

THE WAR DIARY
OF
8 FIELD SURVEY COMPANY R.E.
BRITISH SALONIKA FORCE
FROM
1 JANUARY 1917 TO 10 APRIL 1919

The following is a tabulated transcript of the original war diary held in the Public Record Office, Kew made by the Defence Surveyors' Association.

**WAR DIARY OF 8 FIELD SURVEY COMPANY R.E.
BRITISH SALONIKA FORCE**

<p>January 1917</p> <p>Major H. Wood, R.E. arrived in Salonika on 29th December, 1916 having been sent out from FRANCE by the W.O. with a view to organising a Field Survey Company, R.E. with the British Salonika Force. He was instructed by the General Staff, B.S.F. to submit proposals. This was done and on receipt of further instructions from M.G.G.S. (vide appendix) the TOPOGRAPHICAL SECTION, PRINTING SECTIONS AND SURVEY & MAPPING SECTION were amalgamated into one unit called the Salonika SURVEY COMPANY, R.E.</p> <p>This unit was placed under the command of Major H. Wood, R.E.</p> <p>The amalgamation took place on 18/1/17 and has been considered the date of formation of the Company.</p> <p>Provisional sanction for the proposed War Establishment of this Unit was given on 31/1/17 [S.A. No. 2720(A.b)].</p> <p>The strength of the Sections transferred to form the new company are below: -</p> <p>1 Officer, 20 Other Ranks from Topographical Section. 1 Officer, 15 Other Ranks attached to Topographical Section. 1 Officer, 26 Other Ranks from Printing Section. 1 Officer, 11 Other Ranks attached to Printing Section. 1 Officer, 9 Other Ranks from Maps & Survey Section. 1 Officer, 10 Other Ranks attached to Maps & Survey Section. TOTAL 4 Officers, 91 Other ranks.</p> <p>During the month the various detachments continued the work they had in hand. The 2 Topographical detachments were employed: -</p> <ol style="list-style-type: none"> (1) Surveying on 1/20,000 scale of the country in the neighbourhood of MIROVA (survey on this scale ceased after the formation of the Company in accordance with principles enumerated in M.G.G.S. instructions and the work was continued on scale of 1/50,000.) (2) Surveying on scale 1/50,000 area in neighbourhood of KATERINI. <p>The Headquarters detachment produced during the month, the KAVALA sheet on the 1/50,000 and an edition of VALANDOVO (a French sheet) with new trench detail. The TEMPE, AYIA and TYRNAVOS sheets of old Greece were re-drawn from enlargements of the new Greek maps and produced on the 1/50,000 scale.</p>
<p>February 1917</p> <p>During the month normal work continued. Considerable progress was made in the re-organisation of the administration branch of the old unit. Authority was obtained to transfer 2 Officers and 20 Other Ranks who were attached to the old units, to the establishment of the new company – the remaining attached men A.S.C. & batmen who were shewn as attached on the establishment. Reinforcements of 6 O.R. arrived from England and 21 O.R. from the Base Depot, so that by the end of the month the company only lacked 1 Officer and 10 technical men. Arrangements were made for these reinforcements to be supplied from England.</p> <p>Considerable difficulties were met with in the search for suitable office accommodation but towards the end of the month a suitable house was found and arrangements for taking it over were initiated.</p> <p>The Topographical detachments continued the survey in the MIROVA and KATERINI areas.</p> <p>A provisional map of the area East of the LIKOVAN-LAHANA road was drawn, printed in one colour and published during the month. The usual printing, both lithographic and letterpress was done.</p> <p>Panorama photos were made from two places on the KRUSA BALKANS shewing the enemy positions from LAKE DOIRAN to the neighbourhood of the RUPEL PASS.</p>
<p>March 1917</p> <p>During this month the Company moved into the new office and the various headquarter sections came into one building for the first time. This enabled the various processes to be co-ordinated and better supervised.</p> <p>The details of a mobilisation table for the whole company were worked out and submitted to D.O.S.</p> <p>The Topographical detachments continued work in the LAHANA & KATERINI districts. About the middle of the month the survey of the latter district was finished and that detachment moved to LIKOVAN to survey eastwards along the SUHO ridge and north of it with a view to eventually moving into the STRUMA valley.</p> <p>The fair drawing of the 1/50,000 KATERINI sheet was completed and reproduced during the month.</p> <p>In addition to other miscellaneous work, 4 panoramas made from balloons were reproduced and issued.</p>

<p>April 1917</p> <p>During the month much progress was made in the arrangement and indexing of the records of the old detachments. Nothing had been listed and an inventory of all the photographs, original plane table sections, triangulation books and other records had first to be made.</p> <p>The question of map distribution was gone into and a scale of issue of maps on the various scales was worked out and approved. A memorandum on the maps in use and on the scale of issue (vide Appendix 1 & 2) was drafted and after approval appeared as a G.S."I" document and copies circulated to all concerned, together with a key plan showing the limits of the existing and proposed sheets.</p> <p>The Topographical detachments continued the survey East and West of LIKOVAN.</p> <p>A power-driven lithographic printing machine – which had been ordered soon after Major Wood's arrival escaped the dangers from submarines and was erected in the new offices.</p> <p>The old machine which had done much useful work in GALLIPOLI and SALONIKA was sold to the French. Over 40,000 runs were made during the month on this machine.</p> <p>The following maps were made and issued: - 1/20,000 DOIRAN Ed 2A; DRANLI; CHAIJAGZI, also a special operation map on the same scale near DOIRAN. A wax model was made from this map and 12 plaster casts were made which were issued to the Headquarters of formations in that neighbourhood.</p> <p>Another special map of the same area on 1/5,000 scale was reproduced.</p> <p>In addition to other miscellaneous work 2 Balloon panoramas, 3 maps showing roads in the British area and 3 maps of Northern France were also reproduced and issued to all concerned.</p> <p>During the month one officer arrived from England, and the establishment of the Company as regards officers was now complete. (From Ogilvie diary 18-4-17, this was Lt Antrobus)</p>
<p>May 1917</p> <p>The work of arranging and indexing the records continued.</p> <p>The topographical survey working in the hills overlooking the STRUMA River disclosed the fact that serious discrepancies in the values of the triangulated points existed in that neighbourhood and investigation of the records soon revealed the cause.</p> <p>The existing triangulation was started for the survey of the area in the immediate neighbourhood of SALONIKA which the troops, on their arrival, placed in a state of defence.</p> <p>This triangulation emanated from a small base, 900 metres long and had been carried to LAKE DOIRAN in one direction and to DRAMA and beyond in the other. A tie chain joining these branches had also been made along the STRUMA valley. The values obtained for the common points differed by nearly 150 metres.</p> <p>It was evident that the standard of accuracy of the observations was much too low for such a large area, and to place the survey on a good footing, a new triangulation was necessary.</p> <p>It was therefore decided to throw over the whole area in British occupation a network of triangles with average length of side about 15 miles depending on a new base and with as many stations as possible on the sites of the old triangulation.</p> <p>When observations had been made from these new points and the necessary computations effected, the old triangulation could be re-computed from the new bases and being thus controlled, accumulation of errors would be prevented.</p> <p>Towards the end of the month a detachment was formed to do this work and the preliminary reconnaissance to select the stations and lay down marks was started. The site of a new base was selected and arrangements for the measurement began.</p> <p>The topographical detachments continued the work they had started in the previous month.</p> <p>A report on the work of these detachments was submitted to the General Staff during the month (vide appendix 6) and the substitution of a detachment of native surveyors from India in place of one of the British Detachments was recommended.</p> <p>The sheets GALATISTA and VASILIKA, 1/50,000 were drawn from old materials and published.</p> <p>These were the first sheets to be published of the new series conforming to that of the French.</p> <p>A special operations map on scale 1/10,000 in the neighbourhood of ERNEKOJ was prepared and printed and other miscellaneous work done.</p> <p>17,000 pulls were made on the lithographic machine.</p> <p>Panorama photographs were taken from several positions in the STRUMA valley.</p> <p>6 Other Ranks arrived from England to fill technical vacancies on the establishment and the Company was thus brought up to full strength.</p>

June 1917

The work begun during previous months was continued. Early in the month a small detachment was formed from the headquarters portion of the Company, reinforced temporarily by 30 other ranks obtained from the General Base Depot, to measure a base on the GUEVZNE plain.

The party worked under the immediate supervision of the Officer Commanding Company. Four days were spent in clearing the line and drilling the men in the various operations. The site of the base extended for about 6.5 kilos to the West of and parallel to the SERES road from 16.5 kilo stone to 23 kilo stone. The JADERIN invar wires and the necessary tripods &c were borrowed from the French Topo Section. The base was measured twice – once in each direction. One wire was kept entirely as a standard wire and the remaining 2 wires used for the measurement. These were compared with the standard before and after work each day. During the measures, each wire was read five times and if the discrepancy between the reading exceeded 0.4 millimetres, more measures were taken. The work was much interfered with by heavy thunderstorms but the measures were completed in 6 days (3 in each direction). Lieut-Commander VINEY, R.N. of H.M. Surveying ship ENDEAVOUR was a visitor during part of the preliminary work and during the first measurement, in which he took a leading part. His assistance was of the greatest use.

After making the necessary corrections for level and temperature the values of the two measures were: -

1st. Measure 6475.18 metres.

2nd. Measure 6475.23 metres.

Difference 5 centimetres or 1/130,000 approx.

After correction of the mean value for height above mean sea level the accepted distance used in the computations was 6475.00 metres.

In the evenings astronomical observations for Azimuth and Latitude were made with a 5-inch (micrometre) theodolite. The probable error in the Latitude which was obtained from pairs of N & S stars observed near the meridian was 0.9 seconds. The Azimuth was obtained on three different nights from circumpolar stars at E & W elongation. The greatest difference between the three values was 23 seconds.

While this work was going on the triangulation party continued the reconnaissance and on completion commenced the measurement of the angles for the new triangulation.,

The two topographical detachments completed the survey of the high ground about MIROVA, LAHANA and SUHO and commenced the survey of the STRUMA plains and opportunity was taken during the base measurement to photograph from DEVE KRAN and from KLISELI (between Lakes BESIK & LANGAZA) the greater portion of the SALONIKA defences as it would appear to an enemy attacking the position from the North.

The drawing office produced a new edition of the VALANDOVO sheet (3A) 1/50,000 scale and new editions of POBREG (2A) and KARA OGULAR (2A).

As the plane table sections were received from the field detachments, an edition of the map in one colour was produced to make the new survey available as soon as possible. This was very desirable on account of the move of the fighting troops in this neighbourhood to the retired summer line of defence.

Edition 1 of the 1/20,000 sheets of BASHANLI, BURSUK, ORLJAK and KOPACI were thus produced during the month in one colour.

In addition, the 1/50,000 sheet in old GREECE (LARISSA) was reproduced in four colours from the Greek original as also were 1 Balloon panorama and a map of the Italian front.

36,815 pulls were made on the lithographic machine and 36,450 on the letterpress machines.

Sanction was given during the month to the scheme for employing an Indian Survey detachment in place of one of the British ones and the War Office was asked to arrange for its supply.

July 1917

Work proceeded during the month according to plan.

The triangulation party continued the observations from the new triangulation while the topographical sections completed the STRUMA VALLEY SURVEY. One detachment began the survey of the KRUSA BALKANS while the other commenced survey on the 1/50,000 scale South of the SUHO ridge towards the BESIK LAKE basin.

The drawing office produced preliminary editions in one colour of the 1/20,000 sheets DIMITRIC, KISPEKI and PROSENIK and a regular edition in three colours of DRAGOS (all STRUMA valley sheets).

New editions of DOVA TEPE (3A) and Sheet 5 (Ed.2) on 1/50,000 scale, and DOIRAN (ed 3A) on 1/20,000 scale were produced during the month.

A coloured poster for the 27th Divisional Horse Show was produced during the month.

This was the first attempt made by the Unit in this class of work, and considering the means at its disposal the result was very creditable.

30,100 pulls were made on the lithographic machine and 37,700 pulls were made on the letterpress machines.

The names of: -

Tempy. Lieutenant J.A. McNAMARA, R.E. No. 21656, Sapper (A/II Cpl.) J. McGowan, R.E. No. 6/609, Pte A. Curtis, 13th Canterbury Infantry, N.Z.R. were mentioned in the despatch of Lieut-General G.F. MILNE, C.B., D.S.O., G.O.C.-in-C. British Salonika Force, dated 29th March 1917 (London Gazette 21/7/17) for distinguished services rendered.

August 1917

Work proceeded in continuation of that of the previous month. Both the field and headquarter detachments suffered considerably from sickness with consequent delay in the programme. This sickness more particularly affected the work of the topographical sections.

The middle of the month saw the completion of the original scheme for the new triangulation, 34 stations were included in this work, forming a network over the greater part of the area in the British lines. During the execution of this work, the Serbian Topo Service decided to extend this triangulation into the area in their occupation (around MONASTIR) and to give them a suitable side of extension and also to carry the network on to the high ridges overlooking DOIRAN Lake so as to provide a means of extending the triangulation in the event of any advance up the VARDAR, it was decided to fix 8 more stations. The reconnaissance for this work was completed during the latter half of the month.

A photographic panorama of the SALONIKA defences near STAVROS was made during the month.

The fire which burnt a large portion of the Jewish quarter of the town was recorded by photographs taken during its progress and on the following day. The photographs were in succeeding months, together with those taken by the R.F.C. printed and published in the form of a souvenir book. The sale of this souvenir, after charging the cost of the material used, furnished a large profit which was handed over to the Refugee Fund.

The first publication of the BALKAN NEWS after the fire, and containing an account of the catastrophe was also printed by the Company.

Editions in three colours of the ORLJAK, BASHANLI and BURSUK sheets (replacing the preliminary editions in one colour) were published during the month, as also was TURICA – another of the STRUMA valley 1/20,000 sheets. The 1/50,000 sheet LAHANA also was produced during the month and a special map for operations in the neighbourhood of HOMONDOS.

45,000 pulls were made on the lithographic machine and 38,700 pulls were made on the letterpress machines.

Major Wood, R.E., O.C. of the Company went on short leave to England at the end of the month. During his absence Captain OGILVIE, R.F.A.(T.F.) acted for him.

His Majesty Peter 1, King of Serbia awarded decorations and medals as under, to members of the Company:-

Major H. Wood, R.E. Decoration of the White Eagle, 4th Class.

Capt. A.G. Ogilvie R.F.A. (T.F.) Decoration of the White Eagle, 5th Class.

No. 91678, C.S.M. E.T. Rose, R.E. Military Medal.)

No. 22482, 2nd Cpl. W.P. Pfeil, R.E.) Gold Medal

No. 94543, Sapper (A/Lce. Cpl.) P.J. Cottis, R.E.) for

No. 24007, Sapper H.G. Rose, R.E.) Zealous Service.

No. 6/1332 Pte. C.S. Lovell-Smith, 2nd Canterbury Inf. N.Z.R.)

September 1917

The observations necessary for the fixing of the triangulation points on the high ground overlooking the DOJRAN and STRUMA fronts proceeded throughout the month, and the erection of and the observation at the trig stations common to the Serbian and British triangulations was completed.

Topographical work on the 1/50,000 scale was continued in the ORLJAK, SUHO and VRASTA sheets, and on the 1/20,000 scale in the AKINDZALI and TODOROVO sheets; but the work was retarded owing to the sickness in both survey parties.

On 12th September one of the surveyors in the TODOROVO sheet, while working in front of the summer line was ambushed and captured along with his escort of 2 scouts of the 1st WELSH Regt. This casualty included the loss of 12 square kilometres of new survey. General Staff decided that in future when a surveyor is to be sent in front of the occupied line, G.S."P" G.H.Q. is to be informed and G.H.Q. will cause the requisite escort to be provided.

On September 13th., the M.G.G.S. inspected the headquarter office of the Company.

During the month the possible move of the Company office to the new G.H.Q. building was under discussion. It was finally decided to take no action owing to the difficulty of providing suitable accommodation.

In the latter part of the month the Artillery of XII Corps asked for co-operation in their counter-battery organisation.

The work undertaken included the fixing of the O.P.'s of flash-spotting sections, and the provision and mounting of "planchettes" or battery boards for each O.P. Owing to survey work and the main triangulation, only a few men were available and the fixing could only be done by plane table.

In September the KOPACI and ELISAN 1/20,000 sheets were issued, as well as a third edition of SMOL.

Of these, the first two were drawn from Surveys, while the others were completed from aeroplane photographs.

A third edition of GJEVJELI 1/50,000 was also produced, comprising the work on the recent 1/20,000 sheets, while a provisional map of the LANGAZA area was reproduced from Greek material received from ATHENS.

Greek survey data also provided material for three 1/20,000 sheets in the neighbourhood of Kavalla. These were reproduced chiefly for naval purposes. Enemy defences were inserted from air photos.

In the month, 42,420 pulls were made on the lithographic machine and 52,370 pulls were made on the letterpress machines.

October 1917

Observation for the additional triangulation stations was continued throughout the month, opportunity being taken to obtain fixings of a few points behind the enemy's lines in areas where fixed points were lacking.

Topographical work on the 1/50,000 scale was finished in the ORLJAK, SUHO and VRASTA sheets, as also was the 1/20,000 work in the SNEVCE and RAJANOVO sheets. Work on this scale was continued in the AKINDZALI and TODOROVO sheets, and a series of plane table sketches on the 1/20,000 scale was made of the BELASICA region behind the enemy lines – to be used later in conjunction with aeroplane photographs to compile the BAKJE, SVETA PETRKA, SUGOVO, TODORIC and RAMNA, 1/20,000 sheets.

During the month triangulation was carried out in the LANGAZA 1/50,000 sheet to enable the Greek survey material recently acquired to be used and fitted to the British and French Survey work.

As surveyors became available they were detailed to do the work of fixing by plane table the O. P's of the XII Corps flash-spotting sections.

On October 23rd, the Company received as reinforcement, a Survey Detachment from the Survey of India, consisting of one British officer, Mr. H.B. Simons, 9 native surveyors and 40 khalassis (serpoys). This detachment reached SALONIKA after long delay in EGYPT. It arrived complete as to technical stores, but as it had to be equipped with transport and certain ordnance stores it was kept in SALONIKA till ready for work in the field.

During October the following maps were produced at the headquarter office: -

(a). On 1/50,000 scale – SUHO, a surveyed sheet, PORNA, partly from survey, but mainly from aeroplane photographs based upon triangulation.

(b). On 1/20,000 scale – PETELINOS, KISPEKI and PROENIK-KALENDRA, all three being partly from survey and partly from photographs.

A special sheet was also prepared and printed of the area at the Mouth of the STRUMA. This was on the 1/20,000 scale and utilised recently acquired Greek material.

A poster advertising the 22nd Divisional Horse Show was reproduced.

In the course of the month, 38,460 pulls were made on the lithographic machine and 69,434 pulls were made on the letterpress machines.

153 photographic negatives and 1164 prints were made.

November 1917

Major Wood, R.E. returned from leave on 6th of the month and took over command of the Company from Capt. Ogilvie, R.F.A. (T.F.) who had been acting for him during his absence.

The Indian Survey Detachment were equipped and left for STAVROS by the middle of the month.

The survey of the DOKSAMBOS and NEOHORI sheets (1/20,000 scale) was commenced and triangulation was started in the area both North and South of Lakes LANGAZA and BESIK, to provide points for the survey later on of seven sheets on the 1/20,000 scale in that neighbourhood.

Heavy snowstorms delayed the outdoor work a good deal.

The two English topo detachments finished the survey in the SNEVCE and RAJANOVO areas at the latter end of the month and one detachment was formed, which was ready by the end of the month, to start work for the Artillery in the XII Corps area. The remaining men were sent to the Base Depot with a view to transfer to England.

At Headquarters the drawing and reproducing offices continued their programme as in previous months.

The FITOKI and RAJANOVO sheets (1/20,000 scale) were published during the month and plates for printing a Christmas card for issue to the troops were prepared and over 300,000 printed in four colours in addition to much miscellaneous work.

In the course of the month, 94,826 pulls were made on the lithographic machine and 70,800 pulls were made on the letterpress machines.

58 photographic negatives and 637 prints were made.

The G.O.C. inspected the Company Headquarters during the month.

December 1917

The work commenced in previous months was continued.

The British Survey party began the accurate fixation of positions of our own Artillery and O. P's in the XII Corps area and the preparation of artillery boards.

The Indian Survey detachment continued the survey of the DOKSAMBOS and NEOHORI area, and the triangulation around the lakes.

Many days were lost by the snowstorms and heavy clouds and mists, which for days at a time hung over the hills near the sea, but by the end of the month a good portion of the work was approaching completion.

Panorama photographs of the enemy positions at the Mouth of the STRUMA were made from suitable hills on the West side of the river.

The drawing and reproduction offices at Company headquarters produced the ORLJAK (1/50,000 scale_ and ERNEKOJ and SAVJAK (scale 1/20,000) sheets besides the usual routing productions.

In the course of the month, 14 batteries were fixed besides zero and datum points.

A mounted board for the Observation Section Headquarters showing all O. P's and their arcs of view as well as boards for three groups and 13 O. P's were made and issued.
 Battery boards for 4 batteries were prepared and handed over.
 60 square kilometres (approx.) surveyed on the 1/20,000 scale.
 72,324 pulls were made on the lithographic machine and 184,000 pulls were made on the letterpress machines.
 58 photographic negatives and 637 prints were made.

January 1918

The programme of work commenced previously was continued.
 The British topographical detachment completed most of the work for the XII Corps Heavy Artillery and commenced fixing positions for the R.F.A. (Divisional Artillery).
 The Indian detachment completed the survey of the DOKSAMBOS and NEOHORI sheets.
 As the surveyors completed the area allotted to them they proceeded to Company headquarters where they were employed on fair mapping until all the field work was completed.
 The whole detachment reassembled near AIVATLI (12 kilos from SALONIKA on the SERRES road) on the last day of the month before starting on the survey of the LELOVO, MIROVA, KOCAN MAHALE and LANGAZA sheets.
 During the month a photographer was placed at the disposal of the Royal Navy to make panoramas of the THRACIAN coasts. He obtained these from the northern end of THASO ISLAND and from THASO PULO Island.
 The headquarters offices produced the ORLJAK and SERES (1/20,000 scale) and in addition reproduced a map of SYRIA, a special chart of portion of the AEGEAN SEA for the Navy and an operation map on scale 1/5,000 for the XII Corps.
 The summary of work done was: -
 Positions of 29 batteries and 19 O. P's fixed as well as zero and datum points and a number of positions in the enemy's country for use with aeroplane photographs.
 15 Battery boards were prepared and issued.
 100 square kilometres (approx.) surveyed on a scale 1/20,000.
 33,836 pulls were made on the lithographic machine and 85,950 pulls were made on the letterpress machines.
 148 negatives and 1,165 photographic prints were made.
 The names of the following were brought to notice by Lieut. General G.F. Milne, C.B. D.S.O. in his despatches published in the London Gazette of 28/11/17 and 1/1/18:-
 Major H. Wood, R.E. (promoted to Brevet Lieut-Colonel)
 No. 12954 ?????????????????????????????????

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February 1918

Normal work continued throughout the month.
 The British Topographical Section continued the work of fixing the positions of our own Artillery in the XII Corps area and preparation of battery boards.
 Positions for the microphones of the "Q" Sound Ranging Section were surveyed and fixed by triangulation.
 The Indian Topographical Section commenced the survey of the LELOVO; MIROVA, KOCAN MAHALE and LANGAZA sheets on the scale of 1/20,000. The bad weather about 20th. Of the month interfered with the work to some extent.
Headquarters:-
 The work at headquarters was interfered with considerably by an outbreak of an undiagnosed complaint which affected about 14% of the men at headquarters.
 The SNEVCE (1/20,000 scale) sheet was printed and issued to the troops and the SAVJAK (1/20,000 scale) sheet which had been printed at the end of January was issued during the month.
 Proofs of the MIRSLA; CAJIR MAHALE; AKINDZALI; VIRHANLI and DOKSAMBOS (all 1/20,000 scale) sheets were sent to Corps concerned, for inspection during the month.
 In addition, a map of the Italian front in three colours was produced and issued and much miscellaneous work was done.
 The following is a synopsis of work completed during the month: -
 TOPOGRAPHICAL DETACHMENTS - 75 sq. km survey on scale 1/20,000.
 Positions of batteries fixed. 14 Artillery boards prepared and issued. Microphones of a Sound Ranging Section fixed.
 HEADQUARTERS OFFICES - 17,732 Impressions pulled on Litho machine. 41,780 Impressions pulled on Letterpress machines.
 153 Negatives made and 1,579 photo prints of all sizes printed.

March 1918

Normal work continued through the month.

On the 18th. The M.G.G.S. decided to transfer the Observation Section, working with the Heavy Artillery, XII Corps, and the two Sound Ranging Sections (Q and X) to the Company, which thus became similar to the Field Survey Companies in France.

The transfer took place on the 21st of the month.

The strengths of the units taken over are as follows: -

OBSERVATION SECTION: - 8 Officers, 135 Other Ranks,

“Q” Section: - 3 Officers, 37 Other Ranks.

On the 22nd of the month the Officer Commanding “X” Sound Ranging Section arrived from France and on the 24th., the remainder of the section arrived, strength in all: -

3 Officers, 30 Other Ranks.

On the 28th., Lieut MILLER R.E. arrived from France to relieve Capt. Ogilvie, under orders for England. This officer left the Company on 31st March and embarked on 1st. April, after serving with the Printing Section since its inception in July 1915.

The English Topographical Section completed the work of battery locations for the XII Corps and about the middle of the month moved across to XVI Corps to undertake similar work in their area.

The arrival of “X” Sound Ranging Section however entailed the movement of the microphone positions for that Section.

The Indian Topographical detachment continued the work begun last month. The LANGAZA sheet was completed and that of VULAJLI commenced.

The Observation Section reported a normal amount of hostile artillery activity for the first 20 days of the month, but during the last 7 there was very little hostile shipping.

On the 28th., 29th., & 30th., no observations were obtained owing to a blizzard.

“Q” Section commenced reporting results on the 4th instant.

HEADQUARTERS. A power-driven letterpress machine arrived during the month and the printing shed had to be enlarged. The work of installing it was partly completed by the end of the month.

April 1918

The first editions (4 colours) of the following sheets, on scale 1/20,000 were printed and distributed during the month:- MIRSLA, VIRHANLI, TODOROVO, AKINDZALI and DOKSAMBOS while proofs of NEOHORI (1/20,000 scale) and VRASTA, LOWER STRUMA, and LANGAZA (1/50,000 scale) were sent to Corps for inspection during the month.

2 sheets in 3 colours each of special Artillery maps were also reproduced in addition to the usual miscellaneous work.

The following is a synopsis of the work done: -

TOPOGRAPHICAL DETACHMENTS:- 162 square kilometres surveyed on scale 1/20,000.

Positions of four of our batteries and 21 O. P's fixed.

16 Artillery boards prepared and issued.

OBSERVATION SECTION: - 42 1st. class targets and 137 2nd. Class targets reported.

“Q” Section:- 28 batteries located on 76 occasions from 559 films. Of these 76 locations, 26 were guns, 2 anti-aircraft guns, 47 Howitzers and 1 Trench mortar.

HEADQUARTERS OFFICES:- 35,660 impressions pulled on the Lithographic machine.

103,070 impressions pulled on the Letterpress machines. 206 Photographic negatives made and 1298 prints made.

The strength of the Company at the end of the month was:- 20 Officers and 300 Other Ranks. 1 European Officer, 9 Native Surveyors and 40 khalassis.

May 1918

The work commenced previously continued according to plan.

Under instructions received from War Office on 4th inst., the name of the Unit was changed to 8th Field Survey Company, R.E.

The scheme for the reorganisation of the Observation section was submitted to the General Staff and that part of it which involved technical questions was approved, but the question of training the technical personnel was still under discussion at close of the month. Sanction was given to the abolition of the Headquarters of the Observation Section and the re-arrangement of the groups and posts. The staff of this section has been utilized to form a detachment of the company at 12th. Corps Heavy Artillery under Major Phillimore who will now have the groups of the Observation section and the Sound Ranging Sections directly under his control.

The re-arrangement of the posts of the Observation section was commenced. 4 groups will be formed. 2 of these groups will consist of 4 posts each and will be situated on the flanks of the country they observe. One group (Right) will occupy positions E. of LAKE DOIRAN, enfilading the country N. of PITON CHAUVE and east of the Pip ridge. The other group (a new one) will have three of the four posts W. of the VARDAR RIVER and will similarly

work behind the BULGAR positions W. of Pip ridge. The remaining 2 groups of 3 posts each (but of which only 1 in each group will be manned by day) will be situated between the flank groups.

These 2 groups will be principally concerned with reporting activity on part of known hostile batteries.

The 26th Observation group consisting of 2 officers and 64 O.R. arrived on 30th inst., from ITALY and will take over the new group West of the VARDAR.

An application for an increase of the Indian Survey Detachment was made during the month and received the approval of the General Staff.

Capt. COURT and Lieut. MILLER went on duty to ATHENS on 25th. Of the month to enquire into the utilization of the Greek survey in neighbourhood of LIVADIA and THEBES and to endeavour to obtain copies of any other Greek surveys that might be useful to us.

An application was made to the General Staff to alter the colour in which the enemy's defences is shown on our sheets, and also to raise the question of showing our own defensive systems on the sheets on which they fall. The French authorities here have recently changed the colour in which enemy organizations were shown from red to blue and it was desirable to fall into line with them. It was decided that in future editions of maps:-

- (i) **Enemy defences would be shown in BLUE (in place of red) thus conforming with the French.**
- (ii) A limited secret edition of a map on the XII Corps front shewing our own trenches should be prepared as an experiment.

Colonel GROGAN, G.S. "I" visited the Observation and Sound detachments on the 7th of the month, and Major-General CORY (M.G.G.S.) on the 29th.

The English Topographical detachment fixed 14 battery and 10 O.P. positions in the XVI Corps area.

9 Artillery boards were also prepared and issued.

The Indian Survey party completed the survey on scale of 1/20,000 of 182 square kilometres during the month.

The MIROVA, DUNDARLI and LIKOVAN sheets were completed and work commenced in the KIRECKOJ and ZAROVO sheets. Work was also continued in the VULAJLI and CALI sheets.

The O.C. Company tested the work on the ground between 17th. And 21st of the month.

OBSERVATION and SOUND RANGING detachments. A considerable increase in the activity of the enemy Artillery has been reported during the month – a total of 87 batteries (excluding anti-aircraft) being reported in place of 74 last month. Of these 87 batteries, 40 were confirmed from 2 or more sources. 21 were unconfirmed and 26 were only reported once. The increase reported is most probably due to local moves only.

HEADQUARTERS. The new letterpress machine was brought into use early in the month and has caused considerable saving in time already. The size of the machine being double that of the previous ones the number of runs is reduced by almost half, and fewer men are required for the machine, thus freeing them for setting up. First editions of the VRASTA, LOWER STRUMA and LANGAZA sheets on scale of 1/50,000 and of the SVETA PETKA on scale of 1/20,000 were passed by the M.G.G.S. and will be printed in June.

Three special maps for the Heavy Artillery XII Corps were reproduced besides much miscellaneous work, which included pamphlets with illustrations for D.D.M.S. XII Corps, Director of Railways and for General Staff (Operations).

The following is a synopsis of the work completed during the month: -

TOPOGRAPHICAL DETACHMENTS BRITISH.

24 Battery and O.P. positions fixed.

9 Artillery Boards prepared and issued.

3 surveyors employed on revision work.

TOPOGRAPHICAL DETACHMENTS INDIAN.

182 square kilos surveyed on 1/20,000 scale.

OBSERVATION and SOUND RANGING Sections.

40 confirmed and 21 unconfirmed batteries were located during month.

In addition, 26 batteries were reported active once only during month.

7 A.A. batteries were located.

HEADQUARTERS OFFICES.

77,242 runs on Lithographic machine.

84,120 runs on Letterpress machines.

53 photo negatives and 1,344 prints were made.

The strength of the Company at the end of the month was:- 23 Officers and 398 O.R.

1 European Officer, 8 Native Surveyors and 47 khalassis.

June 1918

The work during the month was normal. A decision on reinforcements for the unit was arrived at. Only "B" men are to be made available. None were sent for training during the month.

The re-arrangement of posts mentioned in last month's report was being effected when information was received that the line held by the British would be extended W. of the VARDAR river. This upset the previous scheme and a new grouping had to be made, involving construction of new posts, the occupation of posts previously unoccupied and the giving up of some of those now occupied.

Right Group will remain the same as before.

Right Centre will consist of three posts but they will only be manned at night.

Left Centre will now cover both banks of the VARDAR and will consist of 4 posts but will watch to the eastwards of the river.

Left Group will partially overlap the right of Left Centre and extend further to the left but will watch Northwards and principally country W. of the VARDAR river.

No increase of personnel being allowed, the strength of each post has had to be reduced to provide the men for the posts required to watch the extended line.

Information was also received from the War Office that the Indian Survey could not supply the 6 Draughtsmen asked for during the previous month.

The work of the various detachments during the month is summarized below:-

English Topographical Detachment. 3 surveyors were employed on making skeleton surveys of the ground in occupation of the enemy, to be used as a basis for making maps from aeroplane photos. The rest of the detachment was employed in making artillery boards and on the fixation of points for this purpose. A good deal of the necessary preliminary work in the country W. of the VARDAR which is to be taken over by the British was finished during the month. The men who were working in the 16th Corps Area were moved across to the neighbourhood of the VARDAR river for this purpose.

Indian Topographical Detachment. Survey on the 1/20,000 scale was continued in the ZAROVO, VULAJLI, CALI and KIRECKOJ sheets and commenced in the LANGAVUK sheet. The survey of the VULAJLI sheet was completed. Two surveyors were employed during the latter part of the month in the revision of the POBREG and SMOL sheets (1/20,000 scale).

Observation & Sound Ranging Sections. There has been some falling off in the number of batteries reported active during the month. 72 (excluding anti-aircraft) being reported active as against 87 and 74 in the last 2 months. Several of these batteries are situated W. of the VARDAR. Of the 72 reported, 37 were confirmed, 10 unconfirmed and 25 reported as only active once during the month. 3 unconfirmed and 6 of those reported once were batteries not previously located while 1 unconfirmed and 1 only reported once were of batteries previously located but not active during the previous month.

Headquarters. First editions of the LANGAZA and SUGOVO (1/20,000) sheets were printed and distributed during the month, as also were reproductions from the French sheets of LIVADI (1/50,000 scale) and MAYADAG and GJEVGJELI (1.20,000 scale).

A new Index chart was also printed and distributed. A special map for the Heavy Artillery, XII Corps, one for XII Corps General Staff and 1 for G.S."I", G.H.Q. were also produced and printed.

Much reprinting of existing sheets necessary for issue to the Greek Divisions and to keep up the stock, was also done. The increase in the work of the reproduction branch has become very great during the last 15 months (since the arrival of the power lithographic machine).

As many runs were made during June this year as were during April, May and June combined, last year.

A synopsis of work completed during the month follows:-

Topographical Detachments.

British. 14 Battery and O.P. positions fixed. 18 Artillery Boards prepared and issued. 3 Surveyors employed on revision survey.

Indian. 122 square kilometres on 1/20,000 scale surveyed. 2 Surveyors employed on revision survey.

Observation & Sound Ranging Sections. 37 confirmed batteries and 10 unconfirmed ones located. In addition, 25 other batteries were reported as being active only once during the month. T anti-aircraft batteries were located.

Total for month: - 79.

Headquarters Offices. 93,573 runs on Litho machine. 72,953 runs on Letterpress machine. 340 photo-negatives and 1,475 prints were made. 13,214 maps printed by the company issued. 724 maps printed elsewhere issued.

Strength of Company at end of month was: - 20 Officers, 385 Other Ranks, 1 European Officer, 7 Native Surveyors & 40 Khalassis.

July 1918

Early in the month a wire was received from the War Office, in reply to one asking for a 3rd Sound Ranging Section, saying that the instruments for 2 sets were being despatched, but no personnel. At the same time, it was intimated that the officers and other ranks sent from this force early in the year for training in Sound Ranging were returning to this country and could be employed as a nucleus for the new section. On the 18th, 2 officers and 6 other ranks arrived from France, and on the 21st, a third officer. About half the stores required for the new section arrived at same time; the remainder are to be sent from England. It was decided to install this section on the West bank of the VARDAR River and steps were at once taken to form a new section. No reinforcements from which this section can be formed had reached the unit at the end of the month. 2 "B" category officers joined the company at end of month to undergo training but no Other Ranks had been posted.

English Topo Detachment. The officer in charge, Lieut. ANTROBUS was ordered home under the "Y" scheme. The War Office was wired for a replacement. This section is very much under strength as several of the men have been granted commissions or are with batteries with a view to qualifying for appointment. No reinforcements can be obtained. 2 Surveyors were employed on skeleton surveys of the enemy line and the rest of the detachment in preparing Artillery boards.

Indian Topo Detachment. Survey on the 1/20,000 scale was continued in the ZAROVO, CALI, KIRECKOJ and LANGAVUK sheets. The work in the first three sheets was completed and HLAMUR and GOMONIC sheets were begun. Two surveyors continued revision work in POBREG and SMOL sheets.

Observation & Sound Ranging Sections. There has been a marked drop in number of batteries reported active during July, while number of new positions located is the smallest since April, in spite of increased power of observation and the extension of the front. Hot weather lassitude seems the cause.

Headquarters. First editions of the LELOVO and KOCAN MAHALE sheets (1/20,000 scale) and a new trench edition of SERES (1/20,000 scale) were printed and distributed. Reproductions of the French 1/20,000 scale sheets of ARBRE NOIR, ISVOR, LIOUMNITZA and KARASOULI were also made and distributed. Reprints of 12 sheets were made to keep up stock and a special map in 2 sheets for the XII Corps was also reproduced. The DOVA TEPE (1/50,000 scale) and ORFANO (1/20,000 scale) sheets were sent up to the M.G.G.S. for approval during the month. The following is a synopsis of the work done during month: -

TOPOGRAPHICAL DETACHMENTS.

British: - 26 Battery and O.P. positions fixed. 6 Artillery Boards prepared and issued. 2 Surveyors on revision survey.

Indian:- 131 sq. kilos on 1/20,000 scale surveyed. 2 Surveyors employed on revision survey.

OBSERVATION & SOUND RANGING SECTIONS: -

40 confirmed and 8 unconfirmed batteries were located while 22 were reported as being active only once during the month. 8 Anti-Aircraft batteries were also located. Total locations for month:- 76.

HEADQUARTER OFFICES: -

83,000 runs on Lithographic machine.

53,430 runs on Letterpress machine.

73 photo negatives and 1,006 prints issued.

574 maps printed elsewhere issued.

The strength of the company at end of month was: -

23 Officers, British. Other Ranks, British, 387.

8 Officers, Indian. Other Ranks Indian, 40

August 1918

Work on the installation of the new Sound Ranging Section (EE) proceeded steadily. The larger portion of the personnel required were posted to the unit on 11th inst., and on 22nd, the Section got into action.

A good deal of the instrumental equipment has still to be received but by borrowing from the other 2 S.R. Sections, & indents on temporary loan from other units, the Section was able to start work.

Some "B" R.A. personnel arrived during month as training for reinforcements but for various reasons about ¼ had to be returned as unsuitable.

ENGLISH TOPO DETACHMENT.

The officer in charge having been sent to England on medical grounds and his replacement not having arrived, Major Phillimore, D.S.O., R.E. took over charge in addition to his other duties. Two Surveyors were employed on skeleton surveys of the enemy's lines and the rest worked on battery boards for Artillery in 12th Corps.

INDIAN TOPO DETACHMENT.

Survey on the 1/20,000 scale was continued in the LANGAVUK, HIAMUR, and GOMONIC sheets. The two Surveyors doing revision work in the POBREG and SMOL sheets completed their work and commenced revision of DOJRAN and KILINDIR. There was a good deal of sickness amongst these men during the month particularly at the latter end of it.

OBSERVATION and SOUND RANGING SECTIONS.

The work of re-organizing the Observation Sections was completed during the month. This re-organization at once began to show a great improvement on the old work.

Group 32 (old Left Flash Group) commenced regular observations from the new O. P's on 19th., and during the last week of the month it located at least 10 new positions. The opportunities for making locations were confined to 3 or 4 rounds by individual batteries or heavy barrages by many batteries. Very careful control from Group H.Qrs over the observers is necessary for successful work under such conditions and the work of Lieut. Taylor, R.E., the officer who recently took charge of the group, is worthy of high praise.

26th Observation Group (W. of Vardar and 30th Group (old Centre Flash) had very little activity to observe it was reduced to one O.P. working by night only as a temporary measure and the personnel were utilized to strengthen 32nd Observation Group.

Both Q and X Sound Ranging Sections gave satisfactory results but EE Section after it started work on 22nd, was hampered by strong southerly gales, and heavy storms continued to end of month. Activity of hostile artillery showed a progressive increase, particularly west of P. Ridge and E. of Vardar and also the sector W. of Vardar. It appears unlikely that this activity is caused by any increase in numbers of hostile batteries.

(There is no mention of 30, 31 and 32 Observation Sections in the Order of RE Units on 11 Nov 1918.

See RE Journal Aug 1919 page 52)

HEADQUARTERS.

The drawing office programme was entirely revised on the 10th of the month when instructions were received to concentrate all efforts on the production of new editions of the sheets covering the area from Lake Doiran to the Vardar River.

The following sheets in course of drawing, were suspended, PROSENIK KALENDRA, DEMIRHISAR, SAVJAK, and ELISAN on 1/20,000 scale, and POROJ on 1/50,000 scale

The sheets of PROVISTA, MIROVA, LIKOVAN, DUNDARLIU and VULASLI, as well as new trench edition of DOKSAMBOS, which were in proof stage, also had to be suspended and work continued only on BAKCE OBASI, KARA OGLULAR, POBREG, SMOL.

New trench editions for DOJRAN and BOGDANCI were also commenced as well as a 1/100,000 scale map covering area shown in N.W. corner of VODENA sheet.

Proofs of all these sheets with exception of SMOL were sent to the Corps concerned during the month.

New or first editions of the following sheets were reproduced and distributed during the month, 1/50,000 scale – DOVA TEPE; 1/20,000 scale – ORFANO, VIRHANLI, HOUMA and KARA OGLULAR.

In addition, a small secret edition of POBREG showing our own trenches, 5 special maps for Corps and Divisions, reprints of 6 existing sheets, a poster advocating enlistment for Cyprus Muleteers besides much miscellaneous work was reproduced.

The following is a synopsis of work done during month:-

TOPOGRAPHICAL DETACHMENTS.

BRITISH.

6 positions for Microphones for EE section fixed. 18 Battery positions fixed by triangulation.

75 Battery and Observation Posts and Datum Points fixed by plane table.

30 Battery boards issued. 30 sq. kilometres skeleton survey.

INDIAN

97 sq. kilometres survey on scale 1/20,000. 45 sq. kilometres skeleton survey.

OBSERVATION SOUND RANGING SECTION.

55 confirmed and 27 unconfirmed battery locations were made, while 16 were reported as active once only during month. In addition, 6 A.A. batteries were located. Total battery active during month 104. Of these 12 were reported for the first time while 28 of the known locations were not reported active.

HEADQUARTER OFFICES.

63,800 runs were made on the lithographic machine.

68,100 runs were made on the letterpress machine.

140 photo negatives and 1218 prints made.

11,550 maps printed by the Company, issued.

1106 maps printed elsewhere, issued.

The strength of the Company on the 31st of month was

Officers British	Other ranks British	Total
24	406	430

Officers Indian	Other Ranks Indian	Total
8	40	48

Grand Total		478
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September 1918

Work proceeded on lines mentioned in last month's report. The period up to about 21st of the month was one of great pressure in every branch.

FIELD WORK.

Both British and Indian Sections continued work as usual until the 24th when a Mobile Topo Section was formed under the command of Major Phillimore, D.S.O. The section commenced work about 28th of month, working northwards from the ridge which runs from VISOKA CUKA (sect ALLEMAND) westwards more or less along co-ordinate line 195.

Triangulation in extension of that already done in area previously in British occupation was commenced and surveys on scales of 1/100,000, 1/50,000 and 1/20,000 were begun.

DETACHMENT WITH H.A. XII CORPS.

Up to about 22nd of month the Sound Ranging and Observation Sections continued in action and obtained many very valuable locations. After that date the various units were employed in recovering their cable etc., and concentrating near H.Qrs of the H.A. After this was finished such officers and men who were available were attached to the Signal Service for temporary duty.

The hostile artillery was very active during the period. At first west of the VARDAR River during and after the attack on the ALCAK MAH positions and towards the end of the period on the DOIRAN front. The number of hostile batteries recorded active during the 3 weeks were 97, 92 and 119 respectively, as opposed to a weekly average of 50.

During the last week, which included the battle on the 'P' Ridge, the Sound Ranging Section opposite that front obtained 124 locations. The progressive increase in the hostile activity is well shown by the locations made each week during August and September which were (commencing from week ending August 4th) respectively 158, 137, 158, 251, 397, 504, 450, 707.

Several batteries were reported firing from positions on roads just prior to the enemy's retirements while the sources of many explosions were also located. An examination of the ground occupied by the enemy has confirmed the accuracy of the results of both the Sound Ranging and Observation Sections. A report on the accuracy of the work of these sections by comparing locations as made by them and as found on the ground is being made and will be attached as an appendix to a subsequent Diary.

HEADQUARTERS.

The drawing office completed the new editions of POBREG and SMOL. (These sheets were entirely redrawn from new surveys and aeroplane photographs based on large number of points fixed by the survey).

The new sheet of BAKCE OBASI was also completed as well as new trench editions of DOJRAN and BOGDANCI (the latter being also brought up to date in matter of roads, streams etc and completed in these items to the sheet lines.)

The VARDAR VALLEY (scale 1/100,000) map was also produced in 2 editions i.e. in one colour and in 4 colours. These maps were all produced and issued to the troops before operations began.

In the latter end of the month 3 new 1/100,000 scale sheets were produced in one colour viz: - RADOVISTA, PETRIC and PECHEVO. These sheets were ready to issue before hostilities ceased. Subsequently 3 new sheets on same scale were commenced viz: - KJUSTENDIL, DUPNICA and SOFIA.

In addition, captured German map (scale 1/50,000) was redrawn and reproduced and 1,000 copies distributed within 28 hours of the original being received. The month was one of great strain on the reproduction offices. Work was carried on for the greater part of the month practically continuously day and night. In addition to the sheets above-mentioned, 5 special maps were printed for G.H.Q.(I) and the Corps, besides many reprints of our own sheets and some miscellaneous work.

In all 43,000 maps (most in 4 colours) were reproduced. In addition, 4,300 of our sheets were printed for us by the French Topo Service. The number of runs on the lithographic machine was 60% above the previous maximum ever done in one month and almost 2 ¾ times the monthly average for the previous 12 months.

Map issues were also very large. In round numbers 53,000 maps of all scales were issued during the month, the monthly average being about 12,000.

The following is a synopsis of work done during month.

TOPO DETACHMENTS

Not reported.

OBSERVATION and SOUND RANGING SECTIONS.

114 battery locations made (3 weeks only) of which 11 were reported for the first time. In addition, 5 A.A. Batteries were reported. Total for the month 119. 24 of the known locations were not reported active during the month.

HEADQUARTER OFFICES.

152,600 runs made on Lithographic machine.

75,650 runs made on Letterpress machine.

121 Photo negatives and 514 prints made.

39,500 maps printed by Company, issued.

13,400 maps printed elsewhere, issued.
 The strength of the Company on the 30th of month was: -
 Officers British 27)
) Total 429
 O.R.'s British 402)

 Officers Indian 9)
) Total 46
 O.R. Indian 37)
 Grand Total 475.

October 1918

Owing to the change in the military situation, the work which the Company used to do for the Heavy Artillery was no longer required. A portion of the personnel was employed on topographical duties, but the larger portion were attached to Signals. A small detachment remained in the area reeling in their telephone wires and collecting all the stores into a central depot. On the 30th of the month all the stores were brought into the Company Headquarters. The Topographical Section continued work in the north of the DOVA TEPE and VALANDOVO sheets (neighbourhood of STRUMITSA valley) until the 26th of the month, when the gradual shifting of troops from that area which led to the closing of the Supply Depots, made the rationing of the party very difficult. Orders were therefore received from the G.S. to close work in that area, and concentrate the party at DOJRAN Station, with a view to their employment in the MESTA Valley. This concentration was effected by the 31st inst.

HEADQUARTERS OFFICES.

The month was a comparatively quiet one after the strain and stress of the previous two. Opportunity was taken to proceed with the fair drawings of the surveyed area, the mapping of which had been put aside when the work of the offensive began. Copies of two of the 1/250,000 scale maps being urgently required before they could be procured from Egypt or London, the reproduction of the two sheets was taken up by the Company as a rush job. The BALKAN STATES map showing communications on scale 1/1,000,000 was finished and issued during the month as also were first editions of MIROVA, DUNDARLI, LIKOVAN and PROVISTA and new editions of SMOL and DOKSAMBOS all on scale 1/20,000.

The DUPNICA sheet, scale 1/100,000, which had been begun just before operations against Bulgaria ceased, was finished, and issued.

Good progress was also made on the fair drawings of the triangulation charts.

An epidemic of sickness (influenza complicated with pneumonia) occurred in the headquarters camp towards the end of the month, a result of which many of the men had to be sent to hospital.

The return for the month is as follows: -

Topographical Section.

Area triangulated = 2,500 sq. kilos.

Survey on scale 1/100,000 = 710 sq. kilos.)

Survey on scale 1/50,000 = 370 sq. kilos.) From 27th

Survey on scale 1/20,000 = 60 sq. kilos.)

Headquarters Offices.

25,000 runs were made on Lithographic machine.

53,490 runs were made on Letterpress machine.

232 photo negatives and 766 photo prints were made.

The strength of the Company at the end of the month was:-

British Officers 27. O.R. 391. Total 418.

Indian Officers 1. O.R. 44. Total 45

Grand Total 463.

November 1918

During the month the personnel of the Observation and Sound Ranging Sections remained attached to Signals. After the signature of the Armistice with Germany steps were taken to get the officers and men posted to Signals or returned to their depots but at the close of the month no decision had been reached.,

A report on the results of these Sections' work during the offensive is attached as an Appendix.

The Topo Sections – both British and Indian – were employed on survey in the neighbourhood of Salonika but the weather throughout the month was so unfavourable very little work was done.

A reinforcement of 1 British, 7 Indian Officers and 29 Indian other ranks for the Indian Topo Section arrived on the 19th instant.

The headquarter officers continued with the arrear work of mapping etc., good progress was made. The BUCAREST and VIDIN sheets of the Austrian 1/200,000 were reproduced as rush jobs and a Map of the CAUCASUS commenced at the end of the month also required as quickly as possible.

In addition, the SOFIA and KJUSTENDIL Sheets on 1/100,000, LIKOVAN, DUNDARLI and SMOL were finished and printed during the month.,

160,000 Xmas Cards in 4 colours were also printed and issued and 40,000 NEW YEAR's Cards commenced. The usual miscellaneous letterpress work was done.

The month was an exceptionally unhealthy one. The epidemic of influenza and pneumonia which had commenced at the end of last month, exacted a heavy toll from the Unit, particularly in Salonika where 1 officer and 10 other ranks died during the month. These were the first deaths that had occurred in the unit or its predecessors since the landing at Salonika.

The return of work for the month is as follows: -

Topographical Section:- Area triangulated – 300 sq. kilos.

Survey on scale 1/50,000 – 139 sq. kilos,

Survey on scale 1/20,000 – 27 sq. kilos.

48,670 runs were made on the lithographic machine.

53,490 runs were made on the letterpress machine.

232 photo negatives and 766 prints were made.

The strength of the Company at the end of the month was:-

British Officers 24, Other Ranks 375

Indian Officers 2, Other Ranks 81

Grand total 482.

December 1918

During the month the personnel of the Observation and Sound Ranging Sections were distributed thus: -

5 Officers & 81 O. R's were posted to Signals.

11 Officers & 78 O. R's returned to Base Depots.

49 O. R's remained attached to Signals.

All stores and equipment of these Sections were returned to Ordnance during the month.

On 4th instant, Colonel WOOD proceeded to CONSTANTINOPLE with "I" Branch of G.H.Q. taking a small party of lithographers and printers.

He inspected and reported upon the work of the Survey Section of the Turkish War Office.

On 19th inst., he left Constantinople with General Sir William Rycroft's Mission.

The British Topo Section closed field work in SALONIKA Area on December 24th, and 4 Surveyors were placed at disposal of C.R.E., Base, for preparation of large scale site plans required by Claims Commission.

The Indian Survey Detachment continued work in neighbourhood of SALONIKA throughout the month.

Both these sections were much reduced by sickness, malaria, influenza and pneumonia.

The death roll of the Company during December amounted to: -

4 British O. R's.

1 Indian Officer.

8 Indian Followers.

The Headquarter offices continued the fair mapping of all material available from British Survey. During the month three maps of RUSSIA and CENTRAL ASIA were printed and issued.

Heavy calls were made on Printing Section for demobilisation forms.

Progress was made in preparation of progress charts, triangulation charts and records.

History of British Triangulation in MACEDONIA is attached as Appendix.

Output of work for month was:-

Topo. Section triangulated 200 sq. kilos. Surveyed 1/50,000 scale 118 sq. kilos.

Surveyed Scale 1/20,000 131 sq. kilos.

29,920 runs were made on Lithographic machine.

95,750 runs were made on Letterpress machine.

37 Photo negatives and 1496 prints were made.

The strength of the Company at the end of the month was:-

	British	British	Indian	Indian
	Officers	O. R's	Officers	O. R's
Constantinople	1	13	-	-
Salonika, with unit	8	160	10	48
Attached to Signals	-	49	-	-
Totals	9	222	10	48

January 1919

During the month the personnel of the Observation and Sound Ranging Sections were distributed thus:-

Of the 49 attached to Signals, 36 were returned to their respective Base Depots or struck off the strength of this Unit by reason of their being in Hospital or evacuated to U.K.

4 other ranks proceeded on the 1st instant to join the printing section at CONSTANTINOPLE.

On the 8th instant, Major Phillimore, D.S.O., and 4 other ranks proceeded to the DARDANELLES via CONSTANTINOPLE for the purpose of checking the Turkish 1/25,000 Maps procured by Lt. Col. Wood from the Turkish O.S.

A survey of ARAKLI FARM was completed for the Director of Agriculture.

The Indian Survey Detachment continued work in the neighbourhood of SALONIKA though much hampered by inclement weather. Output of work:-

Triangulation Nil sq. kilos. Surveyed scale 1/20,000 12 sq. kilos. Surveyed 1/50,000 Nil sq. kilos.

The health of the topo section improved somewhat during January, and there were fewer cases of influenza, malaria and pneumonia.

The death roll amounted to 4 Indian Khalassis, who died in Hospital

As many men as could be spared were demobilised, but in view of outstanding work it was impossible to demobilise all men applied for and permission was obtained from G.O.C., L. of C., to retain.

Lieut. N.B. Walker, R.E. proceeded on Special Leave to the WEST INDIES on the 19th inst.

Captain H.L. Johnston, Canadian Engineers, proceeded on Special Leave to CANADA on the 20th.

Both officers were struck off strength of Unit in accordance with Demobilisation Orders, No. 65.

One Officer (Lieut. A. METHLEY, R.F.A. (T) and 9 other ranks who proceeded on leave to U.K., in November and December were struck off the strength of the Unit during the month in accordance with Demobilisation Orders, No. 65.

16 other ranks have been demobilised during the month under the following classes:-

Group 43.....4

Group 3.....8

Guarantee of employment.....4

2 other ranks were also despatched to Concentration Camp for Furlough as "Time Serving Soldiers"

These 18 other ranks were accordingly struck off the strength of the unit.

The Headquarters Office continued fair mapping of all material available from British Survey.

Printed.

During the month the following 1/20,000 sheets were printed:-

(a). DOJRAN: KILINDIR New editions.
CALI: VALAJLI 1st Editions.

(b) Other sheets.

CAUCASIA, 1./2,027,520 Reprint.

GJEVGJELI, 1/50,000 Blue (only) to complete.

(c) Demobilisation Poster.

Education Forms.

Turkish & Russian Requisition Forms (drawn up and printed).

Orthopaedic Forms for Scottish Women's Hospital.

Drawn.

The drawing of:-

- (a). 1/50,000 sheets VALANDOVO; DOVA TEPE.
- (b). 1/100,000 sheets STRUMICA VALLEY.
- (c). 1/20,000 sheets VALANDOVO; BOGDANCI; HLAMUR; KARADZAKOJ; KIRECKOJ; GOMONIC, were completed
- (d). Final proofs of all trig. Diagrams were made and checked.
- (e). 23,130 runs were made on Litho machine.

33,250 runs were made on Letterpress machine.

75 photo negatives were made, and 1398 prints were taken.

The strength of the Company at the end of the month was:-

	British Officers	British O. R's	Indian Officers	Indian O. R's
Constantinople	1	17	-	-
Salonika, with unit	4	114	10	45
Attached to Signals	-	13	-	-
Gallipoli	1	3	-	-
Totals	6	147	10	45

February 1919

During the month the remainder of the personnel of the Observation and Sound Ranging Sections attached to G.H.Q. Signals was returned to their respective Base Depots and the demobilisation of these sections was completed. Orders were received to reduce the Company to Cadre strength and on the 15th inst Lieut-Col Wood returned from CONSTANTINOPLE to SALONIKA for this purpose.

On the 22nd inst Major Phillimore returned from the DARDANELLES after having thoroughly inspected the Turkish Maps of that neighbourhood.

During the month considerable progress was made in demobilising the unit but the work was somewhat delayed by the difficulty experienced in obtaining any decision from the Greek Military Authorities as to whether they desired to take over the surplus maps held by the unit.

The Indian Topo Section completed a survey of JANES FARM for the Director of Agriculture and the survey of the HORTACKOJ sheet on scale 1/20,000, after much delay by bad weather, was completed. All field work then terminated.

During the month the drawing of the following sheets was completed:-

1/20,000. KARADZAKOJ; KIRECKOJ; GUVEZNE; BOGDANCI (Ed 2); HLAMUR; GOMONIC; RAMNA; TODORIC; SERES (Ed 2); SAVJAK (Ed 2); PROSENIK-KALENDRA (Ed 2).

1/50,000. VASILKA; GALATISTA.

The 6 first named sheets were also printed as well as reprints of 12 other sheets copies of which were wanted for stock or for record.

The lists of the triangulated points and the Triangulation Charts were also printed during the month.

90,000 runs were made on the letterpress machine and

12,000 runs were made on the lithographic machine.

152 photo negatives and 737 prints were made during the month.

The strength of the Company at the end of the month was:-

	BRITISH Officers	BRITISH O.R's	INDIAN Officers	INDIAN O.R's
SALONIKA	6	71	10	30
CONSTANTINOPLE	-	13	-	-
GALLIPOLI	-	2	-	-
TOTAL	6	86	10	30

March 1919
From the 1 st of the month no new work was undertaken at SALONIKA.
During the early days of the month areas of letterpress work were completed and the fair drawing of the 1/20,000 sheets of HORTACKOJ and BAKCE OBASI (west and south edges only to make them agree with the VALANDOVO and KARA OGLULAR sheets) was completed thus bringing the programme of compilation to a successful conclusion. The following sheets were printed for record purposes:- 1/20,000 RAMNA; SAVJAK; GOMONIC; SERES; TODORIC; PROJENIK-KALENDRA; HORTACKOJ and VALANDOVO. 1/50,000 VALANDOVO; DOVA TEPE; VASILIKA; and GALATISTA. On the 6 th inst Major R.H. Phillimore D.S.O. R.E. embarked on the S.S. Maryland for England with 27 cases of original drawings and other records for the War Office and on the 26 th inst 14 more cases were despatched to LONDON. All the stock of spare maps was handed over to the D.A.D. of A.P. & S.S. and on the 13 th inst Lieut Col Wood with 14 O.R.'s embarked for CONSTANTINOPLE with the material &c required for the Cadre. Lieut. E.C. Shone remained behind to attend to the handing over of the office &c and he arrived in CONSTANTINOPLE on the 24 th inst. By the 24 th inst the reduction of the Company to Cadre strength was complete. On the 22 nd inst Lieut-Col Wood was despatched on a mission to General Denekin's force in south RUSSIA from which pace he returned on the 31 st inst when he handed over command of the Cadre to Capt E.C. Shone. Index maps are attached shewing:- (1) Area surveyed on each scale and Area triangulated in advance. (2) From what material the latest editions of the published sheets have been prepared. (3) Published sheets on scale 1/20,000 (4) Published sheets on scale 1/50,000 6,325 runs were made on the lithographic machine 12,000 were made on the letterpress machine. 27 photo negatives and 153 prints were made. The strength of the Company at the end of the month was 2 Officers and 22 Other Ranks.
April 1919
On 10 April, a note signed in Constantinople by Lt Col Wood states that "the Coy has been reduced to Cadre strength and no further War Diary returns will be made".

MAPS – THEIR SCALE AND THEIR DISTRIBUTION.

General Staff, B.S.F., No. 111 "I" (C)

Maps of the country operated in by the British Salonika Force are on three scales, (1) 1/200,000. (2) 1/50,000. (3) 1/20,000.

The map on the 1/200,000 scale (3 1/7 miles to the inch approx..) is a reproduction of the Austrian General Staff Map, and is issued in sheets covering a square degree (roughly 69 miles north and south by 58 miles east and west). The sheets of this map cover the whole area of south-east Europe. In the neighbourhood of Salonika, the map is not accurate, but as it is the only general map of the country, it is the one that would be used by the troops in the event of more distant operations. The chief inaccuracy lies in the relative distances apart of villages. This inaccuracy may be very large between adjacent villages but becomes smaller as the distances increase.

This map is issued to the troops in large numbers – 85 to a battalion – and although it has been replaced during trench warfare by the larger scale maps, units should have in their possession the proper sheets of this scale, as they would be entirely dependent on them when other operations supervene.

The map on the 1/50,000 scale (about 3/4 mile to the inch) has been produced from the surveys of the allied armies during the war. On the front now occupied by the British, the sheets to the west of the 149 co-ordinate line (roughly the country west of the Galiko stream) have been produced by the French; while the sheets to the east of this line are British work. The present British sheets vary in size and their limits do not correspond with the French, but a new series is in the course of production, which will be of the same size as the French sheets and will be a continuation of their series. (Vide Index Map attached).

Each sheet will then cover an area of 28 kilos. By 23 kilos., and is divided by a grid shewing kilometre squares for convenience of describing any point on the map. The map is drawn on a rectangular co-ordinate projection,

and it must be borne in mind that the longer grid lines are not true north and south lines. The sheets of this scale cover the area behind the front line, and as far beyond it as is visible from our side of the line. The maps of this scale produced by the French, and those of the new British series are generally accurate as regards detail, but the contours are only approximate, and these should be considered more as form lines representing the shape of the ground than as true contours.

This series is intended as the general map of the country behind the front line, and is issued to the troops on three scales:-

- (A). Local sheets (i.e. covering the area operated on by the unit).
- (B). Neighbouring sheets (i.e. those covering the area adjoining that operated on).
- (C). Distant sheets (i.e. those chiefly for outside reference).

The scales of issue are shown on attached form.

Maps on the 1/20,000 scale (a little under 1/3 mile to the inch) have been made of the area in the immediate neighbourhood of the fighting zone. They are designed as trench maps, and as each sheet only covers an area of 10 kilometres by 8 kilometres, and as they are issued in large numbers, they cannot be issued for general use for country distant more than 4000 to 5000 yards behind our own trenches. Although sheets on this scale have been made (particularly in area surveyed by the French) of country some distance behind the line, these sheets will only be issued to staffs, &c.

The same remarks as the sizes and edges of the sheets of the 1/50,000 scale apply to the sheets of the 1/20,000 scale, but a new series of the British sheets in the course of production, which will conform to the French series. (Vide Index Map.)

The kilometre grid on these sheets is the same as on the 1/50,000 series, and the same remarks as to the true north apply.

The maps on this scale are issued to the troops on the same three scales as the 1/50,000. (For details see attached form.)

Both the 1/50,000 and 1/20,000 series shew enemy trenches and battery positions. New trench editions of both series are issued as new enemy works are made. The date up to which the trench detail is shewn is printed on each edition.

The attached diagram shews the area of the present sheets, and the proposed new British series. Only those sheets of the 1/20,000 scale which will be issued for general use are shewn.

DISTRIBUTION OF MAPS.

The Officer Commanding the Survey Company, R.E. is responsible for the issue of maps to the troops.

On the production of a new edition, he will obtain from the Staff the names of the units operating on the area covered by the sheet and will send direct to the various units the sheets they are entitled to under the appropriate scale. As soon as the distribution is complete, he will send to G.S.(I), at G.H.Q., and to the General Staff of the Corps, lists shewing to what units' maps have been issued, and the number issued. On the receipt by a unit of a new edition of any sheet, steps should be taken to withdraw and destroy all copies of the older edition.

Units requiring maps to replace wastage will apply to the staff of their division, who will amalgamate demands, and send an indent for the whole division to the H.Q. of the Corps. If the demand is considered reasonable, the O.C. Survey Company, R.E., will be asked by the Corps to supply the maps direct to the division. O.C. Survey Company after complying with demand will inform G.S. (I), G.H.Q. and Corps Headquarters that the demand has been met.

As maps will be issued on scale "A" only to those units actually operating on any sheet, when units change places in the line, the maps of the area held by the relieved unit should be handed over to the relieving unit, and only demands to replace wastage should be made.

Every endeavour must be made to reduce wastage and keep demands down to the lowest limits as :-

The army is entirely dependent on its own resources for the printing of maps.

The number of different sheet is very large.

The scale of issue of individual sheets is considered sufficient for all requirements.

Survey Company, R.E., B.S.F., No. 632, 19-4-17.

Scale of Issue of Maps for British Salonika Force.

- A. Local Sheets (i.e. Those covering area operated on by unit).
 B. Neighbouring Sheets. (i.e. Those adjoining the area operated on by unit).
 C. Distant Sheets. (i.e. Chiefly for outside reference).

	1/200,000		1/50,000			1/20,000	
		A.	B.	C.	A.	B.	C.
Headquarter Units							
H.Q. of a Corps	50	50	20	10	50	20	10
H.Q. of a Division	50	25	10	5	25	10	5
H.Q. of a Mounted Brigade	9	10	6	5	10	6	3
H.Q. of an Infantry Brigade	6	10	6	3	10	6	3
H.Q. of Corps R.A.	10	10	6	3	10	6	3
H.Q. of Corps H.A.	6	10	6	3	10	6	3
H.Q. of Divisional R.A.	6	10	6	3	10	6	3
H.Q. of H.A. Group	5	3	2	1	3	2	1
H.Q. of Divisional R.E.	4	5	2	2	5	2	2
H.Q. of R.F.C.	12	10	6	3	10	6	3
Other Field Units							
Cavalry							

The above table to be completed.