

# VWOA NEWSLETTER

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2007



Dolores Ray & Francis Horn W7NSN

I read and really enjoy your newsletters.

The VWOA awarded me a scholarship in 1943, to RCA Institute, and I went from there into the Navy and served in the radio crew on a Liberty ship, the USS Celeno.

So I thank the VWOA, in more ways than one !!  
Frank Horn W7NSN

Here is a brief summary of my career in "radio", mostly thanks to the VWOA. During my last year in high school, in Johnstown, Pa, my science teacher gave me some forms to fill out. One was an application for a VWOA scholarship to RCA Institute, in NYC. It was for a two year course, but things did not work out that way.

I graduated in 1943, and was off a few weeks past my 17th birthday to my first government job. This was inspecting radio frequency crystals for the U. S. Army Signal Corps Inspection Agency, at a factory in Attleboro, Massachusetts. There, later that summer, I was notified that I had been awarded the VWOA scholarship, and the Signal Corps released me in order to start RCA Institute. (I went to a VWOA award dinner in NYC, that is in your records.)



USS CELENO Radio Operations Crew  
"I am the guy with the Hat"

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Just before my 18th birthday, I took and passed a test for U. S, Navy advanced radar training. To avoid being drafted, I then enlisted in this Navy training program. Thanks to the VWOA and their scholarship, the RCA training allowed me to pass a very difficult Navy training course, in radar, sonar, standard Navy transmitters and receivers, etc. A good many of those who entered this program failed, but were then stuck in the Navy for the duration.

I then served in the Pacific as a member of the radio crew on the USS Celeno, a Liberty ship that landed troops and supplies on various islands. This, for me, included Okinawa and Iwo Jima. We also got in to many other islands on both sides of the equator.

My ship, the Celeno, often sailed with these merchant ships in convoy formation around the Pacific. We were the lead ship in such a formation on our way to Okinawa from Ulithi. We probably had the only functioning radar of the ships in the formation -- most of them merchant marine. Of course we were escorted by DD's or DE's...I always made sure that gadget was working!! We also had IFF, (radar beacon), to identify "friendly" targets the search radar picked up. Different days, for sure.

I had learned morse code years before, thanks to a ham operator who lived next door to us in Pennsylvania. I was therefore able to do a lot

of the "extras" for the radiomen who stood watch. I also kept the radar and other gadgets working, as the only technician on the ship. One thing I did was help copy the news, sent in CW, and helped put out a ship's newspaper. (I later got both commercial FCC radio and radiotelegraph licenses, as well as the amateur license, now W7NSN.)



CAA  
Transmitter  
Station at  
Belmont, CA  
1948

After leaving the Navy in 1946, I entered Stanford on the GI Bill, but also started working nights at the San Francisco Airport for the CAA. (Later, this was the FAA). I worked mids at KSF, the CAA overseas station communicating with aircraft, ships, etc, all over the Pacific. We also ran radioteletype to Hawaii and other distant places. We got involved with ships, including the Coast Guard, for any emergency situation involving overwater flights. The transmitter station was at Belmont, CA, and the receiver station at Pescadero. This roughly paralleled the Mackay Radio Press and similar facilities in the area. (While still at Stanford, I later worked at the Belmont transmitter station, which had over 25 transmitters, mostly CW, with some voice and radioteletype. We shifted

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frequencies and made power level adjustments based on instructions sent by CW by the watch supervisors at the airport. Code speed required was 20 wpm -- this was the only job I ever had in the CAA/FAA that actually required CW capability, although it came in very handy in many other instances)

The CAA offered me a promotion and some additional very specialized training at their academy in Oklahoma City. I later qualified as a registered and licensed professional engineer in a number of states, and worked for the FAA until I retired in 1980.

My assignments included four years in Brazil, two years in Venezuela, and various supervisory technical jobs usually involving installation of advanced air navigation facilities.

And all thanks to the WWOA!!  
**Frank Horn W7NSN**  
**THE END**

**Not Really....In a future issue we will go into some background on his winning the WWOA Scholarship July 20, 1943.**

## WWOA MEMBER NEWS

Last Newsletter we received this information from Douglas Stivison, 2<sup>nd</sup> Vice President, Web Master of the WWOA Web Site and WWOA Historian mentions an interesting Book that can be purchased On Line from Amazon. It deals with a wealth of information on World War Codes and the price of \$12.71 is reasonable these days.

Much more important, one of the covers of the Book has

**WWOA Veteran Member Diana Mackay Eigen.**



**Bletchley Park**

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The following was a response on the subject from:

**Herbert R. Perkins WA2JRY**

I found the article about Bletchley Park quite interesting and have some comments to add.

I have visited Bletchley Park twice and found the place fascinating. For those of us with a Crypto and or communications background, each exhibit holds an interest that we alone can understand.

I am attaching a letter from a book I wrote for my children (Letters from Dad) that chronicled my international travels for many years.

I also recommend a book by Wolfgang Hirschfeld who was a U-boat radio operator. His diary is such an engrossing story that all radio operators will have a hard time putting it down. While I purchased it during a visit to Bletchley Park I feel sure it is available through Amazon.

I was very fortunate to meet up with one of the original WREN operators who worked at Bletchley during the war. She was well into her 80's but could out walk and talk anyone half her age. She was a wealth of information on the place and could recant wartime activities with a clarity I found amazing.

While there I visited Station X which has been the subject of several fictional books. In reality the "X" stood for the Roman numeral ten and nothing more. There was very little that was clandestine about it or the other 9 intercept stations that were located around England.

However, in the attic of Bletchley Park the museum has assembled a station that is representative of what was used during the war. The receiver is a period receiver but the transmitter is a very nicely done home brew amateur rig. While I easily noted it, as did the other two hams who were visiting with me (one from Holland and the other a Swiss) the man leading the tour had no real understanding of what he was showing. The three of us later had a good chuckle about it.

In another section of the museum they have an intercept room with banks of receivers and "canned CW" coming out of one receiver. It is all coded groups and while there listening to the lecture on the equipment, I was surprised to see how many of us could not help but copy the code and were lost to the lecture. I again met several hams who were as fascinated as I was in both the equipment as well as the story behind the place. The man giving the lecture was a former operator and spoke with authority on how the station was used during the war.

Thanks to Ann, the WREN who gave tours, I was able to meet with the engineers from the

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British Post office that were building a copy of the last Turing machine, Colossus. I was delighted to get an up close view of the machine and see how they were able to use optical scanning to read the paper tape at 5000 characters a second (yep in 1944 - great engineering).

I also found out that the official secrets act in the UK precluded the engineers from getting a copy of the blue prints for the machine. In a stroke a genius they asked for and received a copy of the prints from the Americans under the freedom of information act. As we had a team of crypto annalists on site in England we asked for and received copies of the prints used to make the machine.

Shortly after the American copy was received in Bletchley Park, the UK de-classified the drawings in England.

One letter from a book,

**Herbert R. Perkins WA2JRY**  
wrote for his children (**Letters from Dad**) that chronicled his international travels for many years is reproduced below.

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Today was to be a nice day in England and the sun was to shine all day. Well that is what the weather forecast said and like a fool, I believed them and took off for Bletchley Park to tour the best-kept British Secret of World War 2.

The drive to the park took me through the rolling English countryside as at this time the sun was out so it looked wonderful. I enjoyed the drive very much and was looking forward to the day. When I arrived in Bletchley, I had a bit of difficulty finding the place as there were not enough signs to direct you. Fortunately, I had printed a map before I left so I had a very good idea of where I was going despite the lack of signs.



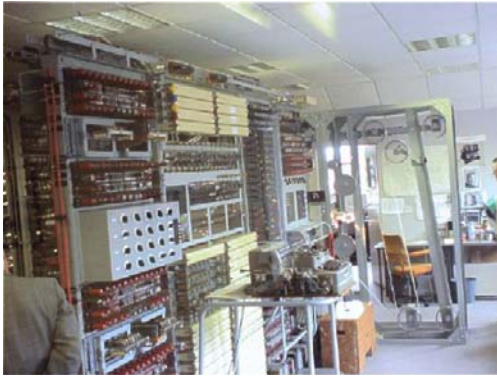
The park itself is a very large area and when you consider that it was the working place for 12,000 people at the end of the war, it is quite impressive. What is so sad about the place was that at the end of the war they simply took all the stuff out in the yard and burned it. The British then made everyone keep the secret of what went on and for 30 years, it remained a secret.



Now it is far from a secret and has even been visited by the Germans who did not know of

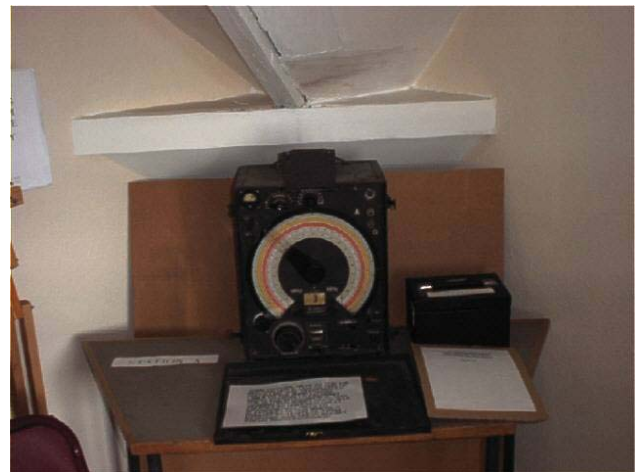
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its existence until it was officially released. I found all this fascinating, as I had read so much about Bletchley and the enigma machines. For me to actually visit the place where it all happened was just wonderful.



Again, due to the official secrets act in Britain, the original code breaking machinery was destroyed. However, it has been remanufactured, in large part for a film that will be released in the fall, and the reproductions have been given to the park to display. There is now even a working model of colossus, the first tube type computer with a paper tape reader. It did some incredible things in its day like reading over 5,000 characters a second off a paper tape.

However, to start with the tour I went to the Station X radio room, which is located in a very small room on the upper floor of the main mansion. Here was a ham station that was set up using period receivers and a home built transmitter.



The fact that for the early part of the war Britain and for that matter America used amateur radio receivers because there was noting the military had made it even more interesting. They did have a VHF/UHF British receiver that was used to intercept both aircraft and radar signal. This I recognized from my visit to the Imperial War Museum.

Following the tour of the radio room, the real tour began and took us to the famous Hut 6



where the naval codes were broken and was the center of activity for the battle of the Atlantic. Then onward to the crypto museum and a German radio station furnished with period German radio equipment. All very fascinating.

I spent six hours reading and looking over the displays and talking with the guides. One of the guides, a short and very active woman was a young girl who actually worked at the park. I

was amazed to learn she was almost 80 and looked like she was 50..... There was another museum for vintage radio equipment of WW 2 .... Included were a suitcase spy radio and a lot of the early airborne radar equipment.



They also had a vintage computer room that went a long way back to the early computers that used cassette tapes for storage. They had everything I could remember and a number I did not know anything about. All in working



order and many had games such as PONG on them that could be played.

I was delighted ..... Here was a mock up of a "Y" or listening station, a decode room with several enigma machines in it and of course the teletype rooms where the messages were transmitted around England. The stories were fascinating ..... several times the English armed forces had the information before the Germans did because it was decrypted and sent immediately to be useful.

However, there was always a cover story of some kind ..... I found them as interesting as the actual code breaking ....

In all, a delightful day.

For dinner, I choose an old pub, well not that old..... Built in the 1800 era ..... this is new when you look at many of the pubs around here. The selection is quite good and I enjoyed a delightful piece of Scottish salmon with fresh vegetables ..... Just right to finish a wonderful day.

Love,  
Dad

The End



Herbert R. Perkins WA2JRY

WENDELL'S NEWS CORNER

We at the VWOA Newsletter would like to hear from you and try to pass along to the rest of the VWOA stories of events that you have experienced and that you feel the rest of the membership would enjoy hearing about. Send us a picture or two and we will try to include it in one of our Email Newsletters

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