance services even in default of orders from higher authority.

APPENDIX 5

PRINCIPAL MATTERS WHICH MAY HAVE TO BE DEALT WITH IN ADMINISTRATIVE INSTRUCTIONS ISSUED WITH AN OPERATION ORDER.

1. Accommodation.

- (a) Administrative areas.
- (b) Accommodation immediately before, during and after an operation.
- (c) Details of any special accommodation allotted or to be constructed.

2. Ammunition.

- (a) Ammunition railheads.
- (b) Ammunition refilling points.
- (c) Location of dumps, and quantities to be dumped and formation to which allotted.

- (d) Responsibility for working dumps and labour to be provided.
- (e) Special instructions regarding S.A.A., grenades and fireworks.
- $(f) \ \ {\bf Special \, arrangements \, for \, advance \, or \, with drawal.}$
- (g) Accountancy instructions and times when expenditure returns are required.

Note.—If an allotment of rounds per gun is made or a limit set to daily expenditure, instructions for this are issued by G. after consultation with Q.

3. Supplies.

- Supplies.

 (a) Supply railhead | with forecast of (b) Supply rendezvous | probable moves. (c) Supply refilling points.

 (d) Supply meeting points.

 (e) Outline of system of supply where departure from the normal is necessary.

 (f) Any special issues—rum, solidified alcohol, etc. (g) Details of attached units, responsibility for supply, and dates to and from.

 (h) Dumps of reserve supplies, location, quantities, and responsibility of formations.

 (i) Special arrangements for advance or withdrawal.

 (j) Any special arrangements for petrol.

- (j) Any special arrangements for petrol.

Water Supply.

- (a) List of approved sources for drinking, watering animals, and washing.

 (b) Allotment of sources between units, time-tables
- and instructions.
- (c) Responsibility for provision of pumps and troughs.
- (d) Special allotment of water tank vehicles, reserve water carts, petrol tins or other receptacles.
- (e) Intelligence regarding water in enemy territory.
- (f) Orders for special water reconnaissance, testing and marking of sources of supply.

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5. Transport.

- (a) Any special allotment of transport for use outside its normal work.
- (b) Light railways and tramways; allotment; means of obtaining facilities; special instructions.
- (c) Mechanical transport; allotment; position of breakdown gangs, workshops, tyre presses and special parking places.
- (d) Horse transport special allotment; division of unit transport into echelons and control of echelons; organization of special pack transport.
- (e) Special transportation facilities, barges, ambulance trains.

6. Engineer Services.

- (a) Method of supply of stores and material.
- (b) Position and responsibility for formation of dumps of R.E. stores and tools.
- (c) Special issue of stores, tools and transport allotted.
- (d) Tramway extension material.
- (e) Camouslage material.
- (f) Provision and erection of sign boards.
- (g) Detail of any special water parties.

Medical Services.

- (a) Positions of C.C.S., M.D.S. and A.D.S.; any special instructions for R.A.F.
- Position of Collecting Posts and Car Posts.
 (c) Detail of personnel for Walking Wounded Collecting Station.
- (d) Allotment of transport for W.W.C.P.
- (e) Additional stretchers, blankets and bearer parties.
- (f) Provision of soup kitchens.
- (g) Temporary re-allotment of field ambulances and forecast of moves.
- (h) Any special sanitary precautions.

8. Veterinary Services.

- (a) Position of V.E.S. and M.V.S. and arrangements for evacuations.
- (b) Position of Advanced Animal Casualty Collecting Posts and personnel for manning.
- (c) Disposal of captured animals.

9. Ordnance Services.

- (a) Position of ordnance store if formed.
- (b) Issue of any special stores.
- (c) Position of mobile workshops.
- (d) Position of salvage dumps, transport and personnel allotted.

 (e) Movement of railhead detachments.

10. Provost Services.

- (a) Traffic control posts, position and personnel.
- (b) Issue of traffic circuit maps, M.T. and H.T.
- (c) Restrictions as to movement in daylight. (d) Restrictions as to use of headlights at night.
- (e) Special traffic arrangements in an advance or withdrawal.
- (f) Stragglers' posts; personnel for manning; method of return of stragglers to units.
- (g) Prisoners-of-war; position of cages; provision of guards and escorts; routes to be followed; responsibility for collection and evacuation. (Interrogation in conjunction with G.S.)
- (h) Signboards.

11. Casualties and Reserve Personnel.

- (a) Time and method of reporting casualties.
- (b) Reinforcement reception camp; location and personnel for control.
- (c) Detail of unit personnel to be left out of battle; where to go; sanction required for sending

Section 2. Administration in Defence and Retirements.

(A) Defence.

Much that has been written in the previous section on administration in the attack applies also in the case of defence. As in the case of the attack, so in that of the defence we first of all require reconnaissance, though possibly to even greater depth and wider to the flanks. Secondly, we require a plan, though this plan must usually visualise larger reserves of administrative necessities. Thirdly, we require detailed arrangements for the counter-attack, for resuming the offensive, and, finally, for the possibility of withdrawal.

A defensive attitude implies lack of movement for the time being, at any rate. This entails increased knowledge by the enemy of our rearward organization, and increased use and accuracy of his harassing tactics by land and air. In consequence modifications will tend to be imposed on our administrative arrangements in direct proportion to the length of the stationary period. Our railheads, dumps, hospitals, etc., may be forced farther back from the front, or they may require a greater measure of protection in one form or another. Similarly, our communications become more liable to attack by air and long-range artillery fire, and more elaborate arrangements are called for to meet the possibility of interruption from these causes.

The longer we adopt a defensive attitude the greater and more elaborate becomes our administrative organization. We require more complete arrangements for the A.A. defence of our railhead areas and our communications in front of them. We must provide alternative means of forward communications by light railways, tramways, and cross-country tracks for horse transport. We must improve and add to our road facilities for mechanical transport. We must provide reserves in advance of all bottle-necks, such as bridges and narrow defiles, liable to be blocked by the action of the enemy, or construct avoiding routes round all such bottle-necks;

and roads which are under observation by the enemy must be screened from his view.

Difficulties which are likely to arise from the vulnerability of our communications can generally be overcome by judicious dumping of essential commodities in advance of localities where interruption is most likely to occur. Such dumping should usually only be necessary in the case of ammunition, engineer stores, water, road material, and stores of a bulky nature for which transport is not normally provided, or is insufficient to meet the demands of static operations. Each case must be considered on its merits, as it is equally bad administration to dump what is not required as to fail to dump what will probably be needed.

The next point for consideration in connection with defensive administrative arrangements is that our attitude of the moment is only a preliminary to the resumption at the right time of the offensive. Our administrative plans must be such that they admit of this change to the offensive taking place without difficulty or delay; that is, a definite plan for all maintenance services when the advance begins must form part of our arrangements while still on the defensive. Furthermore, all defensive plans contain arrangements for the counter-attack in the event of the enemy penetrating any part of our defensive system; our adminis-trative organization should be prepared for such an eventuality. The force of our counter-attack must not be lessened by any lack of maintenance requirements, nor must our general system of maintenance be interrupted by any partial penetration of our front by the enemy. That is, we require administrative reserves and alternative means of supplying the various needs of the troops.

Finally, we must ensure that our defence shall not at any time be prejudiced by a lack of material resources; these resources must be maintained without interfering with the mobility of the fighting troops. The most difficult time of all to ensure this maintenance is during

a retirement, and our administrative organization when on the defensive must include the arrangements necessary to meet the situation arising out of a possible retreat.

The supply of a force (using the word "supply" in its widest sense), when on the defensive, and its continued maintenance when the advance is resumed, a counter-attack launched, or a further withdrawal takes place, depends very largely upon the correct location of the units forming part of our system of supply, and evacuation with regard to the available communications and the special factors affecting their use. The whole area in rear of the troops who are in contact with the enemy needs to be organized with due regard to possible tactical requirements, the maintenance of supply, and the mobility of the troops.

Reconnaissance for administrative purposes is essential, to ensure that our maintenance organization can be adjusted to the actual situation, and it must be carried out in considerable depth and wide to the flanks. Time will always be the deciding factor in the amount of reconnaissance possible, and for this reason there must be the closest co-operation between the various branches of the staff for the interchange of information which it is essential for all to know.

Depth is always essential both in attack and defence; if anything, our administrative organization requires more depth in the defence than in the attack, but this organization must also be carried out well to the flanks of the actual area of operations.

We must be able to expand and to contract, and if necessary to change front; it must be possible to side-slip, or to bring in other troops on the flanks without upsetting our maintenance arrangements; and in the event of our forces being driven off their main rearward lines of communication, maintenance must be provided for by alternative flank routes. At the same time our administrative organization in rear must not disclose the lines upon which it is ultimately intended to resume the offensive.

Staff officers must always think large and reconnoitre wide to the flanks when making defensive administrative arrangements; they must never be parochial, but must always keep in mind the big picture of the whole administrative machine right back to the base. Mistakes will occur in the detailed administration of units, and of the lower formations, unless those concerned can get this clear mental picture of the whole administrative machine.

In our peace training the administrative units of war are largely non-existent, and it may be argued that it is difficult to form the correct mental picture of what is never seen in the flesh. In war, when the troops are actually there and the trains, columns and convoys are really in motion on the roads, the picture will still be only a mental one, as the area covered is so large and no one can be everywhere at once. Yet we must aim at visualising the whole picture, including the units and formations on our flanks, and those of higher formations, rearward services, and of the lines of communication. In so far as the officers concerned are unable to do this will their efforts be disconnected and conflicting, resulting in delays, congestion and consequently loss of efficiency.

The secret of success lies in the maintenance of reserves. No one would think of fighting a battle without tactical reserves, but administrative reserves are also essential and are very apt to be forgotten. Reserves of ammunition, of transport, of tools, of engineer stores, of water, cable, medical stores, and ordnance stores are all required, and they all demand road space, which is often difficult to come by. In our peace training we never have them; in war there is danger of our forgetting them until it is too late.

(B) Retirements.

Withdrawals are undoubtedly the most difficult operations of war; they are particularly so from an administrative point of view. The chief difficulty of

administration during a retirement is in accurately organizing and timing the movements of administrative units so that, though the fighting troops may lack nothing essential to resistance, their freedom of movement shall not be hampered.

In a division, as at present organized, we have to deal with both horsedrawn and mechanical transport. The administrative units of a division, together with the administrative portion of the fighting units which can be temporarily separated from them, occupy in column of route approximately eight miles of road space; while a corps of three divisions with a normal proportion of non-divisional units would have nearly forty miles of mechanical transport to dispose of. It is clear from these facts that, should the tactical situation necessitate a hasty withdrawal, and the number of roads available be limited, the problem of clearing the roads, while still maintaining essential administrative services, is by no means an easy one.

The plan must be ready in advance. The best chance of success lies in a time-table carefully prepared beforehand, drawn up in the form of a march table, and requiring only the addition of the zero hour to put the whole in motion.

The responsible officers must be quite clear in their own minds how the services of supply, ammunition supply and medical evacuations are to be conducted throughout the withdrawal, bearing in mind that unit first-line transport is only capable of carrying the current day's issue of supplies, or its war equipment load.

A first essential for success in the maintenance of fighting necessities, such as ammunition, food, water and tools, is a good system of communication between the various echelons of transport in which these requirements are carried. By this is not meant telephone communication or wireless, for such means are not likely to be available in mobile operations for detailed administrative purposes; what is meant is a well-organized system of personal liaison by the officers

concerned, and an efficient chain of communication by orderly between the units supplying the various commodities and those to whom they deliver the goods. This calls for initiative on the part of staff officers and commanders of all administrative units, including officers detailed to command such temporary groupings as infantry brigade ammunition reserves, or brigaded "B" echelon of first-line transport. It also calls for training of individual non-commissioned officers and men who are to act as the orderlies moving between the various echelons; this is a form of training which is frequently overlooked.

Hitches and delays are most likely to occur after a period of stationary warfare, when supply services have been going on as a matter of daily routine between the same places and over the same routes for some time. A sudden change of routine brought about by a retirement is likely to find the essential communications non-existent; it is the duty of the administrative staff to ensure that it is properly established.

For smooth working a clear definition is required, preferably in operation orders, of the responsibility for ordering the necessary moves of the various transport echelons, maintenance companies, supply, baggage and ammunition companies, mobile workshops, ambulance convoys, brigaded unit transport, etc. The degree of centralization of control will depend to some extent on the frontages occupied by formations, on the number of roads available, and on the efficiency of the existing communications. But the pace of movement of mechanized transport, and the enormous amount of it found now in rear of our fighting formations, calls for a high degree of centralization of control of its movement if confusion and consequent delay are to be avoided.

A well thought out time-table is the basis of a wellorganized withdrawal. It is too late for a staff officer to begin planning his move in a retirement after the necessity for it has arisen. Reconnaissance, liaison and preparation for all eventualities must be continuous in

all matters of administration. The responsible officer must always know where the units are, what is their situation as regards supply, ammunition, tools and stores of all kinds. For this he must not rely on telephones, telegraph or wireless, or in the event of a sudden successful attack by the enemy he will certainly lose touch. Once touch is lost, the commander can no longer control the situation, and if control is lost there is risk of demoralization occurring.

The general principles governing administration in defence and retirements have been outlined above; we will now examine their application to particular services in rather more detail.

In the defence the problems of the administrative officer divide themselves in a great majority of cases into two types—(1) the provision of labour; (2) the provision of transport for duties other than those for which the men, animals and vehicles are normally intended.

Men will be required to help out the provost units in traffic control duties, for stragglers' posts, for escorts for prisoners-of-war; others will be needed for working dumps of ammunition, engineer stores, water or petrol; again, they are needed for baths and laundries, and similar adjuncts to comfort and efficiency; they are also required for working tramways and other improvised transportation agencies.

Transport will be required for dumping ammunition, carrying up engineer stores, road repair material, and ordnance stores in excess of normal daily needs. The provision of this extra transport is not so difficult as might appear at first sight, so long as a sound system of centralized control of transport is established; there is no real difficulty in this under the comparatively static conditions of defensive operations. The administrative staff should prepare tabular statements showing clearly the work to be done in order of priority, the transport allotted for the purpose, the time and place where the transport is to report, and the unit or formation responsible in each case.

The detailed administrative work in retirements will be considered briefly under the separate headings of— Ammunition, Supplies, Medical Services, Ordnance Services, Provost Services, and Reinforcements.

Ammunition

The ideal to aim at is, whilst keeping all mobile echelons full, and the normal system of supply working throughout, to have on the ground at each successive position sufficient (but only sufficient) ammunition for use in that position. This can only be ensured by a perfect automatic working of the normal supply system, which depends for its success on an efficient communicawhich depends for its success on an electent communica-tion by orderly from each rearward echelon to the echelons they supply. The importance of training and constant practice of this orderly system has already been referred to. It is not done in peace because the ammunition echelons do not exist. It must be insisted on in war, or disaster is likely to happen should the occasion for retreat arise. So long as the ammunition sections of maintenance companies are in communication by orderly with ammunition companies of divisions, cavalry divisions and corps troops, and these in their turn are in communication with the ammunition columns and infantry or cavalry brigade S.A.A. reserves, there should be no possibility of failure in ammunition supply from rear to front.

In a rapid retirement it is difficult to foresee in advance where battery wagon lines and infantry brigade S.A.A. reserves will move to. But if the *drill* of ammunition supply is insisted on, there should be no insurmountable difficulty in front of railhead.

In retreat ammunition once dumped cannot be picked up again; it can only be fired. As old-established railheads and advanced depots close the amount available from the rear tends to become much less, until the situation stabilizes again; economy is therefore essential, but the quicker the movement the less the expenditure.

The duty of the "Q" officer is to keep in touch with the situation and do everything in his power to help the maintenance of the routine drill of supply, by ordering moves in good time by selecting the best routes, by keeping people informed of what is happening, by keeping his head and working all out.

Supplies.

Supply companies—and the same applies to baggage—should be kept well out of the way until they are wanted; a few extra miles are of little consequence for mechanical transport in such cases.

Move back the maintenance companies early to refilling points well in rear; when unloaded, send them right back to the new railheads, then order back supply companies on to the refilling points.

Do not attempt to fix meeting points for lower formations on insufficient data, but do everything possible to ensure personal liaison between supply officers R.A.S.C. and the formations to whom it is their duty to deliver. Ensure that all available information is passed rapidly and regularly to the O.C. R.A.S.C. of the formation concerned. Do not do the supply officer's work for him, but help him to do it himself.

The practice of dumping supplies on the side of the road, for troops to pick up as they fall back, should only be adopted in cases of gravest emergency; it savours more of flight than of organized retreat, and may quite likely result in the unit going without its supplies.

Medical Services

The evacuation of easualties during a retreat presents very considerable difficulty. In wars against uncivilized enemies it becomes a point of honour to bring in all wounded, and sometimes also the dead. This is really a tactical operation, the success of which may depend on rapid and vigorous local counter-attacks made with the one object of covering the evacuation of casualties.

Depth is of the utmost importance in the location of medical units during withdrawals; another essential is the provision of a reserve of transport for evacuation purposes.

A casualty clearing station is at all times an immobile unit, and dressing stations formed by field ambulances in the areas of fighting formations are also temporarily immobilized while receiving and attending to wounded. There is little time for evacuation during the early stages; a large proportion of ambulance personnel and transport will probably be required with the troops most closely in contact with the enemy.

The responsible medical officers must be kept fully

The responsible medical officers must be kept fully informed of the tactical situation throughout the operation, and every possible assistance be given to them by way of additional transport.

Ordnance Services.

During a retreat there are apt to be large losses of kit and equipment, and replacements are difficult until the situation stabilizes. Units are not usually in a position to accept bulk issues of stores; but the situation must be kept in hand and arrangements made to issue essentials in small lots at a time, capable of easy distribution to individuals. Transport is now provided in both second and third line echelons for the carriage of ordnance stores, on a basis of twelve tons weight per division and corresponding formations.

Provost Services

From the point of view of traffic control on roads during a withdrawal, the situation presented by the handling of purely military traffic may well be full of difficulties; these difficulties will be very seriously increased if the situation is complicated by the presence of large numbers of civilian refugees.

In such circumstances it will be necessary to reinforce the normal provost companies and squadrons, and for this purpose mounted men are by far the best. The

bottle-necks in the rearward routes must be appreciated well in advance, and strong measures taken to deal with them. It is best to concentrate attention on the most important points, provide them with strong traffic control posts, and supplement them by mounted patrols.

Whenever sufficient roads are available, which, however, will seldom be the case, it is advisable to allot separate routes for ambulances, and for tanks and mechanically drawn artillery. In any case, provision must be made for units which move at widely differing speeds.

The command of traffic control posts and stragglers' posts, which themselves have to be withdrawn as a retreat proceeds, presents difficulties. Such posts are often distributed over a wide frontage, and there is little or no means of communication between them. Sometimes a time programme prepared in advance will meet the case, but there must be occasions, too, when such an arrangement is impracticable. Organization in depth and control in depth present the best solution, but there must be close co-operation with flank formations if success is to be obtained; this means co-ordination by the staff of the higher formations.

The difficulty which arises in connection with stragglers' posts is the provision of the necessary personnel to man them. It will generally only be possible to concentrate on the main traffic routes, but this will depend to some extent on the general pace of movement. If the pace is sufficiently slow, stragglers' posts should be organized in three lines, the line nearest the enemy being manned by regimental police under brigade control; the remaining lines being manned by personnel of provost companies, or specially detailed personnel under the D.A.P.M. A central collecting post for stragglers should then be formed, where they can be fed, if necessary re-equipped, and then be sent back to their units. An organization of this nature, however, presupposes a slow, premeditated and well-planned withdrawal.

Reinforcements.

The timely arrival of reinforcements during a withdrawal has a very good moral effect. But if units are not in a position to receive them and organize them properly into their various sub-units, their arrival may do more harm than good. In such cases the higher formations must be prepared to retain and to administer them until they can conveniently be absorbed by units.

The above remarks regarding administrative staff duties during retirement may now be summarized as follows:—

In an emergency stick to the normal system of maintenance as far as possible; short cuts are generally dangerous.

Do not over centralize, but ensure that tactical information is supplied regularly to administrative services and departments.

Plans and orders must be ready in advance for issue if and when the situation demands it.

Reconnaissance must be continuous and administrative units must be got on the move early.

Be prepared for sudden changes of direction and for other formations encroaching on your area.

The bulk of the administrative staff officers should be kept together, and in the closest touch with the operational branch of the staff.

Rapid decisions will have to be taken, and ignorance of what is going on causes confusion.

Diagram No. X illustrates (purely diagrammatically) the general layout of a divisional area in defence.

Diagram No. XI shows a form of march table which might be used for the withdrawal of administrative units and transport of a division in a retirement.

It will be noted that brigaded "B" echelon transport of infantry brigades have been included as units in this table. Normally it is desirable that this transport should move under the order of colonels-commandant of brigades as integral parts of their own brigade; and when sufficient roads are available, this principle can be

adhered to in a withdrawal. It will often happen, however, especially in retirements, that it is essential to co-ordinate the movements of this transport with that of other units in the division, as, for example, when only one road is available at certain stages of the withdrawal; in such eases it may become necessary for its movements to be controlled by divisional head-quarters. In retirements, too, it will generally be necessary for the areas which are ultimately to be occupied by this transport to be allotted by divisional head-quarters, and their inclusion as units in the divisional march table facilitates this allotment.

Diagram X.

DIAGRAM OF ADMINISTRATIVE ORGANIZATION OF A DIVISIONAL AREA.

Yards. 0	FRONT LINE.
1,000 2,000	Regimental Aid Posts. "A" Echelon, 1st line tpt. of leading bns. Advanced Dressing Stations.
3,000	Inf. Bde. S.A.A. Reserves.
4,000	
5,000	General area of artillery wagon lines, transport of Fd. Coys. R.E., and "B" Echelon 1st line tpt of
6,000	infantry brigades. Divisional Ammunition Column. Mobile Veterinary Section. Hygiene Section.
7,000	
8,000	Main Dressing Station.
9,000	
10,600	Ammunition Refilling Point Amn. Coy. R.A.S.C.
11,000	Supply Refilling Point Supply Coy. R.A.S.C. Baggage Coy. R.A.S.C. Repair Coy. R.A.S.C.

 $\label{eq:control} DIAGRAM\ XI.$ Suggested form of time table for the withdrawal of administrative units and transport of a Division

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	Remarks,		(1)													
	Refill,	Amn. at	(F)													
		Supplies at Amn. at	(i)													
	Deliver.	Amn. at	(4)													
		Supplies at. Amn. at	(0)													
	Route.		S													
	Move.	On.	(e)													
		At. On.	(g)													
-	To.		3													
	From.		(9)													
	Unit, Formation or Service.		(u)	Hygiene Section	Baggage Coy., R.A.S.C	Supply Coy., R.A.S.C	Amn. Coy., B.A.S.C	"B" Ech. Tpt., " A" Inf. Bde.	"B" Ech. Tyt., "B" lnf. Bde.	" B " Ech, Tpt., " C " Inf. Bde.	M.D.S.—Fd. Amb	A.D.S.—Fd. Amb	A.D.S.—Fd. Amb	Mob. Vet, Sec	D.A.C	Fighting Troops
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