

The bottom plate mystery, a tech-fiction story from two worlds.

Reluctantly told by Louis Meulstee PAOPCR, exclusively to those who ever had a look inside a No. 19 Set.

Part 2.

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...in the first part of this tale, a mysterious time lapse teleported me back in time to December 1944, where after being saved from under my overturned vehicle, I awoke in an improvised field hospital...

Improvised field hospital

Trying to find an answer to my questions, with my eyes still closed, I asked him again where I was and what the date would be. To my astonishment and horror I heard the corporal replying, 'Well, we are here in France, to be precise the village of Nouvres, and the date is the 4th of December 1944. One of the top brass guys in the village was expecting you already for an apparently important specialist job. He wanted to speak to you as soon as you are able to. But it will take at least a day or two before I will let you go, Sir,' he grumbled. Not being able to give a reply I believe that I passed out again. The next day I awoke by a meagre winter sun, shining through the dirty windows, tickling my face. Not immediately realising where I was and hearing other people softly speaking nearby, I curiously tried to look around, which was difficult because of a bandage over my head. Suddenly I remembered what I heard the day before, and realising that I was dead and by a strange coincidence came back on earth in the late World War 2 period, or did I land in a parallel world?

I also vaguely remembered that I supposed to be a REME lieutenant. In spite of a splitting headache, I realised that it probably would not be of much use and certainly unwise to tell that in reality I came from six decades later. I might have been treated as a deserter or even worse a German spy. Looking around, now with more interest at my present surrounding, I saw that I lay on a stretcher in a row along with other apparently lightly wounded soldiers. The day passed on with a regular shifting of stretchers with soldiers being brought in or taken away. From one of the chaps nearby I heard that we were outside of the present combat area. Therefore this improvised field hospital was merely for transit as the real bad cases were taken immediately to other places.



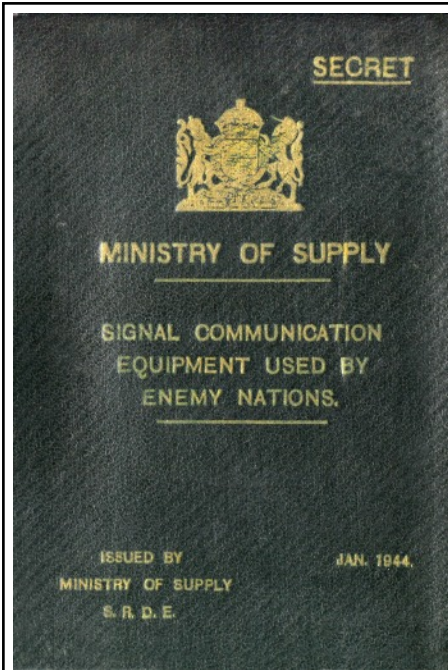
Spring 1944. Work on the No. 10 Set in the Radio Design Section Laboratory (located in the 'S' building) at the SRDE in Christchurch (Hants). The person on the foreground sitting on the stool was Laurie MacMillstead, at that time not knowing that he was going to be posted to France later that year. The man standing beside the Signalling Equipment No. 10 is Mr E.T. R. Note the six Wireless Senders No. 10 Set on the floor, waiting for fitting into trailers.

In the background at the right hand side, in front of the work bench on a table are four Reception Sets R10. Barely visible in this picture were a couple of captured German receivers, being investigated by Walter Ferrar who is not visible on this photo as it later transpired during a meeting with Walter. At the next row of workbenches, tests were done on a prototype of Goniometer Unit No. 4, with Reception Set R106 (DF) No. 2, comprising DF station Transportable Adcock Type 'A' BC2. At the left, near the window, was a R206 Mk.I, with a R206 Mk.II below, the two associated power supply units on top. In the background (right) was a control unit, part of a DF Station PE No. 1.



Meeting Walter Ferrar (left) in 2002 near Andover in Hampshire during a research visit at the Royal Signals Museum at Blandford Forum.

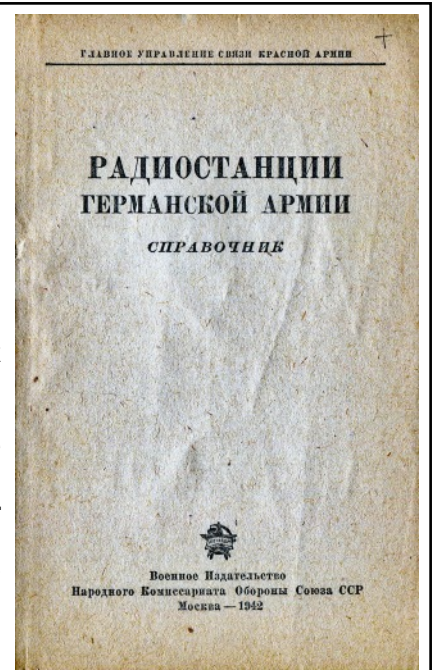
The following day I was allowed to sit up and since I could move and see quite well, I had the chance to inspect my kit. To my surprise I found a notebook, the war diary of the person I was, Laurie McMillstead. Since my headache had eased somewhat, I started reading the diary, written in small meticulous letters and my first impression was that he must be a precise young man. Forced to stop reading as it became dark early in the afternoon, I had difficulties catching sleep that night and could not comprehend what had happened to the person they actually expected. That night I heard heavy roaring of the engines of aircraft passing over, most of the chaps around me were very cheerful hearing this.



This is the cover of the handbook on 'Signal Communication Equipment used by Enemy Nations', published early 1944. It was written by Walter Ferrar during his time at SRDE in Christchurch. In 2010 I was allowed to scan this rare book at the Royal Signals Museum, which was reprinted two years later as WftW Compendium 5.

A similar and equally rare book with the same topic, entitled 'Radio stations German Army', was published in 1942 in the Soviet Union.

It contained comprehensive descriptions of the most common German Army wireless sets and receivers of that time, along with a German-Russian glossary.



Nouvres

The next day I was not fully recovered, but felt so much better that I was dismissed from the improvised hospital and went to see the CSO who had his temporary office in the village.

Although the location was already vaguely familiar to me when I stepped out of the building, but walking to village centre I was startled after seeing the village church and square, with a café bearing the name 'Café René, it WAS Nouvres, the village my family and I spent so many holidays. I should have known of course when the RAMC corporal told me where I was, but there are many villages with that name in other French Departments. Welcomed by the CSO, who had his headquarters in the town hall, and after the initial chat on which I understand that he had met my dad in Flanders during the great war, remembering our unusual family name and the nearby village of Meulestede.

When it came to the reason of being here I had to think of a convincing story and told him that due to the shock of my accident I only had vague recollection of my task here. He looked at me inquisitive and still pitiful whilst he said: 'I am only informed that you were sent in great urgency to modify a number of hush-hush wireless signalling equipment which is one of the Line of Communication new backbones. I had orders to pick you up at the nearest RAF aerodrome and provide any assistance required.' He continued: 'I believe someone said that your assignment was with a 'Number Ten' thing, whatever that might be.'

The 'Number Ten' thing

I immediately knew what that meant; my 'doppelganger' or 'twin-stranger' was

one of the workers of the famous No. 10 Set, an 8-channel shf point to point radio link, based on pulse techniques and completely novel in those days. Later I found, hidden in the rear flap of the diary, a picture of him, working in the Radio Design Laboratory of the SRDE.

I was told that I had orders to stay in France after the task was completed and set-up training courses and supervise the maintenance of the still slightly unstable and for that time, very advanced technology. At the end of the interview the CSO stood up: 'Your base will be here in the village where Signals have a temporary workshop in a large barn, shared with you REME chaps. Your replacement driver will bring you tomorrow to that place'.

The next thing I did was to report to the RASC officer in the same building, who had arranged a billet for me in the village. This appeared to my surprise a very small room at the attic of Café René.

Café René

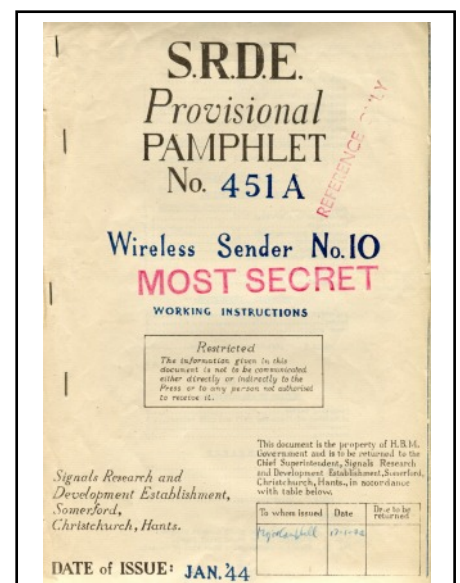
After the kit was brought to my room in the café, I had a glass of the local wine with the proprietor (yes, it was a much younger René), but returned soon to my room to continue the reading of the diary, slightly embarrassed snooping into private papers. But I had not much choice and it was very late that evening when I dimmed the kerosene lamp, now knowing all of my current identity was, staring at my profile in the mirror above the wash-basin.

Whilst reading I came to know that after university Laurie enlisted to a government institute. And so he got employed at the RSDE in the south of England at Christchurch, a small place on the coast not very far off Bournemouth, where he was involved in final testing and assem-

bling the Signalling Unit No. 10, part of the No. 10 Set (as he cryptically called in his diary 'The Ten thing').

Very soon after the invasion in 1944 a chain of No. 10 stations was formed, minor issues had developed which had to be solved with great urgency by a specialist in this field. With years in the university CCF and much experience on the Signalling Unit No. 10, he was promoted to temporary reserve REME Lieutenant and sent to France.

In my salvaged kit I found a tin box with No. 10 Set preliminary EMERs, hand-drawn circuit diagrams, notes and other paperwork required for modification of Pulser Units in Signalling Equipment No. 10, including a larger wooden box with components required for modifications.

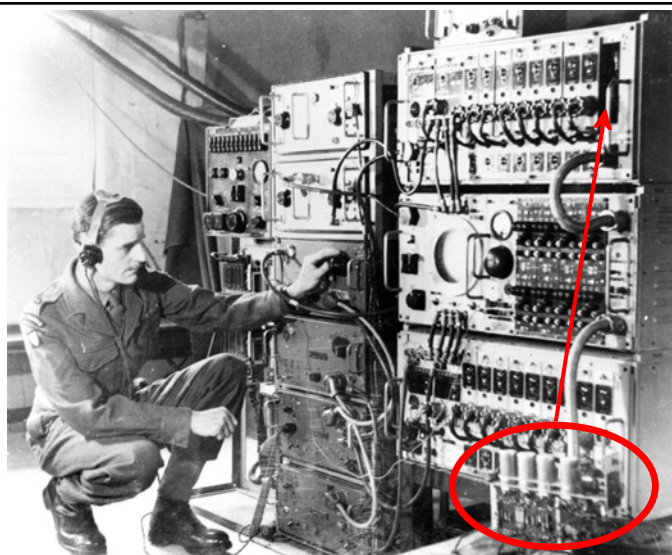


This was one of the documents I found in the tin box: provisional working instructions for Wireless Sender No. 10.

The station near the ruined chateau

The No. 10 Set station on the hilltop at the ruined chateau near Nouvres was temporary located under canvas since it was impossible to get the original trailer uphill. On this rare picture I am completing the final adjustments of one of the R10 receivers. One of the unmodified Pulser Units is on the table on the foreground, bottom right. Eventually I modified all the Pulser Units, amongst other sections in the Signalling Equipment No. 10 in this set and in any of the chain of No. 10 stations in the wide vicinity, all suffering from similar development faults.

Note the two flexible aerial wave guides passing through the tent opening just above the opening. The large 3-unit rack on the right hand side was the Signalling Equipment No. 10, with the Pulser Group Unit on top. The stack of six No. 19 Set type cases housed two transmitter and two receiver units, with two receiver power supply units (one working and a full spare station). In the background were a Switchboard AC Change-over No. 6 and Frames D&P (Distribution and Patching).



An unmodified Pulser Unit (in the red circle) and its (spare) slot position in the Pulser Group Unit above.

At work

The following morning I got out early, went to the now empty bar-room where I consumed a French breakfast, merely consisting of the usual croissant and a cup of hot black coffee, served by one of the waitresses who told me that René always slept until the mid-morning.

As agreed the previous day, I met my driver who guided me to the workshop, my future 'base', which eventually appeared to be a badly lighted and cold place, which I remembered as the large barn where René gave me the R10 receiver. A rather battered Morris 8-cwt 4-wheeled wireless truck, which was assigned to me during the coming time, was standing in the muddy square. This appeared the vehicle where I was supposed to travel.

The same day I visited the first No. 10 station, located on top a nearby hill, on the remnants of a chateau which I remembered as being rebuilt and visited many years later during one of the holiday trips with my family.

Modifying the Pulser Units in the Signalling Units was not a huge effort as I was grown up and educated in valve technology, with transistors just coming around. What I badly missed was my Weller soldering station.

With the aid of the papers from the tin box, and still active knowledge of valve and pulse techniques it was not difficult to do the job, which became even a bit boring. That was made good by drinking endless mugs of tea and sharing meals with the crews at their remote locations, and making notes for a long report on the experiences of the system by the Royal Signals operators.

When arriving at a very exposed hill-top one morning we just found the still smoking remnants of the station which was destroyed by enemy aircraft the day before.

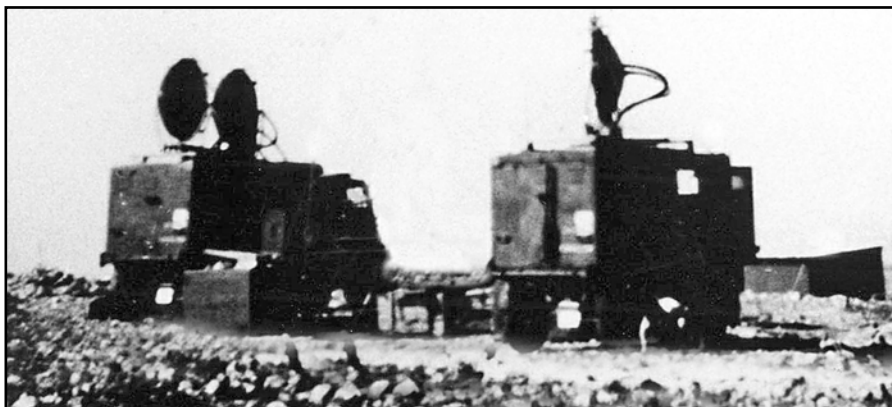
Recognisable items were the Signalling Unit No. 10 and part of one of the parabolic mirrors with flexible wave guide.



A visit with consequences

Travels to the No. 10 Set locations, modifying the Signalling Equipment No. 10, brought me to remote hilltops in three French Departments. Long drives, with unexpected detours, days without warm meals and decent cover at night followed, occasionally returning back to my 'base' in Nouvres. The day before Christmas there was only one location left to visit, to be followed by a few days off duty.

Little did I know that this was not going to happen! Reaching the No. 10 relay station with not much difficulty, the grey midday brought sleet and later heavy snow began to fall. This forced my driver at the return to Nouvres, to slow down at a small muddy track downhill, when in the midst of a bend we saw a light flash from the left, followed by a loud bang. The vehicle made a sharp turn, overturned and I lost consciousness.



The last modification visit, which was on the day before Christmas, brought me to this relay station comprising two No. 10 sets. Located on a hilltop I arrived there shortly before snow began to fall, which made the return that afternoon through steep tracks very difficult.

'He's alive, dad'

A voice shouting 'He's alive, dad', awoke me from my black out, and felt the hands of someone trying to pull me from under the overturned vehicle. 'Good Willem, try to be careful, he seems to have a nasty head wound,' a second voice said, 'I give you a hand to lay him in the trailer'. Then I became once again unconscious...

Will he make it, Doctor?

When I woke up again, laying in a hospital bed, I heard someone saying: 'Will he make it, doctor?' by a familiar voice, my own wife.

Someone else replied: 'Your husband have a nasty head wound, madam, but he will survive.' Noticing that I had awoken he continued: 'Hello and Happy Christmas, Mr Meulstee, I am Doctor Van Dyke, and glad to hear your voice. On your driver's licence we found your name and address on which we notified your family.'

Weakly, I tried to tell him that I do not understand what he meant, what happened and where am I?

My wife and daughters gathered around the hospital bed and the doctor looked at me in pity, who said: 'Yesterday you were found under your overturned and almost under-snowed vehicle by an accidentally passing farmer and his son. They returned with their tractor with trailer after a search for missing sheep at the heath.' He continued: 'They took you from under the car, put you in the hay along with the two missing sheep to keep you warm, and delivered you to the nearest hospital. You had lost much blood from a head wound and you must have

had a guardian angel guiding those farmers to the place of the accident which is a remote and seldom ridden track.' Slowly I tried to make up my mind, closing my eyes again and thinking that I was becoming insane or dying.

As by now you may think that this story has ended, better forget it as I might end up in another kind of hospital and might have dreamed it all, considering that it's all in the mind. I was probably too much involved in the No. 10 Set history which I had studied the previous summer during a week of research at the Royal Signals Museum archives.

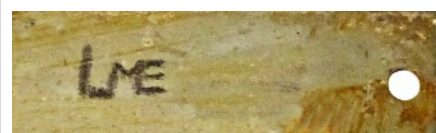
After a later investigation it transpired that the flash and explosion was caused by people who were trying out illegal extremely heavy firework in that inhabited location.

Unfortunately I can only say that this story was not yet ended and had to undergo two more blows of fate.

First mental blow

Jan's overturned Willys MB, which was hardly damaged, apart from a bump in the bonnet, was already back at his home the next day, salvaged and towed away by the farmer's tractor.

It was only a few weeks later, and already at work, that the Reception Set R10 was returned at my home. As it had apparently survived the accident, I pulled it out of its case and found no noticeable damage. I startled spotting a pencil scribble at the reverse side of the front plate: ...my initials 'LME', which I scrawl on equipment after a repair or modification, sometimes accompanied with a note. Coming to my



Enlarged view of my initials written on the reverse side of the Reception Set R10 bottom plate. (Only a small part of the plate is shown)

senses, however, after drinking a cup of strong tea, (white with sugar as I like to have it) I realised that when examining and cleaning Rene's R10 receiver earlier that summer, I unconsciously must have put my initials on the reverse side of the bottom plate, just as out of a habit.

Second blow

A year later, when the misfortune with the overturned vehicle was in oblivion and a small scar on my head was the only remnant of that accident, I received a phone call. It appeared to be from my friend Cor PA0VYL, the curator of the Radio Amateur Museum 'Jan Corver', located in Budel, near Eindhoven. As always during our conversation we took up reminiscences of the days of the 1970's when you need a No. 19 Set part, you went to the surplus shop and just bought it, in most cases new boxed. How little did we know that this would change over the years. Cor recalled the tours we made to surplus shops in Belgium, especially, 'Radio Amical', located at the Vlaamsekaai in Antwerp, with its proprietor Mr Pauwels. And the special 19 Set with built-in power unit, produced by the 32 Armoured Workshop REME, BOAR, I bought there for a then exorbitant high price (we thought then).



Photograph from an early version of the Russian A7 VHF FM transceiver taken at the Radio Amateur Museum in Budel. This FM transceiver operated in the frequency band 24-28MHz with a channel spacing of 100kHz. The RF output was 1.5-2W with a receiver sensitivity of 2µV. The working range with a rod aerial was up to 6km. A complete station weight 24.5kg.

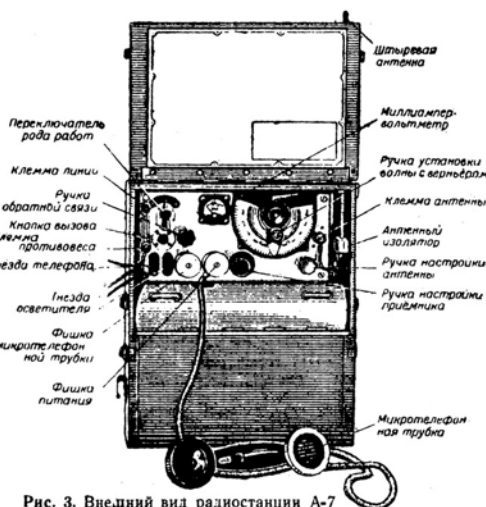


Рис. 3. Внешний вид радиостанции А-7

This drawing of an A7 was scanned from the Russian 'Handbook of Army Radio Stations', dated 1943.

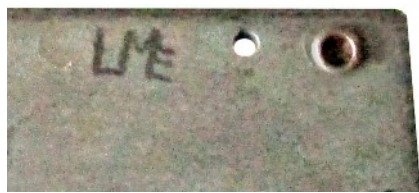


This RO-22 was manufactured in Czechoslovakia, starting in 1949 under licence of the Soviet A7b. Replaced by the R-105 in the Army, it was used until 1975 by the civil defence.

The reason for calling, he explained later during our telephone conversation, was whether I was interested to examine a recently donated Soviet war-time transceiver, probably used at the Eastern Front, before it is going on display, put in the museum stores or disposed.

[Yes radio friends, I must admit, that I am also interested in the early radios made for the Soviet Army, and especially in their construction and design details.

But equally well in Army radios developed and produced in Sweden. I'm afraid that the latter is a different story, possibly revealed in a forthcoming publication in the WftW 'Origin' range, entitled 'The Swedish Connection'.]



Close up view taken from the reverse side of the Russian A7 bottom plate with the lead pencil scrawble 'LME', my initials.

Arriving at the Amateur Radio Museum stores only a few weeks later, Cor produced a small carton containing an unsightly and slightly rusted grey metal box. 'Its probably not worth to preserve,' he said: 'But you may know more or find out what it is.'

I told Cor that I remembered having seen this Soviet set earlier, although an olive drab version made under licence in Czechoslovakia, in which he replied: '..take it home with you and return when you have finished, it actually does not really fit into the museum collection.'

With some hesitation I took the small box with me as I did not dare to think the history of this little radio at the eastern front.

A few days later, when having more time, I opened the A7, at that time I had a look at my Russian 'Handbook of Army Radio Stations', and realised it was an rather rare early version. To my surprise I noticed that all valves were present, and the components fitted on the top chassis appeared to be undamaged. When I turned the set and released the screws of the bottom plate to have a look at the inside I almost fainted: on the reverse side of the bottom plate, in vague pencil scribbling, the letters '**Lme**'. My initials..

It's all in the mind...

Ottersum, December 2022

Apart of the publican of the café in the French village of Nouvres (another inspiration for this tale, whose name and establishment won't be revealed), I never had the valour to search for the persons involved in this story after so many years and believed that the whole affair was a product of my own mind, a mixture of the past and present daily working life, military service life in the early 1960's, and not to forget the holidays in Nouvres, all in a time flash back in my brain, caused by that accident.

There was of course no Laurie McMillstead, neither at SRDE nor in the British Army.

Most of the persons in this tale are fictional, others gave full cooperation (and a good laugh) to be a (virtual) actor.

Accurate detail background information and photographs for this 'tech-fiction' story came from the Royal Signals Museum archives, particularly the history of SRDE and a rare photo album with pictures of this establishment taken in 1944. To make this story more interesting from the technical point of view, and comprehensible for those who are not familiar with certain technical details, I added illustrations of my No. 19 Set with the pencil scribbles, the meeting with Walter Ferrar, author of that rare SRDE booklet. Later added were photos of the Soviet A7 transceiver from the Dutch Amateur Radio museum. The close up views of the Reception Set R10 and A7 bottom plate with my initials are of course 'props' and actually taken from my RF Amplifier No. 2, having indeed the matching colour of the No. 19 Set mentioned above. The core of this story was written in 2007, not published, falling in oblivion and only recently rewritten. Two persons in this story, who I both knew personally, have since the original draft unfortunately deceased: Walter Ferrar G3ESP and Jan Wolthuis PE0RTX.

The Amateur Radio Museum 'Jan Corver', with Curator Cor Moerman in Budel is unfortunately closed forever, as no successor could be found.

I still have the 'Antwerp' Wireless Set No. 19 with the pencil marks, which was the original inspiration for this 'tech-fiction' story, based on a mix of fiction and non-fiction.