A MEDICAL EXERCISE SET FOR A RECENT EXAMINATION.

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The scheme of this exercise was set for candidates in the South-Western Area, Southern Command, for the examination of majors, Royal Army Medical Corps, for promotion to lieutenant-colonel, under King's Regulations, Appendix XII, Part II, in August, 1923. The solutions are the work of R. L. V. F., who was one of the successful candidates, and the whole is now, after slight amendment at more leisure than the examination afforded, offered for perusal by other candidates for this examination in case it may be found useful. As Field Service Regulations, vol. I, of 1923, are now in use for examinations, the scheme, which was drawn up on Field Service Regulations, Part II, reprint 1914, has been amended. Our thanks are due to Headquarters, 8th Infantry Brigade, for the use of the tactical scheme on which the medical exercise was founded.

GENERAL IDEA.

Reference 1 inch O.S. Map Sheets 349 and 355 (combined) and 4 miles to 1 inch Sheets 8 and 9.

On June 12, 1923, Eastland, comprising the counties of Hampshire, Wiltshire, Dorset, and Somerset, with capital at Salisbury, declared war on Westland (capital Plymouth) comprising the counties of Devon and Cornwall.

As soon as war was declared, the Eastland fleet sought out and attacked the Westland fleet off the south coast of Devon. On June 13 the Westland fleet was heavily defeated, and what remained of it took refuge in Plymouth harbour, where it was blockaded by the Eastland fleet.

The main armies of Eastland and Westland came into contact about thirty miles north-east of Exeter. Heavy but indecisive fighting took place between July 26 and 29, and no advantage could be claimed by either side.

Note.—Moral and armament of forces of Eastland and Westland approximately equal, and similar to that of the British Army.

SPECIAL IDEA (MEDICAL).

General headquarters, Westland, is in the field with the main army. The commander, lines of communication area (the whole of Westland less the areas occupied by field formations), is at Plymouth. The director of medical services is with general headquarters; the deputy director of medical services, lines of communication area, is with the commander of that area. At Plymouth there are army hospitals aggregating 3,500 beds, of which 2,000 are already occupied by casualties from the main army.
No more hospitals can be opened, as naval casualties have taken up all other accommodation. There are also in Plymouth a base depot of medical stores, twenty-five motor ambulance cars of a motor ambulance convoy, and the usual medical and sanitary units of a base. Ambulance trains are running between the main army and various hospital centres in Westland, including Plymouth.

**NARRATIVE.**

On the morning of July 29 the general officer commanding, 3rd Cornish Division, Westland Army, who had just completed the mobilization of his division at Plymouth, received the following telegram in cipher from general headquarters, Westland Forces:

"Have received reliable information that an Eastland force, estimated at one division, left Southampton on July 28 with orders to land at some point or points on the Devon coast and seize Plymouth. You are to take whatever steps you consider necessary to defeat this enterprise."

WESTLAND G.H.Q.

At the same time the commander, lines of communication area, received instructions from general headquarters to arrange rearward services (including medical) for the 3rd Division in view of the above order.

**REQUIRED. FIRST TASK.**

As deputy director of medical services, lines of communication area, write an appreciation of the situation as regards disposal of casualties from the 3rd Division in the event of fighting taking place.

**FIRST TASK.**

**Appreciation.**

**Object.**—To provide hospital accommodation and transport on the lines of communication from the frontal areas for casualties arising from the possible fighting of the 3rd Division.

**Factors.**—(i) For how many casualties is it likely that accommodation will be required? The assistant director of medical services, 3rd Division, who must also be considering this question from his point of view, and has presumably conferred with the divisional staff, should be consulted. There is nothing very definite to go upon, except that both forces are about the same strength. An estimate of ten per cent casualties would probably be a safe basis on which to make arrangements. Ten per cent of three-fifths of 17,500 (i.e., the probable number of Westland troops actually to be engaged) would result in 1,050 total casualties, of which 840 (i.e., four-fifths), or say 900, would be wounded.

(ii) The accommodation available is 1,500 beds in army hospitals at Plymouth (subject to the military situation permitting, see later), and an unspecified number at hospital centres elsewhere in Westland.

(iii) The transport available consists of ambulance trains from those
running to Plymouth and other hospital centres, which could be deflected (if possible), and twenty-five motor ambulance cars which might be supplemented by an additional part of a convoy from reserve (if any) at general headquarters with the consent of the director of medical services, or by motor omnibuses or local transport requisitioned by headquarters, lines of communication area.

(iv) The locality of the fighting area is unknown, but will probably be near the coast of Devonshire and at no great distance from Plymouth.

(v) As regards communications, there are in most places good roads, and there is the main Great Western Railway line either on the coast or in communication therewith by branches, single line, to Torquay, Dartmouth (Kingswear), and Salcombe (Kingsbridge).

(vi) It is desirable from a medical point of view that Plymouth be used as the hospital base for 3rd Division casualties if possible, as it has all the medical resources of a capital town, with medical base units such as a depot of medical stores, sanitary units, laboratories, etc. It is also the centre of railways and roads. Accommodation there is at present sufficient (1,500 beds) for the 900 expected casualties, but there are also to be considered the normal sick admissions (one-half of 0.3 per cent) from the Plymouth garrison, strength unknown, and say thirty sick casualties per diem from the 3rd Division now mobilized there. On the other hand, if Eastland effects a landing and the 3rd Division should be compelled to withdraw, Plymouth would be seriously threatened; it is (vide General Idea) already blockaded by sea. The use of Plymouth as a hospital base is therefore a matter for the commander, lines of communication area, to decide.

Courses open to deputy director of medical services, lines of communication area. (i) As regards hospital accommodation: (a) to consider Plymouth as the medical base for the 3rd Division and to utilize army hospitals there, either without, or, preferably, with initial clearing to other hospitals in the interior of Cornwall, e.g., at Bodmin, Liskeard, Truro, Falmouth or wherever hospital centres happen to exist; (b) to evacuate all casualties direct from the fighting areas of the 3rd Division direct to interior hospitals.

(ii) As regards transport: (a) to rely entirely on ambulance trains. Against this is the fact that ambulance trains might not be available, or the railways blocked; also that if fighting occurred in the area South Brent—Modbury—Kingsbridge—Halwell—the wounded might not be near the line, or the single line might not be available for the purpose when required; (b) to use the twenty-five ambulance cars for removing lying-down cases, probably about 200 in number, from the field to ambulance trains at a convenient point, or to Plymouth direct, supplementing them by obtaining local transport or motor omnibuses for sitting-up and walking cases. This would be feasible if extra transport could be obtained, and if the journey for road transport was not over twenty-five miles.

Plan of Action.—(i) To see the commander, lines of communication area, and ascertain how far he wishes Plymouth to be utilized as a medical
base for the 3rd Division. If he approves, to begin clearing the army hospitals at Plymouth to other centres to relieve the pressure, by the twenty-five ambulance cars or by ambulance trains. In the event of refusal, to prepare other hospitals in the interior of Cornwall to take the expected casualties, and the patients already in Plymouth, if it is to be cleared.

(ii) To see the quartermaster-general’s branch at communications headquarters and ascertain if any assistance can be expected by the provision of motor omnibuses, lorries, or local transport.

(iii) To take steps either to deflect ambulance trains to Plymouth, or to retain sufficient there for the operations of the 3rd Division.

(iv) To ask the director of medical services if more motor ambulance cars can be provided, and explain to him the course of action being taken.

(v) Interview the assistant-director of medical services, 3rd Division.

NARRATIVE (continued).

Throughout the afternoon of July 29 unconfirmed reports were received at 3rd Divisional headquarters that enemy transports had been seen off Torquay and Brixham, and that the enemy was disembarking at these points. Other reports were received that the enemy had landed near Tregantle (in Cornwall).

At six a.m., July 30, the general officer commanding, 3rd Cornish Division, received reliable information that Eastland had actually landed two infantry brigades with some artillery and transport at Dartmouth, and one infantry brigade with some artillery and transport at Salcombe. All these troops were under orders to march early on July 30 on Plymouth.

Acting on this information, the general officer commanding ordered the 3rd Cornish Division to move eastwards at once on a two-brigade front, with the intention of attacking the enemy at the earliest favourable opportunity.

SUMMARY OF ORDERS.

(1) The South Devon Yeomanry were ordered to: (a) locate the enemy; (b) find out the direction of his march and report the same; (c) keep in touch with enemy columns and delay their march without becoming involved.

(2) 8th Infantry Brigade and 15th Brigade, Royal Field Artillery, were ordered to march via Yealmpton on Flete.

(3) 9th Infantry Brigade and 25th Brigade, Royal Field Artillery, were ordered to march via Plympton on Ivybridge.

(4) 7th Infantry Brigade and remainder of the division to Plympton.

(5) 8th and 9th Infantry Brigades were to make good the River Erme, and to hold the bridges over the river.

(6) Dividing line between 8th and 9th Infantry Brigades: Billacombe (north of Plymstock)—E. Sherford—Stonycross—Worston—Longbrook—Ermington (all inclusive to 8th Infantry Brigade).
REQUIRED: SECOND TASK.

(1) As assistant director of medical services, 3rd Division, write an appreciation of the situation in view of the orders summarized above.

(2) Write your orders to field ambulances.

Note.—The ambulances of the division are the 7th, 8th and 9th Field Ambulances.

SECOND TASK.

(1) Appreciation.

Object.—To collect and evacuate where necessary the wounded or sick of the 3rd Division.

Factors.—(i) It was decided to clear and evacuate the war hospitals at Plymouth. This has been proceeding rapidly since yesterday morning by means of ambulance trains, and they are expected to be clear by noon on July 30.

(ii) A hospital in Plymouth is in course of being prepared to act as a casualty clearing station, and should be ready to receive casualties by 22.00 hours, July 30.

(iii) The twenty-five motor ambulance cars have been placed at the disposal of the assistant director of medical services, supplemented by six motor omnibuses suitable for slightly wounded, walking, and sitting-up cases.

(iv) The enemy have effected a landing at Dartmouth with two infantry brigades, artillery, and transport, and at Salcombe with one infantry brigade, artillery and transport.

(v) They are marching on Plymouth.

(vi) The 3rd Division is ordered to march eastward on a two-brigade front. The 8th Infantry Brigade with 15th Brigade, Royal Field Artillery, and 8th Field Ambulance as 8th Infantry Brigade Group are to march on Flete. The 9th Infantry Brigade with 25th Brigade Royal Field Artillery and 9th Field Ambulance as 9th Infantry Brigade Group are to march on Ivybridge. The 8th and 9th Field Ambulances consequently will pass out of the immediate control of the assistant director of medical services; but he will still be responsible for clearing them, and should give such instructions as will ensure their main dressing stations being so sited that they can be readily cleared.

(vii) The 8th and 9th Infantry Brigades are to make good the River Erme and hold the bridges over the river. This defines the fighting area.

(viii) The River Erme, north of Flete, is a shallow and narrow stream and offers no real obstruction to an advancing enemy, but there are only
three main roads to Plymouth from the east suitable for military transport, and these roads cross the River Erme at Ivybridge, Ermington, and half a mile north of Flete respectively. The distances by road from Plymouth to these three places are approximately ten to twelve miles.

(ix) The casualties to be expected may be taken at 900.

(x) The transport available with field ambulances is sufficient to remove casualties to main dressing stations. The twenty-five motor ambulance cars, supplemented by local transport, are sufficient to clear main dressing stations to Plymouth, only some eight or ten miles away.

(xi) The extensive use of gas, or the presence of any considerable amount of heavy artillery are unlikely in a force so rapidly landed in a hostile country, but the divisional staff would be consulted on these points.

Plan of Action.—(i) Obtain from the general staff any information on factors mentioned in xi.

(ii) Ascertain from the quartermaster-general’s branch what stocks of reserve stretchers and blankets are held, and what stocks of spare clothing, chloride of lime, etc., are available, in view of the possibility of gas being used.

(iii) Send out orders to field ambulances as per answer to question 2, allotting them to brigade groups and intimating the change of organization.

(iv) Inform the officer commanding the detachment motor ambulance convoy of the general scheme, and the probable position of the main dressing stations which he will have to clear, and direct him to form his headquarters at Plympton.

(2) Orders to Field Ambulances.

3RD DIVISION R.A.M.C. Order No. 1. SECRET.

(ISSUED REFERENCE 3RD DIVISION ORDER No. 1.) Copy No.

July 30, 1923.

Reference 1 inch O.S. Map Sheets 349 and 355 combined.

(1) (a) Enemy troops, approximately one division, have landed at Dartmouth (ten miles north-east of Kingsbridge), and Salcombe, and are expected to attempt to advance on Plymouth.

(b) The 3rd Division is marching this morning to hold the River Erme and attack the enemy. The 8th Infantry Brigade Group is to march via Yealmpton on Flete, the 9th Infantry Brigade Group via Plympton on Ivybridge.

(2) 8th Field Ambulance is allotted to 8th Infantry Brigade Group, 9th Field Ambulance to 9th Infantry Brigade Group. These ambulances will receive orders for the march from infantry brigade group commanders.

(3) 7th Field Ambulance will march to Plympton, hour of starting (as may have been decided when the divisional order was drawn up).

(4) Subject to the orders of infantry brigade group commanders, the main dressing stations of 8th and 9th Field Ambulances should be on or
near main roads to facilitate evacuation. Their location, as soon as opened, will be reported to A.D.M.S. at divisional headquarters Plympton.

(5) Evacuation of main dressing stations will be effected by a convoy of twenty-five motor ambulance cars and six motor omnibuses under the orders of A.D.M.S.

(6) Reports of numbers remaining in main dressing stations at 12.00, 16.00, and 20.00 hours will be sent to A.D.M.S. at divisional headquarters, Plympton. The report at 12.00 hours will also state the numbers evacuated. Subsequent reports will also state the numbers evacuated since previous report.

(7) Acknowledge:

(Sgd.) H. J., Major,
D.A.D.M.S., 3rd Division.

Issued at 07.00 hours.

Copies to:
G. A and Q. D.M.S. File.
War Diary.

NARRATIVE (continued).

Reference ¹/₂ inch O.S. Map Sheet 36.

After indecisive fighting on July 30, 31 and August 1, the enemy was strongly reinforced on the evening of August 1, and the 3rd Cornish Division retired to the north of Plymouth, which was occupied by Eastland troops on August 2. The commander, lines of communication area, Westland forces, and his headquarters had moved to Launceston on August 1.

On August 3 the 3rd Cornish Division and a second division from Cornwall was strongly entrenched on a line, roughly east and west just south of Yelverton, Tavistock being railhead for ammunition and supplies for these divisions.

A casualty clearing station, under the deputy director of medical services, lines of communication, is to be opened at Tavistock, to which casualties from the Yelverton position will be brought by a motor ambulance convoy, also to be at Tavistock, and which will be cleared by ambulance train to hospitals west and north-west of Tavistock. The casualty clearing station is mobilizing at Launceston and is expected to be ready to entrain on August 5. It is equipped with stretchers (with trestles) for 300 patients, and tentage (if required) will be issued; personnel eight officers, eighty other ranks. It has full operating equipment and a dental centre, and five sisters, Queen Alexandra's Imperial Military Nursing Service, will be attached. The unit is to be opened immediately on arrival.
REQUIRED: THIRD TASK.

As an officer detailed by the deputy director of medical services, lines of communication area, for the special duty, make a reconnaissance of Tavistock on August 3, with a view to selecting a site for the casualty clearing station, and reporting on the facilities for entraining cases for evacuation by ambulance train.

The ammunition and supply dumps and lorry parks are in the neighbourhood of the railway stations. Otherwise the general situation in Tavistock is normal.

THIRD TASK.

Report of Reconnaissance, Tavistock.

Casualty Clearing Station.

Three possible sites for the casualty clearing station were found, which, taking them in order of suitability, are:

1. Kelly College. Numerous blocks of modern buildings, comprising the dormitories, dining halls, class rooms, halls, gymnasium and offices usual for a public school taking about 200 boys. For the purpose of a casualty clearing station these buildings, together with two residential boarding-houses (masters' houses), would be highly suitable and readily converted at a few hours' notice into a good clearing station. It is situated on a main road, three-quarters of a mile from the town. It has a single line, Great Western Railway, one hundred yards distant from and parallel to the main road, separated by a level grass field. It would be advisable to construct, say, one hundred yards of line where ambulance trains could be placed on a siding to avoid blocking the main line; or to run a siding across the high road into the playing fields below and immediately in front of the college buildings, in which case hand carriage could be adopted, and there would be no necessity for motor transport. The Royal Engineers could probably lay this line on the level within forty-eight hours, if railway material is available. Water supply, lighting (electric) and heating are installed. At this season the school is, of course, unoccupied.

2. The municipal buildings and market place. The market place itself is a large, closed-in hall with paved floor, about sixty-six by thirty-three yards in area, and should accommodate 200 of the more slightly wounded. There is a road around the building with separate ingress and exits. Immediately surrounding are buildings which could be formed into smaller halls or offices. Facing the market place is a large, broad room, used as a town hall, well lit on the first floor, with suitable access for stretchers. This would make a good ward for about forty serious cases, and an operating room. Water, if not already at hand (it was not possible to gain access to the room), could easily be laid on. There are numerous rooms suitable for the staff and offices, stores, etc., in the block of buildings. In a separate block there is a municipal library which could be altered for cases not requiring stretchers. The Bedford Hotel, opposite the Municipal Buildings,
has twenty-five bedrooms, a dancing room, lounge, etc., and could be
be utilized in addition if required.

The objections to this site are that a market hall is not very desirable
for hospital patients. There is difficulty of heating and avoiding draughts.
Sanitary arrangements would have to be inserted. There is no equipment,
furniture, etc. The site is not sufficiently near the railway stations or lines
to permit of hand carriage, being about half a mile from each station.

(3) A grass meadow lying to the south-west of the Great Western
Railway station, 200 yards from it. This is on a gentle slope, bounded on
the higher side by the Great Western Railway line, and on two sides by
good metalled roads. Adjoining the meadow is a private residence with
town water supply and electric light, which could be utilized for special
cases or officers' and nursing sisters' accommodation. A small factory
(three floors) which is close by could be utilized for personnel, R.A.M.C.,
and light cases (walking only). A large area of playing fields, tennis-
courts, and park is separated from the actual site by the River Tavy. This
is crossed by an iron foot-bridge, not suitable for wheeled traffic. The
river is shallow and narrow and could be easily spanned by a rapidly
constructed wooden or pontoon bridge. This would give ample space
for tents, even of a large general hospital.

The points in favour of the site are (1) proximity to railway line and
good roads; (2) town water supply and electric current on the site;
(3) sheltered position and good aspect.

The objections are: (1) with only forty-eight hours it would be a
difficult task to erect the necessary tentage, get water and electric light
layed on and the site prepared; (2) the site might be already occupied by
other units, ammunition, supply, or lorry parks.

Facilities for Entraining at Stations.

There is a suitable siding for ambulance trains at both the Southern
(London and South Western Railway on map), and Great Western Rail-
way stations. The road accommodation for handling motor ambulance
cars along the siding is in both cases rather cramped, but is quite feasible
with careful traffic control. Both stations have end-loading platforms or
ramps. There is little or no covered accommodation suitable for a
reception station, except the usual buildings of the passenger stations,
which are about one hundred yards from the goods sidings. The approach
to the Southern Railway station is narrow, up a steep gradient with hair-
pin bend, and on this account that station is unsuitable for the purpose
required, and the Great Western Railway station should be utilized.
Both stations are about half a mile from the centre of the town, and the
Southern and Great Western Railways are in conjunction at Lydford
station, the branch line to Launceston; therefore neither has any
particular advantage in this respect.