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#### SCU-NEWSLETTER No. 1-13 MI6 (Section VIII) & the V2 Rocket Edition Sunday, March 17, 2013



#### 1. Sad News.

I am very sorry to report that our wartime colleague Pat Hawker (G3VA) passed away recently. Pat was a Vi (Voluntary Interceptor) of Enigma Abwehr wireless traffic in in RSS (Radio Security Service. In 1941 he went 'full time' into the Service - that had become a constituent part of MI6 (Section VIII) - the subject of my book 'The Secret Wireless War'. His own chapter (No. 34) tells of his work as a wireless technician and operator in SCU3 then into SCU1, before going to France after 'D-Day' as part of SCU9. ['SCU' is 'Special Communications Unit' – the militarised name for what was (MI6 (Section VIII) or SIS Communications]

After World War II he started writing about wireless in magazines. He was well known as a writer for RSGB/RadCom and ARRL printed a number of his articles. He worked for the RSGB, Newnes Books (for whom he wrote, co-wrote or edited a large number of radio and television technical books), Electronics Weekly (an IPC weekly trade publication) and finally the IBA (Independent Broadcasting Authority). Pat was a great help to me whilst I was writing 'The Secret Wireless War' – especially with his knowledge of the 'Minuteman' attempt to bring down the V2. That, added to my discussions with Steve Dorman, have made an authentic record of this extraordinary but true event !

#### 2. Richard Gambier-Parry and his MI6 (Section VIII)'s attempt to bring down the V2 Rockets.

Readers will know of the great part played by Richard Gambier-Parry and his MI6 (Section VIII) organisation in the success of the ULTRA operation. For the recently published 'MI6 The Official Story of SIS' to describe him as 'Brilliant' comes as no surprise to those of us left who worked for him.

This is Richard Gambier-Parry wearing uniform as we usually saw him about at Whaddon Hall, the HQ of his MI6 (Section VIII). He had been an officer in the Royal Welch Fusiliers in World War I, mentioned in despatches for bravery and twice wounded. He later transferred into the infant Royal Flying Corps and saw service as a fighter pilot. After the war he travelled but was immensely interested in wireless – holding an amateur licence from the earliest days. He was the public relations officer for the BBC in the late 1920s then joined the giant US wireless manufacturer Philco Radio as General Sales Manager in 1932. From here, he was 'head hunted' by Admiral Sir Hugh Sinclair in early 1938 to totally reorganise SIS communications. He recruited Gambier-Parry before purchasing Bletchley Park.



During 1939, he had built the MI6 Wireless station in the tower of Bletchley Park to make contact to MI6 Agents and that in Hut 1 to handle all other 'Secret' traffic. They were all part of Sinclair's 'War Station' concept and replicated the SIS wireless stations at Barnes and Woldingham. Neither the so-called 'Station X' in the Tower, nor that in Hut 1, had any connection with the Code breakers. And note, the Code breakers had neither wireless *input* nor *output* of their own. They were the middle part of a triumvirate – *quite impotent* – without the other two parts in place.

In the dark days following Dunkirk – with a German invasion clearly looming – Gambier-Parry fitted out a fleet of 60 Packard motorcars to be mobile wireless units. They were to provide on-going SIGINT (including the infant 'ULTRA') – to the likes of the Admiralty, the War Office, the Air Ministry, Fighter Command, the Cabinet Office and so on – in the event these vital organisations had to move out of London.

This is one of the 60 Packard saloons purchased by Gambier-Parry in June 1940 to form nationwide mobile wireless stations – to handle SIGNINT in the event of a German invasion – following Dunkirk.

This particular one is seen here in Alexandria in 1941 as part of 'A Detachment' to receive ULTRA relayed from the SCU4 wireless station in Cairo. One would be stationed in 8<sup>th</sup> Army HQ, one at the Tactical Air Force Command in the desert and this in Alexandria – as a mobile and emergency support to the Royal Navy's Mediterranean Fleet HO.



Richard Gambier-Parry later handled all the outgoing ULTRA to our Military Commanders in the field via his Windy Ridge wireless station at Whaddon. This went out to his mobile SLUs, from Montgomery in North Africa through to the Allied Army Commanders on 'D-Day' and beyond – including the US Army Generals, Patton, Bradley, Simpson, Crerar (Canada), Montgomery, Dempsey (21<sup>st</sup> Army Group) and so on.

On and after 'D-Day' the ULTRA arising from Bletchley Park was sent out to the US Army Commanders via the MI6 (Section VIII) wireless station on 'Windy Ridge' in Whaddon Village. In all cases Dodge Ambulances were used – stripped out and fitted with our wireless gear.



For the British and Canadian forces – Guy 15cwt army wireless vans were used but stripped of their wireless gear and replaced with our own.

At the same time, it was Richard Gambier-Parry's SCU3 (including RSS) that monitored the most secret and most difficult German traffic – that of the Abwehr and German agents. These messages were passed on to Bletchley Park and thus Gambier-Parry was handling both a vital part of the Enigma *input* to Bletchley Park and the *output* of the resulting ULTRA – to where it could be put to use against the enemy.

However, there were two more vitally important areas where Richard Gambier-Parry was asked to use his MI6 (Section VIII) team of outstanding wireless engineers. Firstly, they constructed the world's most powerful wireless transmitter for Black Propaganda purposes. Secondly, to see if he could devise a way to harness the stations immense power to destroy the V2 Rockets – about to land over England. These two great projects are linked, as you will see:

# Black Propaganda.

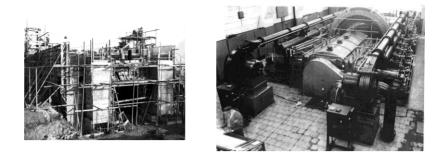
Outside of the overwhelming Allied forces, there were numerous factors that together defeated the Germans; these included Bletchley Park's superb work on Enigma. Another was the Black Propaganda unit formed by the Foreign Office department 'EH' based at Woburn Abbey. It started with producing propaganda leaflets but later turned to broadcasting 'Black' propaganda – that is false or distorted news into Germany and especially to its armed forces radio stations.

They had a station at Milton Bryan and a larger one built by crews from MI6 (Section VIII) at North Cerney near Cirencester. They proved a great success to the point that it was decided to build a more powerful transmitter at Gawcott that was nearer to both Whaddon Hall, Milton Bryan and Woburn Abbey. However, even these were not considered powerful enough so Gambier-Parry's teams set out to build the most powerful transmitter in the world – down at Crowborough in Sussex.

The story is fully told in Chapter 18 of 'The Secret Wireless War' but the transmitter under construction was to be immense -600 Kilowatts when US broadcasters were limited to 50kW output. Bob Hornby was sent from Whaddon Hall to the USA to see it, followed by Harold Robin, who was to oversee the stations construction and running.

Eventually, it was constructed and everything about the transmitter at Crowborough was big – leading to the station to be known as 'Aspidistra' ('Aspi 1') – taken from the song by Gracie Fields – 'The biggest Aspidistra in the World' !

The first picture shows the massive concrete construction of the entrance tunnel and the right hand picture the huge generator room – see the man at the bottom left to judge its scale. And all underground



'Aspi 1' gave Black Propaganda the ability to reach over the AM Medium wave wireless bands of the German forces radio programmes and even the German National broadcasts. It proved of great value in the Black Propaganda war but it was then proposed to give Crowborough a very different – but equally important role. Much more about these enormous transmitters is on: <u>http://www.ominous-valve.com/wlw.html</u>

In the 2010 Autumn Edition of 'Bletchley Park Times' – there was an article by John Jackson about BPs knowledge of the development of the V2. However, R. V. Jones of SIS was instructed 'from-the-top' to see what steps could be taken to eliminate the threat.

'The Menace' and an instruction 'from-the-top' !





This is the story of the attempt by Richard Gambier-Parry's team to destroy the V2 menace by wireless.

The rocket, known to the Germans as **Vergeltungswaffe 2 (V2)**, was code-named 'Big Ben' by the British. In June 1944, after the first V1 flying bombs had been launched at London, the Prime Minister formed the 'Crossbow Committee of the War Cabinet', but became alarmed and annoyed when R. V. Jones revealed that stocks of the V2 appeared to have reached as many as 2000 (this was later shown to be an accurate estimate). The PM, shocked at this unexpected information, was even prepared to consider announcing that an attack on London by the V2 would be met by the release of poison gas over German cities.

# **Radio Controlled ?**

Agents had reported the V2 as being 'radio-controlled'. This could mean a complete tracking, guidance and ranging system or a tracking system that would enable the Germans to confirm where it fell (such a tracking system had been carried on many V1 flying-bombs), or conceivably just an initial radio control system that would shut off the fuel supply some 60 seconds after launch.

Having been given instructions – 'from-the-top' – R.V. Jones, the Assistant Director of Intelligence in SIS, sprang one of his most important projects on Richard Gambier-Parry. It was to deal with the threat of 'Rockets' fired at London. It was thought the immense power of the new 600kW - 'Aspi 1' - could be focused on the guidance of the V2 Rockets to destroy them. The project was given the code name 'Silent Minute'. The discussions that took place at Whaddon Hall were held under the most secret conditions – this at a place where everything was Top Secret anyway !

Although the senior members of MI6 (Section VIII) attended the meetings, the task was given to Steve Dorman. After the war Steve ran the wireless engineering division of HMGCC (HM Government Communications Centre) at Hanslope Park.

This is Steve Dorman in MI6 (Section VIII) at Whaddon Hall. I do not remember seeing Steve dressed like this in uniform but I think was taken for the family album – as he was very proud to be wearing his father's Sam Browne belt.

Steve joined shortly after me and immediately demonstrated his grasp of wireless technology. He took his place in R&D under Lt. Cdr. Percy Cooper RNVR in our Workshops at Whaddon Hall.



A quote by Steve shown in 'The Secret Wireless War' Chapter 32.

'I attended a briefing given by Brigadier Richard Gambier-Parry at the beginning of August 1944. Intelligence had become available that a German rocket weapon, to be known as the V2, was being prepared for launching against the UK and might be guided by a radio signal between about 120 and 180MHz. Our task was to identify and jam the guidance signal before the weapon reached the South Coast. It was estimated that a jamming power of about 50kW would be necessary. There was no known equipment in the UK or USA capable of providing this facility but it was wanted without delay'.

Thus it was decided that the jamming device to be known, as 'Aspi 5' needed be of 50kW but taking its mains supply from the power available for the nearby enormous Aspi 1.

Section VIII had good liaison with the RCA Laboratories in Camden, New Jersey. A suitable building was hastily constructed on the Aspidistra site at Crowborough, Sussex. As well as having an adequate mains supply on site, it could also be supplied from the 1 megawatt, 3000hp, 16-cylinder Crossley Premier diesel engine and alternator as part of the 'Aspi 1' 600kW medium-wave installation. Aspi 2, 3 and 4 were 100 and 50kW U.S. General Electric HF broadcast transmitters installed at the site, after completion of the 600kW MF transmitter.

'Within a week, arrangements had been made for RCA to send over water-cooled triode valves, a pair of which should be capable of delivering 75kW RF power over the required VHF band. We obtained access to a site on Beachy Head for receiver and transmitter remote-control facilities.

Bernard Walsh (the SCU catering officer), and owner of Wheeler's Oyster bars in London, arranged accommodation for and feeding of the team. To this end, he commandeered one floor of the Beacon Hotel, Crowborough. Overall management and site facilities at Crowborough were provided by Harold Robin (another ex-Philco Engineer) with Ronnie Watton. They took over a small engineering works at Crowborough to supplement the small workshop already on site. The design and construction team was mainly from the Whaddon and Hanslope Park laboratories and workshops'.

I have another reason to be interested in the project at Crowborough, namely the minor role-played in the operation by my father. He was sent as part of the team to ensure that the supply of materials, especially wireless gear, was made available to the engineers in the shortest possible time. Before father left Whaddon for Crowborough, he was called in to see Richard Gambier-Parry, and the importance of his role explained to him. He told father that if anything – *anything at all* – were to hamper the work from the supply side, then father should contact him personally and immediately.

According to intelligence by British Intelligence, the V2 attack was expected to start in September 1944. That was just one month after the initial briefing held by Richard Gambier-Parry at Whaddon Hall; thus the work had to be planned to a time-scale of weeks, rather than the months or years needed for a peacetime project of this magnitude. The fullest use was made of conventional designs using readily available materials and straightforward workshop facilities.

Once the first jammer transmitter had been completed (to be known as Aspi 5), it needed to be run up gradually to full power. Problems arose from the huge currents circulating in the resonant lines coupling with adjacent circuits. The DC supply lines had a nasty habit of glowing red, and the fluorescent lights in the building were as bright when switched off as when switched on. Nobody stopped to think of the potential radiation hazards to themselves. An unanticipated problem was also caused by the 600kW radiated from Aspi 1 just a few hundred yards away. When a 1.2 inch copper earthing strap was bolted to the Aspi 5 antenna feeder, the *induced* MF current caused it to glow red and then melt!

Some of the Crowborough aerials with the entire 'Aspidestra' wireless station buried deep underground.



At about 10.00 pm on the evening of Friday 8th September, a phone call was received to say the first V2 had been launched at the UK a few hours earlier. It landed in Chiswick at 6.34 pm, killing three people including an infant girl in her cot. The Whaddon engineers rushed to the site and Aspi 5 was successfully powered up within minutes under remote control from Beachy Head. There were further alerts in the following days but it would seem that few V2s were detected before they came hurtling down from the stratosphere. Even if the warnings had been given in time, Aspi 5, working on the frequencies of the experimental hybrid A4b/Wasserspiel system, would not have affected the missiles.

With the first transmitter running well and the second nearing completion, the Section VIII engineering team began to break up and return to Whaddon to continue with urgent work in connection with the war in the Far East. The team had successfully implemented 'Silent Minute' within less than five weeks and had the system working by the time the V2 attack began although, unfortunately, the equipment had no effect at all on the V2 gyro system. Although the Agent's information had been wrong – it was a great feat bringing this operation together in such a short period.

Although, in the event, the Nazis gained little military advantage from the rockets that had taken them so long to bring into operation and that had consumed so many valuable resources, the long-range rockets opened up vast new possibilities in the conduct of military operations: 'In future the possession of superiority in long distance rocket artillery may well count for nearly as much as superiority in naval or air power' (from Public Records Office file at Kew). None of the public records at Kew in PREM 3/111 relating to the 'Big Ben' rocket mention what may well have been in the minds of some, namely, that such missiles might, before long, be capable of carrying nuclear warheads, each powerful enough to wipe out whole cities.

On the credit side, it has to be recognised that the wartime development of long-range missiles and liquid-fuelled rockets led directly into the Space Age and all that this has entailed.

# 3. RSS Annual gathering at Bletchley Park on Sunday 14<sup>th</sup> April in the Mansion.

This is always an interesting, event with speakers on a wide range of subjects connected with the secret wireless war – waged during World War II. There are only a very few of us left who were in the wartime units RSS or RSS/SCU3 or SCUs – but those with family connections to members and those interested in our work are most welcome.

# 4. My SCU-Newsletters - direct ?

I know some of you receive these Newsletters via another party. However, if you would like to receive them directly then just send me your e-mail address and I will enter your name in the mailing list.

# With warm good wishes from Jane and from me – about to reach our 65<sup>th</sup> wedding anniversary !

Geoffrey Pidgeon Sunday, March 17, 2013