

AWM4
Australian Imperial Force unit war diaries,
1914-18 War

Engineers

Item number: 14/4/6

Title: Chief Engineer, Australian Corps

June 1918



AWM4-14/4/6

CHIEF ENGINEER,
AUSTRALIAN CORPS.

Sb/1004/0

WAR DIARY

or

INTELLIGENCE SUMMARY.

(Erase heading not required.)

Army Form C. 2118.

306

Instructions regarding War Diaries and Intelligence Summaries are contained in F. S. Regs., Part II, and the Staff Manual respectively. Title pages will be prepared in manuscript.

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
	June	1918.		
BERTANGLES	1st.		<p>In view of the fact that the C.R.E. Corps Troops (Lieut.Col.E.J.H.Nicholson. C.M.G.D.S.O.) has for a long time been engaged on forward work without a rest, it was considered by the Chief Engineer that he should have a change in England. The Chief Engineer therefore recommended to D.A.G. that Lieut.Col.Nicholson be posted to command the Engineer Training Depot at Brightlingsea vice Lieut.Col.Martyn.C.M.G. D.S.O. who would then be posted as C.R.E. Corps Troops.</p> <p><u>Engineer Casuals.</u> In view of the fact that there are in the Depots in England about two and three hundred casuals from Engineer and Pioneer units the C.E. recommended that these should be brought over to France and formed into an Engineer Working Battalion, under Corps control, on lines similar to those of Entrenching Battalions. D.A. & Q.M.G. however considered that there would be administrative difficulties, and although these were not obvious to the C.E., the idea was dropped.</p> <p><u>Defences.</u> BUSSY-BLANGY Line inspected by C.E. work progressing favourably but more wire is needed. C.R.E. R.Z.D. instructed accordingly.</p>	
"	"	2nd	<p>C.E. inspected the Bridghead Line from HEILLY to J.25.b.. It is recommended that this line should be strengthened and formed into an integral part of the line ST LAURENT FARM-</p>	

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BERTANGLES	June 2nd.		-HEILLY - BRICKWORKS - VILLERS Line. This recommendation was put before B.G.G.S. who agreed.	
	(contd)		On this date the control of the Bridges and Roads prepared for demolition was handed	
			over by the Tunnelling Coys to the various Divisions concerned. (Appendix "A")	
"	"	3rd.	It is noted that a very considerable wastage of valuable engineer material frequently	
			occurs and as it is considered that this is probably due, in some measure, to the fact that	
			Troops do not realise the enormous expenditure thereby involved, Engineer Circular No.31	
			was issued. (Appendix "B")	
			<u>MINING TIMBER.</u> Chief Engineer 4th Army advised that owing to the railways being required	
			for other purposes it will probably be impossible to deliver mining timber from the Base and	
			that for this reason there may be a shortage in supply.	
			C.E. inspected the sawmills at BACOUËL, DREUIL and ARGOUËVES, in order to	
			ascertain personally whether they were capable of temporarily increasing their output. This	
			was found to be the case and it was arranged that all fallen timber in Corps area should be	
			collected and delivered to DREUIL. A large amount of fallen timber lies in this district but	
			up to the present it has not been collected owing to some idea on the part of Forestry that	
			it would be otherwise disposed of . As the demand for mining timber is increasing, C.E.	

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BERTANGLES	June	3rd.	decided not to waste any more time in formalities, but to collect and cut up the timber.	
"	"	4th.	With C.R.E. 3rd Aust Div. C.E. inspected the forward system in front of VILLERS - BRETTONNEUX to connect with CACHY Salient and the defences in the Bois l' Abbe.	
"	"	5th	With C.R.E. 5th Aust. Div. C.E. inspected the horses and transport of the 8th and 15th Field Companies. The horses were in an extremely good condition and the harness and vehicles clean and well kept.	
"	"	6th	6th Regt. U.S. Engineers moved out of Corps Area. Work on the LA HOUSOYE Line progressing well.	
"	"	7th	With C.R.E. 5th Aust Div. C.E. inspected the transport of the 14th Field Coy and 5th Pioneer Battalion. The Pioneer's horses, harness and equipment were extremely good. The horses of the 14th Field Coy were in good condition but not well groomed and the harness and vehicles were by no means what they should have been.	
			Correspondence with C.E. 4th Army relative to Horsemaster for Engineers and Pioneers of Divisions. (vide Appendix "C") It does not appear that there is any necessity for a Horsemaster for these purposes if the C.R.E. controls the matter properly. In order to arrive at the best results one Officer from each Field Coy and one from the Pioneers should go	

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BERTANGLES	7th June		through a course of Stable management and then by a judicious study of "Animal Management"	
	(contd)		any difficulties should be easily overcome.	
" "	8th "		B.G.G.S. and C.E. accompanied by C.R.E. 4th Aust. Div. visited the forward portion of 'B' Divisional area. C.E. pointed out the importance of the HEILLY-BRICKWORKS Ridge and it was then decided that it should form part of the Corps Line, vide Diary for 2/6/18.	
			<u>LABOUR.</u> Orders were received from D.A. & Q.M.G. that two Labour Coys were to be removed from The Corps area forthwith. As this was the first that C.E. had heard of this matter, it was represented to B.G.G.S. that the removal of two Labour Coys at short notice would very seriously affect the progress of the work on defences. For that reason C.E. accompanied by B.G.G.S. went to A.H.Q. and saw M.G.G.S. and C.E. 4th Army. It was decided, after discussion, that only one Company should be removed, and that one only at such time as it could be spared without dislocation of work.	
			The present situation of the control of Labour within the Corps area is not satisfactory. Nominally "A" Branch is charged with the control of all working parties, labour, etc, and therefore that Branch can, without reference to any other Branch, dispose of labour, including Labour Coys allotted to C.E. for defence work, at his own discretion.	

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Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
BERTANGLES	8th June.		It is considered that a better plan would be for Labour Companies that are allotted for work on defences to be under the direct control, in every way, of the C.E. working in conjunction with the Corps Labour Officer. In this manner Labour detailed for defences could be disposed of by C.E. in exactly the same manner as are Engineer units, i.e. A.T.Coys and Tunnelling Coys.	
"	(Contd)			
"	9th	"	CANAPLES waterpoint ready to run test.	
"	10th	"	With C.R.E.Corps Troops to inspect La HOUSOYE system. Work progressing well. Trenches dug to 5' right through. Drainage .75' completed, revetting and firestepping .60 completed. 8 Reinforced concrete M.G.Pillboxes in hand, work on KEY WOOD in hand, and about .60 of wiring completed to full depth (4 fences) on the whole line.	
"			Major.Lamonby.D.S.O. R.E. C.R.E.R.Z.D.(Sth) on leave. Lieut.Healy.R.E. to take his place.	
"	11th	"	A support line being required for the BLANGY System,B.G.G.S. and C.E. selected a line from T.4.b. , N.34, N.28, to N.22. where it will run into the local defences of BLANGY TRONVILLE. When this support line is dug and the wiring on the other line completed a very marked advance will have been made with the construction of the Army Line as laid down.	

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Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
BERTANGLES	June 12th		<p>At present there are no dugouts for the Left Division in line (see Div.Area)</p> <p>The Headquarters are at ST GRATIEN and this village is liable to be shelled at any time. For this reason C.E. suggested a site at B.21.c and work will be put in hand forthwith.</p> <p>Querrieu Avoiding Road progressing well.</p> <p>Advice received that three Companies 108th Regt.U.S.Engineers arrive in Corps area on 13th inst.</p>	
" "	" "	13th	<p>C.E. inspected work on double Brigade Headquarters at HEILLY, saw A.D.S. at MERICOURT, and the site for proposed Staging Station for medical services at about I.30.b.9.9.. A good shelled station can be dug at this place but at present it is occasionally from the direction of WARFUSEE.</p> <p><u>STANDARDIZATION.</u> A good deal can be done by standardizing the material used in deep dugout construction for medical purposes as well as by standardizing the plans of all deep dugouts for these purposes.</p> <p>Three Companies 108th Regt.U.S.Engineers arrived and are located as follows:-</p> <p>Headquarters . in Querrieu Forest. "D" Coy in Parment Wood.</p> <p>"E" Coy. in N.10.d. "F" Coy in N.31.a.</p> <p>These Coys will be employed on the Army Line under the respective C.R.E.s concerned.</p>	

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Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
BERTANGLES	13th June	(Contd)	They have arrived without any transport, tools or war equipment. Their C.O. even did	
			not know where he was going and they lost their rations for the 14th.	
			While it is recognised that a certain amount of dislocation in war is inevitable, it is considered that a much better feeling would be produced in these new troops if the arrangements for their transportation, equipment and employment were better co-ordinated.	
"	14th	"	C.E. saw Headquarters 108th U.S. Engineers and arranged for them to work on Army Line.	
			In order to complete the training of this unit, which is comparatively backward, 25% of each Company are to remain off works daily for training in musketry, gas, etc.	
			C.E. 4th Army spoke to C.E. regarding the question of dividing the Corps Front into sectors in so far as the Corps Defences are concerned. As a result of this conference S.O. 985 dated 14/6/18 was issued. (Appendix 'D')	
			<u>LABOUR.</u> The question was raised by C.E. of the apparently large volume of labour employed under Corps. C.E. discussed with Corps Commander the question of the 15th Labour Coy, employed on defence works, the sick rate of which was so high that in some cases only 45% of effectives were obtained. As a remedy for this C.E. suggested to the Corps Labour Officer that a Coy which could well be spared by Corps could be formed by taking the Company having the most	

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Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
BERTANGLES	June 15th		non-effectives, transferring from it all the effectives to other Companies and filling it up	
	(Contd)		with 300 or 400 non-effectives from other Companies. This matter discussed with Corps	
			Labour Officer who is going too look into it.	
"	"	17th	C.E.held a conference of all Divisional C.R.E.s. At this conference various matters were	
			discussed	
			<u>Officering of Army Troops Companies.</u> This proposal was accepted by D.A.G. and acted upon. <i>Appendix "E"</i>	
			C.E.4th.Army called in the afternoon and expressed approval of the work done on the Army Line.	
			C.E. arranged that the C.R.E.s Northern and Southern Sectors should take over their new	
			boundaries on the 19th inst.	
"	"	18th	Deep dugout situation improving but a large number of M.G.Dugouts are still required. C.E.	
			spoke to "G" about this and prepared a tracing for the information of the Corps Commander	
			showing M.G.Dugouts only. This disclosed a weakness in forward zone of southern portion of	
			"C" Divisional area and in northern portion of "B" Divisional Area.	
			C.E.inspected KEY and BOIS de PARMENT Line, work progressing favourably.	

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BERTANGLES	June	19th.	C.E. 4th Army inspected 108th Regt. U.S. Engineers. "D", "E" and "F" Companies, at their work. These men are all keen and very anxious to learn, but they have no idea of ordinary fieldwork that is to be expected of Field Coys.	
"	"	20th	More bridges are required on the Somme between DAOURS and BLANGY. As there are no bridges for a distance of 2000 yards on this river C.R.E. 4th Aust. Div. instructed to reconnoitre a site for at least one more bridge in this Sector. C.E. inspected BLANGY Line on which work is progressing well. <u>Training of Tunnelling Companies.</u> C.E. 4th Army raised the question of training of Tunnelling Companies and letter 41/177 of 20/6/18 was sent to him (Appendix 'F')	
"	"	21st	C.E. discussed with Corps Commander the situation regarding M.G. Dugouts, vide diary for 18/6/18.	
"	"	22nd	C.E. accompanied by B.G.G.S. to HEILLY-BRICKWORKS Line and decided upon the approximate position of the Support System. This line will have to be kept up by the Divisions in 'B' and 'C' Divisional Areas.	
"	"	23rd	C.E. inspected site for M.G. Pillboxes about BUSSY and BLANGY. Work is progressing in connection with these.	

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Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
BERTANGLES	June 23rd		Approval received from D.A.G. to recommendation dated 17/6/18 relative to Officering of	
	Contd.		A.T.Coys.	
" "	" 24th		The Army are anxious about the shifting of the R.E.Workshops, store and dump at POULANVILLE which is developing into a very large railhead. C.E. inspected adjacent country and a start will be made by removing the R.E.workshop and stores to another site near CARDONETTE. The other railhead will then, as far as the Engineers are concerned, be merely a transhipment point from the Broad Gauge to the Light Railway.	
" "	" 25th		C.E. to VILIERES BRETTONNEUX and EN CACHY to ascertain whether the forward trench systems in French area join up entirely with those in this Corps area. It was found they join up very well. There are several "international" posts, jointly garrisoned by French and Australian troops, in the area of junction. It is noticed that an excellent spirit of camaraderie exists between the French and the Australians.	
			C.E. saw "F" Coy. 108th U.S.Engineers at work in DREUIL. This is the best of the three Companies now in this area.	
" "	" 26th		C.E. saw C.O. of 108th U.S.Engineers and arranged with him that his men should work the same hours as the R.E. and A.E. work on the Army Line.	

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Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
BERTANGLES	June 26th		<p>It is noted that the U.S. Engineers have a hot meal in the middle of the day. This is not only a waste of time but it is thought that men cannot work so well after their stomachs have been filled up with a hot meal. The proper time for the hot meal is after the days work. C.O. 108 U.S.E. promised to take this matter up and make the necessary alterations.</p>	
	Contd.			
" "	" "	27th	<p>C.E. with "GA" and C.R.E. 5th Aust Div to FRANVILLERS, RIBEMONT and HEILLY. Inspected the BAIZEUX Line and instructed C.R.E. 5th Aust Div to run a switch from D.26.d. towards HEILLY to link up with the BRICKWORKS Line in J.14.a. BAIZEUX Line is in need of repair and C.R.E. Northern Sector instructed to put this in hand as soon as labour available.</p> <p>Saw C.R.E. 4th Aust. Div reference certain special requirements and arranged with him that a pool for these special requirements will be carried by the Stores Officer from which all necessary stores can be drawn without delay.</p> <p>C.R.E. 5th Aust. Div raised the question of digging a new Bde Headquarters at D.19 in lieu of those at HEILLY which are very heavily shelled.</p> <p>Lt. Col. E. J. H. Nicholson. C.M.G. D.S.O. to England vide diary for 1/6/18.</p>	

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BERTANGLES	June	28th	C.E. with D.D.M.S. to BUSSY and inspected the site for walking wounded huts on which work is to be commenced.	
			With C.R.E.4th Aust.Div inspected Bridge site at N.18.b. (vide entry for 20/6/18).	
			"G" decided to issue orders for the garrisoning of the Army Line by the personnel of A.T.Coys, Tunn Coys, and U.S.Engineers. Orders issued. (Appendix G)	
			Certain secret instructions issued to C.E. by B.G.G.S.	
			Maj.Lamonby. D.S.O. R.E. returned from leave and resumed duty as C.R.E. Southern Sector.	
" "	"	29th	C.E. accompanied by S.O.R.E. to LA HOUSOYE Sector, with acting C.R.E. Northern Sector, saw work in hand and proposed for reserve lines about BUSSY.	
			It was decided to remove the workshop and store to a site about G.3.b.	
			<u>WORKSHOPS.</u> It is quite obvious that Brigade and Battalion Commanders do not appreciate the work that can be done by Corps Workshops. Battalion Pioneers do a great deal of work in forward area but most of this is of a rough nature owing to the lack of proper tools and materials. If this was done in the Corps Workshops much better work could be turned out, more rapidly and more economically. (Vide Appendix H)	

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BERTANGLES	June	29th.	C.E. proposed to issue a standard type book embodying dugouts and all constructional work which has been standardized by this Corps.e.g. deep dugouts, sanitary appliances, furniture, etc.	
"	"	30th	1st Aust.Tunn.Coy arrived today in Corps Area and relieved the 182 and 254 Tunn.Coys. Engineer Instruction No.129.issued. (Appendix I).	
			4.7.18	C.E. Aust Corps

18,000-12/17-8723.

WAR DIARY

OF

 CHIEF ENGINEER,
 AUSTRALIAN CORPS.

So/1004/0

Chief Engineer AUSTRALIAN CORPS.

FOR

Original.

J U N E .

1918

LIST OF APPENDICES.

No.

Subject.

- | | |
|----|---|
| A. | Engineer Instruction. No.125. |
| B. | Circular Memorandum.No.31. |
| C. | File.41/161 Horsemaster for R.E.Units. |
| D. | S.O.985 re division of Corps Front and Map. |
| E. | S.O.987. re Officers of Australian A.T.Coy. |
| F. | 41/177. Training of Tunnelling Companies. |
| G. | S.1587. Garrisons for Army System. |
| H. | 325/105. Circular re Corps Workshops. |
| I. | Engineer Instruction.No.129. |
| J. | Works report of 2nd Pioneers Battln for May.1918. |
| K. | 42/45/3 re replacement of badge "Australia" |
| L. | Engineer Instruction No.126. |
| M. | " " " 127. |
| N. | " " " 128. |
| O. | 214/454 re Quartermaster for Div.Hqtrs.Engineers. |

A U S T R A L I A N C O R P S .Engineer Instruction No. 125.....4th. June, 1918.Issued under Australian Corps D.F. "Instructions for the Defensive
No. 45 dated 4th. June, 1918.1. HANDING OVER STORES.

The 2nd. Australian Tunnelling Coy. and "C" Coy 6th. Regiment U.S. Engineers on handing over bridges and road mines to Divisional Units will obtain from them receipts for any reserve explosives, fuze, cable etc. in their possession. All electric exploders at present on issue to them will be handed over to the relieving Divisional Units and receipts obtained for same. These receipts will be forwarded to the C.E.

On subsequent Divisional reliefs receipts for the electric exploders handed over will be given in duplicate, and one copy forwarded to C.E.

2. EXPOSED CHARGES.

Many of the bridges in the Corps Area prepared for demolition are subject to shell fire. Certain of these bridges have exposed guncotton charges liable to be detonated by pieces of shell striking them. In all such cases, except where the replacing of the charge would occupy too long, the charge is to be removed, and charges on timber frames made up in duplicate and securely stored in readiness nearby.

3. Injury to any bridge will be immediately reported by wire to C.E.

4. ACKNOWLEDGE.

John G. Bunnell Corps
A. Brigadier-General.
Chief Engineer AUSTRALIAN CORPS.

4/6/1918.DISTRIBUTION:-

1-6 G. Aust. Corps.
7-8 Q. Aust. Corps.
9 CE 4th. Army.
10 Controller of Mines 4th. Army.
11. CRE 2nd. Aus. Divn.
12. CRE 3rd. Aus. Divn.
13. CRE 4th. Aus. Divn.
14. CRE 5th. Aus. Divn.
15. CRE - CT.
16. 2nd. Aus. Tunnelling Coy.
17. 6th. Regt. U.S. Engrs.
18. 1st. Battln. 6th. Regt. U.S. Engrs.
19. 'C' Coy 6th. Regt. U.S. Engrs.
20. Lieut. J.A. Bolton A.E.
21-23. War Diary.
24. File.
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"B"

CF/AG.

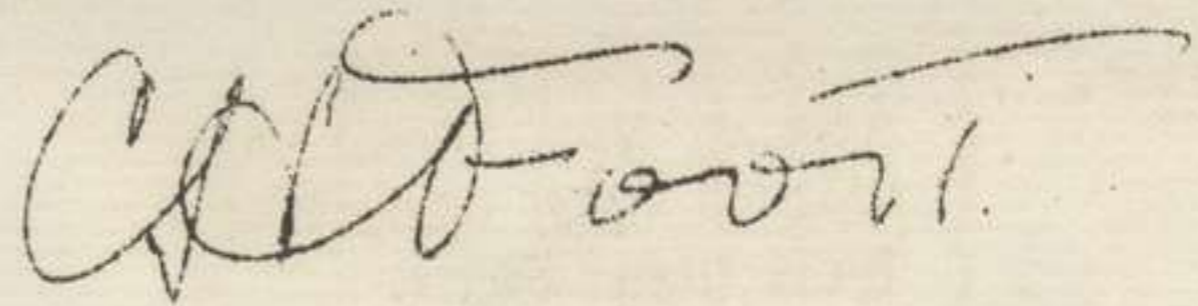
CIRCULAR MEMORANDUM NO.31.by CHIEF ENGINEER AUSTRALIAN CORPS.COST OF MATERIALS.

I wish to bring to the notice of all C.R.E.s the attached list showing the cost of some of the more common Engineer Stores, in order that the Officers, N.C.O.s and Sappers using these stores may realise that unnecessary expense is caused by careless use, or waste, of these stores.

It is not my wish or intention to restrict the legitimate use of any of these stores; I merely wish that all should realise that, as everyone will have to pay his share of the cost of this war, it is up to everyone to use stores of all sorts - not only the items named - as sparingly as is consistent with efficiency.

And the actual money cost is not all. Everyone must remember that there is the transport problem. Railways and roads, M.T. and Horse Transport, are all being fully employed, and even if 1000 sandbags cost only 44 pence instead of nearly £44, it would still be criminal to waste them, as the transport of them from the Base has to be considered.

Put this before your Officers, N.C.O.s and Sappers, please, and ask them to think it over.



4th June.1918.

Brigadier-General.
Chief Engineer. AUSTRALIAN CORPS.

PRICES OF R.E. STORES.

Cement.	barrels.	11/6d including cask. 4/6d.
French wire entanglement.		5/8d per coil.
Corrugated Iron.		£1/14/- per bundle.
Roofing Felt.		6/3d per roll.
Joists 9' x 5" x 3'.		14/6d each.
Screw Posts, long.		1/6 $\frac{1}{2}$ d each.
" " medium.		1/1 $\frac{1}{2}$ d each.
" " short.		8 $\frac{1}{2}$ d each.
Wire Netting.		21/2d per roll.
Williseden Canvas.		1/2 $\frac{3}{4}$ d per sq. yard.
Steel Shelters, large.		£17/6/3d each.
" " small.		£ 5/18/9d each.
R.P.L. large mesh.		1/8 $\frac{1}{2}$ d per sq. yard.
Coir Lewing or Jute Bagging.		1/1d per lin yd 6ft wide.
Trench Pumps. Superior.		4/6/0 each.
" " Inferior.		3/10/0 each.
Hose, armoured delivery.		£1/11/3d per 30' length.
Hose. Suction.		£1/12/6d per 15' length.
Hose. Canvas.		£1/4/0 per 30' length.
Sandbags.		10 $\frac{1}{2}$ d each.
Oiled Linen for Glazing.		£3/8/9 per roll of 50 yds x 1 yd.
Stoves, with piping. (Queen pattern)		9/- each.
Stoves, Canadian, large.		17/6d each.
Stoves, Canadian, small.		13/6d each.
Ear.		15/6d per barrel.
200-gall. Tank, circular.		£2/3/6d each.
400 " " " "		£8/14/0 each.
Barb Wire.		8/- per small coil.
Timber.	(T & G Boarding.	£50 per standard.
	(1st & 2nd quality	£45 per standard.
	(3rd & 4th quality.	£35 per standard.
	(5th quality.	£30 per standard.
Fascines.		3/- each.
Hessian. R.P.		£4 per roll of 100 yards.
Hessian Plain.		3d per yard.
Plain Wire.		7/7d per coil.

306

18

C

C.E. Fourth Army/E.156.
E.-in-C. G.H.Q. ~~CHIEF ENGINEER~~ 31873.

AUSTRALIAN CORPS.
H/161

C.E. Fourth Army.

Will you kindly favour me with your opinion on the points raised in the attached extracts from an Inspection note.

Should you consider the appointment of a horsemaster necessary, will you please take up the question through your Army.

G.H.Q.
3:6:18.

(Sgd.) G.M. HEATH. M.3.
Engineer-in-Chief.

Chief Engineer, ~~III~~ Corps.
" " ~~III~~ "
" " Aust. "

For report please.

yhb

W. Woods

A.H.Q.
5:6:18.

Major.
Staff Officer.
for C.E. Fourth Army.

D5088

A.C.

Horse-mastership was a failing in R.E. Units and he strongly advised providing a Horse-master for R.E. and Pioneers. Temporarily he had made one available with good results. The stamp of horses of one Field Company seen was fair only, but they are the worst in a Division noted for its excellent horses.

5. The G.O.C. of "D" Division had only taken over a few days before and was unacquainted with the Field Units of which two Coys. had just come out of the line. The C.R.E. is a zealous, hardworking Officer, better at works probably than Military Training. I saw one very good and capable Field Company Commander (a regular Officer of 12 - 13 years service). The few men I saw seemed clean and of a good stamp, and good tradesmen: the later recruits were better trained than those who had joined a few months back. 30% of the transport of this Unit was distinctly bad. The mules were good to moderate: the horses exceptionally poor and in bad condition. The Captain, who seemed to be almost entirely engaged on the horse lines, had no previous experience of horses before the War, but occasionally changed places with the O.C. The Subalterns knew nothing of horses and had no opportunity of training in this respect. Some of the Subalterns are not of very good type, and lack initiative.

A capable horse-master would be of great value apparently for these Field Companies.

8. The number of push bicycles in Field Companies might be reduced from 53 to perhaps 21, but 2 Motor Cycles would be an enormous boon in lieu and are a real necessity.

A.C.

306

CF/AG.

CHIEF ENGINEER AUSTRALIAN CORPS. NO.

41/161/3

2

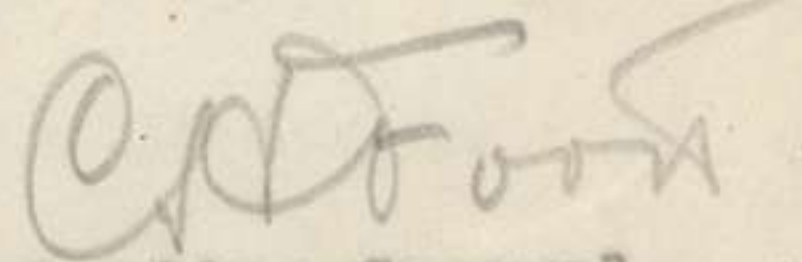
7th. June. 1918.

- C.R.E. 1st. Aust. Div. ✓
- C.R.E. 2nd. Aust. Div.
- C.R.E. 3rd. Aust. Div.
- C.R.E. 4th. Aust. Div.
- C.R.E. 5th. Aust. Div.

H. Q.	
1ST AUSTRALIAN DIVL. ENGINEERS.	
No.	2752
Date	11/6/18

Forwarded herewith is a copy of a letter which I have sent this day to G.E. 4th Army in reply to a memo from him asking for my opinion on the appointment of a Divisional Horse Master for Engineers and Pioneers and for the reduction of the push bicycles per Field Company from 33 to 21.

I will be glad of your views on these subjects.



Brigadier-General.
Chief Engineer. AUSTRALIAN CORPS.

D 5266

W. J. H.
alt

306

7th June 1918.

Chief Engineer.
FOURTH ARMY.

With reference to your E.156 of 5/6/18. My opinion is that it should be quite unnecessary to provide a Horse Master for the R.E. and Pioneers of a Division.

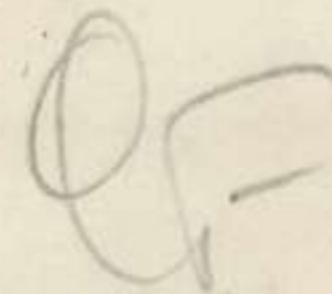
I find no difficulty in keeping the units of this Corps up to the mark in that respect, and I think that if either the C.O. or his Staff Officer know the principles of horse mastership they should be able to keep things right.

As to the units themselves, I think that the second-in-command of the Company, in the case of Field Companies, and either the second-in-command or a selected subaltern in the case of a Pioneer Battalion, should be charged with the care of the horses, vehicles and harness of the unit.

In the particular case to which reference is made in the correspondence I am of the opinion that the source of the whole trouble is summed up in the sentence "the Subalterns know nothing of horses".

I am very strongly of the opinion that it would be conducive to better horse management if one Subaltern per Field Company, and one or two per Pioneer Battalion, could go through a course of stable management. This might be arranged by attaching them to a Divisional Train for training in this respect, provided of course that the Divisional Train know their job.

I am doubtful whether the number of push bicycles in Field Companies can be reduced to 21, as we have found them most useful in the summer time. In the winter of course they become almost useless. I am however very strongly of the opinion that two motor cycles per Field Company and per Pioneer Battalion would be most useful, and I should be quite willing to drop 12 of the cycles now held by the Field Companies if I could obtain two motor cycles in lieu.



Brigadier-General.
Chief Engineer. AUSTRALIAN CORPS.

306

c 22

Headquarters 5th. Australian Divisional Engineers.

Chief Engineer,
Australian Corps.

CHIEF ENGINEER.
AUSTRALIAN CORPS.

41/161/4

C.R.E.
5th AUSTRALIAN
DIVISION.
No. 44/166/17.
Date:

Reference your 41/161/3 of 7th. instant:-
I consider a Horse Master for Engineers and Pioneers, would be an entirely superfluous appointment.

In a Field Company, the 2nd. in Command can easily devote sufficient of his time to ensure that the transport is efficiently cared for, but in a Pioneer Battalion I think the present establishment of one officer, to devote the whole of his time to horses, harness, and vehicles, is quite the best arrangement, as there are 94 horses and many vehicles, and the 2nd. in Command has so many other duties which would prevent him devoting sufficient time to the transport. He should, however, keep a sharp eye on it.

I thoroughly agree with the idea of one Subaltern per Field Company, and a couple from a Pioneer Battalion, going through a course of stable management. I would go so far as to say all Section officers of a Field Company should be put through such a course, because all have a certain proportion of transport, which is, so to speak, their own property; and the more they know about it, the better the efficiency, and the less the time the 2nd. in Command has to spend in chasing the matter up.

Regarding the matter of bicycles.

I would like to see the whole of a Field Company's bicycles, (except say two for emergency runners), handed over to the care of Ordnance during the Winter, as they have proved worse than useless during several Winters' experience. They are certainly useful in the extreme, in Summer time.

I consider the allotment of two motor cycles to each Field Company, would be of immense benefit to the service, and would be quite prepared to hand over 12 push bicycles in exchange. There are occasions when time is of vital importance, and when Field Companies are separated from the C.R.E. by many miles, as is quite often the case, the ordinary methods of communication are quite insufficient. Motor cycles with the Field Companies would make the Engineers independent of these disabilities, and surely it is highly important that they should be, as early information is often of most vital importance.

D 5348
9/6/18.
J.G.B.


Lieut-Col. A.E.
C.R.E., 5th. Australian Division..

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CHIEF ENGINEER, AUSTRALIAN CORPS.
4/1/61/6

3

H. Q., 1ST AUSTRALIAN DIVL. ENGINEERS.
No. <i>F 2257</i>
Date <i>11/6/18</i>

C 23

H.Q., Divisional Engineers,
1st. Australian Division.
11th. June 1918.

C.E., XVth. Corps,

Reference your 315/7 of 9th. instant.

I do not consider there is any necessity for providing a Horse Master for the Field Companies and Pioneers.

In this Division the O's. C. Companies and 2nds. in Command are all capable officers with horses and understand horsemastership. Likewise most of the subalterns, who periodically have a spell from front line work at the horse lines where they are kept fully up to the mark by the Senior Officers.

Two motor cycles would certainly be an enormous boom to a Field Company as it very generally happens that the works are scattered and it is most difficult for the O.C. and Section officers to keep close supervision over their works with the present means at their disposal.

I am in favor of substituting two motor cycles per company for 12 push bicycles at present on establishment.

W A Henderson Lieut. Colonel,
C.R.E., 1st. Australian Division.

4

C.E., Australian Corps,

Reference minute 2. I am in favor of the two motor cycles per Company as it would tend towards greater efficiency and am also of opinion that a side car should be attached to C.R.E. so that he can get round more frequently to the works and Companies.

A Horse Master is not considered necessary.

Minute 3 is a copy of memo sent to XVth. Corps on the same subject.

11/6/18.

W A Henderson Lieut. Colonel,
C.R.E., 1st. Australian Division.

D5550

CHIEF ENGINEER,
AUSTRALIAN CORPS.

HQ RS 4th AUS.
DIV. ENGRS.
No. *D.E. 2291*
DATE *11/6/18*

Headquarters.
4th Aust. Div. Engrs.
11th June 1918.

C.E., AUSTRALIAN CORPS. *41/161/4*

Reference your 41/161/3 of 7th inst.

A horse master is by no means necessary for R.E. or Pioneers provided that Officers are given an opportunity of attending a school of horsemaster-ship and stable management, as is the case with Engineer Cadets and certain selected Officers at the Training Depot who are sent to ALDERSHOT for a 3 week's course. The attachment of Officers to Div. Train or D.A.C. would assist greatly in making them proficient in their mounted duties.

Unless two motor-bicycles - one preferably with side car attachment - were attached to each Field Company, I do not consider that the bicycles of a Field Company should be reduced from 33 especially during the Summer. In the Winter I would suggest that all except about 6 be stored under Divisional arrangement.

I would also strongly urge the provision of a box-car or side-car for the use of C.R.E.

Without means of rapid movement his efficiency is impaired 100%.

In my own case I have three alternatives -

- (a) Car from Divisional pool
- (b) Bicycle.
- (c) Horse.

As regards (a) it is very difficult to obtain a car from Div. pool owing to the numerous people who use them; and even when obtainable it is not always at a time that will fit in with my day's programme.

As regards (b), unless weather conditions are very good the use of a bicycle is not practicable.

As regards (c) it is impossible to use a horse, particularly in a large area and during the warm weather, day in and day out, unless one walks almost the whole time - which is a very slow business. Also, a horse cannot be taken as far forward as a side car, which means probably exposing a man and two horses unnecessarily to shell fire whilst waiting.

R. Johnstone

Lieut. Colonel.
C.R.E. 4th AUSTRALIAN DIVISION.

D5504

*Bt with
near 2nd
CF*

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THIRD AUSTRALIAN DIVISIONAL ENGINEERS.



CHIEF ENGINEER 12th. June 1918.
AUSTRALIAN CORPS.
41/161/5

Chief Engineer,
Australian Corps.

In reply to your 41/161/3 of the 7th inst.

(a) The question of the horse management of a field company.-

I consider that the transport should be in charge of one of the subalterns and not in charge of the Captain.

The Captain is a too highly trained and paid officer to be left at the transport lines. I consider that he should always be with the company commander and the "fighting" part of the company. The company commander and he will then talk over all work, discuss matters, and if the former becomes a casualty he is then ready to assume command straight away.

If the captain is left behind with the transport, the company commander then discusses all matters of organization, of work, policy etc. with his senior subaltern. Then, if the captain has to assume command he has to learn it all from the senior subaltern.

Again, it must be remembered that the majority of company commanders and captains are by no means horse masters, and therefore, if the company commander wishes to have the best transport in the division he must place it in the hands of his best "horse master" subaltern.

My contention is that the officer in charge of the transport must know his job, and be very keen and enthusiastic about it. Very frequently officers in charge of the company transport are changed about in order that they may be given a rest. Good results are not obtained as the officer is not keen on his work; in some cases he does not know anything about horses and leaves everything to the sergeant, and is all the time wanting to get back to his section.

My conclusions are - if you want good transport it must be in charge of a specialist. The bulk of engineer officers are not specialists with horses and never will be, irrespective of how many schools they attend. Therefore the company commander should choose his best subaltern for the job and keep him at it. My experience has been that the best man with horses is the worst man for the engineer work.

I am bearing in mind the old argument of open warfare when sections will have to move independently, but I hardly think the independent section, except for a few days, will ever function, and in these few days the mounted N.C.O. will be able to look after things alright.

I wish to state that I myself am not a horse master, but when a company commander I worked on the above lines and it gave excellent results.

(b) Reduction of Cycles.

During the last few months bicycles have been very useful to the field companies, and I do not think we should suggest a reduction, not even in exchange for motor cycles, but should fight for the 2^d motor cycles as additional to establishment.

Henry Burtold

Major.-
A/C.R.E. Third Australian Division.

D5541

306

1926

CORPS ENGINEER,
AUSTRALIAN CORPS.
41/1601

Chief Engineer.
Austin Corps.

Horse Masters for Engineer Pioneer Units

Attached file is returned
together with my notes on the
subject as requested.

Muller
Major
C.T.O. Austin Corps.

CORPS TRANSPORT
OFFICER,
AUSTRALIAN CORPS
No. *He filed*
Date *15/6/18*

Appointment of horse masters to Engineers Corp and Pioneer Bus.

1. I do not consider the appointments necessary.
2. Transport should be under the supervision of an officer of the unit whose special job it is to keep it efficient & up to the mark.
3. These officers should not be changed unless absolutely necessary.
4. Like everything else the care of horses requires time & thought. Transport officers must get to know ^{each} animal & know intimately their capabilities & peculiarities. This knowledge takes time to acquire & requires a man who is keen on his job & who knows that he is not going to be there for a week or two & then sent on to other work.
5. The main points to be considered are:
 - (a) Thorough cleanliness
 - (b) Regular watering & feeding & grooming
 - (c) Regular work.
 - (d) Equal distribution of work amongst teams & proper pairing of horses as regards pace etc.
 - (e) Strict stable discipline
 - (f) Spelling & building up of horses out of condition
 - (h) Careful shoeing. (The shoe to be made to fit the hoof, - not the hoof cut to the shoe.)

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all these matters more especially watering stable parades require the constant supervision of an officer who is directly responsible to his C.O. for the efficiency of the transport.

- 7 I do not think the same results can be obtained by the appointment of a horse master who would not be a member of the unit & therefore would act more in an advisory capacity.
- 8 Frequent inspections should be made by C.O.s - once a week at least - the C.O. is the responsible party.
- 9 The Staff + advice of the C.O. Duke Train & his officers is always available for units as well as regular attendance of the Veterinary Officer. It is not universally known that the C.O. of the Duke Train is the Senior Transport of a Division & an expert in transport matters.
- 10 Stable management is the most important duty of every officer who belongs to a mounted unit & it seems inadvisable to make any appointment of this nature which would tend to lessen the responsibility of Comdg Officers ^{to} the least degree in this respect.



Millers
Major
C.T.O. Aust. Corps

CF/AG.

C.E.Australian Corps. SO.985.

SECRET.Chief Engineer,
FOURTH ARMY.

Please refer to your E.211 of 9/6/1918.

Taking this Corps as it stands at present, I consider that the Army Line - i.e. the La HOUSOYE System, the sector just W. of DAOURS, and the BLANGY System, together with all works under Corps control in rear of that Line, might be comprising two sectors, as shown on the attached plan; each of these should be under a C.R.E. Defence Sector, with Staff?

As matters are at present, I am unable to spare the C.R.E. C.T. to take a sector - there is a great deal of reinforced concrete work in hand, in addition to a large deep dugout programme, and his time is fully taken up.

It may be possible, when the work is further advanced, to give one of the Sectors to him, and thus relieve a C.R.E. Defence Sector.

Sub-Sectors.

The attached plan also shows the sub-sectors into which I recommend the Defence Sectors be divided.

Establishments.

I venture to recommend that the C.R.E. of a Defence Sector should hold the rank of Lieut.Colonel, and that the Commander of a Sub-Sector should hold that of Major. If the Officer selected does not already hold that rank, he should be given acting rank.

Brigadier-General.
Chief Engineer. AUSTRALIAN CORPS.

COPY TO:

"G" Australian Corps.

Encls.Tracing.

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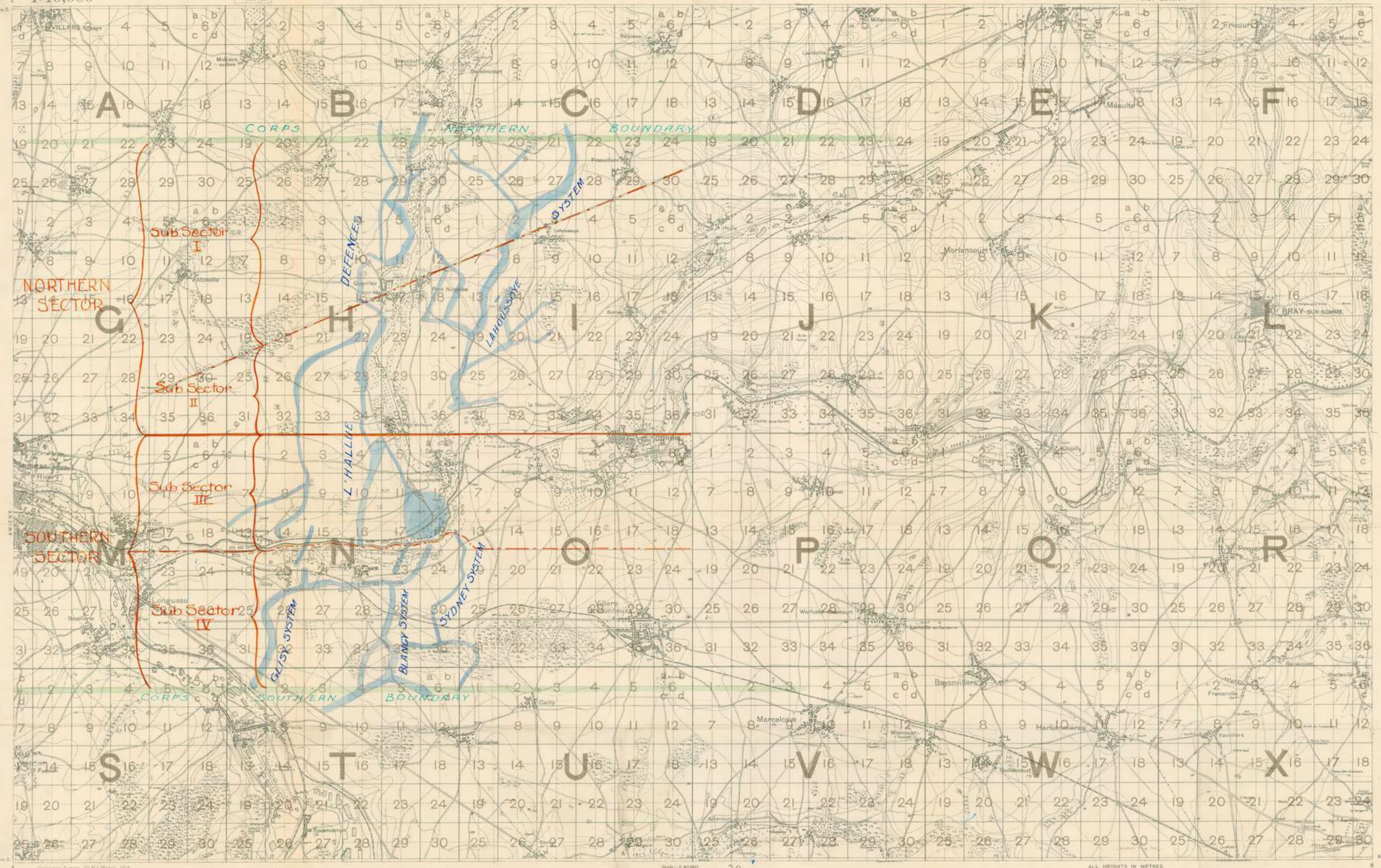
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FRANCE

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FIRST EDITION

SHEET 62^D



Sub Sector I

NORTHERN SECTOR

Sub Sector II

Sub Sector III

SOUTHERN SECTOR

Sub Sector IV

GLISK SYSTEM

BLANCY SYSTEM

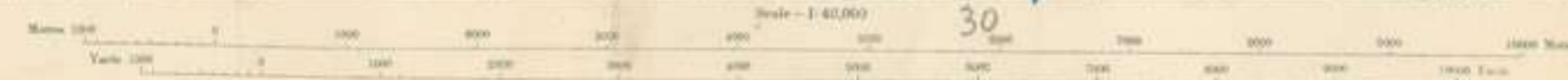
SYDNEY SYSTEM

DEFENSES

LAHOUSSOYE SYSTEM

NORTHERN BOUNDARY

SOUTHERN BOUNDARY



ALL HEIGHTS IN METRES

C O N F I D E N T I A L .

CF/AG.

CHIEF ENGINEER AUSTRALIAN CORPS NO.

31
E
S. 0 987

17th. June. 1918.

D.A.G.
A.I.F.

Officers of Australian A.T.Coy.

I think that some policy should be laid down in regard to the Officering of the Australian A.T.Coy. The Company under present arrangements will come to form a dead-end, unless a system of transfer to, and from, the Field Companies of Divisions is inaugurated.

Here is my suggestion :

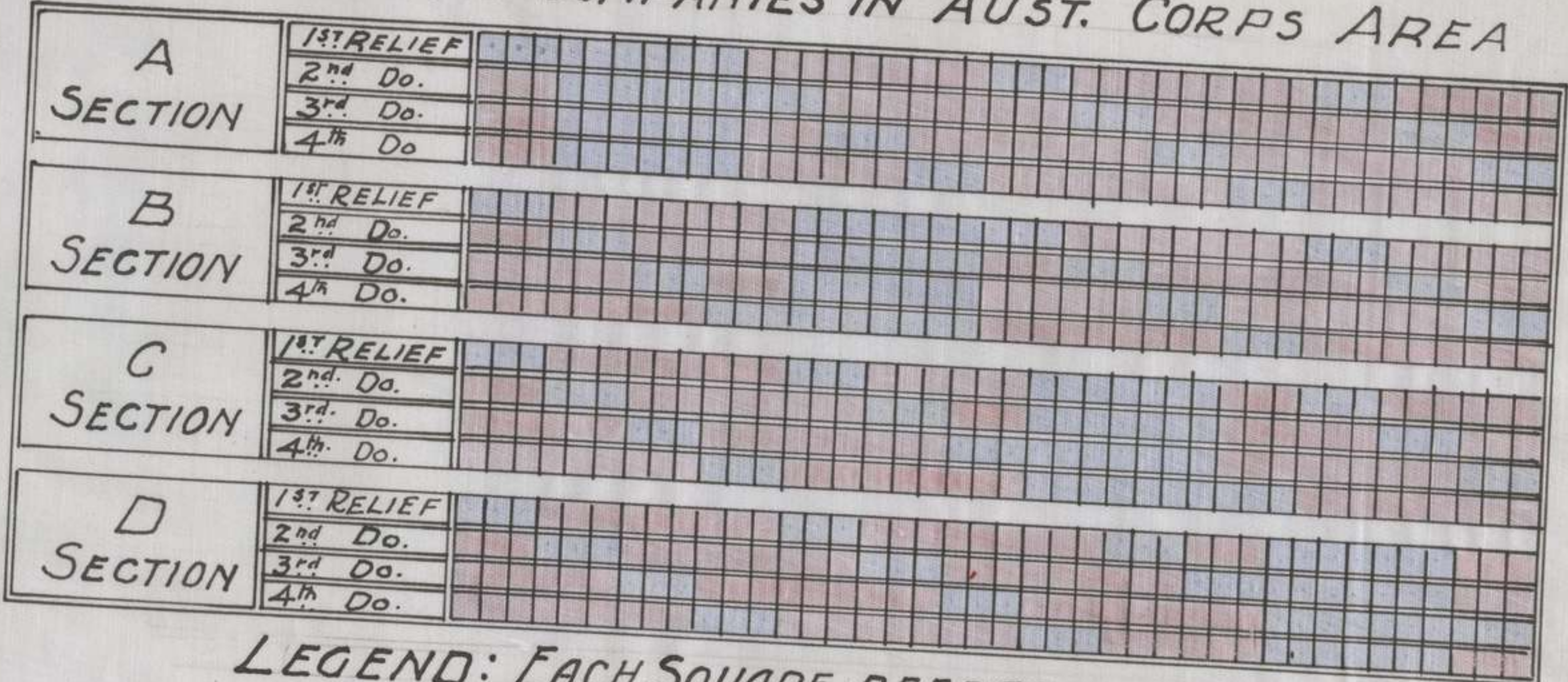
1. The Officers of the A.T.Coy should be found by the Field Companies of Divisions, from which they will be seconded for duty with the A.T.Coy or Companies.
2. An Officer will be seconded from his unit for service with A.T.Coy, for a period of six months, or until he receives promotion in the Engineers whichever shall be the shorter period.
3. If, while seconded to an A.T.Coy, an Officer is promoted, he shall return to Field Company work, and be replaced by another Officer. If, after six months with the A.T.Coy, he has not been promoted, he will return to the unit from which he came.
4. The duty of finding Officers for the A.T.Coy shall be divided among the Divisions as equally as possible.

The above system will ensure a constant flow of Officers through the A.T.Coy, and will I think be in the best interests of the service.

Brigadier-General.
Chief Engineer. AUSTRALIAN CORPS.

306
D5913

DIAGRAM · SHEWING · SYSTEM · OF · RELIEFS ·
IN TUNNELLING COMPANIES IN AUST. CORPS AREA



LEGEND: EACH SQUARE REPRESENTS ONE DAY
RED = WORK., BLUE = REST OR TRAINING.

306 SF/WE

C.E. Australian Corps. 4/177

F 33

20th. June, 1918.

Chief Engineer,
FOURTH ARMY.

-- WAR DIARY. --

Training of Tunnelling Companies.

In continuation of your conversation with me on the 19th. instant, I now submit the following scheme and diagram.

1. Work and Rest Periods.

Each Tunnelling Company to work for nine and rest for three days by reliefs of a section, a "relief" being one fourth of a section.

2. Hours of Work or Parade.

While on the works, the hours to be not less than 49 nor more than 56 per week; while off the works to be, for drill purposes, not less than three nor more than four, for N.C.Os and Sappers, and not more than six for Officers, the extra two hours being devoted to lectures on interior economy, discipline &c. and the rest of the time being devoted to clothing, bathing, &c.

3. The School or Course of Instruction to be an Army School or Course, and not a Corps one, for two reasons -

- (i) A Corps may move out, thus interrupting the instruction.
- (ii) An Army could call up one Section from each of six or seven Tunnelling Coys., thus forming a school of decent size.

4. In order to get a good attendance at the school, (vide 3 (ii) above) the whole of the Tunnelling Coys. in the Army Area should have the same dates for "on work" and "off work".

5. The attached diagram shows that No.1 Relief of A. Section would go "off the works" on the 1st. day for a rest of three days. On the 4th. day it begins a seven day period of training, when it is joined by Nos. 2, 3 and 4 reliefs. On the 11th. day Nos.1,3, and 4 reliefs go on the work, No. 2 relief taking its 3 days off the works.

6. During this period, B.C. and D. Sections of the Company carry on with their ordinary "on" and "off" periods; when A. Section has finished its seven days training, B. commences, and so on.

7. By the synchronisation throughout the Corps of on and off periods, there could be one section from each Tunnelling Company at a school - say six or seven sections at a time.

8. I am of opinion that the instruction should be limited to the following subjects:

- Musketry, and care of arms.
- Bombing & trench tactics.
- Lewis Gun.
- Close order drill and handling of arms.
- Sanitation in Billets & Camps.
- With, for Officers, in addition,
- Interior Economy.
- Discipline.
- Messing & quarters.

C. H. Fourn
Brigadier-General.

Copy to:

Chief Engineer AUSTRALIAN CORPS.

Controller of Mines,
4th. Army.

306



A P P E N D I X 'A'

Issued with Instructions for the Defensive No.54.

GARRISONS FOR ARMY SYSTEM.

Australian Corps Area.

Right Sub-section.	T r o o p s	S e c t o r.	
<u>BLANGY SYSTEM</u> from Corps S. boundary to BUSSY les DAOURS (exclusive). O.C:Major LAMONBY. D.S.O., R.E. Location:N.31.a.	567 A.T.Coy R.E. (F.Coy U.S.Engineers attd)	CABARET.	
	162 Tunnelling Coy R.E.	do.	
	'Z' Special Coy R.E.	do.	
	172 Tunnelling Coy R.E.	SOMME.	
	'H' Special Coy R.E.	do.	
	1 Section No.1 Special Coy RE.	do.	
	254 Tunnelling Coy R.E. <i>1st Aust Tunnelling Coy</i>	DAOURS.	
	131st Regt M.G.Coy U.S.Army.	Disposed over whole system. H.Q. N.22.a.80. 40.	
	=====		
	Left Sub-section.	T r o o p s.	S e c t o r.
<u>LA HCUSCOYE SYSTEM</u> from BUSSY les DAOURS (inclusive) to Corps N. boundary. O.C:Lt.Col.HEARN, D.S.O.,R.E. Location:B.21. ST.GRATIEN.	<i>A.T.</i> 146 Tunnelling Coy R.E. (with 'E' Coy 108 U.S. Engineers).	VIEW.	
	2nd Aust.Tunnelling Coy AE.	CARD.	
	283 A.T.Coy R.E. (with 'D' Coy U.S.Engineers attd).	FRAN.	
	1st Aust. A.T.Coy A.E.	CREST.	
	132 Regt.M.G.Coy U.S.Army.	Disposed over whole system. H.Q.QUERRIEU WOOD.	
	=====		

IN RESERVE:- H.Q. and 1 Coy 122nd M.G.Battalion,U.S.Army, at Wood
S.W. of QUERRIEU, H.20.a.

H

206

CF/AG.

CHIEF ENGINEER AUSTRALIAN CORPS. NO.

325/105

2nd. July. 1918.

- C.R.E. 2nd Aust. Div.
- C.R.E. 3rd. Aust. Div.
- C.R.E. 4th. Aust. Div.
- C.R.E. 5th. Aust. Div.

CORPS WORKSHOPS.

As you know , the Corps has a useful little workshop at POULANVILLE, where a great variety of articles are made.

I do not think, however, that Commanding Officers of units quite understand what work can be done there. I have noticed in the forward areas, Battalion Pioneers and others making various things, using improvised tools and scrap materials.

Would it not be a good idea to let all units in the Corps know that the Workshops are at their service in this respect. If the Workshops Officer has a design or pattern or sketch of any desired article he can usually make it , and it is a simple matter to turn it out , in large numbers, if required.

I am sending you six copies of this memo so that if your G.O.C. concurs, they can be distributed to units.

If any Brigade or Battalion Commander, or their representatives, would care to look over the Shop, it will give me pleasure to arrange for them to visit at any time.

Brigadier-General.
Chief Engineer. AUSTRALIAN CORPS.

COPY TO:

- "G" Aust. Corps. (For
- "Q" Aust. Corps. (information.

306

AUSTRALIAN CORPS.

Engineer Instruction No.129.....30th.June.1918.

Reference Map.62D/ 1/40,000.

1. The 1st Australian Tunnelling Coy arrives in Australian Corps area on 30th June, and works under orders of C.E.Australian Corps from and including 1st July 1918.
2. Two sections of 1st Australian Tunnelling Coy will take over from the 254 Tunnelling Coy RE all work they have in hand at present, all instructions and drawings issued to them by the Australian Corps and all mining materials, timber, steel joists, etc, now in their possession, and all labour being worked by them. O.C. 1st Australian Tunnelling Coy will also take over from O.C. 254 Tunnelling Coy.RE, responsibility for all dugouts in 'B' Divisional Area in accordance with general instructions contained in Engineer Instruction No.101 dated 28th April.1918.
3. The O.C. 172 Tunnelling Coy.RE, will take over from the O.C. 182 Tunnelling Coy.RE, all work now being done by him, all tunnelling material in his possession, all drawings and instructions issued by Australian Corps and all labour now working under him, and will become responsible for all tunnelling work in 'A' Divisional Area.

At the same time the O.C. 172 Tunnelling Coy.RE, will hand over to the O.C. 1st Australian Tunnelling Coy all work he at present has in hand outside 'A' Divisional Area, with all particulars in his possession regarding such work, and also all labour employed by him N. of the SOMME.
4. These reliefs and transfers will be completed by 6 p.m. 1st July 1918.
5. The 182 and the 254 Tunnelling Coys.RE will cease to work under the orders of the C.E. Australian Corps from noon 2nd July 1918, when they will be transferred to XXII Corps and move under their orders.
They will move out with rations for the 3rd July and, commencing 3rd July, will draw rations under XXII Corps arrangements.
6. Labour and Mining sets are allotted to Tunnelling Coys as follows :-

Company.	Divl. Area.	Allotment of Mining sets.	LABOUR.	
			Allotment.	Location of
172 Tunn Coy.RE.	'A'	Dreuil output - 200 sets per day with lagging.	1/3 of 59th Lab.Coy.	N.34.c.
			1/3 of 83rd Lab.Coy.	M.36.d.5.5.
1st Aust Tunn.Coy.	'B'	BACOUFL output - 250 sets per day approx with lagging plus 100 sets daily with lagging from Poulanville.	2/3 of 59th Lab.Coy. 49th Lab Coy less 30.	H.34.b.5.8. (H.14.c.1.2). (N.10.c.5.5).
2nd Aust Tunn.Coy.	'C'	400 sets per day with lagging from FOULANVILLE.	114 Lab.Coy. 14th Lab.Coy.	H.14.c.central. H.33.c.8.3.

P.T.C.

7. ACKNOWLEDGE.

John C. Burnell Capt A.E
 for Brigadier-General.
 Chief Engineer. AUSTRALIAN CORPS.

DISTRIBUTION.

- 1-6. "G" Aust. Corps.
- 7-8. "Q" Aust. Corps.
- 9. C.E. 4th. Army.
- 10. C. of M. 4th. Army.
- 11. C.E. XXII. Corps.
- 12. C.R.E. 2nd. Aust. Div.
- 13. C.R.E. 3rd. Aust. Div.
- 14. C.R.E. 4th. Aust. Div.
- 15. C.R.E. 5th. Aust. Div.
- 16. C.R.E. (N).
- 17. C.R.E. (S).
- 18. 1st. Aust. Tunn. Coy.
- 19. 2nd. Aust. Tunn. Coy.
- 20. 172 Tunn. Coy. RE.
- 21. 182 Tunn. Coy. RE.
- 22. 254 Tunn. Coy. RE.
- 23. Labour Commandant.
- 24. Eng. Officer. att. C.H.A.
- 25-25. War Diary.
- 28. File.
- 29-37. Spare Copies.

5. 6. 18

Brig General C. H. Lott
Australian Corps

Dear General

Following our conversation
in which you asked for some
statistics of timber output
from our Kelly Sawmill, I
forward herewith a ^{*}summary
of our work for May, which I
trust may be of use.

Yours truly
F. W. Lunn

* Prepared as an addendum to
war diary 2018

File War Over
CF

WORK DONE BY BATTALION DURING MAY 1918.306 1. C.Ts. and FIRE TRENCHES.

During May 1918 C.Ts. and Fire Trenches were constructed by this Battalion in three sectors of this front, viz., (1) DAOURS (A and D Coys) (2) BAIZIEUX (B and C Coys) and (3) HEILLY (D Coy and B Coy relieved by C Coy.) -

A summary of the amount of digging for the month reveals that an average working strength of 200 men has been responsible for the construction of over 17,800 yards of C.T. or Fire Trench (over ten miles).

Reckoning an average section of this work to be 3'6" X 2'9" these figures give 514,264 cubic feet of earth displaced, an approximate tonnage of 12,586 tons.

2. DUGOUTS.

A Coy and B Coy afterwards relieved by C Coy have been busy tunnelling making dugout accommodation of the following nature :-
 Artillery Bde. H Qrs. - Regtl. Aid. Posts. - Battalion H.Qrs.
 - O.P. - Advanced Dressing Stations - Machine Gun Emplacements.
 Working in shifts of 6 hours and averaging 2 shifts daily 140 men have excavated 17,644 cubic feet in 21 days, representing well over 440 tons of earth.

In addition to the removal of the earth much time and care has had to be spent in the fitting and adjusting of the timber work in these tunnels and dugouts, according to the nature of the construction in hand, and keeping in view its ultimate utility.

3. TIMBER MILL.

A Coy have for the past three weeks been running a Saw Mill at HEILLY providing all timber of every type required for such tunnelling operations as previously indicated, as well as supplying lagging and sawdust to other units. Up till 31st May 275 trees had been felled and considerable wood salvaged to meet the demand for sets, lagging, etc. These trees representing a total tree length of 4,668 feet were hand split and carried to the mill, the output of which for the three weeks work was 38,460 superficial feet.

In all 28 men are employed felling ~~trees~~^{and} splitting^{logs} and working the mill.

4. ROAD MAINTENANCE.

D Coy and B Coy now relieved by C Coy have in addition to trench construction, been responsible for maintaining and patrolling all Divisional Roads. This means the constant patrolling of 60,000 yards of road. In all approximately 78 tons of metal have been used upon this work.

Just prior to the close of the month B Coy also undertook the maintenance of the roads lying in the VAUX - CORBIE sector.

5. MINOR WORKS.

Under this heading are such works as :-

- (a) Erection of 1800 yards wiring (Baizieux).
- (b) 1800 yards Camouflage along Albert-Amiens Road.
- (c) Parties employed two dumps at Querrieu and Franvillers.
- (d) Construction of Baths at LAHOUSOYE.
- (e) Party employed by Corps Water Supply Officer.

Ch. Henry Lieut.
Asst/Adjutant.

2nd Australian Pioneer Battalion.

306

40

K

COPY FOR WAR DIARY.

SM/WE

CE Australian Corps 42/45/3

20th. June, 1918.

CRE 1st.Aus.Division.
CRE 2nd Aus.Division.
CRE 3rd.Aus Division.
CRE 4th.Aus.Division.
CRE 5th.Aus.Division.
- - - - -

A question raised in this office regarding the replacement of letter badge "AUSTRALIA" which has in many cases, been broken by Sappers carrying tools and material on their shoulders, has brought forth the following reply which is forwarded for your information.

"A.D.O.S. Australian Corps Q.O./203
To CE Australian Corps.

Indents may be placed with D.A.Ds.O.S. concerned for new titles "AUSTRALIA" to replace those broken on service, the broken titles to be returned with indent please.

These will be free issue.

19/6/1918.

Signed. E.T. Leane. Lt.Col.
A.D.O.S. Aust.Corps.

Signed. J.G.Burnell Captain AE
for Brig.General.
CE Aust.Corps.

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SECRET.

Copy No.

A U S T R A L I A N C O R P S .

Engineer Instruction No. 126.....13th. June, 1918.

Issued under Australian Corps 5/559 and Fourth Army
10/232 G. dated 13th. June 1918.

1. Headquarters and one Battalion of 108th. Regiment U.S. Engineers arrive in Australian Corps Area on 13th. June for work under C.E.
2. They will be located and allotted for work as shown in the following table :-

	Approximate Location.	For work under.
Regiment & 1 Battalion H.Q's.	Guerrieu Wood H.14.	
D.Company.	Bois de Parment.	CRE - CT.
E.Company.	N.9.d.	CRE-RZD (N)
F.Company.	N.33.a.	CRE-RZD (S)

3. Units will advise C.E. when they have arrived in their Camps and give their exact map locations.
4. Personnel will be exclusively employed on the "Army System" Defences i.e. BLANGY System-LA HOUSSEY System-VADEN Line.
5. 25% of the personnel of each Company will be left in camp each day for training in gas drill and in the use of the Lee Enfield rifle with which they have just been equipped. C.R.E's concerned will see that suitable facilities and instructors are available for these purposes.
6. ACKNOWLEDGE.

John H. Burnett Capt A.E.
for Brigadier-General.
Chief Engineer, AUSTRALIAN CORPS.

DISTRIBUTION:

- 1-2 G.Aust.Corps.
- 3-8 Q.Aust.Corps.
- 9 CE Fourth Army.
- 10 CRE 2nd.Aust.Divn.
- 11 CRE 3rd.Aust.Divn.
- 12 CRE 4th.Aust.Divn.
- 13 CRE 5th.Aust.Divn.
- 14 CRE - CT.
- 15 CRE-RZD (N)
- 16 CRE-RZD (S)
- 17 108 Regt. U.S.Engrs.
- 18 2nd.Battln 108 U.S.E.
- 19 D.Coy 108 U.S.E.
- 20 E.Coy do
- 21 F.Coy do
- 22-24 War Diary.
- 25 File.
- 26-30 Spare Copies.

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SECRET

42

Copy No. 19

A U S T R A L I A N C O R P S .

Engineer Instruction No. 127.....13th. June, 1918.

Issued under Australian Corps Order No. 112 dated 12/6/1918.

1. The Field Coys. and Pioneers of 2nd. Aust. Division will relieve the Field Coys. and Pioneers of 5th. Aust. Division at present employed under C.E.

Relief to be arranged direct between CRE's concerned and completed by 10a.m. on 16th. instant.

No break to occur in the work owing to change over.

2. Guarding of bridges and road mines will be taken over as mutually arranged by CRE's and in accordance with Engineer Instruction No. 125 dated 4th. June 1918.

The details of the other work to be taken over by the Field Coys and Pioneers of 2nd. Aust. Division are shown in the following table:-

Ref. Map 62 D/1/40,000

Details of Employment of Field Coys and Pioneers of 5th. Australian Division.

Location.	Unit.	Employed		Remarks.
		Under	On	
B.23.Cent.	8th.Fld Coy	CRE-CT	Defences.	Portion of 173 Lab.Co allotted for work.
H.11.Cent.	15th.Fld Coy less 1 Sect. 1 Section.	CRE-CT Lt.Bolton AE	Defences Bridging under CE.	100 men of 86th.Labor Coy allotted for work.
Rivery.	14th.Fld Coy	Lt.Bolton AE.		Available for Bridging under C.E.
Bussy.	5th.Pioneers	CRE-RZD (N)	L'Hallue Defences.	

3. 25% of Field Coys and Pioneers to be available for rest or training daily.
4. CRE 2nd.Aust.Division will advise C.E. when reliefs are completed giving map location of units.
5. ACKNOWLEDGE.

John A. Burnell Capt A E
for Brig. General.
Chief Engineer AUSTRALIAN CORPS.

DISTRIBUTION.

- | | |
|-------------------------|-------------------------------|
| 1-6 G. Aust. Corps. | 15. CRE - RZD (N) |
| 7-8 Q. Aust. Corps. | 16. CRE - RZD (S) |
| 9 CE 4th. Army. | 17. Labor Comdt. Aust. Corps. |
| 10 CRE 2nd. Aus. Divn. | 18. Lt. Bolton AE. |
| 11 CRE 3rd. Aus. Divn. | 19-21. War Diary. |
| 12 CRE 4th. Aus. Divn. | 22. File. |
| 13. CRE 5th. Aus. Divn. | 23-26. Spare Copies. |
| 14 CRE - CT. | |

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A U S T R A L I A N C O R P S .

Engineer Instruction No.....128.....27th June.1918.

Issued under Australian Corps Order No.116 ...dated 24/6/18.

Reference Map. 62D. 1/40,000

1. The Field Coys and Pioneers of the 3rd Australian Division will relieve the Field Coys and Pioneers of the 2nd Australian Division at present under C.E.
2. Relief to be arranged direct between C.R.E.s concerned and completed by 6 p.m. on 28th inst.
No break to occur in the work owing to change over.
3. Guarding of bridges and road mines will be taken over as mutually arranged by C.R.E.s.
4. Details of other work to be done by the incoming Field Coys and Pioneers are as follows :-

Unit .	Location of Hqtrs.	W o r k .	Remarks.
9th Field Coy.	B.23.central.	Salving of LA HOUSOYE & ALLONVILLE Aerodromes.	Labour assistance from 15th Labour Coy.
10th Field Coy.	H.11.central.	Bridging with Lt.BOLTON.	AE.
11th Field Coy.	M.2.d.8.2.		
3rd Pioneer Battalion.	H.35.d.6.0.	Bridging with LT.BOLTON.	AE.

5. 25% of Field Coys and Pioneers will be available for rest or training daily.
6. C.R.E. 3rd Australian Division will advise C.E. when reliefs are completed giving map locations of units.
7. ACKNOWLEDGE.

John C. Burnell Capt A.E.
for Brigadier-General.
Chief Engineer. AUSTRALIAN CORPS.

DISTRIBUTION.

- | | |
|--------------------------|-------------------------------|
| 1-6. "G".Aust.Corps. | 14. CRE - RZD (N). |
| 7-8. "Q" Aust.Corps. | 15. CRE - RZD (S). |
| 9. C.E.4th.Army. | 16. Labour Commdt.Aust.Corps. |
| 10. C.R.E. 2nd Aust.Div. | 17. Lt.Bolton.AE. |
| 11. C.R.E. 3rd.Aust.Div. | 18-20. War Diary. ✓ |
| 12. C.R.E. 4th.Aust.Div. | 21. File. |
| 13. C.R.E. 5th.Aust.Div. | 22-26. Spare Copies. |

CF/AG.

CHIEF ENGINEER AUSTRALIAN CORPS. NO.

214/454

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306

28th. June. 1918.

D.A.G.
A.I.F.

An additional Officer is, in my opinion, required on Headquarters, Divisional Engineers, in the shape of a "Quartermaster and Assistant Adjutant."

The C.R.E. at present has but one Officer - the Adjutant. This Officer is charged with the administration of the three Field Coys, the details of works, upkeep of plans, and the control of the Office.

There is no Officer to supervise the very large quantities of Engineer Stores, nor is there any understudy to the Adjutant.

The result is, that part of the Adjutant's work has to be neglected, for there is too much for him to do.

I have gone into this matter very carefully, and therefore submit two alternative proposals :

- (a). That the Establishment of Headquarters Divisional Engineers be increased by one Officer - a Subaltern - as "Quartermaster and Assistant Adjutant".
- (b). That C.R.E.s of Divisions ^{be} permitted to post an Officer from a Company for those duties. This would in most cases work at present, while there are surplus Officers who could be made available.

C. D. Foot

Brigadier-General.
Chief Engineer. AUSTRALIAN CORPS.

COPY TO :

- C.R.E. 1st. Aust. Div.
- C.R.E. 2nd Aust. Div.
- C.R.E. 3rd Aust. Div.
- C.R.E. 4th Aust. Div.
- C.R.E. 5th Aust. Div.

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