

SCU-NEWSLETTER No. 1-17
Wednesday, May 24, 2017

1. One arm longer than the other?

When I joined MI6 (Section VIII), the workshops were still making the MkV - an excellent but very heavy transceiver. Indeed, it was so heavy that the joke going the rounds was that the Gestapo could easily spot our agents - as he would have one arm longer than the other!

You might think we could not make jokes like that but we did and Ken Green - one of our draughtsmen produced this for 'Stable Gossip' the Whaddon Hall - House Magazine. One of our agents is up at the Pearly Gates - still clutching his MkV - all part of our somewhat grim wartime humour!

Although it *could* be interpreted as successful wireless with the caption 'Penetration' - it was meant to be a 'dig' at the sheer weight of his set - leading to his being revealed as an agent and very soon despatched to the Pearly Gates.

One of the reasons for the early 'spat' between MI6 and SOE - is that some time after SOE was formed in July 1940 - MI6 (Section VIII) at Whaddon Hall were instructed to supply them with their first wireless sets.

Apparently, a party from the infant SOE came to our workshops, where Lt. Cdr. Percy Cooper RNVR - in charge under Lt. Col. Hornby - gave them twenty of our then precious MkVs. They soon afterwards complained that they were too heavy for an agent to carry about.

Their response was not well received by MI6 and Percy Cooper in particular - *albeit that it was frankly the truth and we knew it!* SOE went on to design and make their own sets and they proved very successful.

Although small quantities of MkV were being manufactured into 1942 - our R&D team were working on a new model - the MkVII at the same time. When I joined we were still making parts for the MkV - but we had also just started the first run of 50 of this smaller set.

This picture is the MkV - in a wooden case that was *then* fitted into a suitcase. It was *very* heavy. It was a fairly early model from the Whaddon Hall workshops. It seems that perhaps performance came before any other consideration?

I now wonder if anyone from the R&D department actually carried one for any distance before it went into production?

I am probably the only one left from those Whaddon Hall workshop days but that is something I have not wanted to say before now!



Continued

Now I come to our MkVII - a smaller and much lighter set - about half the weight of the MkV. It proved to be a huge success with our own SIS agents and those in SOE. Eventually, thousands of MkVII's were made either in the suitcase model as shown, or as the 'Cashbox' version the MkVII/2. This was also known as the 'Paraset' and they were both quite rightly, highly regarded by agents of the SIS and SOE.

The MkVII sets.



On the left is an early version of the MkVII in its suitcase and the one on the right is the MkVII/2 - the 'Cashbox' - both were actually a 'Paraset' but that name was more often used for the MkVII/2. Both are probably factory made elsewhere and not from Whaddon Hall, or our workshops at Little Horwood.

Having started this somewhat technical SCU-Newsletter - I should draw your attention to the fact that much of the intelligence coming back from SIS Agents was to our own wireless stations at Nash, Weald and later to Forfar. Please also note that this traffic was fed into Hut 10 at Bletchley Park - under the redoubtable Miss 'Monty' Montgomery - of SIS.

As an aside, I remind you that to begin with SOE did not have its own wireless station. As a result, SOE agents transmissions from occupied Europe were received at the MI6 (Section VIII) 'Main Line' wireless station in the fields in front of Whaddon Hall.

Also note: I have read several reports on the MkVII referring to its serial numbers on the set and power pack, being 'riveted' on. That might well have been the case in later outside factories but certainly not in our original production in Whaddon workshops - or later at our small 'factory' at Little Horwood. There, they were screwed on with Parker-Kalon (PK) self-threading screws. I have good reason to know that to be true. Even at this stage - let us try to get the records accurate.



One night we were all leaving Little Horwood to catch our coach to Stony Stratford - where most of us lived - when suddenly there was an urgent call for 50 MkVII power packs. They were nearly ready but still did not have their serial numbers on. 'Jock' Denham volunteered to stay behind and fit them. Jock was a Glaswegian from the Gorbals - an area of the city that pre-war had a bad reputation for gangs and crime. It seems Jock had been through an awful time at Dunkirk and although still in the army - a quiet job was found for him with us at Whaddon. Jock was a gentle giant of a man with views on all aspects of life - *especially about women* - for anyone who would listen.

I should explain that Parker-Kalon self-tapping screws - to start off - need a hole through the steel. The steel was less than 2mm thick but unfortunately Jock used a 50mm drill. That was *much* too long and so he drilled right through the windings of the transformers!

That night they were collected from Little Horwood and taken to the Despatch Office at Whaddon Hall. Fortunately - one was tested and failed fairly dramatically! That averted the catastrophe of them going out to agents in occupied Europe. Obviously, all of them were now ruined and we had to urgently make another fifty. Clearly - Jock was not very popular around the workshops for quite a while!

I have recently been asked who designed the MkVII? My view is that it was a collective effort by our R&D including Wilf Lilburn, Alfie Willis and Dennis Smith. Also involved in Percy Cooper's office - were Ted Turner, 'Mac' Hawkins and later on improvements were made by Steve Dorman. Being regarded as a 'most urgent' project by our boss Richard Gambier-Parry (Controller of SIS Communications) - all the available brains were brought to bear.

My only contribution was to do as I was told! I made the early Morse key knobs for the MkVII - in lots of fifty on a South Bend lathe and later in larger numbers - on an Atlas capstan lathe. Both of these lathes - like so much of our other machinery - came from the USA. I also made spacers and some of the early chassis for the set. *After all, I was the most junior there at the time - by a number of years.*

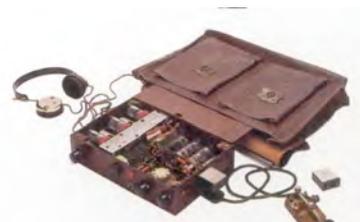
2. Wireless in German occupied Denmark a new and very important - contact!

As you may know, these SCU-Newsletters go from New Zealand to across the USA - where some clubs syndicate it. It also goes to wireless 'buffs' in France, Holland and now from Denmark. I am delighted to have been introduced to Hans Bonnesen via the Royal Corps of Signals Museum at Blandford. He wanted to know about our mobile SLUs (Signals Liaison Units) and has written a book about the wireless intelligence in his country during the German occupation. This is a fascinating story and one that I will relate in a future SCU-Newsletter. But for now - this is a brief summary of an extraordinary tale:

In the early hours of the 9th of April 1940 - German forces invaded Denmark. Despite an agreement of non-aggression, the Germans took full control of the country within a few hours. Due to well-organised plans and a multitude of points of entry, Operation "Weserübung" went smoothly. The population was virtually paralysed, especially as it was quickly noticed, that all communication to Denmark and out of Denmark, was a thing of the past.

Hans Bonnesen was an eight-year-old schoolboy living just outside Copenhagen when the Germans entered the country and his story will be in a later SCU-Newsletter. At this moment, I want to concentrate on the failure of SIS wireless communications and indeed SIS generally in the country - compared to the relative success of SOE agents.

However, neither SIS nor SOE wireless sets operated well in Denmark. Quite apart from anything else, the whole country was on DC (Direct current) - not as in Britain AC (Alternating Current). That meant using vibrator packs - more to carry - and more to conceal!



Now the connection with my Item 1 - above. Wireless engineers in the underground movement in Denmark designed and built transceivers for use by themselves and/or agents. This quite remarkable wireless was called the 'Telephone Directory' - as it was about the same size. However, it was made with components largely available in Denmark and built and operated under the nose of the German Army and Gestapo. It measured 29 x 19 x 6.5cm (approximately 11.5 x 7.5 x 2.5 inches) and weighed in at a little over 1.9kgs (about 4lbs.) excluding headphones and Morse key.

Apparently there are only a few originals to be seen in museums but numerous replicas have been made - by amateur wireless enthusiasts. Hans Bonnesen has been invited to attend next years meeting of the RSS/SCU veterans meeting and is bringing his own replica to show the devotees. He will also talk about the underground wireless in Denmark during the war and the brave men who built these remarkable sets.

I had assumed that SIS agents would have been prominent in Denmark but this is seemingly quite wrong. My authority again is Hans Bonnesen. I am going to visit him and his wife Kirsten in Denmark during the summer and then plan their visit(s) to the UK including Bletchley Park.

Item 3.

On April 7th the Heinz Nixdorf Museum in Paderborn, Germany - hosted a cypher event when it was planned to send an **Enigma** encrypted message to Bletchley Park. The Bletchley Park Museum itself did not participate. As a result, David White arranged for three fellow members of the Milton Keynes Amateur Radio Society to run the operation from this end. The Radio Society of Great Britain allowed them to use their premises located in Bletchley Park. The idea was to use original World War II wireless receivers at this end and Paderborn also used German transmitters from the war.

The transmissions, by Morse code took place as arranged on April 7th and were successfully intercepted using a **National HRO** wireless set. These intercepts were quickly delivered to a team operating the Bombe - in B Block. After several attempts the cypher was decoded.



The wireless transmissions were on 7036 kilocycles on the short wave bands. A two-way video link was established using the Internet and we were able to see visitors to the Paderborn Museum and they were able to see into the RSGB premises. That was similar, in many ways to the exchange in Whaddon Village last year - see SCU-Newsletter 4-16.

From 1995 to 2006 a retired computer engineer John Harper, led a Computer Conservation Society team rebuilding a working World War II Bombe decryption device. On 6 September 2006, John and the team first demonstrated the working Bombe in action. I was astonished to see the intricate wiring required and nothing less than full marks are due to John and his team.

The first picture is the front view of John Harper's rebuild of the Bombe



And the second is of the hugely complex wiring behind it.



Item 4.

This is the latest I have ever sent out a SCU-Newsletter since they began back in 1997. In most years I have sent two out two by this time. The main reason is that having written about the weight of our agents sets - I heard from Hans Bronnesen in Denmark about the remarkable 'Telephone Directory.' I only hope the wait proves worth it?

Item 5.

The more you read about Bletchley Park and 'Codebreaking' - the more you come to realise how much of its success actually depended upon Wireless.

Whilst not overlooking the part played by the Allied and Russian armed forces -
and with my apologies to the Sun Newspaper:

'Codebreaking' - the central and constant theme of the Bletchley Park Museum -
did not win the war on its own. **It was 'Codebreaking and Wireless' - wot won it!**

With my warm regards and best wishes,

Geoffrey

Richmond - May 24th 2017