Part- Three

Wireless Communication

Canadian Corps

operations at Arras

August 26th to Sept- 10th 1918

III

Map Ref
Sheet 51 B

REPORT ON WIRELESS COMMUNICATION
DURING THE OPERATIONS AT ARRAS, AUG. 26th. - SEPT. 10th.
CANADIAN CORPS. Reference Sheet 51B.

I. EXISTING W/T COMMUNICATION.

When the Canadian Corps took over the ARRAS front from the XVIIth Corps on August 22rd, the wireless communication existing within the Corps area was as follows :-

(a) Spark.

The Divisions in the Corps, reading from left to right, were 51st English, 3rd Canadian, and 2nd Canadian. The 51st Division with Headquarters at MAROEUIL, had three Brigade stations all north of the Scarpe River. The 3rd Canadian Division with one Brigade in the line, had their Wireless Directing Station located at Report Centre near Gerrard Exchange in G.29 Central. The Trench set was erected at H.25.b.3.2. an old Battalion Headquarters. The 2nd Division at WARLUS had two Brigade stations working.

(b) Sets with C.C.H.A. and Field Artilleries.

As the XVII Corps had no C.W. sets with Divisional Artilleries, the sets belonging to the 2nd and 3rd C.D.A's were erected but did not operate until after zero hour.

The 17th C.H.A. had four C.W. sets working. One at C.H.A. Headquarters, MAROEUIL, and three others with Left, Centre and Right Groups respectively. These were taken over with personnel, as our H.A. sets had not yet arrived from the South.

(2) PREPARATIONS FOR THE ATTACK.

A forward D.S. was erected at ST. SAUVEUR Corner, G.29 Central, where a dump of wireless stores and an advanced accumulator charging plant were also erected.

The Corps D.S. proper consisted of a Leyland Lorry set with 60 ft. masts loaned by the First Army, and erected at L.8.b.8.9., near ETRUN. As this set was of high power and had a Telefunken note, it was not used until zero hour, when it opened up and exchanged signals with the Advanced D.S., and with the three Divisional Wilson stations. When our own C.W. sets arrived on Aug. 25th they were placed at observation posts South of the Scarpe River, but to prevent these positions being given away to the enemy no aerials were erected until after dark. These sets were again working with the Canadian Field Survey Section whose Headquarters were in ST. NICHOLAS.

P.T.O.

It was not known whether the Canadian Independent Force would be in action but as a precaution the rear set was erected at G.29.d.8.5., and connected by phone to the 3rd Div. Report Centre.

(5) OPERATION DURING FIRST ATTACK, AUG. 28th. - Sept. 1st.

(a) Spark.

The lorry set proved highly satisfactory as a directing station and was able to control all traffic from ETRUN even after the Brigades had moved considerably forwards On account of its power and note Brigade stations were able to read it through considerable Wilson and Trench set jamming. Traffic was not heavy during the first two days as Brigades and Divisions were still on the buried cable system.

On August 28th the Leyland set and charging lorry were moved to the Citadel at ARRAS and erected there with one mast on either bank and the set itself at the bottom of the moat. This arrangement gave surprisingly good results and Brigade stations came in much stronger her than at the Advanced D.S., although the latter station was almost a mile nearer the front.

In accordance with the suggestions made in the report on the AMIENS operations, a special Wilson Mk.III set was erected at the Citadel, Arras as a Corps Message Station. This station came under the control of the Corps D.S. in the same way as the Divisional Wilson sets. The arrangement was very satisfactory as it left the D.S. entirely free to direct the work in the Corps area. Traffic from Divisions to Corps was restricted as far as possible in order to allow the Brigades a free field. However, as the advance progressed, business increased and was heaviest on the 31st when 118 messages were handled by Corps.

On August 29th the Advanced D.S. was moved to the forward slope of Telegraph Hill in preparation for a possible further advance.

(b) C.W.

The C.W. Wireless of the C.C.H.A. was divided into two sections. One section of four sets manned by R.C.A. personnel was used to provide communication from C.C.H.A. Headquarters to the groups. This did not prove very successful as the operators were not sufficiently trained and men could not be spared from the Corps section to supervise the work. Those sets were withdrawn on Sept. 4th.

The other section of four sets, manned by C.C.H.A. operators was very useful. As in the AMIENS operations these sets were loaned by the C.B.S.C. to the Canadian Field Survey Section for Flash Spotting and Observation work.

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...Dawson and Cpl. Churchill were again in charge of the work. The posts were moved frequently in order to keep well up with the Infantry. The only difficulty experienced was due to "Atmospherics" which were very bad at times. The area around their Headquarters station at ST. NICHOLAS seemed to be particularly subject to this trouble. Later they moved Headquarters to a point on the high ground N.W. of VAUCOURT and the trouble from Atmospherics practically disappeared.

SECOND OPERATION, SEPTEMBER 2nd - SEPTEMBER 8th.

(4) PREPARATION.

In order to provide for the possibility of a break through in the attack on the DEMICOURT-QUEANT line, the Advanced D.S. was moved forward on September 1st to H.28c.5.8., just south of VAUCOURT. At this time the disposition of Divisional stations was as follows :-

On the Canadian Corps front from left to right were the 4th English Division at FOSSE FARM, 4th Canadian Division in dugouts in H.15.b, and the 1st Canadian Division in the sunken road in H.21.c. The 1st English Division was in support to the 4th Canadian Division with Headquarters in MONCHY. Divisional Wilson stations were erected at the points indicated above. As every Division had its Brigades either in the line or in close support, all the Trench sets were in operation. This caused a good deal of jamming as traffic was increasing and in addition the XXII. Canadian and XVII Corps were all crowded in on a comparatively narrow front.

The Canadian Independent Force now being in operation, their rear C.W. station was located at H.27b.3.7., and connected to the 1st Canadian Division exchange.

(5) OPERATION DURING SECOND PHASE, BEGINNING SEPT. 2nd.

(a) STAFF.

On account of its favorable location the lorry set at ARRAS was able to handle all traffic throughout the day but by evening the Brigades were getting so far forward that it was necessary to hand over to the Advanced Station. Early on the morning of the 3rd the charging lorry, Leyland and stores were moved forward to the Sunken road in H.28.c., and a Headquarters established there. The Wilson station which closed down and dismantled as soon as the lorry was in operation, was moved to the Crows Nest, U.18.a.3.2., on Sept. 6th. Advanced dump and charging plant for the Field Survey C.W. sets were also located on the DURY-HENDICOURT road near this point.

The Corps message station was brought up from ARRAS to Corps Report Centre during the afternoon of Sept. 5th and placed near the Signal office in the sunken road.

The daily traffic was heavier from September 2nd on, averaging about 60 per day.

P.T.O.

(b) C.W.

The stations of the Canadian Field Survey Section working under orders of the C.R.E.C.C, were busy during the entire period, as it was impossible to keep lines to any of the observation posts until the line had settled down along the Canal. All these posts worked close up to the attacking Infantry and as Interpreters were attached to each post for the interrogation of prisoners, much valuable information was sent in over the Wireless such as identifications, prisoners statements re dispositions, targets, etc., "B" post working towards high ground east of DURY found themselves at one stage in advance of the Infantry and came under heavy machine gun fire. They were forced to retire to the reverse slope of the hill where they erected their station.

In addition to the traffic shown on the attached sheet many fleeting targets and flash spotting bearings were reported. On Sept. 7th the Survey Section moved Headquarters to the cross roads in P.31.c. This greatly improved signals and decreased the difficulty of transporting accumulators as everything could then be handled by the advanced charging plant. On Sept. 8th a fourth post was equipped with Wireless making five sets all told on this work.

The Independent Force went into operation on Sept. 8nd. Their first Headquarters was established at the cross roads in P.26. Good communication was secured xx 2hm as soon as the set was erected. On Sept. 4th the C.I.F. again established Headquarters along the CAMBRAI road at V.6.c. Although this distance was over 16,000 yards good (R.9) signals were obtained both ways. The C.I.F. did not remain in action as long as they did in the AMIENS operations.

A C.W. directing station was established near Advanced Canadian Corps Headquarters on Sept. 11th. This station was used to check wavelengths in the Corps and to control traffic. It was also employed for keeping a check on all messages sent in clear.

A (a) APPRECIATION OF PREVIOUS SUGGESTIONS.

(a) The use of a powerful set for the Corps D.S. was more than justified. The large number of sets in operation made it difficult for trench stations to distinguish their own Wilson sets. The Wilson set at the Advanced D.S. had great difficulty in handling the traffic even for the short periods during which the accumulator banks on the lorry set were being recharged, or the lorry was being moved from one location to another. An extra Wilson set was erected in the lorry and used whenever possible for work with Divisions in order to avoid jamming the flanking Corps.

It is very strongly recommended that a set of this nature be furnished Corps for use as a directing station. It is not necessary for the power side to be used except in cases of necessity or during active operations such as the Corps has been engaged in for the past month.

(b) The Corps message station was also a success. It was located close to the Signal office so that telephone connection was not necessary. As it was working mainly with Divisional Wilson sets it was not necessary to take special pains in choosing its location. This left the D.S. free to control traffic and to assist the Brigades in their work. Also it was possible to place the D.S. in the most suitable spot for receiving signals from all stations. It was found unnecessary, under the arrangement, for the D.S. to be on the telephone, as instructions could be sent or reports received at any time by Wireless.

(c) The extra trench sets for the Divisions were not received in time to be used in the actual operations.

B. (a) FURTHER SUGGESTIONS ARISING FROM ARRAS OPERATIONS.

(a) TRANSPORT.

The steady increase in the amount of Wireless equipment in use in the Corps, has not been accompanied by an increase in the mechanical transport allowed. The chief increase has been in C.W. equipment and as Divisions are not yet fully acquainted with the repair of these sets, practically all of this work has been done by the Corps repair shops. This, in addition to the 7 sets in use by the Heavy Artillery and the Independent Force, has made a very considerable increase in the amount of material that had to be carried for repairs and replacements. Also a much larger stock of accumulators was required as it was necessary to carry one accumulator in stock or on charge for every one in use on the stations.

(h) With the success of the first attack, the enemy communications became disarranged and he used the Wireless very freely, often in clear. Much information is thus available and as an Army cannot possibly take all these messages, it would be advisable for Corps to erect small Interception Stations behing the French and Wilson Area so that this information will be immediately available where it is most useful, i.e. the Corps Report Centre.

(i) Great difficulty was experienced regarding transportation of the Wireless Sets, especially the C.W. Stations, which were required to move with the Artillery, the only transport being the gun limbers. Care cannot be exercised in transit of these Sets unless proper transport is provided.

Until such time as proper transport is provided it is suggested that Wireless Officers will try and arrange to secure a G.S. limbered wagon, have a false bottom put in, using old mattress springs to take up the shock and vibration.

(j) All ciphering and deciphering was done by the Wireless operators at the various stations. This is contrary to the standing orders on the subject and it is suggested that steps be taken to have the Staff appoint an officer for each traffic station. This officer should supervise the traffic through the station generally, and be responsible for any messages sent in clear. In case officers are not available, N.C.Os especially trained in field cipher could be substituted. It is impossible for operators to handle heavy traffic and at the same time do all ciphering and deciphering, also it often occurs that messages handed in are very awkward to cipher. This would not occur if the Staff were better acquainted with working of Field Cipher.

P.T.O.

(a) cont.

Before a Corps Wireless Section can be sufficiently mobile to carry on this kind of warfare successfully an extra mechanical transport must be provided. It is suggested that one extra 30 cwt. lorry be authorised per Corps for the use of the Wireless Section.

Also some means of carrying C.W. sets and equipment must be provided for Artillery Brigade Sections. If carried on G.S. or R.E. limbers the shaking up which they receive makes it necessary for them to be completely overhauled before they can be operated successfully. A half limber fitted with a false bottom and mattress springs has been a success. Another suggestion is to rebuild a medical stretcher cart to hold the set and to be hauled behind a horse drawn limber.

(b) USE OF WIRELESS BY BRIGADES.

It has been again shown that special efforts must be made to educate Brigade Signal officers and Brigade Staffs in the use of the Wireless. It has occurred again and again that although Brigade Stations were erected and in communication with Divisions, when wire communication went, messages were allowed to pile up in the office or were sent by D.R., not even a proportion of them being offered to the Wireless Station. All traffic cannot be handled by Wireless in the same way as it is by wire on account of the enciphering but important messages need never be held in the office as, including the time necessary for enciphering, they can be handled almost as rapidly as they would be over the ordinary wire under the conditions of active operations. If the office staff would only acquaint the Staff or Signal Officer concerned, important messages could easily be franked "In clear" if the circumstances warranted or altered so as to make them more easily enciphered. In open warfare Wireless should not be considered as an emergency means of communication only, but as an auxiliary to the existing wire or runner service.

(c) SPARE PARTS AND ACCESSORIES.

It is again necessary to point out that, due to the lack of certain spare parts, valuable sets are often put out of action for indifinite periods or must be completely exchanged, whereas a few minutes work would repair the set if the necessary part was only available. The most important of these are :-

For C.W. Mk.III Sets.

Intervalve and telephone transformers, grid leaks for transmitters and receivers, change over switch handles and Ammeters. There is still a big shortage of Reed Vibrators and contact screws for H.T. Units.

P.T.O.

(d) CIPHERING AND DECIPHERING AND MESSAGES IN CLEAR.

As in the AMIENS operations all ciphering and deciphering was done by the operators on the various stations. This is very unsatisfactory but appears to be unavoidable for two main reasons :-

First.

The officers actually writing the messages are too busy to do this work themselves and their clerks are not familiar with field cipher.

Second.

A large number of messages come to Wireless stations from the Signal office, wherever it happens that no wire communication exists or the existing lines are badly congested.

During the last operations trouble also arose over the matter of transmission "In clear". This has been partly cleared by the issuing of more definite orders on the subject.

The following is suggested as a means of overcoming these difficulties :-

A Ciphering, deciphering and franking department should be organized by the Staff at the Headquarters of every formation using Wireless communication. The actual ciphering and deciphering should be carried out by clerks specially trained in field cipher and coding, and the work supervised by an officer who would be responsible for franking any messages for transmission sent in clear. Any one having messages for transmission by Wireless would send them to the department for enciphering or for franking "in clear" if such was considered advisable, also all traffic received at the Wireless stations would be sent here for deciphering.

An arrangement such as this would allow the Signals to clear important messages that pile up in the office when lines are down and which now have to be sent back to the office of origin for franking or must be handled by Special D.R.

(Sgd) E. FORD
Lieut-Colonel.
A.D.Signals, Canadian Corps.

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REPORT ON WIRELESS COMMUNICATION DURING THE OPERATIONS

AT ARRAS, AUG. 26th. - SEPT. 10th, 1918.

1st CANADIAN DIVISION. Reference Sheet 51B.

The Divisional Wilson Station took over from the 2nd Canadian Division Set located at N.21.c.8.8. (sheet 51B) at 7.00 p.m. Aug. 27th, good communication being established with Brigades, Flanking Divisions and Corps.

The Station remained here until 8.00 a.m. Sept. 2nd handling an average of ten messages per day. Owing to the lines being well maintained in this area, it was seldom necessary to use the Wireless as the only means of communication. On one occasion however, a counter attack was made on our Front while the forward ~~xxxx~~ lines were out, and the Brigade concerned got the information back by Wireless without delay.

On the morning of the 2nd Sept. the Directing Station was moved to SUN QUARRY, arrangements being made to have the station move at the same time as the Brigade stations. The set was in operation at 11 a.m. communication being established with Corps, Flanking Divisions, and our Brigades as they arrived at their new Headquarters.

Some trouble was experienced at first owing to jamming, and weak signals from Brigades, but by improving aerials and earths, good R.9 Signals were received both ways.

A total of 188 messages were handled by the Division and three Brigade stations from Aug. 26th to Sept. 3rd inclusive, 62 being sent and received at CXA station.

Loop Sets and Power Buzzers were not used as the Brigade Signal Officers consider they secure better results by employing the men of the Power Buzzer Pool, on maintaining telephone lines.

The high forward station at Corps was of great assistance in controlling traffic and working direct to Brigades. In the AMIENS Operation, the Brigades got so far ahead of the Corps Wilson Station they were unable to hear it and consequently ~~they~~ were out of communication during the time their Division D.S. was on the move.

From Aug. 26th to Sept. 4th inclusive, the Artillery C.W. sets handled 192 messages. The Divisional Artillery set was first located at N.21.c. and was moved to SUN QUARRY on the morning of Sept. 2nd.

Due to the close proximity of Brigades to each other on 2nd and 3rd Sept. only one Brigade Station was erected and handled the messages of both. Messages handled by CP1 station being 96.

Nearly everything sent by C.W. was in clear and duly Franked by an Officer of the Brigade or Division Staff.

The traffic handled during the operations is shown on Appendix "B" attached.

(Sgd) P. BARNSHAW, Major, C.E.

9-9-18. Cmdg. 1st Canadian Divisional Signal Company, C.E.

P.T.O.

Report OF WIRELESS COMMUNICATION DURING THE
OPERATIONS AT ARRAS, AUG. 26th - SEPT. 10th, 1918.
2nd CANADIAN DIVISION. Reference Sheet 51B.

The 2nd Canadian Division was engaged in the recent operation on August 26th, 27th, and 28th. The Division relieved the 15th Division in the line on August 24th, but the Wireless communications were not taken over as the outgoing Division maintained their communication until 24 hours after the relief was completed. In the meantime our Wilson set was erected at RONVILLE (G28d2.8), and was in telephone communication with CYB. At midnight on August 24th the 6th Bde. Station took over from the outgoing Bde. station at M8c7.0 and maintained normal traffic. As the operation did not commence on the 25th as expected, the 5th Bde. station was erected at Divisional Hqrs. at WARLUS on the morning of the 25th, in order to have the same number of stations in the area, and to maintain normal message traffic. At 6 p.m. on the 25th the 6th Bde. station was closed at M8c7.0 and moved forward to M18c8.1 where it was erected, but no work was done until after zero hour.

On the 26th the 6th Bde. station was closed at WARLUS at 6 p.m. and rejoined the Brigade. The 4th Bde. station was erected at M10a.8.2. with the office in a dug-out close to Bde. Hqrs. The Brigade Major was apparently afraid this would draw shell fire, and ordered the station to be moved into an open trench about 100 yards away. It was raining at the time, and although every precaution was taken, the set got very damp, and in consequence the Brigade was out of touch by Wireless the whole day. The 5th Bde. station was erected at N5d1.9 and established communication with the D/S at 8.03 p.m. It remained in this location all day as the Brigade did not come into action. The 6th Bde. station at M18c8.1 established communication at 3.11 a.m. At 8 p.m. the station was moved forward to N31c1.9 where it was erected and opened communication with the Corps D/S, as the Div. D/S was moving at that time. Communication was established with the Div. D/S at 7 p.m. At 3.40 p.m. the Div. D/S handed over it's Bde. stations to the Corps D/S, and moved from RONVILLE to M18c8.1, taking over from Corps D/S at 8.50 p.m. Communication was maintained throughout the night with the 5th and 6th Bdes.

On the 27th the Div. D/S remained at M18c8.1 all day. The 4th Bde. station commenced working at 7.55 a.m. but signals were weak due to the faulty instrument. This set was replaced at 9.30 a.m. and at 10 a.m. the station moved forward to M16b8.8 but was not erected there as the Brigade was still moving forward. At 1.30 p.m. the station was erected at O19d8.8 and communication established with the Div. D/S. The station remained in this location throughout the remainder of the operation. At 8.30 a.m. the 5th Bde. station closed down at N5d1.9 and moved to N31c1.9 but did not erect as the 6th Bde. station was working there. At noon it moved to O32a1.9 where it erected and established communication. This station remained in this location throughout the remainder of the operation. The 6th Bde. station remained at N31c1.9 throughout the day, being attached to Advanced Division after it moved to that location. A spare Trench set was erected at Div. Hqrs. at M8c7.0 at 11.40 p.m. and maintained communication with Advanced Div. all night.

On the 28th the Div. D/S moved forward to Advanced Div. Hqrs. and established communication with the 4th and 5th Bdes. at 1 p.m. The D/S was relieved by the 1st Cdn. Div. D/S at 7.28 p.m. 4th Bde. station relieved by 2nd Bde. Stn. at 5 a.m. the 29th. 5th Bde. stn. relieved by 3rd Bde. stn. at midnight on 28th. 6th Bde. stn. was not erected after it rejoined the Bde. as the 6th Bde. was merged into the 4th and 5th Bdes.

REPORT OF C.W. WIRELESS COMMUNICATION, 2nd CDN. DIV. ARTY.
Period - August 31st, to Sept. 6th, 1918.

(1) DISPOSITIONS.

Previous to Aug. 31st one Mk.III set was operated at 2nd C.D.A. Hqrs, and Woolwich Mk.I sets at 4th and 6th Bdes.C.F.A. The latter was very old and in very poor condition, and C.W. communication was a failure. On the 31st of August Mk.III sets were supplied to 5th and 6th Bdes. This report covers work done by these sets. From Aug. 31st to Sept. 2nd and the 1st and 2nd Bdes. C.F.A. were grouped under 2nd C.D.A. but worked direct to 1st C.D.A. by Wireless. From Sept. 2nd to 4th the 1st Bde. C.F.A. was grouped with 5th and 6th Bdes. C.F.A. under the command of O.C. 5th Bde. C.F.A. They worked with both 1st and 2nd C.D.A. Hqrs.

(2) OPERATION.

All stations were easily picked up as soon as they were erected. Signals were good, particularly between Mk.III sets. The greatest distance between sets was seven miles,- on the afternoon of Sept. 2nd. Stations of 1st and 2nd Divn. kept constant touch with each other throughout the operations. Arrangements were made for mutual assistance, but they were not required. A register showing messages sent by each station is appended. A muchh greater amount of business could have been handled, but owing to the success of telephonic communication this was unnecessary. Messages were sent only when lines were out, or very busy. Most messages were sent in a clear. Those containing map locations were in code. Only four messages in seven days were sent out by station at Div. Hqrs. Practically all messages handled were reports from Brigades,- mostly from Group Hqrs.

(3) SUMMARY AND SUGGESTIONS.

(a) Results obtained show that sets would be extremely useful in cases where telephonic communication is poor,- particularly in a big advance, where lines become very long, and difficult to keep in repair.

(b) Brigade stations should set up at all positions. Cases occurred where short halts were made, but under orders of O.C. Bde. stations were not erected.

(c) A higher grade of operators is required. Wavelengths of adjoining units are so close that experienced Wireless operators are required to read through the jamming which is bound to occur at times. The operators at present used on C.W. sets were drawn from Battery signallers. Many of them are poor, and cannot handle messages fast enough to be of use. Operators of at least 20 words per minute standard are urgently required.

The traffic handled by all Divisional stations is shown on Appendix "C" attached.

(Sgd) D. H. MACFARLANE, Capt.
A/O.C. 2nd Canadian Division Signal Company..

P.T.O.

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REPORT ON WIRELESS COMMUNICATION DURING THE OPERATIONS AT ARRAS, AUG. 26th-SEPT.10th, 1918.

3rd CANADIAN DIVISION. Reference Sheet 51B.

SPARK SETS.

Divisional HQ., Wilson Set was erected at LONDON CAVES (G.29 central) on night 25th/26th August and at zero hour was in touch with Canadian Corps D.S. Left and Right Division HQ., Wilson Sets, and the 8th Canadian Infantry Brigade at G.25.a.4.7 Brigade in the line.

No traffic was handled until th 27th August when two Brigade HQs were established at ORANGE HILL; the 7th Canadian Infantry Brigade at H.34.b.5.2. and the 8th Canadian Infantry Bde at H.34.b.5.8.

From those positions Brigades worked with Division until ordered forward at 7.30 a.m. on 28th August.

The 8th Bde.W/T Set opened at O.6.c.9.5 at 10.30 a.m. on 28th and the 9th Brigade Set at O.7.b.3.8. at the same hour. The traffic handled by each Brigade is shown in Appendix "D".

C. W. SETS.

Divisional HQ. Artillery station erected at G.29a.8.8 and at zero hour was in touch with 9th and 10th Artillery Groups. The number of messages handled by C.W., during the action is as shown on attached sheet Appendix "D".

LOOP SETS.

Loop Set communication was established between the 7th Canadian Infantry Brigade Report Centre and the 49th Batt'n HQ., but was not used, being held as an emergency communication.

P. B. and A.

P. B. and A., sets were not used during the operations as the movement of Headquarters were too rapid for their use.

(Sgd) J. H. LEESON, Capt.
for O.C. Signals,
3rd Canadian Division.

P.C. No. 17

REPORT ON WIRELESS COMMUNICATION DURING THE OPERATIONS AT ARRAS, AUG. 26th - SEPT. 10th, 1918
4th Canadian Division.

Reference Sheet 51B.

SPARK WIRELESS. On the 1st of Sept., Div'l.Wireless Station was established at F.16.b.8.8. with three Brigades in the line:-

10th Bde. at O.16.a.4.4.
11th Bde. at O.28.a.0.8
12th Bde. at O.21.d.4.6.

Shortly after zero hour on Sept.2nd the Brigades moved forward to new positions. It was then that the Div'l. Station experienced some difficulty in maintaining communication with its Brigades, which was principally due to the following:-

(a) Brigades too far forward from Divn. to get good receivable signals.
(b) Interference from enemy jamming stations.
(c) Interference from our own stations.

This difficulty was overcome eventually by the Div'l. station moving forward to our Report Centre at O.19.d.8.8. Quite a lot of business was handled from this point to our Brigades and to rear Divn. through Corps Directing station.

At 10.30 a.m. our 11th Bde. Station was put out of action by a shell, one man being wounded. New set was procured immediately from O.C. Wireless, Corps and delivered that afternoon to Brigade.

On the morning of the 3rd. the Divn. Station again moved forward to our new Report Centre at O.21.d.4.8. at the same time our three Brigades were also on the move. When Bdes. found their new Hqrs. Wireless communication was established immediately and kept up until we received orders from Divn. to dismantle and report as soon as possible to their new Hqrs. at O.34.b.3.4.

Within thirty minutes after our arrival at the above location, we were in good communication with our three Bdes. and Corps. A number of important messages were handled that night to and from our Bdes.

CORPS D.S.

The work of the Corps Lorry set throughout the operation was all that could be desired. With their extra transmitting power they were able to handle several very important messages to our Brigades which we were unable to get through owing to jamming.

C.W.WIRELESS.

The following was received from O.C. Signals, 4th C.D.A.

"The C.R.A. 4th Canadian Division has expressed himself as being extremely well satisfied with the results obtained by C.W. Wireless during the past month. He has also stated that he would not go into action again without these sets. They transmitted and received very important messages when other means had failed".

Return of traffic is shown on Appendix "G" attached.

(Sgd) O. SKINNER, Lieut. C.E.
i/c Wireless, 4th Canadian Division.

TRAFFIC HANDLED BY WIRELESS

CANADIAN CORPS STATIONS, AUGUST 26th - SEPTEMBER 10th, 1916.

C.C.H.A. E.S. Section.

Date	Crps. Msg. Sent	Crps. Msg. Rcvd.	H.Qrs. Strs. Sent	H.Qrs. Strs. Rcvd	A Post. Sent	A Post. Rcvd	B Post. Sent	B Post. Rcvd	D Post. Sent	D Post. Rcvd	E Post. Sent	E Post. Rcvd	Coast P. Sent	Coast P. Rcvd	Totals. Sent	Totals. Rcvd	Endld
Aug. 26	12	15	11	47	21	-	20	7	6	4	-	1			25	68	85
27	16	16	15	38	8	5	18	7	8	3	-	-			89	46	75
28	15	27	14	35	1	-	15	0	12	5	-	-			89	55	86
29	19	22	5	26	1	-	16	8	9	1	-	-			22	48	70
30	5	22	8	17	1	1	8	4	6	3	-	-			13	39	52
31	22	29	10	51	5	2	11	5	37	3	-	-			52	80	112
Sept. 1	29	35	8	17	15	5	5	8	1	3	-	-			37	[illegible]	89
2	16	19	[illegible]	[illegible]	[illegible]	2	9	5	5	5	-	-	11	14	37	[illegible]	92
3	18	35	11	31	4	5	9	5	19	5	-	-	1		30	86	86
4	10	18	7	19	11	4	1	8	7	1	-	-	15	11	32	48	80
5	10	43	5	11	8	5	0	1	9	1	-	-			15	54	69
6	19	42	13	26	9	4	4	5	13	4	-	-			52	68	100
7	18	19	18	21	6	6	6	5	2	2	5	6			36	40	76
8	22	45	16	23	7	3	1	5	7	3	8	5			38	[illegible]	106
9	10	15	17	25	8	4	7	6	6	5	4	2			37	[illegible]	65
10	12	11	21	19	6	5	4	4	5	6	6	6			33	30	65
	253	403	195	409	109	42	125	78	152	58	23	19	27	25	465	[illegible]	[illegible]

APPENDIX No.

TRAFFIC HANDLED BY WIRELESS.

1st CANADIAN DIVISION. AUG. 28th - SEPT. 4th, 1918.

Date		1st C.Dv.HQ. Sent	Recd	1st Bde. Sent	Recd	2nd Bde. Sent	Recd	3rd Bde. Sent	Recd	CFA Hqrs. Sent	Recd	1st Bde.CFA Sent	Recd	2nd Bde.CFA Sent	Recd	Totals Sent	Recd
Aug.	28	2	5			0	0	2	2							4	5
	29	7	7			7	1	5	3	4	9	9	4			32	24
	30	3	9	1	1	3	3	2	3	1	8	6	1			16	25
	31	3	2	1	1	1	2	0	0	0	6	6	0			11	11
Sept.	1	0	0	0	0	0	0	0	0	0	0	0	0			0	0
	2	0	21	0	0	20	0	0	0	4	9	5	1	4	4	33	35
	3	0	5	0	0	4	0	1	0	6	12	8	3	6	5	25	25
	4	-	-	-	-	-	-	-	-	9	6	12	2	14	7	35	15
		15	47	2	2	35	6	10	8	26	50	46	11	22	16	156	140

APPENDIX No.

TRAFFIC HANDLED BY WIRELESS

2nd CANADIAN DIVISION. AUG. 26th - SEPT, 4th, 1918.

Date		2nd C.Dv.HQ. Sent	Recd	4th Bde. Sent	Recd	5th Bde. Sent	Recd	6th Bde. Sent	Recd	CFA Hqrs. Sent	Recd	5 Bde.C.FA. Sent	Recd	6 Bde.CFA. Sent	Recd	Totals Sent	Recd
Aug.	26	2	12	0	0	5	0	7	0							14	12
	27	0	5	1	0	3	0	1	0							5	5
	28	6	0	0	3	2	3	0	0							8	6
	31									1	5	4	0	1	1	6	6
Sept.	1									0	2	2	0	0	0	2	2
	2									2	6	5	1	1	1	8	8
	3									1	12	6	1	6	0	13	13
	4									2	14	12	1	2	1	16	16
		8	17	1	3	10	3	8	0	6	39	29	3	10	3	78	68

ANNEXURE No. 4.

TRAFFIC HANDLED BY WIRELESS.
3rd CANADIAN DIVISION. AUG. 26th - AUG. 29th, 1918.

DATE	3rdC.Dv.HQ		8th Bde.		7th Bde.		9th Bde.		CF3 Hqrs.		8th Bde.CFA.		10thBde.CFA		Totals.	
	Sent	Recd	Sent	Recd	Sent	Recd	Sent	Recd	Sent	Recd	Sent	Recd	Sent	Recd	Sent	Recd.
Aug. 26										2	1		1		2	2
27	5	2	3	2	5	5	-	-	13			7		6	36	26
28.	26	25	2	5	21	11	2	2	2					2	55	52
29	16	20	7	2	2	4	11	2							36	28
	49	55	12	9	28	18	13	11	15	2	1	7	1	8	139	108

4th

TRAFFIC HANDLED BY WIRELESS
CANADIAN DIVISION. SEPT. 1st - SEPT. 6th, 1918.

DATE 40	Dv.Hqrs.		10th Bde.		11th Bde.		12th Bde.		CF4 Hqrs.		3rd BdeCFA		4thBde.CFA		Totals	
	Sent	Recd	Sent	Recd	Sent	Recd	Sent	Recd	Sent	Recd	Sent	Recd	Sent	Recd	Sent	Recd
Sept. 1	3	4			1		2	1							6	5
2	3	3	1	3	1		1	0	22	24	14	5	10	17	52	52
3	27	16	1	4	6	2	9	8	8	11	6	6	8	2	62	49
4	25	15	2	3	5	11	1	4	18	12	6	9	6	9	61	54
5	6					4		1	17	12	6	8	6	15	38	34
6	18	1					1	18							19	19
	82	30	4	10	11	17	14	32	65	59	32	32	27	43	236	213