

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

Signals

Item number: 22/1/17 Part 2

Title: Assistant Director Signals, 1st
ANZAC Corps and Assistant Director
Signals, Australian Corps

September 1917 Appendices



AWM4-22/1/17PART2

Second Army.

G.344

D.D.S.

20th Sept., 1917.

The Army Commander wishes to convey his congratulations and thanks to you and all under your command for the excellent work that has been done by the Signal Service, and which has contributed so largely to the Second Army success today.

(Signed) C.H. MARINGTON,

M.G.S.S.
Second Army.

A. D. Signals,

BAR/7689.

I Anzac Corps.

I have much pleasure in forwarding the above letter which is very fratifying to all concerned.

21/9/17.

(Signed) A. HILDEBRAND,
Colonel, R.E.,
D.D. Signals, Second Army.

O.C. 1st Aust. Div. Sig. Co.
O.C. 2nd Aust. Div. Sig. Co.
~~O.C. 4th Aust. Div. Sig. Co.~~
~~O.C. 5th Aust. Div. Sig. Co.~~
O.C. "K" Corps Signal Co.
O.C. Corps Heavy Artillery Signals.
Corps Wireless Officer.

A. D. SIGNALS.	
1 Anzac CORPS.	
No.	T. 107/13.
Date	22.9.17.

The above letter is forwarded for your information.
Please convey the Army Commander's congratulations to all concerned

22nd Sept;
1917.Lieut. Colonel, R.A.,
A.D. SIGNALS, I ANZAC CORPS.

488

"C" Form
MESSAGES AND SIGNALS. No. of Message

Prefix.....Code.....Words.....
g s. d.

Charges to collect

Service Instructions.

Received
 From.....
 By.....

Sent, or sent out
 At.....
 To.....
 By.....

Office Stamp

Handed in at.....Office.....m. Received.....m.

TO
 A.D. Sig. Auo.

*Sender's Number Day of Month In reply to Number

LB. 190 20 AAA

Ydy	closes	BODEWAERSVELDE	and
opens	VILLERS CHATEL	noon	tomorrow
AAA	can	you	staff
CCT	please	AAA	AAA
sig	NCO	repta	AD
auo	DD	sig	BAR

FROM
 PLACE & TIME

sig Ydy

* This line should be erased if not required.
 (S 3188) Wt. w. 7496—M857 250,000 Pads. 1/17 H & S (E489.) Forms/C.2123/3.

"A" Form.
MESSAGES AND SIGNALS.

Army Form C.2121
(in pairs of 100).

No. of Message

Prefix	Code	m.	Words	Charge	This message is on a/o of:	Recd. at	m.
Office of Origin and Service Instructions.							
			Sent		Service.		
			At		No.		
			To		Date		
			By		(Signature of "Franking Officer.")	By	

TO

5 Ans. Division

Sender's Number.	Day of Month.	In reply to Number.	AAA
* AA 687	20.		

Please detail party of 50 men to report to Area
Signal Officer KRUSTRANT FARM at 8AM on 21
will be work on buried cables. AAA to be returned
by mail but guaranteed by Area Signal Officer

copy to A.D. Signals

From

1 ANZAC

Place

1050

Time

This above may be forwarded as now corrected.

(Z)

Kellie Officer

Censor.

Signature of Addressor or person authorised to telegraph in his name.

* This line should be erased if not required.

958.002. W 1134-1252. H. W. & V. Ld. 6/10.

Appendix No 48

"C" Form (Original).
MESSAGES AND SIGNALS.

Army Form C. 2123.

Words 10 Received 10 Sent, or sent out 10 Office Stamp 10
From 10 At 10 m. 10
By 10 To 10
Charges to collect 10 By 10
Service Instructions. 10
Handed in at 10 Office 10 m. Received 10 m.
TO 10

*Sender's Number 10 Day of Month 10 In reply to Number 10 **AAA**

During cable between 10 and 10
GW was cut through for
about twelve different places by
infantry working parties who
will be necessary to carry
new route can work starts
this afternoon

FROM 10
PLACE & TIME 10

* This line should be erased if not required.
W 15660—M 151 75,000 Pads. H & S 2/16 Forms/C.2123. (5588)

Appendix N^o 49Appendix 49

1st ANZAC CORPS.

No. T.S. 123/7

Date 22-9-17.

O.C. "K" Corps Signal Co.
 Corps Wireless Officers
 O.C. 1st Aust. Div. Sig. Co.
 O.C. 2nd Aust. Div. Sig. Co.
 O.C. 4th Aust. Div. Sig. Co.
 O.C. 5th Aust. Div. Sig. Co.
 War Diary.

My F.P.T. -

From midnight 22nd/23rd September:-

37, 25, 55, 7, 15, 34, 28.

Alv. Sirett Capt R.E.T.

for Lieut. Col., R.A.,

A.D.SIGNALS, I ANZAC CORPS.

22nd Sept,
 1917.

3
SECRET.

Copy No. *Appendix No 96*

TS 134/16
First ANZAC Corps,

22nd Sept; 1917.

SIGNAL INSTRUCTIONS No.1. *Appendix 50*

(Series No.2.)

Issued under G.S. Preliminary Instructions No.1 (Series No.2).

COMMUNICATIONS Part A. (Preparatory).

1. LINES.

(i) The following is the present state of buried cable communications on the Corps front, forward of the test points ID and CJ on the Corps System.

- (a) From CJ to GW a buried route of 50 pairs has been constructed and is working.
- (b) From GW to WK the 25 pair buried route which was not completed for the last operation is now being completed.
- (c) From ID to WK a buried route of 41 pairs has been constructed but only 21 pairs are working. WK has been joined to JT by a route of 25 pairs.
- (d) From WK a shallow bury of 20 pairs has been constructed to the Brigade Forward Station of the Left Division at ALBERT REDOUBT - J.9.a.5.9.

(ii) In order to push forward communications for the next operation the following routes will be constructed:-

- (a) Buried route of 70 pairs from GW to a test point NB now being selected at the S.E. corner of Nonne Boschen Wood. This is being undertaken by the 1st Australian Division.
- (b) Buried route of 70 pairs from NB to a test point PG now being selected about J.9.a.3.4. This work will be undertaken by Corps Signals.
- (c) The ID - WK route will be strengthened by a new route of 30 pairs, to be undertaken by Corps Signals.
- (d) The CJ - GW route will be increased by a new route of 20 pairs, making 70 pairs in all, if cable is available. This will be undertaken by Corps Signals.
- (e) Left Division will construct a route of 50 pairs from PG to connect PG with the two cable heads to be selected by 4th Australian Division. This work will be undertaken at once by the 2nd Australian Division with digging labour from 4th Australian Division ^{now} at disposal of 2nd Australian Division. O.C. 4th Australian Divisional Signal Company will select the route according to the positions of cable heads chosen, and will provide technical assistance to O.C. 2nd Australian Divisional Signal Company for the supervision of the work. This route should also join up to the 20 pair route from WK.
- (f) 5th Australian Division will immediately on going into the line construct a buried route of 50 pairs forward from NB to selected cable head. It is suggested that one cable head should be selected to serve both brigade sectors and be at about J.9.c.8.2, so that the route may eventually be carried forward through the track in Polygon Wood running towards the huts in J.4.c.4.0.

(iii) All routes will be six feet deep, marked, and joints specially marked.

/(iv)

(iv) Maintenance.

(a) Corps Signals will continue to maintain routes up to CJ and ID as at present, routes forward of those points being in divisional maintenance as under:-

Right Division.

C J - G W.
 G W - N B.
 N B - P G (exclusive of PG).
 N B - Cable Head.
 G W - W K (as far as Divisional boundary).

Left Division.

I D - W K.
 W K - J T.
 W K - G W (as far as Divisional boundary).
 W K - P G.
 P G - Cable heads.

(b) Corps linemen will be stationed to assist divisional linemen at the following test points -

GW, WK, NB, PG.

(c) All lines on buried system, including divisional routes, will, as heretofore, be allotted by A.D.Signals to divisions, artillery, and certain other units; vide Signal Instructions No.3.

(d) The instructions contained in Signal Instructions No.3 regarding allotment and use of lines and maintenance will be as stated in Signal Instructions No.3.

(e) A map shewing the buried routes existing and to be constructed in the forward area is attached.

Divisions will notify the positions of cable heads selected to A.D.Signals as soon as possible.

2. VISUAL.

Divisions will at once prepare schemes for visual signalling in their own sectors, and will select new divisional reading stations if necessary.

6. WIRELESS.

(i) The positions of Corps Directing and Advanced Directing Stations, and arrangements for accumulator charging will remain as stated in Appendix 1. to Signal Instructions No.4.

(ii) Divisions will submit schemes for extending the present chain of wireless, power buzzer and amplifier working in their own sectors. A revised Corps Wireless Scheme will then be issued

7.

The following instructions will be adhered to :-

(i) On 1st and 2nd Divisions being relieved by 5th and 4th Divisions respectively, the following W/T, P.B. and amplifier stores only will be withdrawn by outgoing divisions.

2 trench sets, 50 watt, each complete with masts, aerials, 3 10 volt accumulators, 2 pairs 'phones, and earth mats.

2 amplifiers, each complete with 2 pairs 'phones, 6 valves, 3 4-volt accumulators, 10 earth pins and necessary cable.

5 power buzzers, each complete with 3 10-volt accumulators, 10 earth pins and necessary cable.

- 3 -

The balance of the W/T and amplifier stores in the area will be handed over to the incoming divisions and a receipt obtained for same; a copy of the receipt being forwarded to Corps Wireless Officer at earliest opportunity.

Any B.W.T. 3 valve Amplifiers at present in the area will be handed over to incoming divisions.

Arrangements for contact aeroplane wireless will be as laid down in Signal Instructions No.4.

Arrangements as to Wireless Tank will be notified later.

8. PIGEONS.

Arrangements will be as laid down in Signal Instructions No.3 (as amended), and No.4.

9. GENERAL INSTRUCTIONS.

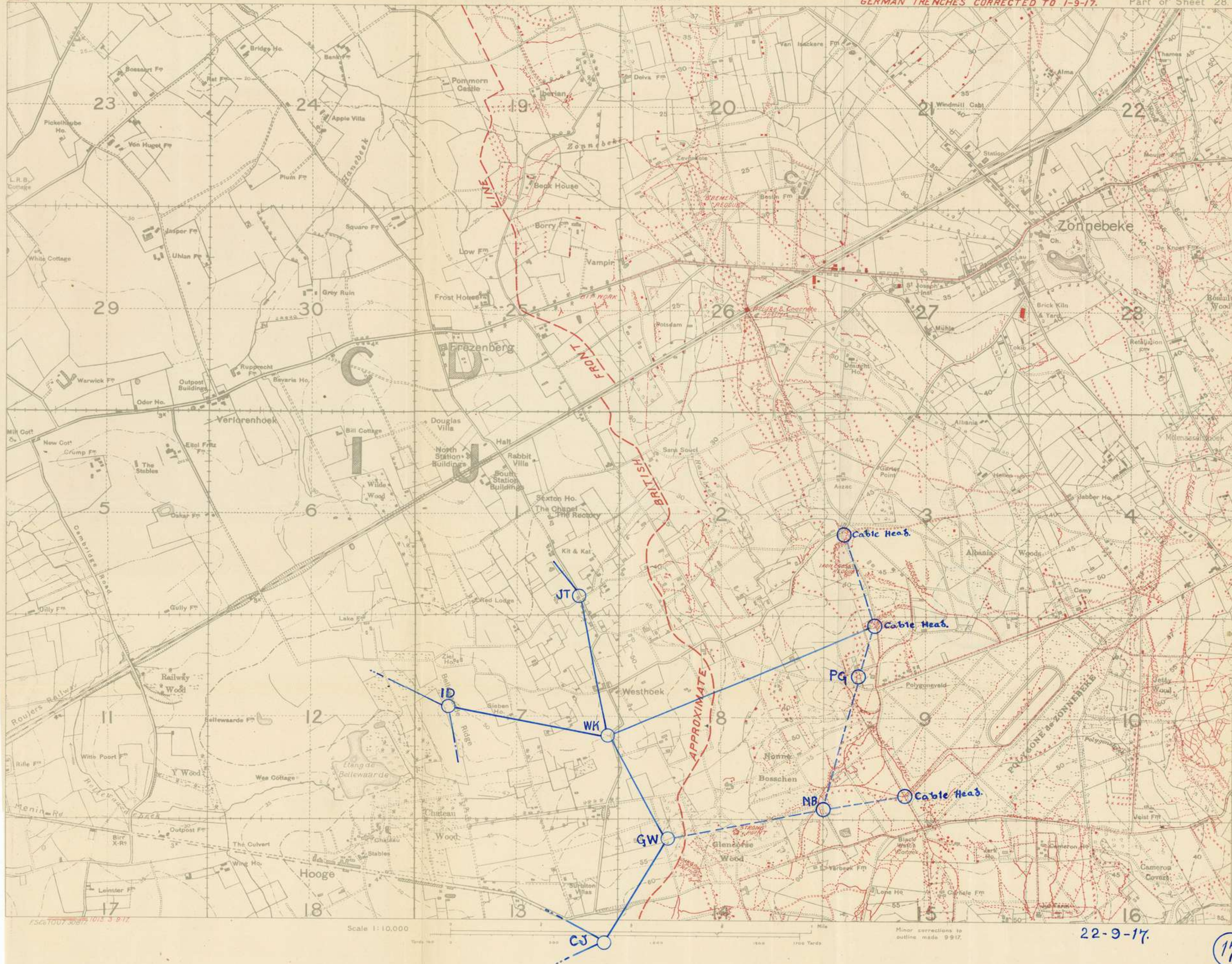
As laid down in Signal Instructions Nos. 3 and 4.

R. A. Powell

Lieut. Colonel, R.A.,
A.D.SIGNALS, I ANZAC CORPS.

Distribution:-

	<u>Copy No.</u>
O.C. 1st Aust. Div. Sig. Co.	1.
O.C. 2nd Aust. Div. Sig. Co.	2.
O.C. 4th Aust. Div. Sig. Co.	3.
O.C. 5th Aust. Div. Sig. Co.	4.
O.C. "K" Corps Signal Company.	5.
O. i/c Signals, Corps H.A.	6.
Area Signal Officer.	7.
Corps Wireless Officer	8.
A.D. Signals, V Corps.	9.
A.D. Signals, X Corps.	10.
D.D. Signals, Second Army.	11.
I Anzac G.S.	12. 17-26 and 8 maps.
G.O.C., R.A.	13.
C.M.G.O.	14.
AQ.	15.
War Diary.	16.



"C" Form.

Army Form C, 2123.
(In books of 100).

MESSAGES AND SIGNALS.

No. of Message.....

Prefix <i>Sy</i>	Code <i>Jacobs</i>	Words <i>8</i>	Received.	Sent, or sent out.	Office Stamp.
Charges to collect			From <i>arp</i>	At <i>m</i>	
Service Instructions <i>of 6 adds (appendix 5-1)</i>			By <i>Cra</i>	To <i>5-1</i>	
Handed in at <i>9/15</i>			Office <i>9/15</i>	m. Received <i>9/16</i>	m.
TO	<i>Signals and</i> <i>Signer and</i> <i>oc Jones and</i>				
*Sender's Number	Day of Month	In reply to Number	A A A		
<i>H IV 187</i>	<i>23/9</i>				
<i>arp close Remingtonst 10 am</i> <i>reopens H 27 B 77 (sheet twenty)</i> <i>same hour</i>					
FROM	<i>Sys arp</i>				
LACE & TIME	<i>8. 45 am</i>				

Appendix 52

1st ANZAC

T.S. 13/8

24-9-17.

- 1 Files
- 2 O.C. "K" Corps Signal Company.
- 3 Corps Wireless Officer.
- 4 O.C. 1st Aust. Div. Signal Co.
- 5 O.C. 2nd Aust. Div. Signal Co.
- 6 O.C. 4th Aust. Div. Signal Co.
- 7 O.C. 5th Aust. Div. Signal Co.
- 8 War Diary.
- 9 Files

CORRECTION TO B.A.B. TRENCH CODE No.3.

1. The following correction will be taken into use at midnight, September 24th/25th :-

Throughout the Second Army -

F = plus 44.

2. ACKNOWLEDGE.

Sept; 24th,
1917.

Lieut. Col., R.A.,
A.D.SIGNALS, I A.N.Z.A.C.

"A" Form.
MESSAGES AND SIGNALS.

Army Form C.2121
(in pads of 100).
No. of Message

Prefix	Code	m.	Words	Charge	This message is on a/o of:	Recd. at	m.
Office of Origin and Service Instructions.			Sent			Service.	Date
			At	m.	(Signature of "Franking Officer.")	From	
			To			By	
			By				
TO		A.D. Signals					
		O.C. Signals					
Sender's Number.		Day of Month.		In reply to Number.		A A A	
* J.A.T. 62		24					
				(EN20)			
2nd Austr. Div.		closed		at H 21 D 3.2			
and opened		Remmighelst		10 am. ABA.			
4th Austr. Div.		closed		at Stenwoorde			
and and opened		(EN20) H 21 D 3.2		10 am ABA.			
1st Austr. Div.		opened		Stenwoorde			
at 12.30		pm					
From		Sign		A.V.O			
Place				12.30			
Time							
The above may be forwarded as now corrected.				(Z)			
Censor.				Signature of Addressor or person authorised to telegraph in his name.			
* This line should be erased if not required.							
750,000. W 2186-M509. H. W. & V., Ltd. 6/16.							

MESSAGES AND SIGNALS
"A" Form.
Army Form G2121
(In pads of 100)
No. of Message

Prefix		Code		m.		Words		Charge		m.		This message is on a/o of:		Recd. at		Date		From		By		Service.		Signature of "Franking Officer"		By		Date		In reply to Number.		Sender's Number.		* J.H.T. 62			
TO		A.D. Signals		05		Signals		05		Signals		05		Signals		05		Signals		05		Signals		05		Signals		05		Signals		05		Signals		05	



A.D. Signals

"C" Form (Duplicate).
MESSAGES AND SIGNALS.

Army Form C. 2123.
(In books of 50's in duplicate.)

No. of Message

Charges to Pay
£ s. d.

Office Stamp.

Service Instructions.

Appendix 54

Handed in at

Office 4-07 p.m. Received 4-18 p.m.

TO

Sender's Number
OK/560

Day of Month
24/9

In reply to Number
H24

AAA

Lt.	CHUBB	Left	today	to
report	to	ENI	ask	added
DD	Sigs	Second	Army	reptd
AD	Sigs	1st	Angels.	

FROM

PLACE & TIME

Second Army Sig Coy

CONSOLIDATED RETURN.

1st Anzac W/T Section.
Australian Divisional Signal Company.

Return of all Wireless and Earth Induction Sets.

To be rendered IN DUPLICATE to A.D. Signals, I. Anzac Corps, weekly (up to and including ~~Sundays~~ ^{Mondays}).

Formation.	No. of Map.	Map square.	Type of set.	Wave length.	Call.
<u>WIRELESS.</u>					
H.Q. Stn.	28	G.35b2.8.	Press		
Directing Stn.	28	H.22c5.9.	Wilson	550	DL, CA', CP.
Adv. Dtng. Stn.	28	I.14b1.8.	"	"	NR, PK, MH.
Bde.H.Q.4th Div.	28	I.12c3.5	T.S.	"	ML, CY, CK.
Reserve Bde.H.Q. 4th Div.	28	I.17b2.8.	T.S.	"	DI, ZW, DV.
Reserve Bde.H.Q. 5th Div.	28	I.17c4.8.	T.S.	"	ZR', PM, ZB'.
Bde.H.Q.5th Div.	I.17c4.8.	I.18b2.6.	T.S.	"	MP, CF, CML.
<u>AEROPLANE CONTACT PATROL.</u>					
Adv. Div. H.Q.	H.27b2.8.	H.27b8.8.	Mk.III Tuner Amplifier.	140	
Reserve Bde. H.Q.	28	I.17c4.8.	"	"	
Bde. H.Q.	28	I.18b2.6.	"	"	
<u>AMPLIFIERS.</u>					
Bde.H.Q.4th Div.	28	I.12c3.5.	Amp. & P.B.	-	CAA.
Relay	28	J.7a3.2.	"	-	CAF.
R. Adv. Bde. H.Q.	28	J.7d9.8.	"	-	MAH.
L. " " "	28	J.1d6.2.	"	-	MAJ.
Bn.H.Q.L. Bde.4th Div.	28	J.2b8.3.	"	-	CBI.
" " R. " 4th Div.	28	J.9a5.8.	"	-	MAK.
Bde.H.Q.5th Div.	28	I.18b2.6.	"	-	CRR.
Relay " " "	28	J.13b2.2.	"	-	CRT.
Cable Head. "	28	J.14a5.8.	"	-	CAS.
Bn.H.Q. L. Bde. 5th Div.	28	J.8d9.4.	"	-	CHQ.
Bn.H.Q. R. Bde. 5th Div.	28	J.14b8.8	"	-	CHG.

Date 24.9.17

(Sd.) *Russell Robinson*O.C. *Ward* Divisional Signal Co.

1 Anzac

<div style="display: flex; justify-content: space-between;"> <div> <p>"C" Form (Duplicate).</p> <p>MESSAGES AND SIGNALS.</p> </div> <div style="text-align: right;"> <p>Army Form C. 2123. (In books of 50's in duplicate.)</p> <p>No. of Message 17</p> </div> </div>			
<div style="position: relative;"> <div style="position: absolute; top: 10px; right: 10px; border: 1px solid black; border-radius: 50%; padding: 5px;"> TELEGRAPHS </div> <div style="position: absolute; top: 50px; left: 50px; font-size: 2em;"> 21 apr AB 54 </div> </div>		Charges to Pay. £ 1 Office Stamp.	
Service Instructions. X		appendix 56	
Handed in at. GW		Office. 1:10h m. Received 2:14h m.	
TO ID Signals Auto			
Sender's Number Km 8	Day of Month 25	In reply to Number	A A A
CT aaa	to OK	GW except	Route 4" pair
Wa			
FROM PLACE & TIME		Lt Murray GW 1pm	

Wt. 432—M437 500,000 Pads. H W V 5/16 Forms C. 2123.

app: 57.

3

Carrier Pigeon Report. Sent out 25th Sept. 1917

LOFT.	No. of Birds.	Date of return.	Tactical Messages.	Practice Messages.	Without clips.	R E M A R K S.
24 Horse Drawn. to 4th Aust. Divn.	52	17 on the 26th 32 " " 27th 1 " " 28th 2 " " 29th *	12	9	31	* Brought by Army Sergt from Strange loft.
57 Horse Drawn. to 4th Aust. Divn.	16	4 on the 26th 11 " " 27th	1	2	12	1 Missing.
58 Horse Drawn. to 5th Aust. Divn.	72	47 on the 26th 17 " " 27th 2 " " 28th	4 Carried by 8 birds.	34	24	6 Missing.
R25 Stationary. to 5th Aust. Divn.	28	12 on the 26th 7 " " 27th 5 " " 28th 1 " " 29th	NIL	7	18	3 Missing.
5 Motor Mobile. to T.Z.B.	6	4 on the 26th 2 " " 27th	5	-	1	-
5 Motor Mobile. to Heavy Arty.	36	31 on the 26th 7 on the 27th	8 Carried by 11 birds.	-	25	All birds returned in good condition. I have no trace of these missing birds being liberated, and have hopes of some of them yet returning.

Randall

Lieut. Colonel, R.A.

A.D. SIGNALS, I ANZAC CORPS.

Appendix No 57 106

3

Carrier Pigeon Report Sent out 26th Sept. 1917.

LOFT.	No of Birds.	Date of return.	Tactical Messages.	Practice Messages.	Without clips.	R.E M A R K S.
R.25 Stationary to 5th Aust. Divn.	30	22 on the 27th 7 " " 28th	-	6	23	1 Missing.
5 Motor Mobile to 5th Aust. Divn.	30	23 on the 26th 7 " " 27th	2 Carried by 4 birds.	8	18	-
57 Horse Drawn. to 4th Aust. Divn.	52	26 on the 27th 15 " " 28th 6 " " 29th	1	26	32	5 Missing.
24 Horse Drawn. to 4th Aust. Divn.	16	10 on the 27th 6 " " 28th	-	4	12	-

All birds are returning in good condition and those missing may yet turn up as they have only been away 3 days. If liberated 4 of them are bound to turn up being old birds.

R. B. Wells

Lieut. Colonel, R.A.

A.D. SIGNALS, I ANZAC CORPS.

Appendix No 57

107

1st ANZAC CORPS.

No. T.184/10.

Date 1-10-17.

D.D. Signals, Second Army.
I Anzac G.S.
War Diary.

The following supplementary report shewing work done by Wireless, Power Buzzer and Amplifier during the offensive operations of September 26th is forwarded for your information:-

WIRELESS.

The Corps Wireless Directing Station and Advanced Directing Station were in same position as for the operations of the 20th inst., and also the Trench Wireless Sets in the Right Division; but on the Left Divisional front three wireless stations were installed instead of two. One was maintained at Reserve Brigade H.Q. at Birr X Roads, one at Left Brigade H.Q., J.1.d.7.1., and the third at Right Brigade H.Q., J.7.d.9.9.

All the trench sets were in constant communication with the Corps Directing Station and all messages handled, averaging twelve per day, were transmitted in good time. In this connection it is interesting to note that the average speed of total transmission, including enciphering in Playfair, sending and deciphering, reached an average of two words per minute for all the messages handled by wireless during the Bullecourt operations (May 3rd to 20th) while now, using the Field Cipher and having to cope with less proficient operators at Divisional Stations, it is in my opinion impossible to attain an average of more than 15 words in 12 minutes. This necessarily slow rate is very detrimental to the utility of wireless, especially as this means is principally provided for emergency messages.

AMPLIFIERS AND POWER BUZZERS.

The dispositions of Power Buzzers and Amplifier Stations were considerably altered from those of the previous operations. In the Right Divisional area, a chain of power buzzer communication from the forward wireless station at Brigade H.Q., HOOGE, to the cable head at J.9.c.8.3. with intermediate relay stations at J.13.b.2.2 and J.14.a.5.8, was provided.

Two mobile power buzzers and amplifiers were kept in readiness at cable head to move forward with the "A" detachment of brigade forward parties after attack. Power buzzers and amplifiers were combined at all stations and no trouble was experienced in maintaining good communication between them.

In the Left Divisional sector: power buzzers and amplifiers were installed with each of the forward wireless stations at right and left Brigade H.Q., each working to their respective cable heads J.9.a.4.4. and J.2.b.9.1. A mobile combined amplifier and power buzzer set was ready at each of these latter positions to go forward to Brigade Forward Stations after attack.

ACCUMULATOR CHARGING ARRANGEMENTS.

These were in every respect the same as provided for the previous operation of 20th instant, and were entirely satisfactory.

DURING BATTLE.

The mobile power buzzer and amplifier sets held * previous to zero at the various cable heads were installed successfully and without casualties, one at each brigade forward station in the positions as shewn on accompanying map diagram.

In the Right Division great difficulty was experienced in maintaining the earth leads, but no long interruption occurred in communication and a considerable number of messages were handled by this means.

In the Left Divisional area, the Amplifier and power buzzer with Left Brigade forward station, although in good communication, was hardly required; but at the Right Brigade Forward Station, the power buzzer and amplifier installed there was the only means of communication used for the 36 hours after zero, and no interruption occurred in its utility.

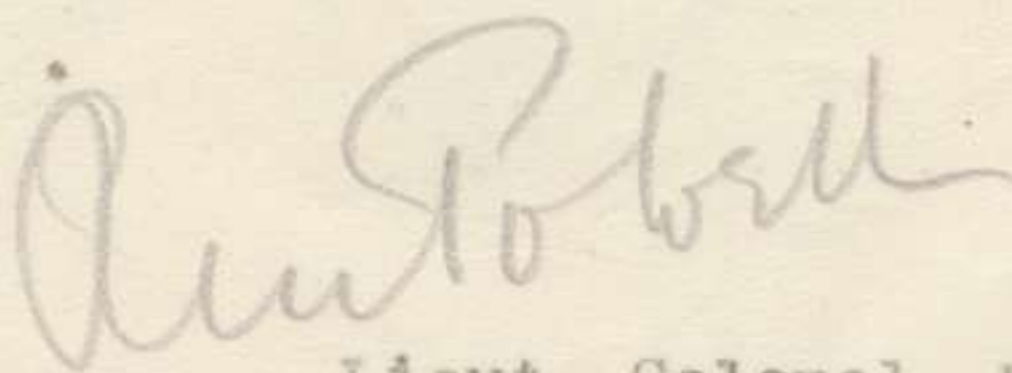
GENERAL.

The organization of wireless and power buzzer and amplifier stations has worked far more smoothly during these offensive operations than during those of September 20th. Carrying parties are the only thing that have given any real trouble. Definite arrangements for these must be made in Preliminary Instructions and carried out.

Casualties of apparatus have been comparatively light. Two amplifiers, three power buzzers and about eighteen accumulators having been lost during and since the battle.

A difficulty has arisen in the new organization of divisional control. Since an officer has been definitely detailed for wireless duties in each division, there appears to be a tendency for Brigade Signal Officers and their assisting officers to entirely shelve the responsibility of looking after the amplifier stations in their areas on to the wireless officer. With the large number of amplifier stations in each division, the work of the divisional wireless officers has been very considerable; particularly as there are not enough N.C.O.'s in the establishment of the wireless section to place one in charge of each station. Brigade Signal Officers must realize their responsibilities and duties in this respect..

The supply of wireless instruments and stores has been adequate, and no trouble has been experienced in replacing damaged or destroyed apparatus during either of the operations so far. A very large proportion of valves have been found to be unserviceable on arrival at forward stations though tested before being sent up. It is difficult to impress on carrying parties the importance of careful handling, especially when shelling is heavy. In this connection, it is thought that the mechanical construction of the electrodes of the valve might with advantage be made more rigid.



Lieut. Colonel, R.A.,

A.D.SIGNALS, I ANZAC CORPS.

1st October,
1917.

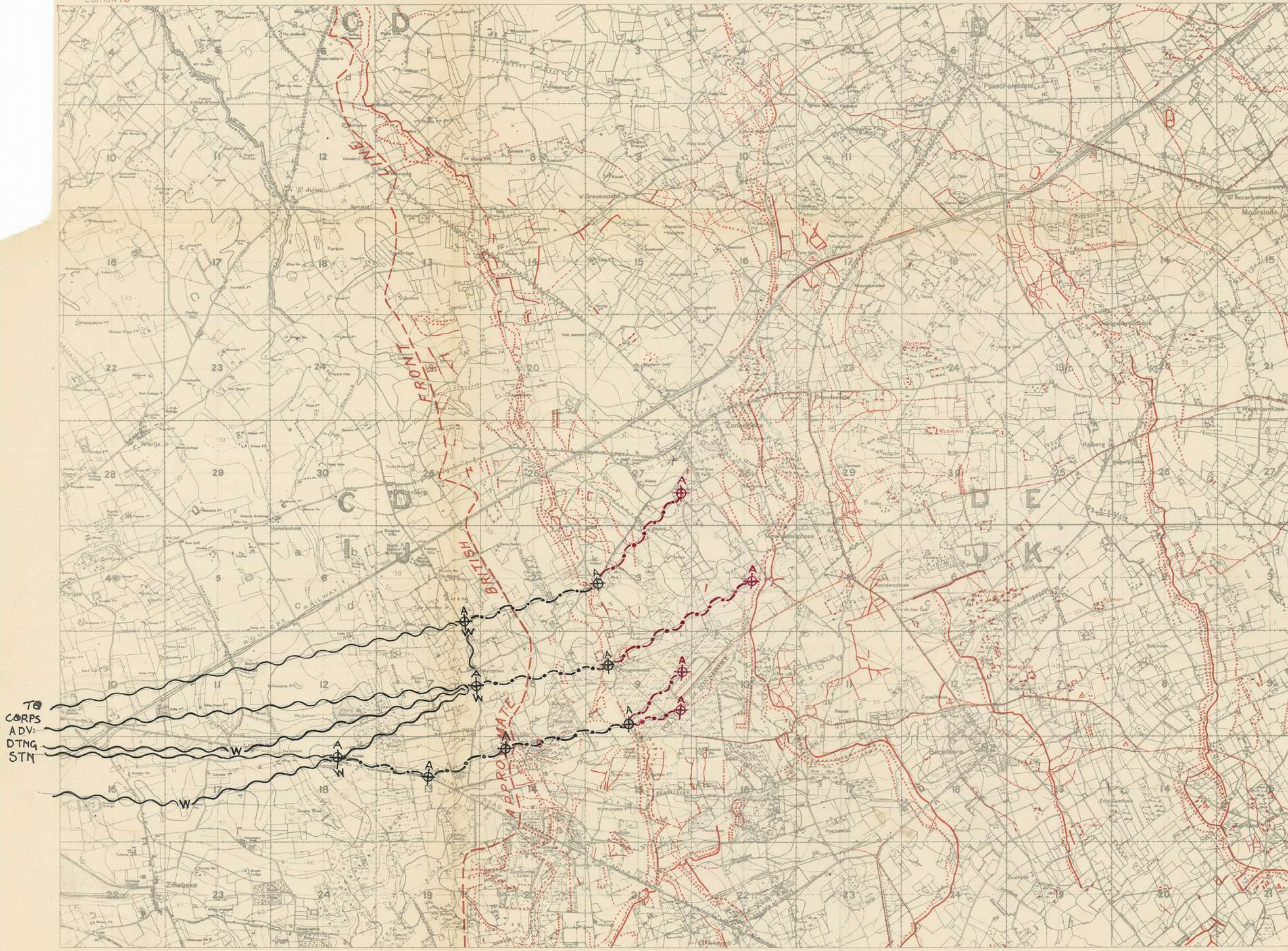
Communications previous to Zero shown in Black
" extensions after Zero " " Red

Sept. 26th.

POLYGON - WOOD

EDITION 1B

German Trenches corrected to 9-9-17. Part of Sheet 28.



TO
CORPS
ADV.
DTNG
STN

3
CONFIDENTIAL.

III
Appendix 59 Appendix N 59

1st ANZAC

T.C. 6/3
27-9-17.

O.C. 7th Div. Signal Company.

D.D.Signals, Second Army. (for information).

I have to-day sent back to you the jointing party under Corporal Hodgson which you kindly lent me.

I should like to express my appreciation of the excellent work done by this party, especially by Corporal Hodgson, Sapper Furzer, and Sapper Cooke.

On the 24th instant, in particular, these men worked all day at Glencorse Wood to get a route completed, remaining at their task without a break, and finally finishing up jointing in a shell hole by candle light. On the 25th instant they jointed up a route under very heavy shell fire, having also to carry up extra cable to let in to a break, and remained at their work till it was completed.

I have brought the names of the three men mentioned above to notice.

R. G. G. G. G.

Lieut. Colonel, R.A.,

A.D.SIGNALS, I ANZAC CORPS.

27th September,
1917.

3
SECRET.

Appendix 60
Appendix No 60 112
23.
Copy No.....

First ANZAC Corps,

30th September, 1917.

* * *

SIGNAL INSTRUCTIONS No.1. (Series No.3.)

Issued under G.S.Preliminary Instructions No.1 (Series No.3).

1. LINES.

(i) The following routes have been completed in the new Corps forward area :-

- (a) Buried route of 70 pairs, ID to JT.
- (b) Buried route of 70 pairs, JT to AZ (J.2.d.9.8)
- (c) Buried route of 42 pairs, AZ to GP (Garter Point J.3.a.cent.) thence from GP to test point AL (J.3.a.9.9) thence to D.27.d.6.5, at which latter point it is at present left untermiated.

(ii) To complete preparations for next operations, the following construction work will be undertaken forthwith :-

- (a) Buried route 25 pairs from JT to SANS SOUCI (SS) J.2.a.3.6, thence to Brigade H.Q. at railway D.26.c.1.3 (LR). To be constructed by 2nd Australian Division.
(or a suitable spot in the vicinity)
- (b) Completion of AZ - GP - AL route to TOKIO (TK) where it will be led in and terminated to serve as cable head for Left Division. To be constructed by 2nd Australian Division.
- (c) Buried spur of 20 pairs from ^{GP} towards HELLES (HL) to point to be selected by Right Division at their cable head. To be constructed by 1st Australian Division.

(iii) It will thus be seen that the main forward route will run from Y - RB - BX - ID - JT - AZ - GP, carrying communications of Right and Left Divisions and Heavy Artillery. At GP the route will divide to cable heads (HL and TK) for Right and Left Divisions respectively. Alternate routes available will be BX - HO - ID, and HO - CJ - GW - WK - JT also WK - PG - AZ.

(iv) 2nd Anzac Corps are constructing a buried route of 35 pairs from BV test point on their buried system to JT.

A revised map shewing above routes is attached.

(v) Maintenance. Division of maintenance will be as under.

- (a) Corps Signals will maintain the system as far forward as JT and WK, including the JT - WK route and that portion of the WK - GW route in this Corps area. Routes forward of JT and WK will be in Divisional Maintenance as under.

Right Division... WK - PG.
PG - AZ.
GP - HL.

Left Division ... LR - JT.
JT - AZ.
AZ - GP - TK.

. Right Division will assist Left Division in the maintenance of AZ - GP route.

/ (vi) ...

(vi) Allotment of Lines

(a) Attention is called to para.1(iv)(c) and (d) Signal Instructions No.1, Series No.2, of 22nd September.

(b) Preliminary allotment of lines in new buried routes will be as follows :-

<u>ID - JT</u> ...	Right Division ...	15 pairs.
	Left Division ...	15 pairs.
	Heavy Artillery...	10 pairs.
	Remainder in reserve.	
<u>JT - AZ</u> ...	Corps (including H.A.)..	20 pairs.
	Right Division ...	15 "
	Left Division ...	15 "
	Remainder in reserve Left Div.	allotment.
<u>AZ - GP</u> ...	Corps (including H.A.)..	10 pairs.
	Right Division ...	15 "
	Left Division ...	15 "
	Left Division allotment.	
<u>GP - TK</u> ...	Corps (including H.A.)..	15 pairs.
	Left Division ...	15 "
	Remainder Left Division allotment.	
<u>GP - HL</u> ...	Corps (including H.A.)	5 pairs.
	Right Division ...	15 "
	Right Division allotment.	
<u>LR - JT</u> ...	Reserved for 2nd Anzac Corps	5 pairs.
	Remainder Left Division allotment.	

Any spare circuits on WK - PG, and PG - AZ routes beyond those already in use, will be in Right Division allotment.

(c) O.C. Divisional Signal Company in whose allotment the route falls will notify numbers of circuits allotted in accordance with the above to A.D.Signals by wire on receipt of this order. Applications for additional circuits on routes on which allotment has already been made will be submitted to A.D.Signals.

(d) Right Division will notify position of Cable Head selected to A.D.Signals as soon as possible.

2. VISUAL.

Divisions will at once prepare schemes for visual signalling in their own sectors, and select new divisional reading stations.

3. WIRELESS.

(a) Positions of Corps Directing Station and Advanced Directing Station will remain as at present; vide Appendix I to Signal Instructions No.4 of 17th September. The Corps Directing Station at EN.20 will, however, also act as Army Control Station.

(b) Divisions will submit schemes for wireless, P.B. and amplifier communications in their own sectors. A revised Corps Wireless Scheme will then be issued.

(c) Only such instruments as are specified in para.7(1) Signal Instructions No.1, Series 2, of 22nd Sept., will be taken out of the line by 4th and 5th Australian Divisions on relief. Remainder will be handed over under arrangements to be made by Corps Wireless Officer.

/(d)...

- 3 -

(d) Contact Aeroplane Wireless Stations will be established for next operations at following places only :-

- 1 set Reserve Bde. H.Q., Right Division.
- 1 set Reserve Bde. H.Q., Left Division.

(e) Arrangements for Wireless Tank will be notified later.

4. PIGEONS

5. GENERAL.

6. CONTACT AEROPLANES.

As laid down in paras. 4, 5, and 6 respectively of Signal Instructions No. 2, Series 2, of 24th September.

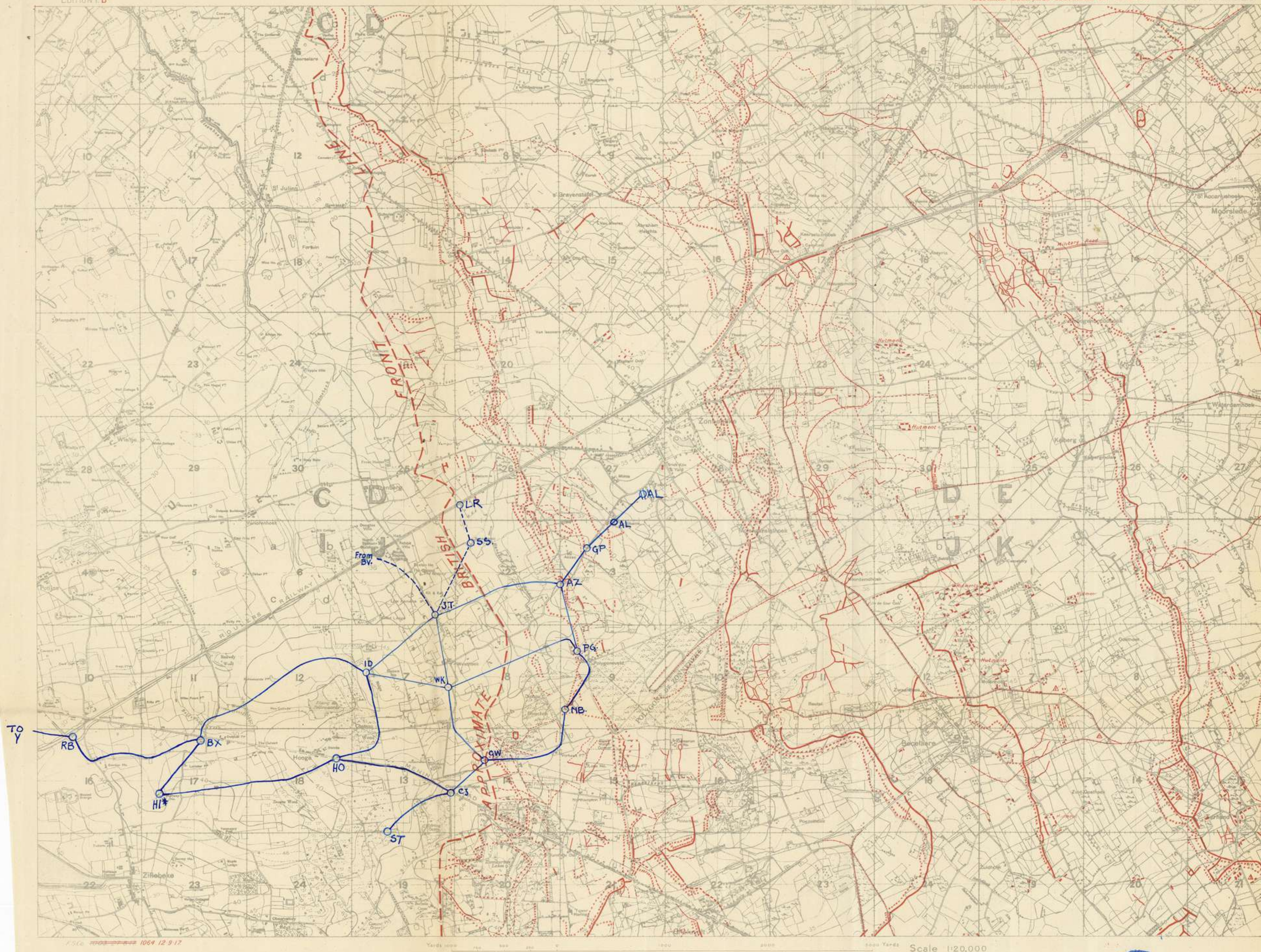
7. ACKNOWLEDGE.

Recd To 6216

Lieut. Colonel, R.A.,

A.D.SIGNALS, I ANZAC CORPS.

<u>Distribution.</u>	<u>Copy No.</u>
O.C. 1st Aust. Div. Sig. Coy.	1.
O.C. 2nd Aust. Div. Sig. Coy.	2.
O.C. 4th Aust. Div. Sig. Coy.	3.
O.C. 5th Aust. Div. Sig. Coy.	4.
O.C. "K" Corps Signal Company.	5.
O. i/c Signals, Corps H.A.	6.
Corps Wireless Officer.	7.
Area Signal Officer.	8.
A.D.Signals, II Anzac Corps	9.
A.D.Signals, X Corps.	10.
D.D.Signals, Second Army.	11.
I Anzac G.S.	12 to 19.
G.O.C., R.A.	20.
C.M.G.O.	21.
AQ	22.
War Diary.	23.



30/9/17

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Appendix 61

Appendix No 61/16

1st ANZAC

CORPS.

T.S. 169/6

30-9-17.

O.C. "K" Corps Signal Company.
Corps Wireless Officer.
A.D. Signals, II Anzac Corps.
D.D. Signals, Second Army.

I Anzac C.S. (for information).

War Diary

During the next operations Contact Aeroplane
Wireless Stations will be erected at the Reserve Bde.
Headquarters in each attacking division.

Corps Wireless Officer, I Anzac Corps, will
send the following to report to A.D. Signals, II Anzac
Corps, as soon as possible :-

4 R.F.C. Wireless Operators and
1 complete station with special stores as under
1 Mark III Tuner.
1 5-valve H.F. Amplifier.
2 4-ft. special folding masts.
aerial wire.
accumulators.
H.T. Batteries.
Etc.

O.C. "K" Corps Signal Company will arrange
necessary transport.

ACKNOWLEDGE.

Robell

Lieut. Colonel, R.A.

A.D. SIGNALS, I A.N.Z.A.C.

30th September,

1917.

HISTORY OF 1st ANZAC CORPS SIGS. NEW BURIED ROUTES.

The new buried system of the 1st Anzac Corps was commenced on 5th September, 1917.

The whole scheme, approximate by $6\frac{1}{2}$ miles, was dug by the 1st and 3rd New Zealand Rifle Batts. and was finished by the morning of 14th Sept., so far as the actual digging was concerned.

The task was divided between the two Batts. as follows.

1st Battn. dug the trench from Y to RB, BX to HH and HI, HH to HO, and HO to CJ.

The 3rd Battn. dug from RB = ID and ID to HO.

The cable trench holds 54 pairs thro' the system except between HO and CJ, where a 100 pairs were put in. Between RB and HG, 28 extra pairs were laid, and between HH and HI on the existing route 60 pairs were laid, so that the old route between Y and YP could be connected.

The proportions of cable in the 54 pair routes are as follows :-

- 6 - 7 pair (partly armoured and partly brass sheath).
- 6 - quad (armoured).

The 100 pair route consists of :-

- 12 - 7 pair brass sheath cable.
- 8 - quad armoured.

The 28 pairs from RB to HG -

- 4 - 7 pair brass sheath cable.

The jointing and marking of all routes was done under the direction of 2/Lt. Paul, R.E., and was carried on at the same time as the digging, so far as possible.

2/Lt. Hare, R.E., was responsible for the leading in of all routes to the various test boxes and dug-outs.

Two cable sections were attached to each battalion and they were responsible for the laying of the cable.

BD Cable Section under 2/Lt. Starbuck, R.E., and J Cable Section under 2/Lt. Hedderwick, R.E., were with the 1st N.Z.R.B.

AT Cable Section under 2/Lt. Jackson, R.E., and P Cable Section under 2/Lt. Helmsley, E.Surrey Regt., were with the 3rd N.Z.R.B.

Route Y - RB. (1st N.Z.R.B.)

This route was commenced on the morning of 5th Sept. 1917, and about 400 yards were laid. Across the moat layers of sandbags have been ~~and~~ placed on the cable to form a protection against shell fire. Average depth of trench in Ypres is 6 ft. From the Moat to RB the average depth is 5'6" and was completed on the night of the 6/7-9-17.

The route has been "crumped" twice on the one day. The shell holes were about 10' deep. Position of breaks - one on the railway cutting, and one 60 yds. East of RB. Since then there has been no trouble.

/Route...

Route RB - BX (3rd N.Z.R.B.)

This route was dug on 8th and 9th Sept., 1917. It was commenced from the BX end. Average depth 5'6". Composition of cables is the same as Y - RB. Up till the present this route has not been crumped. 28 pairs have been laid between RB and HG box on existing route.

Route BX - ID (3rd N.Z.R.B.)

Commenced on night of 5/6-9-17 from ID. The digging was very difficult on this part of the route owing to the bad ground. The area is very badly shell-holed and at the time of digging these were full of water. Pumps were used freely and with great success. At the BX end the ground is worse to dig than at the ID end, but the average depth was maintained at 5'6".

Fourteen pairs were lost between I.12.c.8.7 and I.12.a.3.1, so a new trench was dug and 2 7-pair cables were put in. This route has been cut once by a "dud" shell which penetrated about 10 feet into the ground; this happened at I.11.d.1.2 before the route had been completed. Since then it has been hit in several places but has not "gone down".

Route BX - HH (1st N.Z.R.B.)

Commenced on night of 7/8-9-17 and finished 8/9-9-17. This is a 54 pair route of the same composition of cables as the others. An extension of 60 pairs has been made to the old HI box and the old route has been connected up so that it can be controlled from HH box. The route was cut by a shell before the jointing was completed. Since then it has been thro' all the time.

Route ID - HO (3rd N.Z.R.B.)

Commenced on night of 9/10-9-17 and finished 10/11-9-17. Digging was commenced from HO end. It was tried to drive a way thro' Chateau Wood but this was found to be impossible owing to the tree routes and water. The route was brought on the east side of the wood thro' very wet ground. The average depth in the valley is 4'6". A greater depth was impossible owing to the water which rose in the trench as soon as it was dug. On the high ground at ID and HO the depth averages 5'6". This route has been cut three times; twice at the door of HO dug-out, and once ~~see~~ about 100 yds. from HO.

Route HO - CJ (1st and 3rd N.Z.R.B.)

This route was dug partly by the 1st and 3rd N.Z.R.B., and was done on night of 13/14-9-17. Average depth 5 feet. The ground is very bad from HO to the D/2 entrance to the tunnel. From D/2 entrance to CJ was laid by the Bde. in the tunnel. 100 pairs buried.

In the open this route has not been cut, but at HO dug-out entrance it has been cut twice. Considerable difficulty was experienced in the jointing owing to the heavy shelling of the area.

Route HH - HO (1st N.Z.R.B.)

Commenced 8/9-9-17 and finished 13/14-9-17. 54 pairs were laid. Average depth 5'6". Route has been cut once at HO end.

The 3rd N.Z.R.B. dug 220 yards of the trench at the HO end. This route has not been cut since the first time.

During the actions of the 20th and 26th Sept., 1917, the buried systems stood well. Communications forward were thro' at these dates.

Route GW - NB - PG.

A new 70 pair route between the above points was put in by the 4th N.Z.R.B..

It was commenced on 22/23-9-17 from PG - NB. Average depth was 5 feet.

On 23/24-9-17, NB - junction with 5th Div. bury from GW was completed.

The joints were made and test ~~point~~ boards were put in at the 3 boxes mentioned and the lines tested well. Only three pairs were lost right through. On the morning of 26-9-17 these routes were blown out between J.14.b.3.4 and NB so that it could not be repaired. Three hundred yards forward from NB the same thing occurred.

These routes are now out of commission.

Route GW - WK.

Twenty-six pairs were laid by the 4th N.Z.R.B. to join up with Divl. bury from WK on night of 24/25-9-17. Average depth 5'6". Route tested out and put on boards 25/9/17. No trouble has occurred so far on this route.

Route ID - JT - AZ.

Seventy pair route dug by 4th N.Z.R.B. commenced 26-9-17. Average depth 5 feet. Digging started from ID end. JT to AZ was done 27/28-9-17. Average depth 5 feet. These routes tested out well, only four pairs being lost. Up till now (3-10-17) the routes have not been cut.

The jointing and wiring up of the dug-outs on the routes forward of ID was done under the supervision of 2/Lt. McMurray, R.E.

I am, Sir,

Your obedt. servant,

(signed) Robt. McMURRAY,

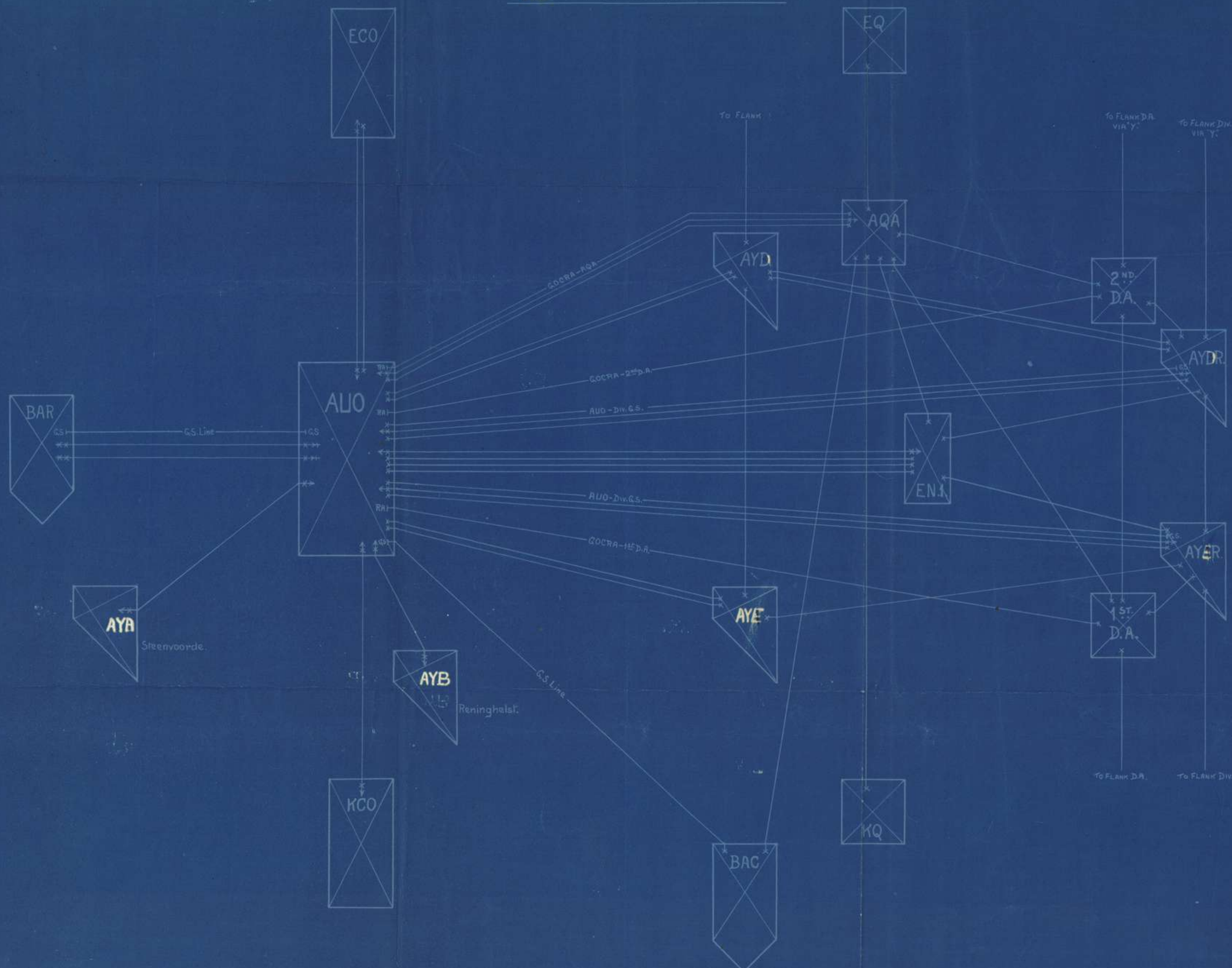
2/Lt. R.E.

EN.1.
3/10/17.

II ANZAC CORPS :

: TACTICAL LINE COMMUNICATIONS :

: 26TH SEPTEMBER 1917 :



SECRET.

WAR DIARY
A.D. SIGS
I ANZAC
1st/30th Sept 1917

SHEET 27. SHEET 28.

L G

G

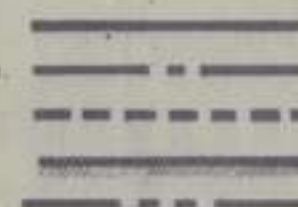
6 1 2 3 4 5 6 7 8 9 10 11 12



SCALE 1/10,000:

I ANZAC CORPS:

PERMANENT ROUTES
SEMI-PERMANENT ROUTES
POLED CABLE ROUTES
BURIED CABLE ROUTES
COMIC AIRLINE ROUTES



EXCHANGES
TEST STATIONS
TEST BOXES
JUNCTION POLES



OVERHEAD ROUTES:

30-9-17: