The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

June 2019 Volume 25 Issue 06

MEETING/ ACTIVITY NOTES

Reported by
Marv Beeferman

The ON-LINE Broadcaster

The *Jersey Broadcaster* is now on-line. Over 160 of your fellow NJARC members have already subscribed, saving the club a significant amount of money and your editor extra work. Interested? Send your e-mail address to mbeeferman@verizon.net. Be sure to include your full name.

Well, I'm back from my yearly "Broadway Binge" which left the Kutztown Swapmeet and our Spring Repair Clinic in the rear view mirror so there won't be anything about these events in this month's issue. However, on the positive side, I managed to make my reservations for 2020 on a date that could not possibly interfere (I hope) with these events next year.

We are still trying to reach 1,000 subscribers on our YouTube channel to maintain free streaming of our monthly meetings. As of May 28th, we had over 940 subscribers so we are not quite there yet. Still, our webmaster, Dave Sica, still intends to maintain YouTube as our streaming platform. As a temporary measure, we'll be using Twitch as explained on our club's homepage (http:www.njarc.org).

Dave has publicized this request through other radio clubs, the Early Television Museum and online groups and as you can see, "the response has been heartening." Dave also wants to stress that subscribing doesn't come with any obligations; you don't have to give YouTube any personal information and you won't be bombarded with emails. In fact, you'll only be notified of new videos if you also choose that option after subscribing.

If you haven't subscribed already, you'll find a convenient link on the club's homepage (http:www.njarc.org). Also remember that there's no harm in asking friends and family to participate in this effort to reach our 1,000 goal! Again, it's free, it's fast and easy and will help the club.

Dave would also like to remind us that he takes the web streams from Twitch and archives them on YouTube. The last two meetings are already posted on our homepage.

Although I wasn't able to attend the May meeting, I was able to follow Al Klase's very well-received presentation "Practical Ham Radio for the Antique Radio Person" via our YouTube stream and the posting of the slides at https://bit.ly/2WoCv9T. Al covered a myriad of topics including Moore's Law, UHF/VHF repeaters, antenna systems, antenna tuners, getting/upgrading a license, and 21st modern receivers and transmitters. Member Gary Berg (KD2RZN) appreciated a "great presentation," just having passed his Tech and General tests "but have not gotten any ham gear, possibly thinking about the Eleccraft KX3." Member Bill Sloma said he would like to use the presentation as a reference to set up his station. Thanks Al for reviving interest in another aspect of the club's activities.

President Richard Lee would like to thank all the participants at our Spring repair clinic this May. Although missing a few of our "experts," Richard said that we managed to get by via multi-tasking with our clients.

Richard also suggests that we might want to start an "I remember when thread." In a recent club cleanout, he found a number of old receipts from New Jersey electronics suppliers dating from the 1950s, 60s and 70s like William Electronic Supply Co., Nidisco Inc., Lafayette Radio & Electronics, Arrow Electronics, Federated Purchaser Inc., Aaron Lippman & Co., etc. These companies were located throughout New Jersey in Edison, Union City, Jersey City, Passaic, Hackensack, Ridgefield, Trento, Newark, Plainfield, Bradley Beach, Morristown, etc. It would be nice to know what companies still exist and in what locations. Your comments are welcome via the NJARC Communicator.

Tube Lore - A Reference for Users and Collectors (1996) by NJARC honorary member Luwell Sibley has been called "the ultimate tube reference" book. It is no longer in print and just try to get a used copy for under $100! However, Ludwell has recently announced that there is indeed a new edition in process. It's 288 pages and covers "gridded" tubes of "universal interest." For "weird" radar and microwave parts, there's another 105 pages on CD-ROM. Lud said that it will probably be another month or so before the book is available and it will most likely be offered through vendors in the tube business.

Member Bill Zukowski realizes that most of us occasionally need a cabinet refinished but are lacking the ability. He has electronically restored a few consoles and the customer had the cabinets refinished, including veneer work, by a local vendor He says they look great...no heavy gloss and almost like new. Bill hasn't sent the restorer any business as of yet but he is planning to begin with one of his cathedrals when he's done restoring it. The vendor is Tom's Furniture Refinishing, 2001 Route 9 North, Toms River NJ, 08755 (732-557-0100). If anyone else has experience with "Tom's," let's hear from you. You can't beat a local resource if the work is good and the price is fair.

MEETING NOTICE

The next NJARC meeting will take place on Friday, June 14th, at 7:30 PM at Princeton's Computer Science Hall. Directions may be found at the club's website (http:www.njarc.org) with a map showing the location of the Science Hall in relation to Bowen Hall. This month's presentation, by NJARC member Darren Hoffman, is titled "Vacuum Tube Manufacturers of the Past." We'll also be holding a small auction "of some very nice radios." Please take notice of the temporary building location change from Bowen Hall to the Computer Science Hall. Signs will be posted in the Bowen Hall parking garage showing directions to the Science Hall.

THE JERSEY BROADCASTER is the newsletter of the New Jersey Antique Radio Club (NJARC) which is dedicated to preserving the history and enhancing the knowledge of radio and related disciplines. Dues are $25 per year and meetings are held the second Friday of each month at InfoAge or Princeton University. The Editor or NJARC is not liable for any other use of the contents of this publication other than information.

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Tech. Coordinator Al Klase and I have been kicking around the idea of a meeting program for September accentuating homebrew radios. Many of the early homebrews used a variety of circuits that were quite interesting and instructions for their construction could be found in radio magazines of the day. We envision some kind of show-and-tell and lecture that includes examples built by early experimenters that are now part of your collection or reproductions, both recent and vintage, built by our members. Your input would be appreciated.

As announced in our "Meeting Notice," June will feature a small auction. Here's some examples provided by President Lee - all items are tubed and speaker is good:

Stromberg Carlson 5-A speaker.

Colonial 10 or 12

Freshman Masterpiece

For you audio fans, I came across a site called the Audio History Library (AHL) (audiohistory.com). The AHL advertises that it serves as "the world's only repository and resource for the technological history of acoustic and electronic products that have made possible the very existence of the radio, television, concert touring, film and recording industries." The AHL endeavors to become an on-line encyclopedia chronicling every aspect of the development of the technologies of sound recording, sound storage, broadcasting and sound reproduction.

Although the library collection focuses on manufacturer's product literature, included are equipment reviews, photographs, poster art, books and industrial design information. The photo collection includes the first speaker manufacturing facility in the western hemisphere, the world's first use of a public address system, the first microphone used by a Pope and the first movie soundstage.

Unfortunately, the museum itself is a "pop-up" so the web site offers no information on viewing artifacts directly. In a YouTube posting from 2018 (see below), a reference is made to the library being located in New Jersey but that's as far as it goes.

https://www.youtube.com/watch?v=4VTGdQHjXts

Perhaps it might be worthwhile to investigate what this resource is all about. Contact information is as follows:

Louis Manno
Lenox Hill Box 1979
New York, NY 10021
212-988-0642
louismanno@gmail.com

Upcoming Events

July 12 - Monthly meeting at Princeton's Computer Science Hall; Alan Wolke presents "SDR (Software Defined Radio) for the Antique Radio Listener"
July 14 - SCARC Sussex Hamfest, 37 Plains Rd., Augusta, NJ 07822
July 20 - Summer Tailgate Swapmeet/ Hamfest at InfoAge
August 3 - Summer Repair Clinic at InfoAge
August 9 - Monthly meeting at Princeton Computer Science Hall; topic TBA
August 13-17 - AWA annual convention, Henritta, NY
September 13 - Monthly meeting at InfoAge; "Homebrew Radios"

September 19-21 - Kutztown Antique Radio Swapmeet
October 11th - Monthly meeting at Princeton's Bowen Hall; presentation by Mike Molnar (topic TBA)
November 2 - Fall NJARC Swapmeet-Hamfest at Parsippany PAL
November 8 - Monthly meeting at InfoAge building 9032A; Show-and-Tell/ Hints and Kinks
November 16 - Fall Repair Clinic at InfoAge (building TBA)
December 4 - E-Board meeting
December 14 - Annual Holiday Party at West Lake Golf & Country Club

THE APARTMENT OF MISS SYLVIA B. FISCH

Edited by Marv Beeferman

A 1923 photo that appeared this year in the photo archive *Shorpy* titled "Miss Sylvia B. Fisch listening in to a radio program" was addressed in a short article by Richard Quam in the January 2019 issue of *Horn of Plenty* (newsletter of the Puget Sound Antique Radio Association).

One commentator who discussed the photo with members of his local radio club felt that the woman was listening to a radio (probably a TRF or regen set) which was located somewhere else in the house, with jacks that could be used to listen in various rooms. It was also speculated that the item behind the chair was a speaker to use when more than one person wanted to listen. The box under the speaker might be an amplifier to get sufficient volume for the speaker. The amplifier would be plugged into the jack instead of the earphones.

The commentator was not sure why anyone would take a photo like this except as an example of "conspicuous consumption" since this would be very advanced for 1923. He also noted that having the radio in another room wouldn't be very practical since a lot of "fiddling" would be involved to find and keep a good signal.

Another commentator felt that the item behind the chair was an antenna with the lower part being a crystal set and the wall connection was a ground. Contrary to this, another person thought that the radio was in another room and the plate on the wall was an audio output to be used with headphones or a speaker.

Finally, someone speculated that the "pole thing" was most likely a loop antenna and the cover is just to conceal it in an attempt to blend it in with the surroundings. "The antenna probably swiveled for best reception...I also believe that the radio set itself is behind the chair on the floor and that is where it hooks up to the antenna and the headphones. The cord coming from the wall is a power cord."

Richard Quam in the referenced *Horn of Plenty* article suggests that the young lady looks rather well-to-do and the room is nicely furnished. (Editor's Note: It was ultimately discovered that Sylvia Fisch was one of two children of Newark hatter Joseph Fisch and his wife and business partner Fannie Fisch.) This made Quam think that she could be in one of the high-end apartment buildings of the time (1923) that were wired so all units had access to a central radio. Or, she was living in a house similarly wired.

Mr. Quam points to the October 1923 issue of *Radio in the Home* that has an article about apartment hotels in Newark and Philadelphia constructed with rooms to a central roof-mounted radio:

"For several months, the Ritz Apartments, 229 Clinton Ave., Newark, have had a splendid radio service. The receiving set, located on the roof, furnishes radio service to all of the seventy-two apartments of the hotel. The superintendent of the building reports that so popular has 'listening-in' become, especially in the winter months, that elevator service in the evening has decreased considerably, the patrons preferring to listen in at home."

"At the Pennsylvania Hotel, a special radio room has been built on the roof, where first class receiving apparatus feeds the signals to powerful amplifiers, which in turn distribute the broadcasts to lobbies, smoking-rooms, lounge, grill room, dining room and the large auditorium. This service can be supplied separately or simultaneously to all rooms."

"In the radio rooms on the roofs of the Lincoln Drive and the Garden Court Apartments, three radio receiving sets are to be installed, all connected to the house radio service systems. Tenants of these buildings will thus have a choice of whatever three broadcasts are being received at the time the tenant wishes to use the private radio line in his apartment."

Master Atlee Van Fleet can listen-in by himself in his home in the Ritz Apartments in Newark, New Jersey. (From *Radio in the Home*, October 1923.)

A FIX FOR WD-11 TUBES

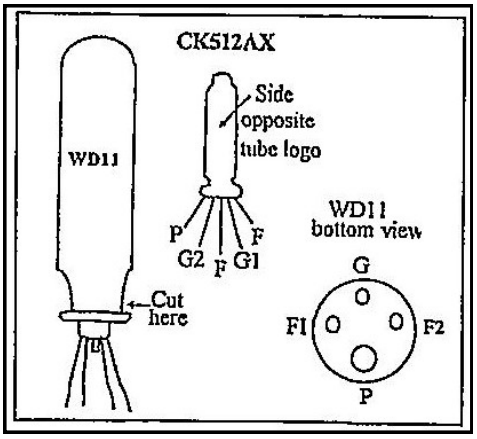
By Lea Barker

The following article first appeared in the Fall 1998 Ottawa Vintage Radio Club (OVRC) newsletter and later in Vol. 20, No. 6 (December 2018) of the "Tube Collector." Although the process might seem a little work-intensive for newbies, the cost of a good WD-11 is probably well-worth the effort. Just to get your Radiola IIIA working, you might want to just experiment with a tube replacement by just using a WD-11 base and save the "insertion" effort for a later date. With a little searching on the web ("WD-11 Replacements") you can find some additional methods and ideas on creating replacements...Ed

Here is [a] way to "restore WD-11 tubes to operation which involves the insertion of a smaller tube with a 1.25-volt filament inside the glass envelope of the dud WD-11. For the active element, I use the Raytheon CK512AX hearing-aid tube. This is an ultra-miniature pentode with wire leads.

First, ensure the glass envelope is loose from the old cement in the dud WD-11 tube base. It usually is, but it can be encouraged with a good solvent like acetone. Remove the tube by desoldering the leads from the tube pins: wick the solder out and pull on the tube envelope.

Now, get out your trusty Dremel tool and insert one of the small, thin abrasive cutting discs. What we are going to do is to cut off the bottom of the glass envelope where it narrows and has a slight flare, as shown in the illustration:



This takes some nerve and a steady hand, as no one wants to ruin a good WD-11 glass envelope, even if the tube itself is a dud. Put on a respirator mask and safety goggles; the abrasive wheel is going to heat up the glass to red heat and microscopic glass wool will be spun off. It's not good to breathe this!

First, release the vacuum by crushing the tip of the evacuation tube at the bottom of the glass envelope with a pair of pliers. Now, with a light touch, run the Dremel tool all around the flared area of the tube to score it. This will prevent a ragged cut if the glass should crack by itself. Then, apply a little more pressure to the tool. The abrasive disk will quickly cut through the glass with the glass at the leading edge of the disc becoming red-hot. Go all around the tube. When the bottom section has separated, withdraw and discard the tube elements along with the glass press and wire leads.

Prepare the glass envelope by spraying the interior with some silver bumper paint. This is purely cosmetic, because it covers any clear areas of glass where there is no getter metal. This will hide the view of the new tube inside the envelope. It will take a few hours to dry unless it is encouraged with a hair dryer.

Take the CK512AX and add about one inch of spaghetti insulation to the tube leads keeping the screen leads together. Arrange the leads with the appropriate orientation, insert the CK512AX into the WD-11 base and solder the wires in place.

Now glue the glass envelope back in place. Put some clear epoxy around the bottom of the WD-11 envelope, slide it over the CK512AX and press it in place, ensuring that it's reasonably aligned with its base and is not crooked. Wipe off excess epoxy.

And voilâ! A replacement WD-11 with the same filament voltage and good performance.

The following information was added by the OVRC editor:

The CK512AX is the most common of the hearing-aid types and actually has a 0.625-volt filament. If the filament rheostat in the associated radio doesn't have enough resistance to get the voltage down to 0.6, the tube can probably be used by including a 1/4-watt dropping resistor in the WD-11 base - say 33 ohms. Alternatively, one could wire a silicon diode across the filament pins in the base such that, in conjunction with the filament rheostat in the set, the filament never gets more than about 0.6 volts.

Lots of other subminiature battery tubes should work: the CK526AX, CK527AX, 1AG4, CK542DX, CK534, 6519 and 6281 have the same pinout. There are lots of 1.25 volt types with other pinouts: 1AD4, 1AE5, 2E31, 2E35, etc. The late Dick Mackiewicz once sent me a WD-11 replacement using a domed plastic tube (cigar package?) for the envelope with a 1AD4 inside.

A BLAST FROM THE PAST!

THE FIRST CLOCK RADIO?

By
Marv Beeferman

Occasionally, I dig back into the Broadcaster archives to feature a past article that might have slipped past member's memory. In any case, new members who have never seen it may find it of interest. What prompted my choice of this article from June 2006 and its follow-up from July of the same year was a note from Len Arzoomanian in January 2016:

"I came across 2 issues of your club newsletter with articles by you on the India Ivory Company and their crystal clock radio. I am a historian and collector of Rhode Island made radios and parts. I would like permission to post the articles on my website on the page dedicated to the India Ivory Company."

Mr. Arzoomanian was able to supply additional information regarding the history of the India Ivory Company which I added to my original article and offer "the rest of the story."...Ed

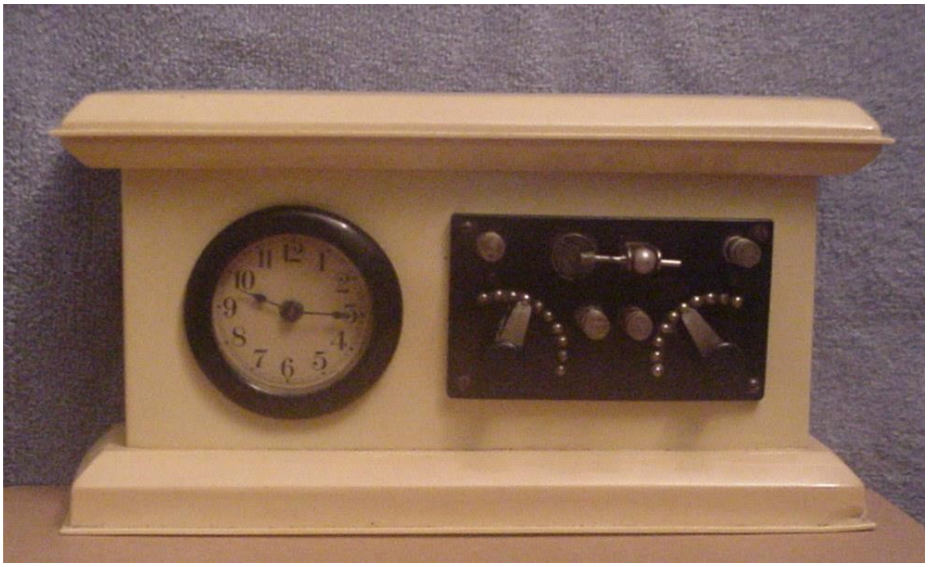
I purchased what might be considered one of the first "clock radios" ever made about 15 years ago from Bruce Mager of "Waves." It was displayed at one of our club show-and-tell sessions but it was only until recently that I decided to do a little research regarding its origins.

On the rear of the case is engraved "RADIO CLOCK CASE - INDIA IVORY CO." Printed along the bottom edge of the clock is also found "THE INDIA IVORY CO., PROVIDENCE R.I." The India Ivory Company manufactured miniature mantle, desk and table clocks encased in a celluloid material that was sometimes described as "French ivory" or "ivorine." They are easily recognized and distinguished by their classic design using pillars and columns.

The core business of the India Ivory Company was celluloid buttons and novelty manufacturing. Incorporated in 1920, the company's president and secretary was Joseph Zitowitz. The company was located at 238 Thurber Ave., Rhode Island with facilities also at 163 Thurber Ave. It seems like the end of the line came in June 1925 when the company was appointed a receiver by the Rhode Island Superior Court following suits in October and November 1926 and charges of "attempt to defraud" in 1927 that were dismissed.

The crystal radio set is identical to the Beaver Baby Grand (Beaver Machine & Tool Co., Newark, N.J.) that was manufactured between 1922 and 1924. It came in various styles (seven versions have been identified by collectors) with cases made from oak and molded hard rubber and prices ranging from $3.40 to $18.00 depending on accessories.

This "clock radio" is something of a rare bird with limited sightings. One version is said to have brass (or gold) colored hardware. Another example showed up in



The first "clock radio?"

The Beaver Baby Grand - note its similarity to the set in the "clock radio."

Interior of the 1924 Baby Grand showing its multi-tapped coil. With no antenna tuning, this set was designed to receive only a limited number of nearby stations. The set was available in a handsome gift box, with headphones, for $6. The set by itself, without headphones, sold for $3.40.

an old equipment contest at Radiofest 1992 in Elgin, Illinois. Variations of the Beaver Baby Grand crystal set are shown in a few versions of the clock radio.

While I was doing research on this article, I came across and purchased offerings for two clocks which were similar in design (without the radio) and made by the same company.

THREE MORE CODE TALKERS FADE INTO HISTORY

Edited by Marv Beeferman

With memories of the 75th anniversary of the Normandy invasion still fresh, although linked to events continents away, the recent deaths of three more of the last living Navajo Code Talkers is brought to mind. (Navajo leaders believe fewer than 10 Code Talkers remain alive today. Chester Nez, the last surviving member of the original 29 Code Talkers died in 2014.) On June 12th, 2018, Samuel Tom Holiday died. On January 13th, 2019, Alfred K. Newman passed away. On May 24th, 2019, John Pinto and longtime New Mexico lawmaker also died. You might remember that three surviving original Navajo Code Talkers were honored at the White House in November 2017, although the event was largely overshadowed by President Donald Trump's attempt to insult Senator Elizabeth Warren by dismissively calling her Pocahontas. Prior to

that comment, Trump spoke in awe on a topic he admitted he had known little about beforehand.

Samuel Tom Holiday joined the Marine Corps at 19. During the war, he served with the 25th Marine Regiment, 4th Marine Division and participated in operations in various locations in the Pacific, including Kwajalein, Saipan, Tinian and Iwo Jima. During his time in combat, Holiday was injured by an exploding mortar, which hindered his hearing for the rest of his life. He later received a Congressional Silver Medal and a Purple Heart. In 2017, Holiday said that he was mistaken for a Japanese soldier during the war by his fellow American soldiers. However, he said his dedication to the cause never wavered despite these discouraging remarks.

Alfred K. Newman died at the age of 94. In November 1943, Newman was part of the Guadalcanal campaign before he spent a month on Bougainville Island. He then went to Guam, serving with the 1st Battalion, 21st Marine Regiment, 3rd Marine Division before ultimately landing for the end of the Battle of Iwo Jima.

Code Talker John D. Pinto also died at the age of 94 and was the longest-serving senator in New Mexico, where he had been serving since 1977. Pinto advocated for education reform and anti-poverty programs. Receiving a Congressional Silver Medal and lifetime achievement award, Pinto once recalled going hungry at times as a child while his parents juggled odd jobs and said the experience influenced his work on issues of homelessness as a lawmaker. Although fully prepared for deployment as a Code Talker, he never served overseas since the war ended in 1945.

Origin of the Code Talkers

The plan to use the Navajo language as a secret code began with Philip Johnston, who had spent his childhood on a Navajo reservation while his parents served as missionaries.

The idea to use a Native American language as a code was not new. The US military had used the Choctaw language during World War I as part of its secret code, but Germany and Japan had worked to learn Choctaw and other Native American languages during the interwar period. But the Navajo language's syntax and linguistics are particularly tricky for non-Navajos, and it is not written. So the Marines recruited and trained 29 Navajos at Camp Elliott near San Diego beginning in 1942. Those 29 Navajo created more than 200 new Navajo words for military terms and committed them to memory. For example, the Navajo word for "shark" was used in code to mean "destroyer."

In simulated battles, the Navajo code proved much faster than the encrypting machines being used at the time. So, in August 1942, 15 code talkers - just over half the recruits - joined the Marines for combat duty amid the assault on Guadalcanal.

After the first battle, Major General Alexander Vandegrift, commander of the 1st Marine Division, sent word back to the US asking for more Nvajos:

"This Navajo code is terrific," Vandegrift said. "The enemy never understood it. We don't understand it either, but it works. Send us some more Navajos."

More than 350 people had learned the code by the end of the war. As stated, none of the original 29 code talkers who invented the language are still alive. Chester Nez, the last surviving member of the original 29, died in 2014.

The program wasn't declassified by the military until 1968, and it would take several more decades before the story received wider recognition. In 2001, President George W. Bush presented the 29 original Navajo Code Talkers with the Congressional Gold Medal.

Private First Class Preston Toledo and his cousin, Private First Class Frank Toledo, relay orders over a field radio in their native tongue on July 7, 1943.

"On the Air" for the Last Time?

On April 4, 2014, as described in an article in December 2014 *QST*, the culmination of more than a year of research, coordination, and testing brought together the last living member of the first platoon of Marine Navajo Code Talkers, a World War II TBX-6 transceiver and the Marines of the Marine Corps Network Operations and Security Command (MCNOSC). In order to dedicate a new annex to Code Talkers Hall in Quantic, Virginia, a Marine officer was tasked to locate any pieces of history relevant to the Code Talkers that could be displayed at the entrance of the hall. It was also planned to have an operational radio available as well as the last remaining original Code Talker present for the dedication.

Enter NJARC member Rob Flory (K2WI) who just happened to have an operational TBX-6 radio in his collection. Rob, who has an impressive collection of vintage naval radio equipment, agreed to part with his TBX-6, which was instrumental in making the event an overwhelming success.

In its original configuration, the TBX-6 transceiver consisted of four components - the transmitter/receiver in one box, a hand-cranked generator, an accessory case, and the antenna. The receiver was powered by batteries and the hand-cranked generator provided +500 V plate

voltage and filament voltage for the transmitter.

The TBX-6, as fielded, was a portable, tactical HF transceiver operated by three Marines. The transmitter is capable of 9 watts on CW or 3 watts on AM from a one tube, 837 pentode final and is crystal or master-oscillator controlled. Ranges approximate 30 miles for CW transmission and 15 miles for phone transmission. Though the TBX-6 is a transmitter/receiver, the transmitter portion and the receiver portion are powered separately. A hand-cranked generator, gasoline engine generator, or dynamotor powers the transmitter while batteries or a rectifier powers the receiver.

The transceiver was carried by one of the Marines. A second Marine carried the battery and accessory box (headset, microphone, key, receiver cable, and spare tubes) in another canvas bag. The third Marine carried the generator and antenna.

The antenna is a 24-foot guyed whip with a unique connection that is rarely seen by today's amateurs. The feed line is connected to the transceiver by what today resembles an automotive spark plug connector.

After overcoming hardware issues, propagation and weather challenges, reliable contacts were made with Flory's TBX-6. Initially, a G5RV antenna was used and then an AS-2259 NVIS (Near Vertical Incidence Skywave). These allowed successful contacts on 3885 kHz to local hams assisting in the test. A request for the special event call sign N4C (Navajo 4 Code Talker) was processed by the ARRL.

Corporal Chester Nez, since deceased original Code Talker, was guest of honor at the ceremony. When the subject of the TBX-6 arose, Nez was asked how long a Marine had to crank the generator. Nez quickly responded - "All day!'

During the ceremony, Corporal Nez took the TBX-6 microphone in hand and, in the Navajo code, transmitted his first transmission on Guadalcanal, 71 years earlier: "enemy machine gun nest on your right flank - destroy." This was probably the last time one of the original Navajo Marines would transmit the code, which was never broken by the Japanese, and he did it on a TBX-6 radio formerly owned by an NJARC member!

The TBY

In the majority of "code talker" photos, the TBY is the radio of use. These portable, high frequency transmitter-receivers were capable of two-way communications by either voice or CW on any one of 130 different channels within a frequency range of 28 to 80 MHz. It put out 1/2 watt from a push-pull Hartley oscillator. The transmitter was quite unstable and the regenerative receiver was quite broad. Usually operated by two "talkers" with the second operator acting as a monitor, the TBY could also be used as a one man backpack radio as opposed to up to four individuals required for the TBX-6.

The TBX-6 transmitter/receiver.

Les Groshong and J.B. Martin provided the following comments "concerning Marine radios" which might question Chester Nez's recollection of which radio he actually used:

"At the battalion level, up through Saipan, we had no hand-held radios. The TBY, a one man back pack, battery operated unit was used at the company level. It was fairly efficient, but usually confined to line of sight operation. Going into Saipan there were 6 TBY's in service. At the battalion headquarters level, we had one TBX powered by a generator. It usually was carried by 4 men and consisted of antenna, generator, transmitter and receiver. Efficient, but the antenna had a tendency to be seen from a distance, and getting 4 men together after the Tarawa landing proved to be impossible."

The TBY transmitter and receiver are housed in an aluminum cabinet to which the battery supply is strapped. The battery supplies voltages of +150, +3, +1.5 and -7.5 VDC. Besides the battery, power could be supplied via a wet storage battery/vibrator combination or a rectifier for 110 VAC input. The antenna is in 10 sections, fitted together in a "fish-pole" fashion to form a completed unit nine feet long. The end of each section is color-coded to facilitate proper assembly since different combinations of sections are used for different frequencies. The aircraft anti-noise type microphone uses a press-to-talk switch which transfers the transmitter-receiver units from receive to transmit when pressed. The key, cord, and plug assembly consists of a key housing in a small aluminum box. In addition to the key, the unit contains a send-receive switch that performs the same function as the press-to-talk switch on the microphone. A rubber cap protects the key when the set is operating in rain or in the presence of spray.

I was surprised to find an interesting posting by a TBY owner which brings back memories of recently deceased NJARC member Joe Croe:

"In an experiment with Joe (N3IBX) about 7 miles from me, I was able to successfully communicate with him while he was using modern amateur equipment. Since I could not tune my transmitter very precisely, I told him to tune to 29.0 MHz plus or minus 100 KHz and call me where he found me. This worked out fine. I was using a coaxial sleeve dipole (vertical) at about 40 feet and Joe was using a similar antenna."

The TBY-8: Member Bruce Williams and your editor are working to get their examples in operation.

RADIO

New Jersey Antique Radio Club's

Summer Tailgate Swap Meet

InfoAge Science History
Learning Center and Museum
2201 Marconi Road
Wall, New Jersey 07719

Saturday July 20th, 2019

Refreshments Available

40 spaces available
$25.00 for members
$30.00 for non-members
Bring your own tables

Open to the Public
8am to 12 noon
Vendor setup at 7:15 AM
$5.00 Entrance Fee
Club Donation

For Directions
Visit our website: www.njarc.org
or Mapquest
2201 Marconi Road, Wall NJ 07719

Vendors Make Your Reservations Now!
Contacts:

President	Vice President	Secretary
Richard Lee	Sal Brisindi	Marv Beeferman
(914) 589-3751	(732-857-7250)	(609) 693-9430
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