

# K9YA Telegraph

Robert F. Heytow Memorial Radio Club

Volume 10, Issue 4, April 2013



## IGY

Part II: Amateur Radio's Role, 1957 - 1958

Philip Cala-Lazar, K9PL

### QST, December 1957 "Operating News"

A reminder that the IGY year started July 1 and there was still time to take part in the Propagation Research Project. Participants needed to possess the ability to "operate and make v.h.f. notations with fair

observing consistency." Those participating were entitled to receive the monthly publication, *PRP News*.

### *The New Yorker*, December 28, 1957

Even the urbane *The New Yorker* magazine rustled up an item about phone-patches. Example described, calls from Carl Ecklung, an IGY scientist stationed in Antarctica, to Chappaqua, N.Y. via local dentist and ham, Dr. Paul Z. Haus, W2VH.

### CQ, January 1958

Cleveland's St. Joseph High School radio club was quite adept at plotting Sputnik I and recording its signal as it orbited the earth. The club's members developed a schedule of its passes. Listening to the satellite's 40 Mc signal for eight days, the young hams assessed and analyzed the signal's propagation, Doppler effect, and range (3,600 miles) and found no evidence of skip.

### The New York Times, January 12, 1958

#### Polar Bear Adds to Arctic's Dark

Ursine happenings at "Drifting Station A," situated on a large ice floe "435 miles from the North Pole," the northernmost U.S. IGY base. There, a crew member interviewed via an amateur radio link stated it "was 'very warm' at the time—29 degrees [F] below zero." That is compared to a recently recorded 59 degree below zero temperature that caused "the ice to make strange popping noises."

A polar bear and her cub were reported to have "Perhaps in a playful mood..." torn up electrical cables and caused outages of half the base's runway lights. Fortunately for the bruins, hunters abandoned their pursuit when they found the "extreme cold had congealed the oil in their guns making them inoperative."

### The New York Times, February 1, 1958

#### Facts About Army's Jupiter-C Rocket

On November 8, 1957 the U.S. Army launched a Jupiter test rocket to carry the Explorer I satellite into orbit. Aboard the satellite was an instrumentation package designed to record: the satellite's skin and internal temperatures, cosmic dust erosion and cosmic ray data. The artificial moon transmitted on 108.03 MHz with 5 mW of power; "its signal can readily be received by amateur radio operators."

### Khrushchev Gets Answer in Space

Soviet party chief Nikita Khrushchev announced he was "waiting for the American and other satellites to join them and to form a commonwealth of satellites." The 184 lb Sputnik (Wanderer) satellite, launched October 4, 1957, was joined by the 21.5 lb American satellite, Explorer I launched January 31, 1958.

"...strange  
popping noises."

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# The Chinese Invasion Continues

*Goldilocks and the Three HTs*

Paul W. Ross, W3FIS



Baofeng UV-5R

I had breakfast the other morning with a group from the Sussex Amateur Radio Association, our ham radio group here in “slower lower Delaware.” From time to time members bring in their new toys, though fortunately, the guy who collects and restores “boat anchors” doesn’t do this. Well, one fellow had a new HT I had heard of, but not seen. This is the Baofeng UV-5R+. I own a couple of the earlier Baofeng UV-3R

(*K9YA Telegraph*, November 2011) transceivers, a pair of Wouxun KG-UV3Ds and a Yaesu FT-60R. Can one ever have enough HTs?

This new Baofeng transceiver was decidedly different than the Baofeng transceiver I previously reviewed. This one has a keyboard (which is *much* more convenient to program), comes with a “drop in” desk charger and features some other interesting features.

So, what is in the box?

- Baofeng UV-5R+ transceiver.
- Charger base and separate “wall wart.”  
The base charger unit accepts the radio with the battery in place, or the battery itself.
- Black nylon wrist strap.
- Belt clip with two tiny screws to hold it on. The screws are shipped inserted into the back of the radio. A small Phillips screwdriver is needed here.
- “Rubber Ducky” antenna: it has the “reversed” SMA connector like the Wouxun KG-UV3Ds. However the Wouxun antennas will screw on, but not seat completely. The pin is in the radio, not in the antenna.
- A semi-inscrutable instruction manual, more about this later!
- Lithium Ion battery pack. Mine was shipped with a 1,800 mAH unit. Larger aftermarket batteries are available.

*“Can one have enough HTs?”*

- Earpiece/microphone unit. You too, can look like a Secret Service agent!

The battery went in with a nice solid “click,” and into the charger we go! The battery latch is at the top, just behind the belt clip. The manual said to charge the battery for five hours before use. However, the green charge completion light came on after a couple of hours. Time to play.

## Solidly Built

Next, I installed the belt clip. The manual says not to use any glue, but I have made it a habit to put a *small* drop of thread locker on the threads to avoid things loosening up over time. The belt clip has a nice strong spring, and a loop on the top for a lanyard. In addition, there is a lanyard clip on the side of the unit, so I opted for the side attachment of the wrist strap.

The antenna screws on in the usual manner. I put a *small* drop of silicone dielectric grease (available at any good auto parts store) on the threads for easy

fitting, and to provide some corrosion protection. A fellow ham who runs charter boats here on the Delaware shore suggested it as a preventive for salt air corrosion problems. I use it especially on PL-259 fittings. Of course, don’t transmit without an antenna in place or you will likely fry the output transistors.

## The Setup

Now, for setting up my local repeaters, manual programming is a very much like the Wouxun and Baofeng UV-3R transceivers. Key in the desired receive frequency, PL tone (if needed), offset (600 kHz or 5 MHz or none, for simplex), and offset direction (+ or -, or none). Set the power level and bandwidth, as appropriate, and save the results in a convenient channel. Alphanumeric tags are also available, but need to be set with the software. The scan rate is definitely faster than the Baofeng UV-3R; so don’t hesitate to load up the memory (128 slots) with your favorite repeaters.

## Software

As to software, it can be downloaded (both factory, and CHIRP) from a number of sites. I would



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strongly suggest going on to the Yahoo! Group for the Baofeng UV-5R+, as it contains a wealth of information on the radio, useful files, and current software. The reference manual shipped with the unit is a translation from Chinese, and marginally useful. Get one of the “on line” guides and avoid a lot of frustration and wasted time. However, if you are familiar with the Wouxun line of HTs, you will feel right at home.

If you already have an HT that can be read with the CHIRP software, then you can “steal” the settings to load into your new transceiver, saving a *lot* of time. Because I had CHIRP for my Wouxun units, I was able to use those settings, and had this part of the setup process done in about five minutes. The programming cable for the Baofeng UV-5R+ is the same as the one used for the Wouxun. Already having the Wouxun programming cable saved me some money. Some people have problems with USB programming cable drivers. The Yahoo Baofeng UV-5R Yahoo news group clarifies any issues you might have, and provides various down loadable drivers for different operating systems.

### External Antenna

I like to connect my HTs to my home QTH antenna. I have stub tuned Arrow J pole in the attic (HOA restrictions!). I broke out a spare BNC female to SMA female adapter I had for the Wouxun HTs, which use the same antenna configuration. The adapter screws into the HT all right, but does not completely seat. A quick trip to my local hardware store and the purchase of a 22¢ neoprene washer (take your HT and adapter along to get the right size!) fixed that issue nicely. I can now run the HT in the car with a battery eliminator and my MFJ 310 auto window mount antenna, for a quick-and-dirty (and XYL approved) mobile rig,

*“just right”*

or with the home QTH antenna. It should also be noted the Baofeng UV-5R+ will accept the Wouxun and Kenwood two-pin speaker microphones without any problems.

### FM Radio

In addition, the Baofeng UV-5R+ has a nice FM radio. If a VHF/UHF station is received at the same time you are listening to the FM radio, it will be interrupted. Great for walking the dog and monitoring your local repeater! The screen is a dual display; two channels will show, giving a “dual watch” capability.

Further, I have my HT programmed for the NOAA weather channels, the local fire and police, and the Coast Guard channels. Being near the shore (about four miles), you can turn into a real weather junkie!

### Variations on a Theme

Something a little strange, peering inside the case after removing the battery, there is a statement that the units were made for EBay and Amazon on-line sales! Figure that one out? There are a number of variations of this radio, differing in the firmware and case configuration. A cool feature is the variety of back light options available: orange, purple and blue! To paraphrase Goldilocks, “one is too small, one is too large, and one is just right.” The Baofeng UV-5+ seems to nicely fit into the “just right” category! ■



Baofeng UV-5R



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# The Art and Skill of Radio-Telegraphy

Fifth Revised Edition

## K9YA Telegraph Staff



The K9YA Telegraph staff is very pleased to announce the long-anticipated fifth revised edition of *The Art and Skill of Radio-Telegraphy: A Manual For Learning, Using, Mastering And Enjoying The International Morse Code As A Means Of Communication* by William G. Pierpont, NØHFF (SK), is now available.

Since its first edition in 1992, *The Art and Skill of Radio-Telegraphy* received accolades from the amateur radio community and is recognized as the standard reference work for newcomers and veteran CW ops alike.

Two years in the making, the fifth revised edition includes hundreds of improvements to the text, an updated index, the addition of many new illustrations, a selection of historic telegraphy quotations and a new cover.

*The Art and Skill of Radio-Telegraphy* guides readers through all facets, technical and psychological, of first learning the International Morse code and then using time-proven techniques to improve operator speed and accuracy.

Pierpont discusses the Koch, Candler and Farnsworth methods for acquiring the code. He also offers an overview of many of the mechanical learning devices used through the years to achieve proficiency. Telegraph keys and their proper use are described in detail.

Other chapters cover amateur licensing and military training, banana boat and other “swings,” speed contests, abbreviations, the Phillips code and Marshall Ensor’s, W9BSP, on-the-air code and theory course.

To avoid pitfalls on the path to code a chapter on methods *not* recommended is included. For those wishing to broaden their code knowledge, one chapter

is devoted to jump-start learning the American Morse (landline) code using what they already know.

Published by the Robert F. Heytow Memorial Radio Club, K9YA, *The Art and Skill of Radio-Telegraphy* is sold at cost, plus shipping, through the Lulu Web site. True to the author’s directive, no profits of any kind accrue to any persons or entities.

From concept to completion this book has been a labor of love for all involved in its creation and in its several revisions. As its creator stated: *This book is dedicated to lovers of telegraphy and to those yearning to learn to play the “music of the ether.”*

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## Other K9YA Books

### The Rod Newkirk Collection

*From the Pages of the K9YA Telegraph 2004 - 2009*

By Rod Newkirk, VA3ZBB/W9BRD



### Wired Love:

*A Romance of Dots and Dashes*

By Ella Cheever Thayer



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K9YA Telegraph

# Conan Wyatt Burtram Barger, W3CVE

Part X

5

Scott B. Laughlin, N7NET

In 1944, I was transferred to Falls Church, Virginia. The workload was heavy and the radio car was on constant vigilance investigating suspicious transmissions. One case, which comes to mind, is the enemy signal coming from Washington, D.C. Units from Washington State and Texas established that the enemy transmitter was operating from a vehicle within our nation's capital. The signal frequency was in the 15 Mc range and due to an ionosphere bounce the signal was skipping over our units in Washington. Another transmitter was finally located inside the German Embassy, sending vital ship movements back to Germany. The FBI arrested everyone involved.

Later, I reported to Shinda, the code name for Silver Hill. Our primary task there was to monitor unauthorized radiotelephone traffic. While the other units to which I had been assigned were RIB, Shinda was categorized as Foreign Broadcast Intelligence Service (FBIS). I remember one operator picked up a station that came on the air with heavy AC modulation. After about fifteen minutes words to this effect were spoken:

*Hello everybody. This is Joe and Bill, just a couple of farmers here in good old Iowa. We got enough equipment to rig up a transmitter so that we could tell you that President Roosevelt is leading your boys to slaughter. We will never whip Germany. The Nazis are too strong....*



The case on this station was held open for the duration of the war and every word was recorded. Bearings were taken and the "cock's hat" was found to be at Hitler's headquarters.

We picked up numerous clandestine stations: White Eagle, Red Feather, White Feather, and more. Lord Haw-Haw, Robert Henry Best and Axis Sally from Germany; Tokyo Rose from Japan; and Ezra Pound from Italy—the traitors were all recorded and transcribed.

From our K Street location, using as many as fifty receivers, and each tuned to a different station, we monitored transmissions in German, Dutch, Spanish and Greek. Not only were we in a shooting war, but also a psychological war. The enemies blasted propaganda around the clock and our job was to tune in each broadcast and direct it to a monitoring stall. Shinda

was as busy as a beehive. All international shortwave broadcasting stations had several transmitters beaming to different parts of the world. For example: Berlin transmitted English, Spanish to Latin America, and Turkish to Turkey. Each of these stations was monitored and record by our FBIS units. The tests of various broadcasts were analyzed with extreme precision, resulting in intelligence that was vital to our armed forces.

During the Second World War, I recorded a great number of news dispatches and historical events. The famous dispatch "Normandy Beachhead" was recorded, as was the dispatch from General Douglas MacArthur when he presided over the signing of the peace treaty aboard the USS *Missouri* in Tokyo Bay. I have some 300 historical recordings on 12-inch discs and each carrying my trademark, Sound History.

I remember two weeks before Berlin fell, May 2, 1945, when all German transmitters were silent. At Shinda, we had our SX-28s tuned to various Nazi frequencies. Merl Ballou and I were on the evening watch, four to twelve, midnight. The receivers were checked regularly to be certain they remained on the correct frequency. At 8:45 PM, two days before Berlin fell, the receiver standing by on the 11 Mc Berlin frequency showed maximum S-meter deflection, indicating Berlin was on the air. Ballou immediately contacted K Street and told them to monitor it closely. At 9 PM the usual Berlin fanfare was given and then Axis Sally came on with words to this effect:

*Hello North America. This is Radio Berlin. We are back on the air after repairing some trouble and will continue the North American broadcast as usual. Nazi Germany is stronger than ever and we will win the war. The Americans and Russians are cornered and will soon surrender, etc., etc.*



Hallicrafters SX-28



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CONTINUED - CONAN BARGER ON PAGE 8

# Bob Henry, WØARA

**Bob Ballantine, W8SU**

We've written about Ted Henry, W6UOU, earlier, how about his older brother in the same radio sales and parts business starting out in 1927; Bob Henry, WØARA, in Butler, Mo? Since your author got started in the 50s, I've always read about Bob Henry and his Henry Radio retail and mail order store in Butler.

## Donuts

Those donuts and hot coffee were a big draw on weekends! Coffee always tastes much better when someone else buys. I didn't know where Butler was located until recently. Located in western Missouri between Kansas City and Joplin lies the town of Butler, population of about 4,200. I wanted to share something I read recently that struck home, "That long counter that reached from a young man's dreams to touch the hearts and minds of so many ham operators is gone." Well almost!

**Robert E. Henry, Sr., 9ARA-WØARA (1908-1988)**

## Henry 2K

Bob earned his first ticket, as 9ARA, in 1924 and held an "EE" degree from the Massachusetts Institute of Technology. *QST* magazine noted: "Bob's company bought and sold new and used amateur equipment and is well known among amateurs for its '2K' line of linear amplifiers. Henry Radio, with stores in Butler and California, are probably *QST*'s longest running advertiser; 34 years and still going."

Let's add this: *Henry Radio in Butler has a large staff of highly qualified sales and service personnel pledged to serve you. Henry Radio carries large stocks of all major brands. We take trade-ins, sell used equipment and*

*offer better terms because we carry our own financing. Our reconditioned equipment carries a 15-day trial, 90-day warranty and may be traded back within 90 days for full credit toward the purchase of new equipment. Export inquiries solicited. Also, military, commercial, industrial and scientific users please write for information on our custom line of high power linear amplifiers and RF power generators.*

## Heaven on Earth

KØMYW wrote, "Henry Radio in Butler was 'heaven on earth' to a kid back in the late 50s and early 60s. My father frequently had business to conduct in Kansas City and often I'd tag along on his drive from our home in southwest Missouri. He'd drop me off at Henry on his way to KC in the morning, and then pick me up on his way home in late afternoon. I'd spend the day in the demonstration room just to the right of the main sales counter. It was filled with the kind of gear, mainly receivers that I could only dream about owning. For several hours I could tune around the bands. While I did buy some lower cost gear from them, the sales guys were very tolerant of my "test driving" the expensive rigs. Fond memories.

Here is to Bob Henry, Sr., WØARA, he expired in 1988 at age 80 years. Both Henry stores have been closed for a good while now. Here, in my area, one by one of the radio service and parts stores have closed and the Shack is the last resort. One remains which only deals wholesale. So we revert to snail mail or the Internet. ■

*"heaven on earth"*

1957  
Edition

BOB HENRY WØARA, BUTLER, MO.  
TELEPHONE 295

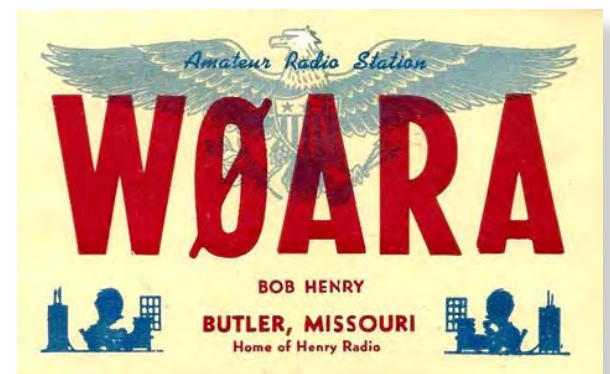
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The article noted the large audience listening on ordinary shortwave receivers heard Sputnik's high frequency signals on 20.005 Mc and 40.002 Mc, while Explorer's signals on 108.03 Mc required an "uncommon sort of receiver."

### The New York Times, January 1, 1959

#### Science Assays Vast I.G.Y Gains

Observing the reflection of signals from distant stations it was discovered that disturbances in the F-region move like gigantic "waves" several thousand miles long. The progress of these waves were monitored along their paths.

Some 550 amateur radio operators throughout the world reported on signal strengths from many stations at various hours. More than 9,600 punch cards were required each month to record the data received.

### The New York Times, January 4, 1959

#### Rocket Believed Radioing Data On an Unannounced Frequency

A recently launched Russian satellite was reported transmitting on an "unannounced frequency."

A Hawaiian tracking station reported monitoring a signal on 70.4 Mc, this was before the launch of the new satellite was known. The signal heard was not on one of the four previously announced frequencies and confirmed by RCA's program radio department as a "steady signal of varying pitch."

The satellite was launched after the close of IGY so it was not subject to the rules requiring IGY participants to reveal all frequencies used.

Ham Edward Tilton [Ed Tilton, W1H-DQ, *QST*'s "On the Ultra Highs" and "The World Above 50 Mc" columnist from 1939-1960, frequent article contributor and book author] of Canton, Conn. said that of the frequencies used by the U.S.S.R., "the three frequencies in the general range of 20 megacycles should be received almost continuously throughout the world. The other frequency is much higher, however, and can only be heard on the side facing the receding rocket." Other frequencies employed by the Soviets included: 19.997, 19.995 and 19.993 Mc.

### QST, November 1959

In a letter addressed to the ARRL, the executive director of the National Academy of Sciences Natural Sciences Council, Hugh Odishaw, again commended amateur radio operators for their services rendered providing communications between scientists at the South Pole and "their families and friends at home." Attached to his letter was a list of 36 call signs of hams especially

cited for their relay work. He also noted this list was only "partially complete and there are many more who have had a part in this significant contribution to the IGY Antarctic program."

### Jules Madey, K2KGJ

Of the many hams involved in IGY phone-patch operations one, a 17-year-old New Jersey high school student, clearly stands out. Jules Madey, K2KGJ, licensed since 1954 and with a 110-foot tower in the family home's backyard, was the preeminent runner of phone-patches to U.S. Antarctic bases. Jules and his younger brother, John, also an amateur radio operator, "rigged up a radiofax machine, allowing them to transmit scientific data as well as photos." Quoting Jules, "A typical 8x10 photo took about 20 minutes to send in those days."



Jules Madey, K2KGJ

Photo: W2JSN

Antarctica's Madey Ridge, "...trending NW from Mount Moffat along the N side of Berquist Ridge in the Neptune Range, Pensacola Mountains," was named to honor his service.

### Looking Back

Amateur radio's participation in the International Geophysical Year is certainly one of the most notable events in the service's 100-year history. Government agencies actively sought to recruit the large number of amateur radio operators thought essential for its many planned projects to succeed.

Some thirty years earlier a relatively few, now legendary, hams achieved their efforts to span the Atlantic Ocean with their signals. Then, in 1957, as the space age dawned, thousands of amateur radio IGY participants, including not only those officially enrolled to collect and report data, but also those caught up in the spirit, spun their receiver dials hoping to hear, for the pure joy of hearing, the pips, peeps and squeaks emanating from the first American and Russian satellites. It was a very busy, visible and productive time for the amateur radio service.

For more about hams' early involvement in the Space Race see: *K9YA Telegraph*, September 2007, "We Like Ike."

*"On the Ultra Highs"*

CONTINUED - IGY ON PAGE 8



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That was their last broadcast.

The wind up of World War II was at hand. Germany was out of the picture and Japan was on the run. Our efforts at Shinda were concentrated on Japanese transmitters, round the clock vigilance. Our west coast units had better reception from Japan, but we at Shinda had our hands full locating and monitoring clandestine stations. Our Hellschreiber circuit to and from Puerto Rico was in constant use.

The complete surrender of Japan was inevitable. The supreme commander of the Pacific, General Douglas MacArthur, was pounding Japan with increasing force.

On April 18, 1945 our nation was in great sorrow. One of America's greatest presidents, Franklin Roosevelt, was dead--only 83 days after he had been unanimously elected for his fourth term.

Harry S. Truman immediately took office. President Truman fully realized the heavy burden placed on him. He soon made plans to put an immediate end to the war that had caused so much destruction throughout the world.

An atom bomb was dropped on Hiroshima on August 6, 1945. Three days later, August 9, 1945, another was dropped on Nagasaki. On August 10<sup>th</sup> Japan came to the peace table and on the 14<sup>th</sup> they accepted the Allies' terms.

Both Japan and Nazi Germany realized the intensity, determination, and integrity of the Sleeping Giant. ■

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## Ham Quips DICK SYLVAN, WACBT



DICK LIKES TO DRAW UPON OLD RADIOS  
TO CREATE NEW CARTOON IDEAS!

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Photos: U.S. Navy, National Oceanic and Atmospheric Administration, W2JSN

Video: 150% *The Jules Madey Story*

<http://www.gwillow.com/Madey.html>



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