

K9YA Telegraph

Robert F. Heytow Memorial Radio Club

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Ham Radio on the Home Front

Rosie the Radio Operator

Philip Cala-Lazar, K9PL

*FCC, §97.1 Basis and purpose:
(d) Expansion of the existing
reservoir within the amateur
radio service of trained opera-
tors, technicians, and electron-
ics experts.*

Even before the United State's declaration of war following the December 7, 1941 attack on Pearl Harbor, amateur radio operators were seen as forming the backbone of any future, wartime, U.S. military and civil defense communications.

The original source of much of what follows were press releases issued by the American Radio Relay League and disseminated to newspapers nationally. Here is a snapshot of ham radio on the American home front, 1941-1946, recaptured from the archives of the Chicago Daily Tribune:

(Note: The text in quotes follows the word choice, spelling and grammar of the original.)

April 6, 1941: "LEGION ENLISTS AMATEURS FOR RELIEF, DEFENSE—100 to 150 Experienced 'Hams' Sought."

The American Legion's emergency disaster relief organization sought to recruit "...older, reliable, and experienced..." hams to staff a state-wide communications network. "The services of the Legion network will be offered to the United States government for any use in national defense." The network plans to coordinate its efforts with similar groups including the American Red Cross and the ARRL.

November 30, 1941: "HAMS TO PLAY 'FIFTH COLUMN' RADIO SLEUTHS"

Members of the Illinois Institute of Technology radio club plan to play fox to the hounds when the club's president, Anton Seda, will transmit "...code signals just like a fifth columnist..." Operating CW on "1750 kilocycles," Seda will send the letter "R" for 15 minutes at random times while identifying with club call, W9WY.

The hounds will use homebrew and commercial gear "...adapted to use in a car. Receivers will be fitted either with uni- or bi-directional loop antenna."

Tidbit gleaned from this article: "Amateur short wave operators have an inter-collegiate organization, Rho Epsilon fraternity..." IIT was home to Epsilon chapter of the fraternity.

December 10, 1941: "AMATEUR RADIO MEN NEEDED IN ACTIVE SERVICE"

Appended to the order suspending all amateur radio operation was an appeal for the enlistment of hams qualified for military service.

"While no explanation was given for the order (to suspend operation), the shutdown was presumably

CONTINUED - HOME FRONT on Page 6

*"...older,
reliable, and
experienced..."*

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The Four Cartoonist Amigos

Trook, Sylvan, Beasley and Murray PC

Dick, Sylvan, W9CBT



Dick, Sylvan, W9CBT, Drawing a New Cartoon for the K9YA Telegraph

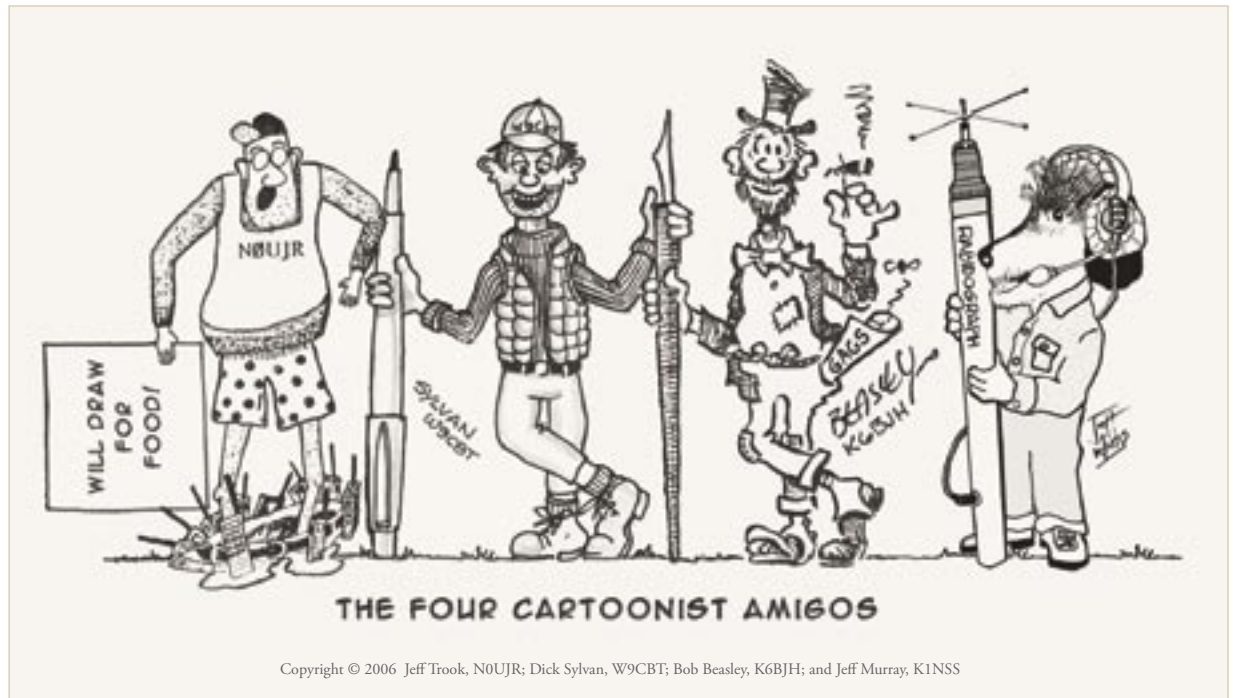
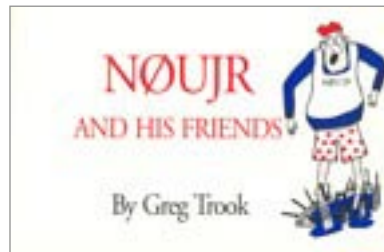
The cartoon, the “Four Cartoonist Amigos,” started as a fun project after receiving a beautiful drawing from my friend, and ham radio cartoonist, Bob Beasley, K6BJH. It was a single cartoon titled, “The Cartoonist.” I was impressed by his artwork and hung it on my wall. Looking at it for a while, I thought: what if I added my own character, drawn in my style, next to

his? I did that and sent him a copy. I called it “The Cartoonist Friends,” Bob liked that, and that made me happy.

Greg Trook, NØUJR, is another fine ham radio cartoonist with a unique drawing style. Wouldn't it be fun if

he added his character to the cartoon? I called Greg and suggested it; he liked the idea and added his character. Bob's character is holding a pen because he likes to draw in India ink. I work in markers, pen and pencil and mostly do my cartoons in color. I did this one in black and white to match Bob's work. Greg's character's pants are always at half-mast from all the ham gear around his waist.

Recently, I met a fourth ham radio cartoonist, Jeff Murray, K1NSS. He is the creator of “Dash,” the ham radio dog. I told him about what we now dubbed the “Three Amigos” cartoon and he offered to add his character to the group, thus the cartoon became the “Four Cartoonist Amigos.” That's how the cartoon was created. This is probably one of the few times (or only time) four ham radio cartoonists collaborated on one cartoon and best of all, we're all active hams, too.



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I sent Beasley, Trook and Murray (sounds like a law firm) copies of our cartoon. We got a big kick out of the project. The cartoon rights belong to the four of us as we all had a part in its creation.

I purchased Beasley's and Trook's books when I first started cartooning a few years ago. Their humor is great and I like to reread and enjoy their cartoons. Jeff is still collecting material for a book.

It's too bad the great cartoonist "Gil" Gildersleeve, W1CJD, whose work graced the cover of *QST* for so many years, is not around anymore. I grew up laughing at his work. He was one of the really great cartoonists. Perhaps he would have added his iconic "Jeeves" character to the group.

Bob Beasley's book, *The Best Of Beasley*, is one of several books he's published. You can order it from *WorldRadio* magazine at:

<http://www.wr6wr.com/>

Greg Trook's book, *NØUJR and His Friends*, is available on the Internet at:

<http://incolor.inetnebr.com/n0ujr/>

Jeff Murray's cartoons appear in many ham publications around the

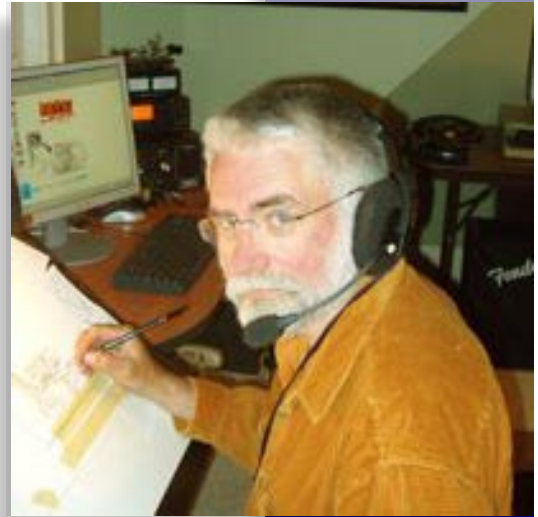
world. He was a ham in the 60's; a cartoonist in the 80's; and now blends the two pursuits in the 21st century. Weekly papers in New York, Baltimore, Washington and San Diego published his earlier work. Jeff also drew editorial cartoons for suburban Boston weeklies. Check out his latest creation, "Dash! The Dog-Faced Ham" at:

<http://www.dashtoons.com>

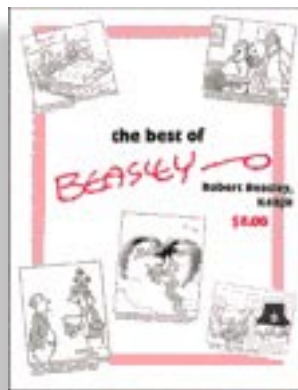
Bob and Greg's cartoons appear in many other ham radio publications as well.

My new book, *Hi Hi — A Collection Of Ham Radio Cartoons*, is available from my Web site:

<http://www.k9ya.org/w9cbt>



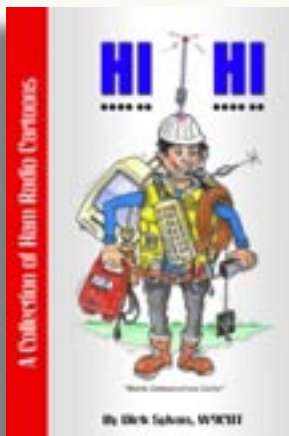
Jeff Murray, K1NSS,
at Drawing Board



As always, my cartoons are seen every month in the *K9YA Telegraph* and also reprinted in *RadCom*, the official publication of the Radio Society of Great Britain.

We hope you enjoy the "Four Cartoonist Amigos" cartoon as much as we enjoyed creating it. ■

HI HI — A COLLECTION OF HAM RADIO CARTOONS



A graduate of the Art Institute of Chicago, Dick's impressive career involves the design of consumer and industrial products and packaging. Recently, semi-retired, Dick serendipitously discovered cartooning—focusing on his lifelong interest in ham radio.

Influenced by the gadget-filled and hilariously skewed world of legendary cartoonist Rube Goldberg, Dick brings that visionary's spirit to ham radio.

For information about ordering Dick's book, visit his Web site at: <http://www.k9ya.org/w9cbt>



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My QSO with the USS Bennington

Flashing Lights with CVS-20

Paul Signorelli, WØRW



Paul, WØRW, with his Flashing Light Setup

The USS Bennington (aircraft carrier CVS-20, known as “Benn”) was scheduled to be in Santa Monica Bay (California) for a special open house in May 1966. That weekend the Navy shuttled visitors and VIP’s (including Miss Santa Monica) offshore to visit the WWII veteran warship. I was familiar with the vessel having been aboard her on a IEEE cruise to Catalina Island a year earlier.

Hearing of the event I wanted to see if I could signal them. It was a warm spring Saturday night when I drove up to Topanga Lookout, 2,400 feet above Malibu. I scanned the coastline and saw the Benn easily in the shimmering moonlight. The moon was waning in the southwest and the Benn was in the southeast.

Transmitter: I had my GE 4540 (450W, 7-inch diameter) aircraft landing light (good only for 3-wpm) and a Grimes signal lamp; model K-3 (100W) in my car. The Grimes has a trigger finger switch and the GE 4520 lamp is good for high-speed signaling because it has a fast extinguish time.

In that time period big spotlights, called “Suns,” were standard equipment for use on nighttime transmitter hunts (T-hunts) which were very popular activities.

Receiver: Spotted the Benn about 15 miles away with my 10x50 binoculars.

Contact: At about 0500z, I swung the 450W landing light back and forth across the Benn, which created a flashing signal. The 450W took two seconds to extinguish so it was only good for QRS. Soon I received a flashing response.

I used my 100W-signaling lamp (QRP/QRQ) to send my call sign. The Navy signalman on lookout sent a few letters and a bunch of “T’s.” He kept repeating letters over and over. I finally learned from his response that I had to send a dash after each word to acknowledge his signal or he would automatically repeat his last word. After I learned the sequence we had a great conversation for an hour. I asked if he had access to any radio equipment—he didn’t.

Benn’s tactical call was “Big Boy.” (If ships are always referred to as feminine, it should have been “Big Girl”).

He taught me to send “A” for CQ. I am not sure these are still the current procedures.

The USS Bennington was involved in the sinking of the Japanese Imperial Navy’s super-battleship Yamato in WWII. In peacetime duty the Benn recovered Apollo 4 from the Pacific Ocean.

She was decommissioned in 1970 and towed to India to a ship breaker’s yard in 1994.

You can see her history at: <http://www.history.navy.mil/photos/sh-usn/usnsh-b/cv20.htm>

Her crew maintains contact on the Bennington e-mail reflector. I e-mailed Jack, WD6AEI, who was on board that night. I am still waiting for a QSL card. Most of the crew was on leave and had a good time on shore.

You can view photos and read the USS Bennington’s history at: <http://www.uss-bennington.org/photos.html>

See flashing light signal procedures at: http://www.tpub.com/content/aviation/14243/css/14243_73.htm

I recently outfitted my HeNe laser with a CW shutter and connected it to my keyer but it’s probably not a good idea to signal a carrier with a laser these days. If you see a flashing light in the hills, please answer, K K K K. ■

*“...please
answer,
K K K K...”*



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WAR—CW at 500 wpm

Hams to the Rescue

Rod Newkirk, VA3ZBB/W9BRD

When the attack on Hawaii yanked the U. S. A. into WWII early in December, 1941, the country's military communications needed transformation overnight. Leisurely peacetime networks were suddenly swamped by a flood of shortwave traffic. The worst bottleneck was the War Department Message Center in the old WWI Munitions Building at the nation's capital. Help was vital.

Routine amateur radio, of course, had been suspended. Telegrams were dispatched to members of the Army Amateur Radio System urging them to tackle the problem in Washington. With Europe already at war, I had signed on with AARS (forerunner of today's MARS) after high school in Chicago, so I eagerly joined the parade. Some snappy YL ops also answered the call. Initial pay was subsistence level, lower Civil Service grade, but that wasn't important. Radio adventure beckoned, my first job away from home. Tojo, Hitler and Mussolini had put a quick end to the Great Depression. America was going back to work.

Billeting in Foggy Bottom was tight. Other government agencies were adding to the personnel influx. We were in for 'round-the-clock shift work on a 44-hour week. Many of my new colleagues held ham callsigns familiar to me from 80-meter traffic nets. Very popular in group was Bob Denniston, W9NWX, who later became president of ARRL. But weirdly conflicting work schedules made it difficult to cement friendships. As for socializing on the job, not much chance. The WDMC was organized chaos, a roaring bedlam.

Washington was exciting, all right, but our heady experience was tempered by bad news from overseas, Uncle Sam was getting trounced. Japan was overrunning Asia and the Pacific. Doolittle's symbolic bombing of Tokyo helped morale, but not until months later when the Navy spanked an enemy fleet near Midway, was there much to cheer about. Meanwhile the traffic load at WAR, our very appropriate callsign, built higher and higher. We had our hands full.

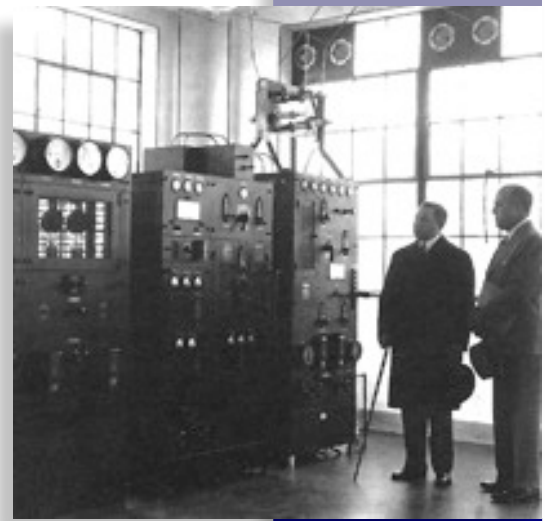
Duties were challenging from the start. Crammed orientation on Signal Corps procedures, massage pro-

tol, priorities, routing, Z-signals, ad inf., soon enabled us to carry our weight. Most traffic, exchanged with similar smaller installations around the country and beyond, moved by Morse code "slip" on shortwave. Inbound, signals received at nearby Battery Cove produced siphon-inked tape at WAR which was visually transcribed on a typewriter. Outbound, keyboard perforators punched tape that zipped through keying heads to activate transmitters at Fort Myer. This technique, a radio/mechanical marvel, could carry data at hundreds of words per minute over a single HF channel.

The technology was, however, labor intensive. Under ideal ionospheric conditions at 500 WPM, a dozen transcribers, grabbing baskets of fresh tape, could barely hold their own. Segments of tape were pulled from right to left by foot-pedal control through slots mounted just above mill keyboards. After a few hours of this you walked in circles. An

equivalent team of punchers were grinding away at the other end. Encryption was increasing, another headache. Hotshots who could approach 100 WPM on plain text burned out fast at 25 WPM on monotonous five-letter code groups. Copy was typed ten words per line, fifty words per paragraph, one hundred words per page, to agree with preamble word count. Curiously, some of WAR's speediest slip readers, commercial ops from RCA and Mackay, comprehended no CW by ear.

The intricacies involved in surviving all WAR's whirring-gadgetry would fill a humorous book or two. One year of that noisy circus was quite enough for me. The pace of automation was accelerating. Soon



David Sarnoff of RCA (L) and Capt. Stoner, in Charge of the War Department Message Ctr., Inspect Radio Transmitters at Station WAR

"Billeting in Foggy Bottom was tight."

CONTINUED - WAR on Page 8



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ordered to prevent the transmission of information, including weather reports, of value to the enemy.”

In addition to active service enlistees, all amateur radio operators even those “who because of marital status, age, or slight physical defects are ineligible for active military service” were invited “to offer their services to the war department in civilian capacities.”



Morse Code Class

January 10, 1942: “AMATEUR RADIO SETS SILENCED BY FEDERAL ORDER”

January 9, 1942, the Federal Communications Commission orders the cessation of all amateur radio operation. “The commission, acting at the request of Defense Communications board, explained

that, ‘national defense considerations require such complete cessation.’” Previously, on December 8, 1941, the FCC halted all amateur activity except those authorized by the Defense Communications board “upon recommendation by “federal, state, or local officials in connection with defense.” Of 65,000 U.S. amateur radio operators, about 1,000 were operating under special authorization.

“FRIEND OF THE YANKS”

The advice column “Friend of the Yanks” answered military draft and service questions.

January 31, 1942: “Friend of the Yanks” columnist, Clay Gowran, replies to a query about the qualifications needed for commission as an officer in the Army Air Corps.

“Communications training—Completion of two years of engineering studies, or completion of two years of college, plus an amateur radio license.”

February 14, 1942: Responding to individuals wanting to enlist in the Army Signal Corps. “Aside from those with the qualifications mentioned, only men possessing commercial or amateur radio licenses may enlist directly into the signal corps.” <http://www.archive.org/details/RadioatW1944>

The same column notes the Signal Corps, “charged with the breeding and training of homing pigeons,” was seeking pigeon breeders.

March 8, 1942: “HERE’S HOW NAVY GRINDS OUT RADIO ACE IN 3 MONTHS”

At Chicago’s Balaban & Katz television studios the U.S. Navy provides the “equivalent of a two year college radio engineering course into three months...” Upon graduation, the student’s duties will include “...the upkeep of such devices as RADAR, the radio detector for aircraft.”

“The students are... mostly former ‘hams’—amateur radio operators—or radio service men.” Students (ages 25 to 55) at the school take classes that include: “mathematics, electricity, radio, drafting, and kindred subjects...” followed by advanced training. Graduates of the radio school receive the naval rank of radioman, second class.

The school “is the only privately endowed one in the country with B&K paying for instructors and equipment and donating classrooms.”

July 17, 1942: “CQ, CQ, CQ, GIRLS: ARMY NEEDS YOU TO TEACH RADIO”

It wasn’t just men the government required: “So urgent is the need for qualified instructors to speed training of thousands of radio technicians for the United States army air force that... a call went out for 10,000 new instructors, both men and women, who can qualify to train men to operate radio transmitters and receivers.”

“...the cessation of all amateur radio operation...”

The Signal Corps, which the article notes had more rigid standards for instructors than the Air Force, states, “...women who can meet its standards may qualify as instructors.”

July 28, 1942: “ARMY SEEKS 1,200 RADIO AMATEURS TO TEACH CADETS”

Brigadier General Arnold Krogstad, head of the “new army aviation radio school” calls for “...all licensed amateur radio operators to enroll for training as instructors in the course.” Additional requirements for would-be instructors: “...six hours of college physics, 20 hours of college mathematics, and either an operator’s license or technical training.” The pay? Between \$1,620 and \$3,200 per annum.



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August 30, 1942: "AMATEUR RADIO LINK TO BE WAR AID"

A planned "ultra high frequency" (2 ½ meters) emergency radio network, a part of the War Emergency Radio Service, created June 1942, will serve Chicago's northwest suburbs. WERS stations will be "used only for essential communications relating to civilian defense and only during or immediately following actual air raids, impending air raids, military operations, or acts of sabotage." The network will be the responsibility of the licensed operators of the Northwest Amateur Radio Club.

Essential industries, transportation hubs and military installations in the area included: Douglas Aircraft (this facility eventually became O'Hare International Airport), Glenview naval air base (which included aircraft carrier training on nearby Lake Michigan), Benjamin Electric Company and many railroad lines.

The club's annual participation in Field Day is described as: "an actual test of the amateurs' portable emergency powered equipment which could be used in case of emergencies, floods and disasters of any kind where ordinary communication has failed."

February 28, 1943: "SOUTH SIDE CLUB OF RADIO HAMMERS IS GIVING AID IN WAR"

It was not business as usual on the bands, but radio clubs carried on. For the Hamfesters group (still extant), many of its nearly 500 members served "the army, navy, and marine corps, either as civilian instructors or radio operators." Hamfesters, the article notes, offered well-attended civilian Morse code classes, and like Northwest Amateur Radio Club, Hamfester's annual participation in FD is remarked.

March 20, 1944: "LIP MIKE' NEW SOUND MARVEL TO GUIDE ARMY"

The model T-45, "lip mike," developed for the United States Army by Cheyney Berkley of the ARRL's QST and A.R. Kahn of Electro-Voice Manufacturing Co. (and later a co-founder of Ten-Tec).

December 13, 1944: "RADIO AMATEURS ARE WATCH DOGS FOR AIR LANES"

QST reports "Radio amateurs are proving Uncle Sam's watch dogs of the air in war time." According

to Oliver Read, a Chicago amateur radio operator, hams as "...members of the radio intelligence division (RID) of the federal communications commission... have done an outstanding job for four years in policing the airways, tracking down clandestine stations, trapping enemy spies, and saving human lives."



Included among the 400 illegal radio stations detected and "put out of commission" by the division was the German embassy in Washington two days after the attack on Pearl Harbor. Added to the tally are "more than 200 axis spies in South America" and "9,000 cases of alleged unlicensed or subversive transmissions in this country and elsewhere..."

The war in its last year—victory in sight—the great struggle continues.

"...trapping enemy spies, and saving human lives."

March 23, 1945: "INVESTORS' GUIDE"

Hallicrafters, a company "...specializing in short wave radio apparatus..."

"Since early in 1942 Hallicrafters has been making short wave receiving sets and transmitters, radar, and other electronic equipment for the military forces exclusively."

1939 Sales, \$865,824: Profit, \$25,221

1944 Sales, \$37,033,799: Profit, \$691,064

Post-war plans include continuing their line of products for amateurs and shortwave listeners, as well as equipment for commercial users.



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For the story of a Hallicrafters transmitter that “went to war” see: <http://www.archive.org/details/VoiceofV1944>

V-J Day—August 14, 1945

August 29, 1945: “AMATEUR RADIO OPERATORS STAY UNDER OLD LICENSES”

On August 22, the FCC announced, “amateur radio operators will continue to function under their pre-war licenses. The amateurs were authorized... to resume activities in the 112 to 115.5 megacycles bands for the first time since 1942.”

November 10, 1945: “AMATEUR RADIO RESTRICTIONS LIFTED BY FCC”

The FCC declares a gradual return to peacetime operation: new amateur frequency allocations will open; existing operator’s licenses are extended to May 15, 1946; and station licenses valid in December, 1941 will receive an extension to the same date. Communications with DX stations are again permitted. Operations from the central, south and west Pacific are prohibited. Hams will use their prewar call signs and those who moved to other locales “must operate under portable transmitter procedure.”

February 13, 1946: “FCC REOPENING RADIO LANES TO HAM OPERATORS”

It was a drawn-out affair, this business of getting back on the air. The FCC is again issuing new amateur radio licenses. Now the approximately 3,000 hopefuls who passed their exams during the wartime ban can now exercise their operating privileges.

Kenneth B. Warner, ARRL executive secretary projected: “...the number of ‘hams’ to reach a new high of 250,000 within five years as compared with a peak of 60,000 prior to the start of the war...”

Amateur radio operation was suspended during wartime, but amateur radio operators did their bit and more as they served on America’s home front and distant front lines. As hams stood down in the post-war period the best was yet to come in an era fondly remembered as amateur radio’s “Golden Age.” ■

the WDWC would move to new quarters in the huge Pentagon being built across the Potomac. Some of our original gang enlisted in the Signal Corps on the spot. Others headed out to join the Navy, Marines, etc. I returned to Chicago as a civilian for a little family time before more wireless adventure in the southwest Pacific. The tide of war was turning. AARS and associated volunteers had done their job. ■

Call for Articles

Ham Radio’s Golden Age Remembered

Any old timers out there?

The immediate post-WWII period to about 1970 is often referred to as the “Golden Age of Amateur Radio.” Do you have firsthand memories and experiences of that period you would like to share with hams worldwide? If so, the *K9YA Telegraph* invites you to submit your story to us.

Not sure of your writing skills? Not a problem, the *Telegraph’s* staff will edit your manuscript. The important thing is to get your story out there. Hint: Save a thousand words, or two, and send some descriptive photographs with your story.

How to do it? Simple, see:

http://www.k9ya.org/write_for_us.htm

Ham Quips

DICK SYLVAN, W9CBT



**THINK YOU’VE GOT BOATANCHORS?
CHECK OUT WHAT I BOUGHT AT THE
NAVY SURPLUS AUCTION!**