



Colonel-in-Chief of The Intelligence Corps
His Royal Highness The Prince Philip,
Duke of Edinburgh
10 June 1921 - 9 April 2021

**Prince Philip (RIP) wearing
the uniform of
The Intelligence Corps of
which he was Colonel in
Chief**

**A Branch condolence card
was sent to Her Majesty the
Queen on behalf of the
Branch.**

**Members recount personal
memories of the Prince (See
page 5.**

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National Branches District Election of Chairman

Members will have already received details of the E-voting process by which this Branch is able to select its preferred candidate to Chair National Branches District and we encourage everyone, please, to read the CVs of the two candidates and to cast their vote before the closing date of 11th May 2021.

Branch Chairman's Message

As a matter of policy we try not to use items in the Branch Newsletter which have already been included in material sent out by the Legion Head Office. The death of Prince Phillip, is however, of particular note since he was Colonel in Chief of The Intelligence Corps, in which many of our Branch members served, and his passing is worthy of our front page picture.

Covid-19 has obviously curtailed many events which is a great shame in the Legion's centenary year. However we are continuing to make plans for our Branch Summer Gathering 2021 and for the rededication of the Y Services Memorial Garden at the NMA. Details of both these events elsewhere in this newsletter.

Eagle eyed members may have noticed that we have stopped reporting our membership totals each month. This is because, of late, the membership database has been spewing out inaccurate reports. The Legion membership department is working on identifying and resolving the problems and we hope soon, to be able to report on our continuing efforts to recruit new members.

Otherwise, from myself and on behalf of your Branch Committee, I trust that you are all keeping fit, safe and well or are enjoying at least one of those conditions.

Jim McDermott, Branch Chairman

Poppy Appeal Fundraising the Easy Way



We continue to raise funds for the Poppy Appeal year round using this really easy system. To register and attract a donation every time you make an online purchase with any of the thousands of participating retailers GO TO:

<https://www.easyfundraising.org.uk/causes/rblyservices/?invite=1DZNV&referral-campaign=s2s>

Editorial note:

Contributions to this monthly Branch Newsletter are always welcome on any topics members think will be of general interest. We aim to provide uplifting stories and attempt not to duplicate messages already sent from RBL HQ. Copy should be sent by email, to the editor Jim McDermott at

jim.mcdermott77@ntlworld.com

Preferred format is unformatted MS Word and any photos, cartoons or pictures should be submitted separately as JPEGs.

Researcher seeks help from Military Widows

Northumbria University, in partnership with the War Widows' Association, is exploring social isolation and loneliness in the military widow(er)s community. This study is one part of a series of studies. We are aware that this may be a sensitive topic but the aim of this study is to explore the experiences of social isolation and loneliness, as well as to understand services targeting social participation of military widow(er)s. If you are able to take part and contribute to this study, by completing an online survey, please click on the link below for full information.

[Online Survey Software | Qualtrics Survey Solutions](#)

The survey should take between seven and 15 minutes to complete. Paper-based surveys are also available and can be posted out to you with a pre-paid envelope.

If you would like a paper-based survey, please contact Gemma Wilson either via email or telephone:

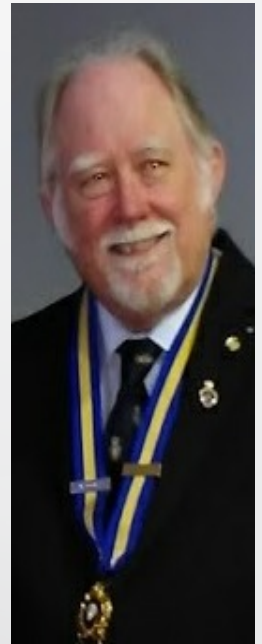
Email:

gemma.wilson@northumbria.ac.uk

Telephone: 0191 215 6054

National Branches District – Chairman Steps Down.

Branch member Dave Street chaired his last meeting of the National Branch District Committee on 22 April 2021. He has been Chairman for almost nine and a half years and was Vice-Chairman for 4 years before that, from 2007. He stands down from this role at the end of the National Conference on 16th May 2021. David moves on now to the Membership Council continuing the history of Y Services Branch members holding in key roles in the Legion hierarchy.



Summer gathering weekend Friday 23rd –Sunday 25th July 2021.

One of the great benefits of being a member of our branch is to make use of the opportunities to meet and stay in touch with former colleagues. Having had to cancel last year's gathering, the plan this year is use last year's arrangements and to meet at Chippenham, a town that is well served by the M4 motorway and Great Western rail service. It is hoped that many members living in the South West will take the opportunity to join us for the weekend.

Accommodation There are not many hotels in Chippenham and the one I have chosen is very convenient being in the Market Place. It has recently undergone refurbishment and is just a 10 min walk or a short taxi ride from the railway station. A number of rooms have been provisionally reserved at the Best Western Plus Angel Hotel, a 3-star hotel in Chippenham, Wiltshire, Chippenham SN15 3HD. I have negotiated what the manager assures me are the best rates available. It is also planned to be our venue for our informal dinner on the Saturday evening. Website: <https://www.legacy-hotels.co.uk/hotels/best-western-plus-angel-hotel-chippenham-wiltshire>.

Hotel deal:

Arrival Friday 23rd July 2021 for 2 nights

Fri 23rd July, B&B for 1 night @ £50.00 per person sharing a twin/double

Saturday 24th July Dinner B&B for 1 night £68.00 per person sharing a twin/double

Single supplement of £20.00 per night includes bed and breakfast

The above includes **free parking** provided guests book their vehicle into reception.

Saturday options:

Visit City of Bath travelling by train from Chippenham station. Every 30 mins and the journey time is 10 mins. Bath is a famous Georgian town with many attractions including the Roman Baths <https://www.romanbaths.co.uk/> Other options include: Visit MoD Lyneham REME Museum. Travel by car (10 miles) <http://www.rememuseum.org.uk/> or visit local National Trust Cotswold villages of Lacock and Castle Coombe. Both used as film sets for costume dramas.

The Hotel is holding a number of rooms for a few months so please let me know if you are planning to attend either alone or with partner **by 31st May 2021**. I will then contact you to discuss your hotel booking but, due to the current uncertainty with Covid 19, we will not confirm the booking until closer to the event but I will contact the hotel to ensure that enough rooms are reserved for us. I will be including more information in the next newsletter including details of a get together on the Friday evening. Menu choices for the Saturday dinner will follow nearer the event. My email contact for this event is summergathering2021@gmail.com. Please **contact me on this address to let me know whether you are planning to attend or have any questions.**

Looking forward to seeing you in July
Eric Sambell, Branch President.



Y Services Memorial Plot at the NMA – Re-Dedication

We had expected by now to be posting pictures of the enhanced footpath at the NMA but much to our dismay our appointed contractor had to withdraw due to illness and we found ourselves, in late March 2021, returned immediately to the 'start all over again position' requiring another survey of the site and new quotes from potential builders. Fortunately a builder based in Lichfield has provided a cost effective solution to refurbishing the Y shaped footpath and we awarded the contract to this new contractor in the last week of April. Work is scheduled to start in mid to late May 2021. As members will know, we attracted considerable support for our appeal for funds to pay for the refurbishment of the site, but another bombshell metaphorically exploded on our fiscal planning when the NMA advised that we need to have a maintenance contract in place before work can commence. As it happens, we have accrued sufficient monies to cover the maintenance of the site (that is NMA staff keep it mowed, clipped and neat and tidy year round) until October 2022. However, after that we need to devise some way of raising funds annually to cover this cost and your committee will be addressing this issue in the coming months. If you do happen to come up big on the Lottery, please add us to your list of potential beneficiaries! Thank you.

In the meantime, we look ahead to work being completed soon and for our planned re-dedication of the site event to take place on **7 September 2021** (Covid-19 restrictions permitting). All members are cordially invited to attend and all those individuals (non members) and organisations who contributed to our appeal will also be invited. So please consider attending and take the opportunity meet up with old comrades. Details of the event published in the March 2021 issue are repeated here for info:



Re-Dedication - Attendance

It will greatly help with organising the event if members who plan to attend could advise Branch Secretary John Swann via email yservices.secretary@rbl.community by 31 May 2021
A short message is all that is needed at this stage, something along the lines of *"Yes, I plan to attend the rededication ceremony on 7 September 2021. I will be accompanied by [as appropriate]."*
Having a gathering of members presents a great opportunity for a social get together and a dinner evening (at your own expense of course) is planned at the Shoulder of Mutton pub, website: theshoulder.hamstall.co.uk (Branch Vice Chairman Dennis Weir is organising the evening function and if you would like to attend please contact Dennis by email on: yservices.vicechairman@rbl.community
Please note that nil returns, for the re-dedication or the evening event are NOT required. For those not familiar with the term 'nil returns' it means if you do not plan to attend you do not need to tell anybody or send apologies.

Memories of Prince Philip (RIP)

Prince Philip was Colonel in Chief of the Intelligence Corps and many members will have tales to tell of his visits to operational sites. In 1970 something I was an instructor at Det 4 Comms Unit when Prince Philip paid a visit. A month before, the usual posse of high ranking officers descended to ensure that everything was in order. The Prince was scheduled to visit several lecture rooms to see trainee analysts beavering away solving problems. The narrow corridor in the building (actually it wasn't narrow but the Brigadier thought it was) was said to pose the problem that the person escorting the Prince would have to turn their back to him as he was led from one room to the next and handed over to a succession of instructors. It was decreed, to solve what was considered a serious problem that instead, I would escort him throughout that part of his visit and walk backwards! In one classroom a group was working on a task which would be a daily routine when they joined an operational unit. I explained to the Prince that as a pilot he would be familiar with this sort of procedure and he declared "...and what happens when they have pieced it all together, does someone shout house?" We dared to laugh. As we left the first room the Prince said, "Lead on, there's no need to walk backwards!"

Jim McDermott ex Int Corps

Branch member and regular contributor of amusing poems to this newsletter, **John Berry also ex Int Corps** has his own memory of the Prince:

"Reforger 1979 was the latest in a series of United States Reinforcement exercises, in which the Pentagon flew over thousands of US servicemen from America and dumped them in southern Germany to exercise against the threat of the Red Army.

The newly fledged 14 Signal Regiment (EW) was the only UK participant in the exercise, and no doubt Dennis Weir, Peter Derrick and many other members will remember it well. They may even have defrosted by now!

For my sins I had just been commissioned and was given the job of Quartermaster, running "B" Echelon, a small detachment resupplying the grafters of the Regiment with rations, water, fuel and second line repair through the attached LAD.

We were in Baden-Wuerttemberg near Uffenheim and looking for somewhere to lager up for the night. Evening was drawing on when we sighted a large quadrangular barn complex. A broad path led to what looked like a stately home, with an imposing front door.

I was authorised to spend a maximum of 10 DM per night on "rent" for any accommodation we could negotiate.

I knocked on the door and it was opened, not by some flunky, but a rather elegant lady, who seeing my uniform, immediately went into English and invited me into the hallway. I explained who we were and that we were looking for temporary accommodation for a couple of days where we could protect our stores from the foul weather. She was happy to allow us to use the barn complex, which was ideal (and even had an outside khazi!)

I noticed a large portrait of Prince Philip displayed prominently in the hall and expressed my delight.

"I see you have a picture of Prince Philip. He is our Colonel-in-Chief!"

"Oh, how nice! He's my brother!!"

I discovered later that the lady in question was Princess Margarita of Greece and Denmark, wife of Prince Gottfried of Hohenlohe-Langenburg, whose outbuildings we were borrowing for our 10 DM per night. Her grandson, Philip, Prince of Hohenlohe-Langenburg attended the funeral of his great uncle

EARTH INDUCTION TELEGRAPHY

Technical article on Sigint in WW1
Clive Kidd (Branch Member, Ex Royal Navy)
Part Two

German Equipment

Now, what of the German equipment? Internet forums and a WW1 intelligence booklet [10 p.38]- indicate that the Germans called their sets 'Moritz' but the NSA document [1] says they were called 'Arendstationen' (shortened to Asta) after their inventor, Herr Arendt. The NSA document goes on to say [1 p.26] that the control post of one of the listening groups was located at St Maurice. This seems too much of a coincidence to me and it may be the British Intelligence staff put two and two together and got three - or perhaps I have! However, my thoughts are backed up by information in [1 p 27]

"... In July 1917 all of the listening stations on the Western Front were placed under the control of a Central Exploitation Office There were in August 1917 two listening posts in the area of the 121st Division ... under the control post of the group at St. Maurice..."

The German rendering of St Maurice being St Moritz and so, perhaps, the slang for the Listening Service became Moritz – at least to those operators in this sector of the line who just happened to be captured and interrogated by the Allies. This backed up that [1] also states there were two other groups of Listening Stations reporting to Boinville and St Jean and probably others who then forwarded their work to the aforementioned Central Exploitation Office. A further NSA Document [11] backs up the Arendt name and gives a little more detail

"... Arendt apparatus," named for the then German Postal Councillor (sic) who developed it. According to Wilhelm Flicke, a German cryptologist in both world wars, the device was patterned (sic) after some captured French equipment probably for wiretapping. The Arendt set, which may have been just an amplifier connected to a switchboard, was the heart of a widespread wireline intercept operation which the Central Powers maintained on all the fighting fronts. Until reasonably adequate Comsec measures were instituted - in 1917 in the west, never in the east - the Germans and Austrians had it within their power to copy virtually every Allied message in the forward battle lines. ... "

Just to make things more interesting, two more names for the Central Powers intercept sets emerge from the mists of time. Flicke [12] provides us with the names "Polyps" and "Penkala!" The former is a sea creature that catches its victims by means of outstretched tentacles. The latter is appar-

Flicke also states

"...In the summer of 1915 (German) engineers near Verdun had captured instruments by the aid of which the French had been intercepting German telephone lines. These instruments had been improved in Germany by the then Postal Councillor Arendt, and they had been used in the war of position, first by the German and then by the Austrian Army, to intercept telephone conversations of the enemy...."

But what of the German intercept equipment itself? There were some trials on German Amplifiers at the end of WW1, which are described in a TNA document [13] - itself a closed document until 1970!

Originally published in the e-Newsletter of The Defence Electronics History Society and Reproduced with the kind permission of the Editor

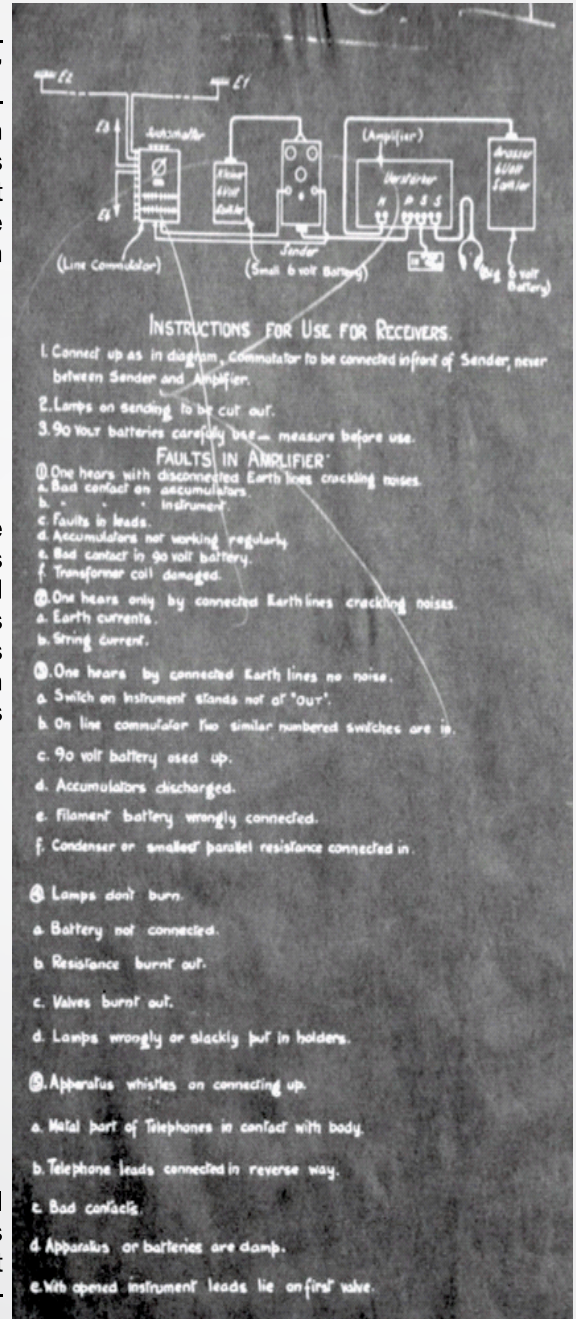


Figure 4 [Image credit TNA File AVIA 23/15].

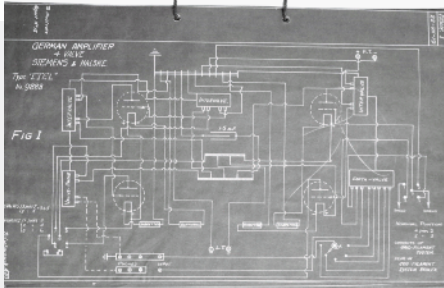


Figure 5 German amplifier circuit
(Image credit: TNA File AVIA 23/15)



Figure 6 German Set (Image -Open Source)

Photographs of a German ETEL can be found at [14]

French Systems

Gustave Ferrié is credited by the French with inventing TPS - a resume of his life can be found at [15] - and they credit invention of Listening Stations to Lt Delavie. A comprehensive paper, in French, recounting his time in TPS / The Listening Service is given at [16] along with a photograph of a station in action and some excellent photos of TPS and Fullerphones are given at [17], [18]. A TPS set along with its crew and the TPS badge is below



Figure 7 (Image Source: Roger Faure)



Figure 8 (Image source: Freddy Laigu, F5IRO)

United States of America

The Americans adopted the French system and, fortunately for us, most of the US TPS handbooks and information on many other pieces of equipment, are preserved and made freely available on www.radionerds.com [19,20, 21] giving us circuits and clearer photographs of their equipment

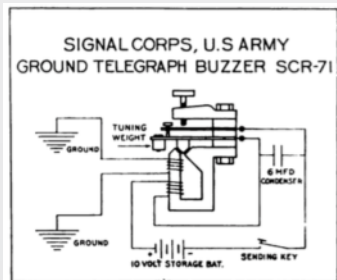


Fig. 4—Schematic Wiring Diagram of the Type SCR-71 Set

Figure 9 (Image Source: Radionerds)

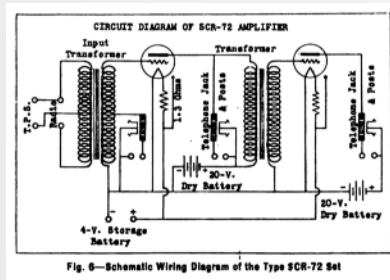


Fig. 6—Schematic Wiring Diagram of the Type SCR-72 Set

Figure 10 (Image Source: Radionerds)

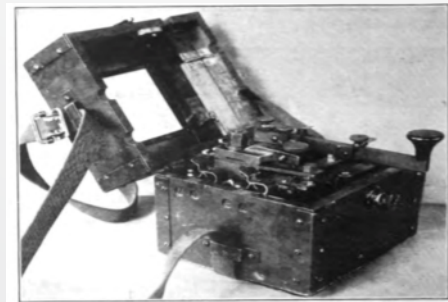


Fig. 3—Set Box, Type BC-16 of the Type SCR-71 Set

Figure 11 (Image Source: Radionerds)

An excellent account of the American Signal Service can be found in the 1919 Report by the US Chief Signal Officer [22], which, as you might expect, is a mine of information on the state of communications in the US army in 1918. Indeed, a whole series of reports from 1869 is available on the US Signal Corps via babel.hathitrust.org. [23]

By 1921, TPS was no longer in use by the US Army and seem to have disappeared from the UK inventory about the same time. The Fuller-phone remained in UK Service until the middle of the 20th century.

It can be seen that a lot of effort was expended during WW1, not only in TPS sets and their near relatives, but also in listening in, whether for policing purposes or intercept of enemy transmissions.

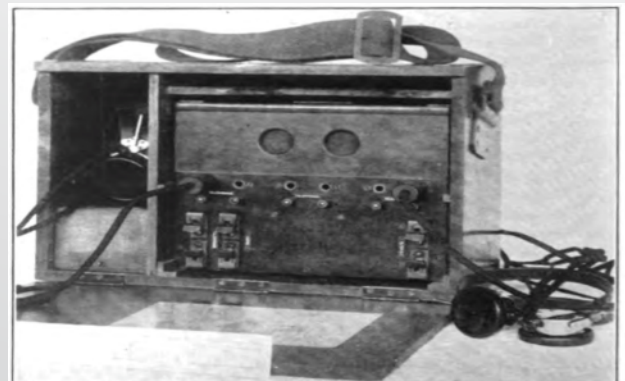


Fig. 5—Set Box, Type BC-17 of the Type SCR-72 Set

Figure 12 (Image Source: Radionerds)

Additional Reading

A first-hand account of the American Listening Service is given in:

Listening In Intercepting German Trench Communications in WW1 Ernest H Hinrichs – Sgt First Class US Army ISBN 0942597788, published by White Mane Books, 1996.

Wireless Telegraphy Communications in the Canadian Corps. Captain W Arthur Steel

http://www.rcsigqs.ca/index.php/Wireless_Telegraph_Communications_in_the_Canadian_Corps

The Buzzer and other Devices of Induction Telegraphy. Major Edgar Russel US Army Signal Corps 1909.

<http://cgsc.contentdm.oclc.org/cdm/ref/collection/p4013coll4/id/483>

Des téléphonistes et télégraphistes passerands en 14-18

<http://www.histoire-passy-montblanc.fr/histoire-de-passy/de-la-prehistoire-au-xxie-s/la-guerre-de-1914-1918/mitrailleuses-de-14-18-et-mitrailleurs-passerands/des-telephonistes-et-telegraphistes-passerands-en-14-18/>

Acknowledgements

Grateful thanks to Roger Faure, http://faure.roger.free.fr/documents/delavie_par_barres.pdf

and Freddy Laigu, F5RIO, <https://j28ro.blogspot.com/2014/07/la-telegraphie-par-le-sol.html>

for allowing me to use the photographs from their sites in this paper.

References

[1] Notes on the liaison service and the liaison intelligence service of the German army during the world war.

https://www.nsa.gov/Portals/70/documents/news-features/declassified-documents/friedman-documents/publications/FOLDER_214/41760659079980.pdf

[2] Some aspects of military line communication as deployed by the German armed forces prior to 1945

<http://www.cdvandt.org/Wirecomm99.pdf>

[3] The Royal Corps of Signals A History of its Antecedents and Development Major General R. F.H. Nalder CB OBE RS Institution 1958

[4] The Signal Service in the European War 1914-1918 <https://archive.org/stream/signalserviceine00prie#page/98/mode/2up>

[5] Power Buzzer and Amplifier

<http://cgsc.cdmhost.com/utills/getdownloaditem/collection/p4013coll9/id/255/filename/256.pdf/mapsto/pdf/type/singleitem>

[6] Wireless for the Warrior: Fullerphone Principles of Operation. <http://www.wftw.nl/fullerpr.html>

[7] The Buzzer Phone Type EE-1

http://radionerds.com/images/3/32/WI_PA01_May_21%2C_1918_The_Buzzerphone_Type_EE-1.pdf

[8] The Autakym eDEN No 62 Part I: September 2017

[9] The oscillatory value relay: a thermionic trigger device Turner L B Journal of the Institution of Electrical Engineers(1919),57(1S):50

[10] SS537 Summary of Recent Information Regarding the German army and its Methods

<https://archive.org/details/summaryofrecenti00grearich>

[11] Comint and ComSec; the Tactics of 1918

https://www.nsa.gov/Portals/70/documents/news-features/declassified-documents/cryptologic-spectrum/Comint_and_Comsec_Pt_1.pdf

[12] War Secrets in the Ether Part I and II https://www.nsa.gov/Portals/70/documents/news-features/declassified-documents/friedman-documents/reports-research/FOLDER_264/41761019080017.pdf

[13] German Amplifiers. TNA AVIA 23/15

[14] ETEL. http://www.rkk-museum.ru/vitr_all/exhibits/922_e.shtml

[15] Gustave Auguste FERRIÉ (1868-1932; X 1887). <http://www.sabix.org/bulletin/b37/ferrie.html> [16] Le Lieutenant DELAVIE et ses postes d'écoute 1915-1918

http://faure.roger.free.fr/documents/delavie_par_barres.pdf

[17] Telegraphie Par Sol <http://guerre14.e-monsite.com/medias/files/telegraphie-par-le-sol.pdf> [18] First War Technik Telegraphie

Par Le Sol. <http://firstwartechnik.free.fr/TPSfr.html>

[18] First War Technik Telegraphie Par Le Sol. <http://firstwartechnik.free.fr/TPSfr.html>

[19] SCR 71. http://radionerds.com/images/c/ce/RA_PA-10_1918.pdf

Addendum

Whilst checking that the hyperlinks were still valid (I had last accessed some more than a year ago when I started writing the article), I came across the following, recently published, scholarly document which bears more reading by all interested in TPS and intelligence:

Beach, J., & Bruce, J. (2019). British Signals Intelligence in the Trenches, 1915-1918: Part 1, Listening Sets. Journal of Intelligence History, 1-23.

Available at: <https://doi.org/10.1080/16161262.2019.1659580>

Ends