## Adventures of Roy Russell during World War 11 in the Royal Corps of Signals

I was called up as a conscript on July 15th 1939, shortly before my 21st birthday. The recruiting officer asked me what I was interested in and I told him I was interested in music. "What kind of music?" he said. I replied "Beethoven, Brahms, Mozart" - "That's the enemy!" he said. I replied "I just enjoy music. His response was "I think you would do well in Signals" illogically I thought.

I was sent to Harrogate for basic training, where we conscripts lived in a tented camp. From there I was sent to the Merchant Navy College in Hull for six weeks Signals training in morse.

Six of us were then sent to a base on the north side of the Thames estuary. It was under the flight path of the German bombers heading for London, and we frequently had bombs dropping around us.

Our work was to intercept messages being sent by the Germans back to their controls. When they had dropped their bombs and were returning to Germany, they shut down their radios and opened sealed orders. All their communications were in the form of a 3-letter morse code and one of our team (who had been a "Ham" radio enthusiast in peace time) picked up a new code which only varied slightly from the one the bombers had used previously. This new code gave the pilots instructions to return to different bases, thereby ensuring that the pilots on the base they had set out from did not know how many planes had been lost on the raid, and it also gave the RAF the knowledge of which bases they should bomb. All this had been made possible because we had been issued with a newly-invented USA radio set, called a Hallicrafter, which made these interceptions possible.

The coded messages we recorded went eventually to Bletchley Park, where they were interpreted and gave valuable information to our defence staff. (My familiarity with the Hallicrafter was put to good use, when, years later on a first visit to Bletchley Park with a U3A group, I was able to recognise it and name it to their staff, who had not previously known its name and purpose. Now they knew my role in all this I was made a Freeman of Bletchley Park!)

When the blitz was over I was a Sergeant and was posted back to Number 1 Special Wireless Branch in Harpenden. One day my CO said "Russell, have you ever thought of going on to be an officer?" I said "Well, I've never thought about it - yes I would". So, before I knew where I was, I was at the Royal Signals OCTU in Catterick and I spent 26 weeks there - physically and mentally being pushed over limits— climbing Helvellyn, jumping into Ullswater Lake fully clothed, and all that.

When I came out, there was a "Passing Out Parade" and my mother and sister were invited. When it was over, we went in, one by one, to the office of the CO of OCTU, whom I had never seen. He said "Russell, you've got a very good mark for Battle School (I'd acted as if I was not terrified) and so I'm recommending you for Beach Landing Signals". This sounded to me like a death knell, so I said, "But sir, I've been working in the Y service. I know German and Italian radio procedures far better than I know ours". He turned to his adjutant and said "What the hell is he talking about?" The reply was "The Y service is something secret, sir" he replied "We don't keep secrets here. All right – dismissed".

When I got my movement order, instead of Beach Landing Signals, it was to go to the Post Office at Highworth and ask for the Post Mistress, and as soon as I read that, I realised it was Y service stuff. When I got to Highworth, there were two middle-aged ladies, and I said "Which of you is the Post Mistress?" They said " She's having her lunch" one said "I'll wait". They said "Oh no, she'll come out". She came out and said "Mr Russell?" I said "I'm Lieutenant Russell" She said "Not to me, you're not! I'll get a car for you." The car came and took me to Coleshill House in Highworth. I didn't know its role -nobody told me, but I learned much later that it was the HQ of the Auxiliary

Units. It belonged to the Earl of Radnor, of the Pleydell Bouverie family; I met one of the family, Lord Montagu.

I shook hands with officers of the Army, the Navy, the Air Force, the French Navy, the French Army, Americans. Some of them were Brigadiers - Vice Admirals - all sorts. I was in my 2nd Lieutenants uniform! It was just having meals, sitting with different officers each time. It didn't occur to me that it was anything inquisitorial at all and at the end of days, evidently they decided that I was still green and I didn't know till after the war, when I reflected on it, what had happened there and what some of the questions meant.

I was posted to Carmarthen, to a civilian billet to a Mr and Mrs Pole, and I met Jack Millie. He was a Sergeant and had three lads with him, all Royal Signals. They had an empty radio shop in the town, with blacked-out windows; this is where the radio experiments were taking place.

Jack and I drove up to the Brecon Beacons almost every day. (I say "Jack" because he was really a friend. He died recently but he was a lovely, lovely man, very quietly spoken, a Scot.) He'd say "Aye, I don't think we ought to do that, Roy" and it was that sort of relationship. In civilian life he was in electronics - early electronics - he was a boffin and he was inventing the set we were going to use. So, every day he and I, and sometimes some of the lads, used to drive from Carmarthen – and it's a very tricky road, all the way up to the Brecon Beacons, and spend the day experimenting with the height we needed for our aerials, what power we needed, moving from place to place.

I, for one, did not yet know why. I said to Jack "Why are we doing this?" "I don't know" he said. This is what happened all the way through; we were never told anything we did not need to know in the Y service (we didn't even know it was the Y service then).

Eventually, when we were happy, Jack and I drove one day, with a driver who was as dumb as anyone I have ever met - he couldn't even light a fire properly, he burned himself lighting one - I should have given him full instructions. We arrived in Sevenoaks; behind the Odeon cinema, which was closed, there were some very old buildings, blackened with age, which were to be our premises. I had a small office and there was a big room where we built and tested our sets.

I was billeted with Mrs Ludgate, across the road, a middle-aged lady whose husband had been working in Whitehall and had been evacuated to Blackpool. She said "What do I want to go to Blackpool for?" She had another military guest who was a medical corps psychiatrist. He told me that the most dangerous thing in his work was walking into a mental hospital ward when someone threw a "poo" at him. I said "Was that nasty?" He said "It's nasty when it's full!!" I never asked him what he did, or where his hospital was, in case he quizzed me in return. I just had to walk across behind the Odeon to my set-up. Mrs Ludgate never asked us what we did - I don't think she was interested.

A Royal Engineer officer came - I think he was a Captain - and took us to see our two underground units, ready for our occupation. The Royal Engineers had built the stations, and devised the secret entries.

The unseen hatchway design was brilliant. You had to know exactly where to look, usually on the fringe of a copse with tall trees, where the camouflaged aerials were strung high. We put the radio equipment in and we started testing. I did not see the In stations being built, but when they were operating I went in a lot, so I remember what they were like. The sets were the ones we had been developing, and our main task was to put up the aerials and their hidden feeder cables. The aerials were working on a very high frequency, not known to the Germans or the Italians. It meant that to get good communication the aerials had to be very high, over 100 feet. The aerials were made of two pieces of copper wire, and what we called a dipole - you sometimes see an aerial with two rods sticking out and a junction box which somebody told me Jack had made. From there it was joined to something I had never seen before - a co-axial cable; it was never used

domestically then. The cable had to go up the main trunk of the tree. (The aerials at the Out stations were simple-no one would query a domestic type aerial) The cables were placed under the tree bark, which had to be peeled back and then replaced. To get into the underground station you had a crank (I had one and so did Jack). You knew more or less where the entrance was and you had to find a particular small flat stone. I don't know where they got them from but there was one in each place. You moved that, and underneath you could see the rod which the crank fitted onto. You could turn it and up came a circular piece of grass which was really like a manhole cover which you see in the street, except that it was a large saucer-like piece of turf which had been cut to fit entirely into it so that when it was tightened you could not see any join.

When it came up it revealed a shaft and at a certain height you swung it away so that you could climb underneath it. You then put the crank handle on the rod at the bottom of the turf and turned it the other way to reseal it and no one knew you were there except your colleagues. The structure was like a Nissen hut with corrugated iron arched across to form a roof. The shaft was four sided, about the size of a trap-door. It was wood-lined; there was no ladder, but wooden steps, fastened at one side, and you just climbed down, about 8 feet, on to a concrete floor. At the bottom there was a room, about 6 feet by 9, with shelving all round, and on one shelf there was an empty shell magazine, which gave the impression, if anyone found it, that the place was an empty ammunition dump. If you looked carefully, on one of the shelves lay a length of rigid wire. If you knew what to look for, there was a small hole in the woodwork into which you could push the wire.

Something was activated on the other side and the whole of that side cantilevered. If you bent down you could now walk in and close it behind you. You were now in a room where you would see in front of you two tables with our radio sets on and three ATS officers operating them.

They were talking to the Out stations and when they were free they would talk to us, telling us of any military incidents, or it could be just a set problem or aerial trouble or a power problem, or it could be to do with air-conditioning or sanitation or battery charging. Usually we could sort it out; if not we would radio back to our base in Sevenoaks.

I had a staff of twelve - they were of different trades - Jack was the only sergeant; there were one or two NCOs who had got their stripes by passing radio tests, so if anything went wrong I had the staff to deal with it. Then I would ask the ATS whether they had any other problems and if not we would have a cup of tea, and we would go back up the shaft the way we came. The main faults were usually with the aerials. Communication at the high frequency we used required accurate direction for reliable reception. High winds or even branch growth could alter the delineation and lose radio contact. It would then be necessary for one of our several volunteers to go up the tree.

He would be hauled up, standing in a noose of rope thrown over a high branch. The other end was attached to my Humber car, and by slowly backing, he would be drawn up the tree. Sometimes he had to climb the last few feet, carrying a bag of tools on his back. This was a job we shared in view of the risks involved. Even when we started winning the war, towards the end, we were still operating, as this was part of an anti-invasion operation, which Churchill personally set up because he said, and I remember his words, "The French were run over and had to start thinking about setting up a resistance."

I met Churchill just once. I was at a meeting where he spoke to me and others. He was very positive that we were not waiting till we had been invaded before we set up a resistance movement.

Those who passed information to the Out stations were never seen by me or my staff. Also in reserved occupations, they were trained in the recognition of German military vehicles and their uniforms.

Their received information would be passed on to the other radio people without them knowing each other, so that if either was captured neither could be made to give the other away. This was

because the metal numbers on some telegraph poles had been taken out and a space bored deep enough to take written messages. The trick was that the pole number would be replaced upside down to indicate that it was "live".

I believe that the info-gatherers were also trained in hand-weaponry, infighting and garrotting but I have no proof of this. This was why the Out stations were set up. We knew at once if anything was wrong at the coastal stations because the first thing the In stations did (there were eight Out stations to one In station and nine to the other) was to call each station. The Out stations had very much less complicated sets than the In stations; theirs just said "Send" and "Receive". They were designed by Jack Millie. The aerials for the Out stations were also very simple-no one would query a domestic type aerial. All those who worked at Out stations were volunteers.

Beyond the set room there was a room with cooking facilities and Elsans, and there was a room for battery charging. There was no electricity laid on; every thing was powered by batteries which had to be recharged by a little engine - a "Chorehorst" - (petrol-driven) in a tubular cage; the exhaust from that was lead away by a duct and came out in a ditch some way away, where you could only just hear it faintly.

The last room led to an emergency exit tunnel which was a heavy duty concrete culvert pipe, 30 inches in diameter, 15 - 20 feet long, through which the occupants could try to escape should their station be discovered by the enemy. On paper we were known as a group called "Auxiliary Units" which would convey nothing of what our military role was. It was part of the Y service, another anonymous service. The ATS officers - Captains - had not had any military training or drill and had not come up through the ranks.

Recruitment happened when one of the girls went on leave and in chatting to a friend would drop hints about the secret work and tell her how she could apply. She would be told to go to Harrods in Knightsbridge, wearing a red rose. The store was boarded up, but the doorman would tell her to go to the fifth floor. Other girls wearing a red rose were there, and each would be interviewed by Senior Commander Beatrice Temple - a niece of the then Archbishop of Canterbury, William Temple.

They were tested solely on their suitability for secret work. Only when they were accepted would she tell them what they were going to do! They were then kitted out and came straight to us. I said "Why are they officers? We could have done this with ATS Sergeants". I was told "Well, we first thought all they needed to be was Privates, and then we thought with all you chaps going down there it could have been very difficult" "I don't think so" I said "They never interested me".

That is why they were ATS officers. We all acted correctly. They were nicknamed "Secret Sweeties" (not by us!) which apparently they hated, but they knew they had to keep their mouths shut. And of course, they never wore trousers always skirts! They were very nice girls, cut-glass spoken! They were taken from the FANYS sometimes and other sources which could be trusted. Both In stations in Kent at Brasted and Harrietsham worked with Out stations which were virtually on the Kent and Channel coasts. When we started we were the only group operating; it was only when they found that the system worked that other stations were developed.

Eventually there were fourteen areas around UK, each having its own In stations and Out stations. I regularly visited my Out stations. One was in a farmer's chicken coop; they had their own ways of deciding where to hide their sets. I said to the farmer "Where is your set?" We went out to the barn and inside one of the coops he lifted a board on a hinge. He had cut a space in the chalk ground underneath to fit in his set. In another coastal place the lady operator was a music teacher and her set was in the Music room. "Where?" I said "Can't you see it?" she said. I was looking all round and I told her she had hidden it very well. She took the front off the upright piano; she had removed the top eighteen or twenty key hammers and it was there.

These sets were designed by Jack Millie; they were in aluminium cases, about a foot long; they were robust and all they had was an on/off switch according to whether you were sending or receiving. If you wished to send, you might have to wait for the In station to come back to you; it was so simple a child could use it; Jack had kept it so simple. Another set I remember was operated by a vicar; I asked him where his set was and he took me into the church and showed me where it was in the pulpit. "Nobody but me goes up there!" I remember another Out station because the man did not want me to know about it; he said "You don't need to know, do you?" but I said "Yes, I have to!" The set never went wrong so I never went back there again! It seems now that after our In stations were successful, others were built further inland as a second line of defence, and have now been discovered.

The girls at the In stations arranged the times of contact with Out stations according to the operators' occupations. There were always three on duty at the In stations; they worked eight hours on and sixteen off all through the conflict. They never complained though the work was full time underground.

The time came that there was much speculation that we must soon be mounting a joint invasion of Northern France with the American forces, now building in Southern England. There was a much larger concentration in places like Salisbury Plain and the South Coast.

Our tiny contribution, although I only guessed at the time, was to step up our on-air traffic. We made up hundreds of meaningless five-letter - coded group messages and transmitted them to our Out stations for their "dummy traffic" responses; round the clock. It was the first intimation I had that the enemy could pick up our very-high-frequency; although maybe they couldn't, we'll never know. If they could it would tell them that our invasion could start from the Dover coastline.

In support, a concentration of tanks, landing craft and military vehicles in our area could have been seen by their recce aircraft. It caused them to leave troops in the Pas de Calais that were not facing ours when D-day came. But they were life-size blow-up dummies, even realistic when I saw them at ground level; as bogus as our surge in radio traffic. I'm afraid I never had an Army Officer's mind. When the invasion succeeded, I was delighted, like everyone; and I was sure one of the consequences would be that we would be stood down. But I was wrong. That armada of military landing-craft were reported by the RAF to be still poised off the coasts of France, Belgium, Holland and Northern Germany, possibly having rushed away personnel to defend against invasion, we couldn't know. So our High Command put us on the alert, which kept us vigilant until the Germans were defeated.

As victory became near, we were all stood down. I was still in Sevenoaks when I heard that our In stations had been filled in with concrete. I was posted to Penley, a village north of Shrewsbury. It was a large holding company which had been built originally to receive Americans when they entered the war. Many of our Royal Signals personnel were sent there while awaiting demobilisation. I was Assistant Adjutant. So to help to keep them occupied, I organised the transformation of the U S hospital operating theatre into a stage and auditorium. We found many talented people amongst those awaiting their discharge. I wrote sketches and plays, and we put on new shows every week. Each morning at the end of the parade I would give the order "Theatre Squad, fall out" and about twenty men of various civilian trades - painters, decorators, electricians, a coppersmith, two actors, typists (for scripts) and an architect - all set about the conversion. I even got a proscenium arch. Chairs for the audience appeared from all over the camp. It would have been a Planning Officer's nightmare. Fortunately, as I was writing the first show, provision was being made to receive ATS personnel for demobilisation; several of them joined the theatre staff. We were so rich in resources that I think we were doing a new show every Friday, Saturday and Sunday, and playing to full houses, including the families of village workers on the site. Free admission.

I suspect that the CO. delayed my demob papers, because they seemed a long time coming through, but I really don't know. But I left sure in my mind that I could earn a living writing for the theatre. Plays I set my sight on. Thus began my post-war career writing plays for the stage and television.

Roy Russell