I became interested in the technical side of radio in my late teens and I sat and passed the examination for an "Amateur Operators Certificate" in August 1939 and received a letter telling me that I had passed the exam on Friday 1st September. War was declared on the 3rd September and ham radio was immediately banned. It was 1946 before I was able to get a transmitting licence. Early in 1941 the NZ Post Office carried out a recruiting campaign among persons who had some technical radio knowledge seeking recruits for RNZAF technical work. I applied and was accepted as a "wireless mechanic". After going through a training course at the Electrical and Wireless school at Wigram I was able to switch to Radar work. At that time everything about radar was officially classed as "Secret" and all persons working with it were required to sign a declaration under the "Official Secrets Act".

You will all be aware of the Japanese attack on the large American naval base at Pearl Harbour on December 7<sup>th</sup> 1941. This was a great victory or defeat, which ever way you looked at it, but at the same time it was probably the greatest political blunder of all time as it as it stirred up the Yanks more than anything else has stirred them up before or since. Within a few days they declared war on Japan and Germany and their huge industrial power geared up for the production of war materials. There was a film about the attack made about 1970 which ends with Admiral Yamamoto who was in charge of the attack declaring "We have awakened a sleeping giant, he will exact a terrible revenge".

The Japs were well prepared for war, they swept down through Malaysia, Singapore, the Philipines, the Dutch East Indies and stopped at the Solomon islands. They walked ashore on the island of Guadalcanal without opposition and started to build an airfield and base. While this was going on the Americans had not been idle. They prepared a substantial military force to oppose the Japs and this force landed with little opposition on Guadalcanal in August 1942. To get a large force down to the Solomon islands nine months after their peace time situation was shattered by the attack on Pearl harbour was a considerable achievement and they should be given credit for it. They chased the Japs out of the base and airstrip that they were building and there followed an intermittent battle that went on for about six months as the Japs tried to recover the base but the Yanks held it and continued to build it. I have read that during this time the Japs suffered heavy losses from disease and starvation and the survivors were taken off in early 1943. This was the first time that the Yanks had chased the Japs off an island that they had occupied. The island was declared to be free of Japs about the time I arrived there as part of RNZAF Radar Unit number 52 which was the first NZ radar unit to pick up Jap planes. I plotted the first one. My role was chief technical man on the radar unit. I was responsible for all the initial setting up adjustments and calibration and was always called on to fix faults and answer technical questions.

However the Japs were not prepared to give up completely. They made as much nuisance of themselves as they could by sending nuisance air raids by single planes at 8pm and 4am every night. Many of the bombs fell on open ground but some did significant damage. To counter these raids it was arranged that the Yanks would supply night fighters and NZ would supply a GCI Radar unit. GCI stands for Ground Controlled Interception and the idea was that the radar would show the position of

both the bomber and fighter and direct the fighter to get behind the bomber and shoot it down. The planes that were described as night fighters were twin engined 2 seaters fitted with aircraft radar and four 20mm cannon but they were not designed for high altitude interceptions and were not fitted with oxygen. However the crews took them up and did the best they could with the handicap of lack of oxygen. The Japs who were responsible for these raids were not a lot of idiots and it did not take them long to work out what was happening. The R/T that we were using to give instructions to the fighters was powerful enough to be heard at the Jap base at night, they must have had a person who could understand English and also a person who had knowledge of the idea of Ground Controlled Interception. Then they found the radio frequency that we were using to give instructions to the fighters and they tumbled to the fact that when a transmission was heard on that frequency the fighter was being given an instruction to get it onto the bombers tail. Then they tumbled to the fact that they could dodge the fighter by simply changing course and it became obvious that the Jap bomber crews had been instructed to listen on our R/T frequency. This dodging the fighter could be repeated a long as necessary. The range of the bombers only allowed them to stay in the area for about 25 minutes. They were intercepted about 25 to 30 miles out and by keeping them busy dodging the fighter they were very effectively prevented from bombing their target which was Henderson field.

This went on for several months with every night bomber being intercepted. Even though they were intercepted 25 or 30 miles out every time an incoming bomber was detected a "condition RED" was sounded. Condition red was the Yank term for an air raid alarm. The radar equipment ran continuously and the operating crew were divided into watches which changed 5 times per day. With the changing day/night

work and condition reds the technical crew lost a lot of sleep and became very tired, niggly and bad tempered. After several months the Japs gave up their futile attempts to bomb Henderson Field at night, every one got a bit more sleep and tempers improved.

Even though only two were shot down this combined operation was outstandingly successful at preventing the night bombing of Henderson Field.

When I returned to NZ I continued working on radar units until early 1944. As the Japs were being pushed back many of the radar units had been closed down and there was an opportunity to transfer for pilot training. I took this opportunity and became a fully qualified pilot on single engined aircraft but as the war was nearly over by then I did not fly on active service.

I have now had a transmitting licence for over 70 years. I have built and used a variety of home brew equipment. When there was a lot of war surplus equipment available I bought some 100 TH transmitting valves and built a transmitter that ran 4 times the maximum power that hams were permitted to use. With this rig and good aerials I had thousands of DX contacts. When SSB came into use I built an SSB rig which gave good results for many years but, as everyone did, I switched to commercial equipment when it became available at reasonable prices.

When I retired from the farm and moved to Pukekohe I found a house and section that was big enough to erect a full size 80mtr antenna as well as a log periodic for the higher frequencies. I continued ham activities and switched to digital modes when they became popular. I have taken part in comms for many car rallies, Field days and other contests and have won the Sangster Shield, Memorial contest and Home station section of Field day many times. I have been a member of NZART for 80 years and Franklin branch since it was revived about 1948.

Now aged 98 I reside in an independent unit in the Possun Bourne retirement village where big aerials are not permitted so I must content myself with a few VHF contacts on a temporary aerial.