

The Original Paraset

Dave Gordon-Smith G3UUR

Lack of official information and the initial reluctance of those involved to talk about their war-time work have led to a certain amount of conjecture and some misguided assumptions being made about particular spy sets over the years since the end of the Second World War. The assumed interpretation eventually becomes lore and the evidence contradicting it sometimes takes so long to trickle out that it is missed, or ignored. The case of the *Paraset* is a good example of how this can lead to fanciful claims and a general acceptance of a distorted version of the facts. So, which set is the *Paraset* really and who first coined the name?

Introduction

The first reference to a *Paraset* appears in a Second World War BCRAM report about the state of the nascent radio communication networks in France during the second year of the German occupation. The Bureau Central de Renseignements et d'Action Militaire (BCRAM) was the intelligence wing of the Free French Forces, then exiled in London, and this report was written for them towards the end of February 1942 by Captain Pierre Julitte. It was published in March 1942. The author has not been able to find a copy of the original report in French but a few British authors, including Pat Hawker G3VA, have commented on it so often over the years that enough of the translated version has been published to get the gist of the report. It included some fairly strong criticism of the agents' sets supplied to the BCRAM by the British Secret Intelligence Service (SIS) Section VIII at Whaddon Hall [The BCRAM dropped 'Militaire' from its title in September 1942 and is generally known these days as the BCRA]. These same agents' sets were being supplied to the Special Operations Executive (SOE) at the time, as they were also dependent on SIS Section VIII at Whaddon Hall for wireless communications and radio equipment for the first two years of their existence.

Captain Pierre Julitte

The author of the BCRAM report, Pierre Julitte, had first-hand knowledge of the problems facing the French in setting up radio communication networks in enemy occupied territory as he had been sent back to France in May 1941 to investigate the situation out there, and do what he could to sort out the problems the famous Confrerie Notre-Dame (CND) group, led by Colonel Remy (Gilbert Renault), were having with their wireless communications. CND was one of the earliest and most important intelligence-gathering groups in France in the first couple of years of the occupation and supplied much useful information to the Allies on German activity along the Atlantic coast of France until the group was infiltrated and broken up in the spring of 1943.

On his second BCRA assignment back in France, Julitte was captured by the Gestapo and spent most of the rest of the war in Buchenwald, where he was forced to work in a nearby armaments factory. Realising that what he was working on was part of a gyroscope for the guidance system of a rocket he got word to the Allies *via* an escapee about what was being produced there.

Allied intelligence agencies took this information seriously enough to have the factory bombed. So, on 24th August 1944, the US 8th Air Force sent 128 Flying Fortresses on a daylight raid to Buchenwald where they obliterated the factory and its immediate surrounding area. The bombing was fairly precise and, although many hundreds of slave labourers were killed in the factory buildings, very little damage was done to the camp. Miraculously, Pierre Julitte and some of his co-workers survived. In 1945, he was moved from camp to camp as the Allies advanced across Germany and he ended up in Bergen-Belsen, from where he was liberated by the British 11th Armoured Division in April 1945. He wrote a book about his time in Buchenwald entitled *L'Arbre de Goethe* [1], which might be of interest to some readers.

The first and only Paraset?

Le Paraset mentioned in Pierre Julitte's report could not possibly have been the Whaddon Mk.VII, which is widely known as the *Paraset* today, because it had not even been designed at the time this report was written. Geoffrey Pidgeon, author of *The Secret Wireless War* [2], joined the mechanical workshops at Whaddon Hall (MI6 Section VIII) in July 1942. Later, he worked on the very early batches of the Mk.VII, which were produced at Whaddon, and he is adamant that it was not introduced until late in 1942. According to Geoffrey, the main agents' set that was being produced at Whaddon Hall when he first arrived was the Mk.V. Unfortunately, Julitte does not specify exactly which mark of SIS set is *Le Paraset* in his report, and that is why some authors have jumped to conclusions that do not actually fit what is known with reasonable certainty. The fact that the suitcase version of the Mk.V was being supplied to the BCRA(M) for use in France for nearly a year prior to the publication of this report, and is not otherwise mentioned in it by its mark number, tends to suggest that it is what he and the BCRA called *Le Paraset*. In addition, it fits the criticisms levelled at it in the report and, really, it could not have been anything else given the very few different types of set being supplied to them at the time and the fact that experts believe their mark numbers were issued in sequence.

The SIS Mk.I and Mk.III sets are just transmitters. The Mk.II set is a primitive transmitter-receiver, with a pre-set tank circuit, built into a wooden box with a hinged lid and drop-down front panel. It was introduced when Section VIII were still at Barnes, before they moved to Whaddon Hall in November 1939. The Mk.III was introduced late in 1939

and normally paired with a National HRO receiver. It was used in many embassies and by mobile liaison units. The Mk.IV is missing from the list of sets and is a mystery. However, it's very unlikely that any of these sets had suitcase versions and were being supplied to the BCRA, or being dropped by parachute in 1941. The Whaddon Mk.VI came out towards the end of 1941, but the suitcase version of that set (variation 1C) was only produced in small numbers and used for special missions such as the operation to assassinate Reinhard Heydrich in Prague in 1942. One or two must have been issued to the BCRA because, in his report, Pierre Julitte mentions a suitcase transmitter-receiver with a transmitter section like that of the Whaddon Mk.III, and that is exactly what the Mk.VI (1C) is, so that could not have been what he called *Le Paraset*. Given that the Mk.V was the only agents' set that was being dropped into France by parachute in any significant numbers during 1941 and early 1942, and the only set not specifically mentioned by its mark number in his report, it really is the only contender for the title of *Le Paraset*.



Figure 1. Scanned image of the photograph of a Whaddon Mk.V suitcase set that appeared in a WW2 German Police Handbook illustrating captured British spy sets and their accessories. Image courtesy of Geoffrey Pidgeon/Pat Hawker.

The elusive Whaddon Mk.V

Figure 1 shows a photograph of the very rare Whaddon Mk.V suitcase set. This is an enhanced image, reproduced from a scan of the photograph of a captured Mk.V that appeared in a war-time German Police Handbook. This booklet had been prepared specifically to alert members of the Abwehr, Gestapo and Sicherheitsdienst (SD) as to what British spy sets looked like. Note that this set is built into a wooden case that fits snugly inside the suitcase. The date this set was introduced is variously given as 1941 or 1942 but, in view

of what is revealed in Geoffrey Pidgeon's book [2], it must be 1941, or earlier. Judging by the poor reputation it acquired as an 'agent killer', it's highly likely that, in 1941 and 1942, quite a few of these sets had been captured by the Abwehr, Gestapo or SD, along with their operators. One of the main problems with it, apart from its potential to cause severe interference to any nearby broadcast sets because of its power, was that it was almost impossible to conceal the fact it was very heavy. This was one of the criticisms levelled at *Le Paraset* in Pierre Julitte's report. There's no way this could possibly apply to the Mk.VII and it is surprising this glaring inconsistency did not create more doubt than it did about whether the Mk.VII was the original *Paraset*, or not, long before its exact date of introduction was established.

The rate of attrition amongst wireless operators in 1941 and 1942 was quite high relative to their small numbers and most would have been using Mk.V sets, so that could account for its rarity. The only surviving set of this type that the author has been able to track down is in the Centre d'Histoire de la Résistance et de la Déportation (CHRD) in Lyon. There may be a few other Mk.V sets in private collections around the world, but he has not been able to find any leads on them so far, even with the assistance of Louis Meulstee, PA0PCR.

Mk.V technical details

The Mk.V is not a low power set as it uses a 6V6 or 6F6 quartz crystal oscillator driving an 832 double tetrode power amplifier (PA) to about 25 W output at frequencies below 8 MHz. At higher frequencies, the 832 acts as a power doubler and the output is somewhat lower. **Figure 2** presents a rear view of the Mk.V and clearly shows the 832 power amplifier on the lower left-hand side of the set and a metal 6F6 in the lower part of the centre compartment. Note the rectifier valve for the power supply mounted above it with the power transformer to the left, and immediately above the power amplifier. The wooden panel on the upper right-hand side is the bottom of the accessories box with the receiver packed into a very tight space below it. This set is an original Whaddon Mk.V as the receiver section in this one is a three-stage regenerative affair with one RF, a detector and then one audio stage, all using the same type of valve, a 6SK7. Later versions had only two valves with no RF amplifier. Two sets of two coils are required to cover 3–17 MHz.

Referring to the front panel layout in **Figure 3**, the receiver section can be seen on the lower left-hand side just below the accessories compartment containing the coils for other frequency ranges. Because the legends for the main controls are not very visible, additional labels have been added to indicate where a few of the main ones are located. There are cut-outs for the two receiver coils and the RF valve, all in a line immediately below the accessories box. Beneath the RF stage is the main tuning knob – the large one with a metal scale as indicated. The smaller one with a metal scale to its upper left is the fine tuning knob – quite an advantage as anyone who has ever tried tuning a standard Mk.VII receiver, which does not have one, will know. The regeneration control (REGEN) is on the other side of the main tuning dial and immediately below that is the headphone socket. Opposite this, on the other side of the main dial, is the HF gain control. This controls the bias applied to the cathode of the RF stage to lower the gain independently of the level of regeneration.

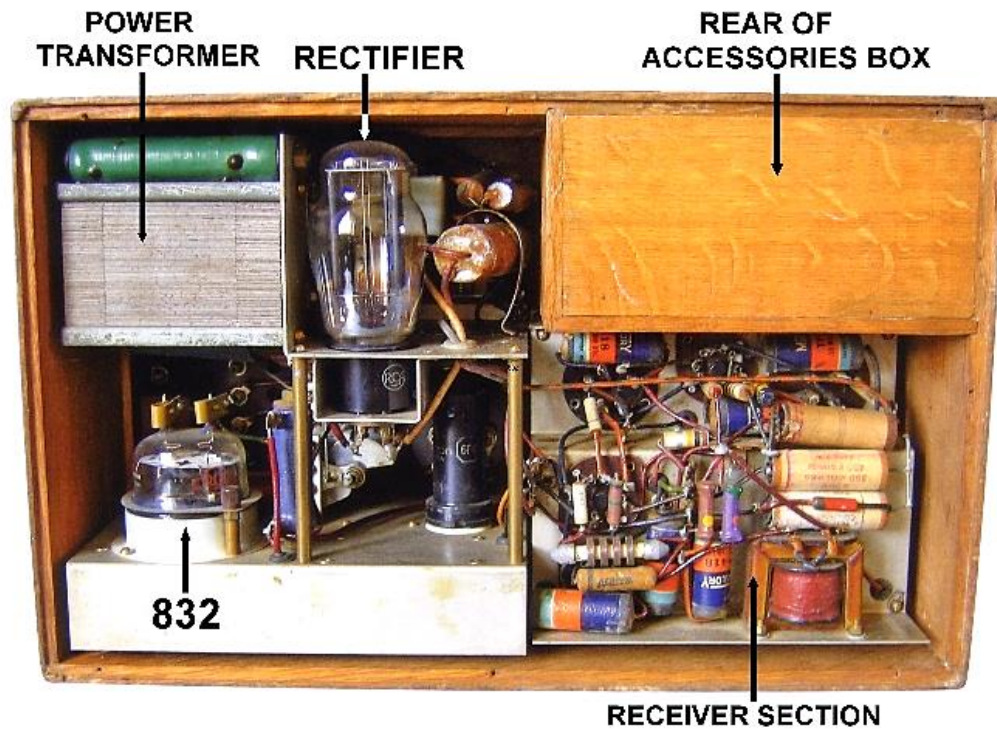


Figure 2. Rear view of a Mk.V transmitter-receiver showing the internal construction and placement of some of the major components. Image courtesy of CHR D

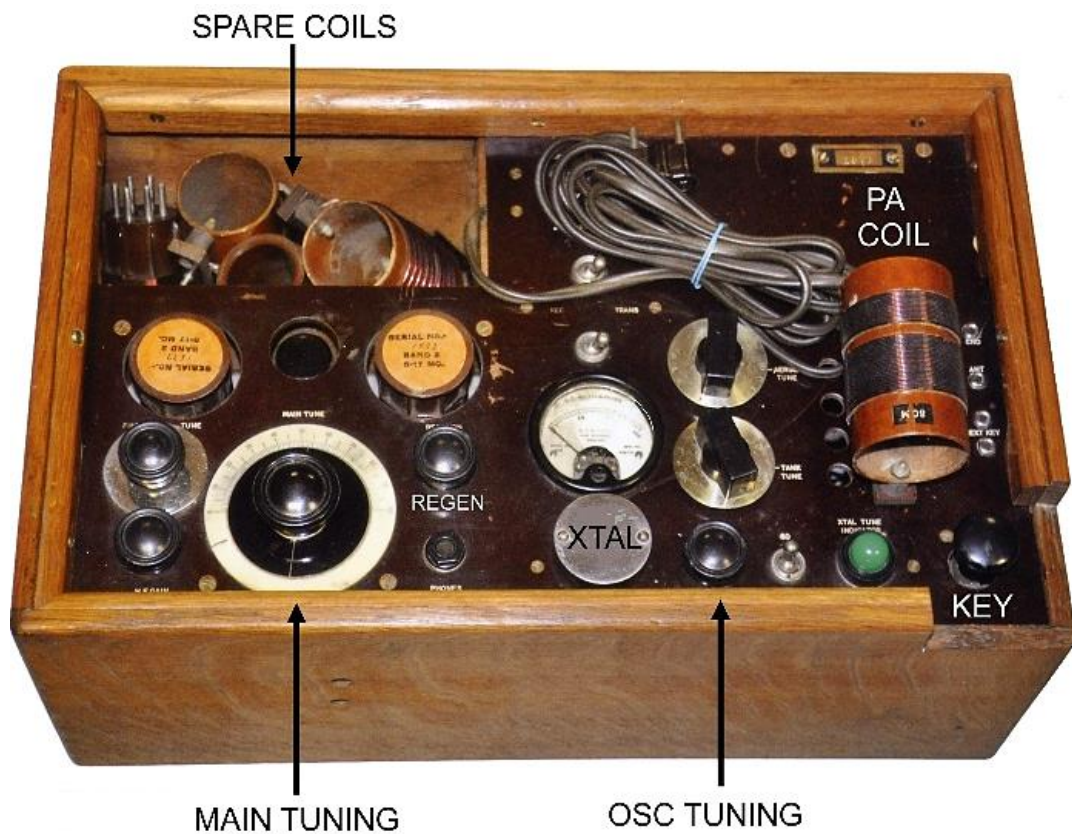


Figure 3. Front panel of a Mk.V showing the layout of the main transmitter and receiver controls, sockets, PA current meter, coils and quartz crystal – note the coils for other ranges in the accessories box. Image courtesy of CHR D

The PA anode current meter clearly dominates the centre of the front panel with the quartz crystal (XTAL) just below it. The two National-type 'R' knobs with metal skirts to the right of the meter are for anode and aerial tuning. The PA coils are plug-in types in the early version, but a later version of the Mk.V had a pair of tapped coils for the PA and aerial tuning. A lamp located below the lower end of the PA coil is link-coupled to the oscillator tuned circuit so its resonance can be detected by the brilliance of the bulb. The switch between the oscillator tuning control (OSC TUNING) and the lamp is for shorting out part of the oscillator coil on the higher ranges. Three PA coils are required to cover 2.9–18 MHz in the transmitter. There is also a built-in key in the lower right-hand corner and sockets for an external key partway up the right-hand side, just below the ANT and GND sockets. The circuit for this set can be found in volume 4 of *Wireless for the Warrior* [3] which deals with clandestine sets.

An understandable mistake

Those readers familiar with Pierre Lorain's book, *Secret Warfare* [4], may have been expecting the author to say that the very first type of SIS transmitter-receiver to be sent into France was the Whaddon Mk.XV but, unfortunately, that is not correct. Pierre Lorain's mistake is understandable, though, as he had been told by one of his father's former French Resistance colleagues that the first sets were housed in a wooden box. Now, the very first sets to be sent into France after the armistice came overland through Portugal and Spain to the unoccupied zone in the south of the country. These were Mk.III transmitters and it is not clear whether his father's friend was referring to these, or to the Mk.V suitcase sets delivered by the RAF a year or so later, as both types were built in wooden cases. In any event, whichever set his father's friend meant, when Pierre came across one of the later, more common Whaddon Mk.XV sets in a wooden box, he thought he had found one of these very early sets. To be fair to him, it should be borne in mind that his research was conducted in the 1960s and early 1970s prior to the publication of the original French version of his book, *Armement Clandestin*, in 1972, and he would have only had a few personal accounts to go on at the time and little access to official documentation.

There is also the fact that Mk.V sets of any kind appear to be extremely rare, even in France and, unless he had come across one of these in the course of his research, he would have been completely unaware of its existence and place in history. He would not have known at the time he wrote his book that the Mk.XV had not been introduced until 1943 and that the first radio sets had been dropped by parachute two years earlier in 1941. Many authors since have just copied the information on radio sets in Pierre Lorain's book, without doing any original research of their own, and his error has been perpetuated right up to the present day.

A few points regarding SOE and SIS

There is some confusion and much misinformation on the Internet, and in a few books and articles, about the dates that some clandestine sets were introduced and who used them. This is not altogether surprising as official details were slow to be released and often incomplete, and those who participated in this work were reluctant to talk about it until relatively recently. The author is aware that Pat

Hawker G3VA was troubled by the fact that some of the information he unearthed was contradictory, to some extent, or did not fit perfectly with other facts he believed to be true. The year of introduction of the Whaddon Mk.VII was one of these discrepancies. Had he been in good health and able to read and digest the sections of Geoffrey Pidgeon's book [2] that cover these problem areas, he would have been able to resolve some of these discrepancies a bit quicker than the author has been able.

There also seems to be some confusion about the difference between SOE and SIS. The British Secret Intelligence Service (SIS) was established before the First World War as the Secret Service Bureau (1909) and its primary purpose was to gather and analyse intelligence about Britain's enemies during war time and potential adversaries during peace time. It was an established intelligence service of some standing at the outbreak of the Second World War. The part of SIS that dealt with intelligence abroad was MI6. Their aims and methods often conflicted quite badly with those of the Special Operations Executive (SOE), which was a totally new organisation that had been formed in July 1940 from Section D of SIS and a couple of sub-departments from the War Office, MI(R), and the Foreign Office, Electra House, "to set Europe ablaze." The loss of Section D caused some resentment because SOE also inherited a few SIS establishments along with it, and SIS lost control of a section that might compromise their intelligence-gathering work in Europe if there were no coordination of activities between them. It created tremendous tension between the two organisations and great rivalry, and probably caused some future difficulties for SOE when it came to organising missions involving air and sea transport.

SOE was tasked with organising and supplying resistance groups for subversion and sabotage in Axis-occupied countries. However, they inherited very few training centres from their predecessors and had to establish many more around the UK to train agents in every aspect of their work. Initially, their wireless communications and radio equipment were provided by Section VIII of SIS (MI6) at Whaddon Hall but, by the end of 1941, it was obvious that this situation did not suit their type of work, or the expected scale of operations envisaged by SOE. They had already set up a Signals Section in the spring of 1941 and started their own signals training at one of their Finishing Schools at Beaulieu in Hampshire. Later that summer, the signals school moved to Grendon Hall, near Grendon Underwood in Buckinghamshire. This became the site of their first wireless station (STS53a) when they were given signals independence from SIS Section VIII on 1st June 1942. Their Signals Section became a Signals Directorate in September 1942 and, as their operations in Europe expanded, a second wireless station (STS53b) was established in the fields around Poundon House, to the east of Bicester, which became active in the spring of 1943. Poundon took over responsibility for communications with Belgium, the Netherlands, Denmark and Southern Norway and Grendon continued dealing with France, Spain, Northern Norway and North Africa. SOE also established wireless stations in Cairo, Gibraltar and Malta. Others were set up in India, Ceylon and Australia, and, as the war progressed in North Africa and Europe, the theatres of operation moved around and more stations were set up around the Mediterranean. SOE's fortunes were quite mixed in the middle years of the war and early

successes sometimes turned into disasters later on. However, things came together for D-Day and they played a crucial role in hampering the enemy and slowing down the progress of reinforcements at critical times in the struggle for a foothold in France following the Normandy landings.

SOE existed for less than 6 years and was disbanded in January 1946. Its establishments and equipment were handed over to SIS (MI6) a few months after the end of the war. Some SOE personnel deemed useful, or essential to SIS, were kept on and the rest dismissed. So, SOE was only a temporary war-time secret service that was reliant on SIS (MI6 Section VIII at Whaddon Hall) for their communications and radio equipment for the first couple of years. Thereafter, they handled their own wireless traffic and manufactured, or had manufactured for them, many thousands of their own agents' sets. By contrast, SIS sets designed by Section VIII at Whaddon Hall and manufactured there, or at Little Horwood, were produced in much smaller numbers.

There are many books about SOE and its operations in various countries during the Second World War but the very first book [5], which is, in effect, an in-house history of SOE, was suppressed by the authorities for many decades and finally published in 2000. This was actually written between 1945 and 1947 by William Mackenzie, who had been invited to write SOE's official history by its executive head, Colin Gubbins, at the end of the war. Mackenzie was able to interview key members of staff and had access to many official documents, which historians in later years were denied. The book gives a very comprehensive picture of SOE, its formation, structure, relationships and its activities country by country. It is essential reading for anyone seriously interested in the history of SOE.

A few false connections

Much has been made of the comments by David White, the former curator of the Radio Museum at Bletchley Park, concerning the Whaddon Mk.VII sets found at Poundon Wireless Station (STS 53b) when he was clearing it ready for closure in the late 1960s. Some authors have used his comments to link the Mk.VII with SOE, rather erroneously it seems. The former SOE wireless station at Poundon had been in SIS hands ever since January 1946 when Sgt. Edgar Harrison, of SIS Section VIII at Whaddon Hall, had taken it over, dismissed the SOE staff and cleared out much of the unwanted equipment. Since then, Poundon House had also been used by other organisations, including the Diplomatic Wireless Service (DWS) and the British Army who used it as a training centre. Most probably the clandestine radio equipment David White found there had been left at Poundon by SIS after the war.

A separate, nearby wireless station on the other side of the road at Poundon Hill (STS53c and OSS Station Charlie) was used by the American Office of Strategic Services (OSS) for less than a year following its completion towards the end of 1943 and beginning of 1944. They moved to Station Victor in Berkshire when that was ready and handed Station Charlie over to SIS, who eventually passed it on to the DWS after the war. Actually, SOE never used STS53c directly, though it had an SOE establishment code and they had provided some personnel to help OSS get the station up and running because both the Ossex and Jedburgh radio traffic was handled by STS53c. Any

Whaddon Mk.VII sets found there would either have been spares left there by OSS (Ossex radio equipment from Operation Sussex) or ones left there by SIS (MI6).

Some confusion has also been caused by the fact that OSS used Grendon Hall in Northamptonshire as a holding centre for Ossex agents about to be flown out to France from the nearby RAF Station at Harrington by the United States Special Operations Group (Carpetbaggers) stationed there. These Ossex agents were issued with Whaddon Mk.VII sets, amongst other things, and reports mentioning this set in connection with Grendon Hall have caused some individuals to link it with SOE and, in turn, to connect SOE with the Mk.VII again. There is no link. SOE had no part in Operation Sussex. It is unfortunate that there are two stately homes in England with the same name, but the one in Northamptonshire had no connection with SOE. The one used by SOE was at Grendon Underwood in Buckinghamshire, over 25 miles away. Figure 4 shows a photograph of Grendon Hall at Grendon Underwood, taken about 30 or 40 years before the Second World War. SOE had one of its main receiving stations on fields nearby and the house, itself, was used for officers' accommodation, training and administration. The grounds were also covered in Nissen huts to accommodate many of the 400 staff working there. The transmitting station associated with Grendon was not too far away at nearby Edgcott.



Figure 4. Grendon Hall at Grendon Underwood in Buckinghamshire taken around 1900–1910. The war-time SOE receiving station was built on land nearby and huts were erected in the grounds to accommodate staff. The Hall itself was used for offices and accommodation for some of the officers.

Image courtesy of Historic England

Concluding remarks

The publication of Geoffrey Pigeon's book, *The Secret Wireless War* [2], has helped to tidy up a number of loose ends concerning British SIS communications equipment from the Second World War. The dismissal of critical points concerning the *Paraset* in Pierre Julitte's BCRA(M) report that did not fit the Mk.VII as being errors in translation would seem to have been a serious mistake and confused the issue of its real identity for many years. I think we can now be reasonably certain that Julitte was actually referring to the suitcase version of the Mk.V. A

claim often made for the Whaddon Mk.VII is that it was used by SOE as well as SIS. The much later date of introduction that has now been established for it and the comments made by Frederic Boyce and Douglas Everett, the authors of *SOE: The Scientific Secrets* [6], would seem to suggest otherwise. They mention that a small number of Whaddon Mk.VII sets were tested by SOE engineers and found not to be suitable for their purposes. That seems to suggest quite strongly that, if SOE ever entertained the idea of using the Mk.VII, they decided not to go ahead after testing a few. Both authors worked for SOE at the Frythe (Station IX) during the war and had first-hand knowledge of what went on there. Apparently, John Brown, who had developed several of SOE's early suitcase sets by 1942, was very impressed by the Polish sets he tested and when SOE were unable to produce enough sets of their own later in 1942, they provided the Polish Radio Workshops at Stanmore with components to build around 180 Polish A1 and A2 sets for them. SOE also arranged for the Marconi Company to manufacture their Type A Mk.II sets and, in 1943, they bought several hundred more A1, A2, A3 and AP4 sets from the Polish Radio Workshops at Stanmore. This bridged the gap until their own factory at Stonebridge Park, building Type 3 Mk.II (B2) suitcase sets, was producing enough each month to satisfy their immediate needs. However, they were soon required to expand into the factory next door to meet the ever increasing demand in the build-up to D-Day.

Unfortunately, time has very much run out now and there is no longer the opportunity to question those involved with clandestine radio design or manufacturing in the Second World War. Ambiguous or vague statements cannot be queried as to their real meaning, and all that can be done is to consider the most reasonable interpretation based on what is known now. Fortunately, that knowledge has increased considerably over recent years compared with what was known in the first few decades after the war ended. What we now know for certain is that SOE preferred to use their own radio sets, or ones provided by the Polish Radio Workshops at Stanmore, and that the Whaddon Mk.VII appeared long enough after the start of the war that it was probably only ever used by SIS operatives and some BCRA agents. The question now is whether the number of Mk.VII radio sets going to France from late 1942 onwards was great enough for the French to transfer their fond appellation from the Mk.V to the Mk.VII. It probably was, but that is by no means certain. It could still have been down to someone mistakenly identifying the Whaddon Mk.VII as *Le Paraset* after the war? The epithet, title, or nickname *Paraset* is quite catchy and could well have been applied to other sets that were dropped by parachute. There is some evidence that staff at the Bontex Knitting Mill making B2 suitcase sets for SOE might have referred to them as *Parasets*, but the jury is still out on that one!

SOE agents did actually use what is now believed to be the original *Paraset* because the heavy, more powerful Whaddon Mk.V was one of the very few sets available to them back in 1941 and the first half of 1942. These sets would have been used in small numbers all over Europe as SOE attempted to establish contacts in all occupied countries up until the time their own Signals Section took over responsibility for wireless communications and equipment on 1st June 1942. From then on, SOE wireless operators would have used either the Type A, Type 3, or one of the Polish sets.

SOE's female wireless operators were not deployed into the field until later in 1943, so would have used one of SOE's own sets and not Whaddon Mk.VIIs as fancifully claimed by some authors of articles about making replicas of them. Noor-un-Nisa Inayat Kahn, for example, would have been trained on the Type A Mk.II and, possibly, also the Type 3 Mk.II. Since she was sent to join the 'Cinema' resistance group, which was linked with the ill-fated 'Prosper' network in Paris, she would have been issued with the Type A suitcase set, as that had sufficient power to get through to the receiving station at Grendon from there. Agents deployed to the south of France would have used the more powerful Type 3 Mk.II sets.

The earliest post-war reference to *Le Paraset* being a Whaddon Mk.VII seems to be in the French edition of Pierre Lorain's book, *Armement Clandestin*, which was published in 1972. The author would like to hear if anyone knows of an earlier reference, particularly one from the war (post 1942) linking the two, that may help to establish whether the BCRA or the French Resistance actually transferred the title of *Le Paraset* from the Mk.V to the Mk.VII during the latter part of the war, or if it was really a case of post-war misidentification.

Given the limited information available about some British clandestine sets used during the Second World War, it is not always possible to say definitively which particular secret services used them, or exactly when they were introduced. It is only possible to talk in terms of probability, or likelihood. However, the date the Mk.VII was first introduced has now been discovered, within a month or two, and that opens up other possibilities for progress. The conclusions drawn in this article are based on what is known at the present time. Maybe there are other snippets of information yet to be discovered, or known to someone else, so these conclusions may have to be reconsidered in the light of new evidence at some time in the future. At this point in time, though, the one thing that's absolutely certain is that the nickname *Le Paraset* was previously given to another SIS (MI6) agents' set some time before the Mk.VII was first introduced. That set was, most probably, the Mk.V.

References

1. P Julitte. *L'Arbre de Goethe*. Presses de la Cité, 1965. ASIN: B0000DL5IF.
2. G Pidgeon. *THE SECRET WIRELESS WAR: The story of MI6 Communications 1939–1945*. Arundel Books, 2008. ISBN: 978-09560515-2-3.
3. L Meulstee and R Staritz. *Wireless for the Warrior, Volume 4: Clandestine Radio*. Wimborne Publishing Ltd., September 2004. ISBN 0952063-36-0.
4. P Lorain, adapted by D Kahn. *Secret Warfare: The Arms & Techniques of The Resistance*. Orbis Publishing, London 1984. ISBN-13: 978-0856135866.
5. W Mackenzie. *The Secret History of SOE: Special Operations Executive 1940–1945*. St Ermin's Press, 2000, ISBN 1 903608 11 2.
6. F Boyce and D Everett. *SOE: The Scientific Secrets*. Sutton Publishing, May 2003. ISBN-13: 978-0750931656.

~ ~ ~