

# *The Old Barney Beacon*

## **An Interesting Story About The History Of The Car Radio**

*The David Sarnoff Radio Club put out this story about the  
"History Of The Car Radio." I found it interesting and thought I  
would pass it along.*

### **HISTORY OF THE CAR RADIO**

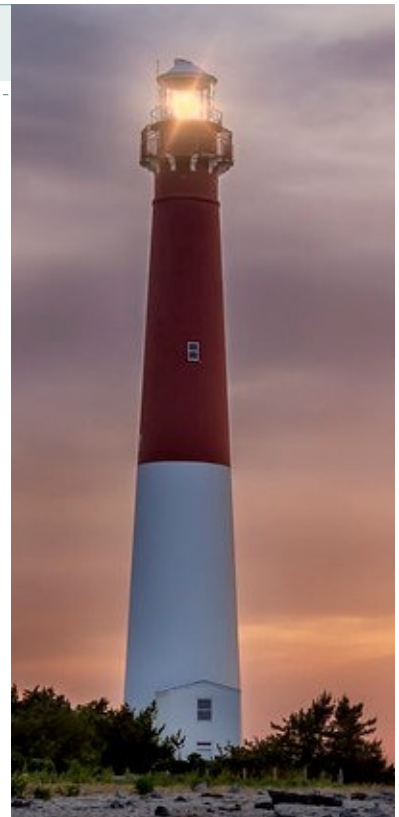
**Seems like cars have always had radios,  
but they didn't.**

**Here's the story:**

**One evening, in 1929, two young men named  
William Lear and Elmer Wavering drove their girl-  
friends to a lookout point high above the  
Mississippi River town of Quincy, Illinois, to watch  
the sunset.**

**It was a romantic night to be sure, but one of the  
women observed that it would be even nicer if  
they could listen to music in the car.**

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## DUES DEADLINE—April 1st

Dues are \$25

Students and Military are free.

Dues can be mailed to:

PO Box 117, Manahawkin, NJ 08050

Or for electronic submission:

<https://paypal.me/OBARCDUES>

(When submitting use send money to a friend option)

For any questions contact Tom Preiser, N2XW

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***Our next meeting will be on Wednesday, March 2, 2022 at the Ocean Acres Community Center.***

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### VE CORNER

We had a good VE session in February. Out of 5 candidates we had 2 new Techs and 2 new Generals!

VE sessions are held Wed nights before the meeting at the community center at 6pm.

If you are looking to upgrade your license or you know someone who needs a session please contact Rick at [n2rpq@arrl.net](mailto:n2rpq@arrl.net).

### WHAT IS YOUR STORY?

I'd like to start a section on how each of us decided to get into Amateur Radio. I'm looking for participants to write a brief story about your beginning in the hobby. If you are interested please send it to me at [n2rpq@arrl.net](mailto:n2rpq@arrl.net). I will use a different story each month. Feel free to include pictures if you would like. I'm sure there are many interesting, and probably some common, beginnings out there!

### WRITER'S WANTED!

I always enjoy when a member sends me a story to share with the group. Please join the club of newsletter writers. I'm always looking articles to include.



## Car Radio—continued from page 1

Lear and Wavering liked the idea. Both men had tinkered with radios (Lear served as a radio operator in the U.S. Navy during World War I) and it wasn't long before they were taking apart a home radio and trying to get it to work in a car.

But it wasn't easy: automobiles have ignition switches, generators, spark plugs, and other electrical equipment that generate noisy static interference, making it nearly impossible to listen to the radio when the engine was running.

One by one, Lear and Wavering identified and eliminated each source of electrical interference. When they finally got their radio to work, they took it to a radio convention in Chicago.

There they met Paul Galvin, owner of Galvin Manufacturing Corporation. He made a product called a "battery eliminator", a device that allowed battery-powered radios to run on household AC current.

But as more homes were wired for electricity, more radio manufacturers made AC-powered radios.

Galvin needed a new product to manufacture. When he met Lear and Wavering at the radio convention, he found it. He believed that mass-produced, affordable car radios had the potential to become a huge business.

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"When you've seen beyond yourself, then you may find, peace of mind is waiting there."— **George Harrison**

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## PRESIDENT'S MESSAGE

Ambition...sometimes we find ourselves just not having it especially this time of year.

We have had cloudy skies so much lately that when I see the sun I realize how much I miss it.

The good news is that Spring is just around the corner and we can all look forward to more time outside.

Our events will be starting up and I'm hoping we can have all of them this year!

Outdoor projects can start up. I'm talking about the important ones like fixing (or in my case putting up) antennas. Maybe we can even work on the house if we have time.

So get ready because if the ambition seems to have dwindled maybe the Spring will kick it back into high gear.

And after a good day outside. Sit back, relax, and get on the radio.

After all, radio is where you can share your day with others.

Until next month...

N2RPQ

## 2022 ARRL CONTESTS

DX Contest—SSB	Mar 5-6
Rookie Roundup	Apr 10
June VHF Contest	Jun 11-13
Kid's Day—June	Jun 18
Field Day	Jun 25-26
IARU HF World Championship	Jul 9-10
222MHz & Up Distance Contest	Aug 6-7
10 GHz & Up—Round 1	Aug 20-21
Rookie Roundup (RTTY)	Aug 21
Sept VHF Contest	Sep 10-12
10 GHz & Up—Round 2	Sep 17-18
EME 2.3GHz & Up—Wknd 1	Sep 17-18
EME 50 to 1296 MHz—Wknd 2	Oct 15-16
School Club Roundup	Oct 17-21
Nov Sweepstakes—CW	Nov 5-7
EME 50 to 1296 MHz—Wknd 3	Nov 12-13
Nov Sweepstakes—Phone	Nov 19-21
160 Meter	Dec 2-4
10 Meter	Dec 10-11
Rookie Roundup—CW	Dec 18

## FUN FACT—Why radio amateurs are called "HAMS"

(from Florida Skip Magazine - 1959)

"Have you ever wondered why radio amateurs are called 'HAMS?' Well, it goes like this: The word 'HAM' as applied to 1908 was the station CALL of the first amateur wireless stations operated by some amateurs of the Harvard Radio Club. They were ALBERT S. HYMAN, BOB ALMY and POOGIE MURRAY.

At first they called their station 'HYMAN-ALMY-MURRAY.' Tapping out such a long name in code soon became tiresome and called for a revision. They changed it to 'HY-AL-MU," using the first two letters of each of their names. Early in 1901 some confusion resulted between signals from amateur wireless station "HYALMU" and a Mexican ship named 'HYALMO.' They then decided to use only the first letter of each name, and the station CALL became 'HAM.'

In the early pioneer days of unregulated radio amateur operators picked their own frequency and call-letters. Then, as now, some amateurs had better signals than commercial stations. The resulting interference came to the attention of congressional committees in Washington and Congress gave much time to proposed legislation designed to critically limit amateur radio activity. In 1911 ALBERT HYMAN chose the controversial WIRELESS REGULATION BILL as the topic for his Thesis at Harvard. His instructor insisted that a copy be sent to Senator DAVID I. WALSH, a member of one of the committees hearing the Bill. The Senator was so impressed with the thesis is that he asked HYMAN to appear before the committee. ALBERT HYMAN took the stand and described how the little station was built and almost cried when he told the crowded committee room that if the BILL went through that they would have to close down the station because they could not afford the license fees and all the other requirements which the BILL imposed on amateur stations.

Congressional debate began on the WIRELESS REGULATION BILL and little station 'HAM' became the symbol for all the little amateur stations in the country crying to be saved from the menace and greed of the big commercial stations who didn't want them around. The BILL finally got to the floor of Congress and every speaker talked about the '...poor little station HAM.' That's how it all started. You will find the whole story in the Congressional Record.

Nation-wide publicity associated station 'HAM' with amateur radio operators. From that day to this, and probably until the end of time in radio an amateur is a 'HAM.' "

**FUN FACTS**

## OLD BARNEY GEAR

You can find Old Barney Gear at all these places:

**It appears that Southern Ocean Marine Sportswear has closed down. If anyone know any different please let me know.**

### Café Press (All types of logoed items available)

New Logo Items: <https://www.cafepress.com/oldbarneyarcnewlogo>

Old Logo Items: <https://www.cafepress.com/obarc>

### Gold Medal Ideas (Personalized Old Barney Items)

1160 Thompson Blvd, Buffalo Grove, IL 60089

[https://stores.goldmedalideas.com/ygs/Old\\_Barney-Products/10000170](https://stores.goldmedalideas.com/ygs/Old_Barney-Products/10000170)



## HAVE YOU JOINED THE MEMBER'S AREA?

The member's area of the OBARC website is being developed to provide useful tools to our members. Currently there is:

- Club Documents & Meeting Minutes
- Swap and Shop Postings (You decide if yours is just for members or the public)
- A "Ask for help/Questions" area to post questions to other members for assistance.
- A members directory for those who want to be listed.

Take a look. Suggestions are welcome! You can request access to the area by going to: [www.obarc.org/members](http://www.obarc.org/members)

## OUR MEMBERS

### Welcome to Our New Members:

John Fasanelli

John Kafka

Joseph Rua

James Woltman

### March Birthdays:

**3/27—Ross Lambert**

## JOIN US ON THE AIR

Join us for our club net. The net is held every Thursday night at 7:30pm (except holidays and special occasions) on the WU2E repeater.

Every week we host a random topic of discussion.

Find us at: 146.835 (-600) PL 127.3

We look forward to sharing time with you!

For any comments or questions regarding the weekly net please contact Tom Preiser, N2XW at [n2xw@arrl.net](mailto:n2xw@arrl.net).

Old Barney would like to thank the 835 users group for allowing us to use the WU2E repeater to host our club nets.

Lear and Wavering set up shop in Galvin's factory, and when they perfected their first radio, they installed it in his Studebaker.

Then Galvin went to a local banker to apply for a loan. Thinking it might sweeten the deal, he had his men install a radio in the banker's Packard.

Good idea, but it didn't work. Half an hour after the installation, the banker's Packard caught on fire. (They didn't get the loan.)

Galvin didn't give up. He drove his Studebaker nearly 800 miles to Atlantic City to show off the radio at the 1930 Radio Manufacturers Association convention.

Too broke to afford a booth, he parked the car outside the convention hall and cranked up the radio so that passing conventioners could hear it. That idea worked -- He got enough orders to put the radio into production.

#### WHAT'S IN A NAME

That first production model was called the 5T71.

Galvin decided he needed to come up with something a little catchier.

In those days many companies in the phonograph and radio businesses used the suffix "ola" for their names -

*Radiola, Columbiola, and Victrola* were three of the biggest.

Galvin decided to do the same thing, and since his radio was intended for use in a motor vehicle, he decided to call it the Motorola.

But even with the name change, the radio still had problems:

When Motorola went on sale in 1930, it cost about \$110 uninstalled, at a time when you could buy a brand-new car for \$650, and the country was sliding into the Great Depression. (By that measure, a radio for a new car would cost about \$3,000 today.)

**In 1930, it took two men several days to put in a car radio -- The dashboard had to be taken apart so that the receiver and a single speaker could be installed, and the ceiling had to be cut open to install the antenna.**

**These early radios ran on their own batteries, not on the car battery, so holes had to be cut into the floorboard to accommodate them.**

**The installation manual had eight complete diagrams and 28 pages of instructions. Selling complicated car radios that cost 20 percent of the price of a brand-new car wouldn't have been easy in the best of times, let alone during the Great Depression.**

**Galvin lost money in 1930 and struggled for a couple of years after that. But things picked up in 1933 when Ford began offering Motorola's pre-installed at the factory.**

**In 1934 they got another boost when Galvin struck a deal with B.F. Goodrich tire company to sell and install them in its chain of tire stores.**

**By then the price of the radio, with installation included, had dropped to \$55. The Motorola car radio was off and running. (The name of the company would be officially changed from Galvin Manufacturing to "Motorola" in 1947.)**

**In the meantime, Galvin continued to develop new uses for car radios.**

**In 1936, the same year that it introduced push-button tuning, it also introduced the Motorola Police Cruiser, a standard car radio that was factory preset to a single frequency to pick up police broadcasts.**

**In 1940 he developed the first handheld two-way radio -- The Handy-Talkie for the U. S. Army.**

**A lot of the communications technologies that we take for granted today were born in Motorola labs in the years that followed World War II.**

**In 1947 they came out with the first television for under \$200.**



In 1956 the company introduced the world's first pager; in 1969 came the radio and television equipment that was used to televise Neil Armstrong's first steps on the Moon.

In 1973 it invented the world's first handheld cellular phone.

Today Motorola is one of the largest cell phone manufacturers in the world.

And it all started with the car radio.

## **WHATEVER HAPPENED TO**

the two men who installed the first radio in Paul Galvin's car?

Elmer Wavering and William Lear, ended up taking very different paths in life.

Wavering stayed with Motorola. In the 1950's he helped change the automobile experience again when he developed the first automotive alternator, replacing inefficient and unreliable generators. The invention lead to such luxuries as power windows, power seats, and, eventually, air-conditioning.

Lear also continued inventing. He holds more than 150 patents. Remember eight-track tape players? Lear invented that.

But what he's really famous for are his contributions to the field of aviation. He invented radio direction finders for planes, aided in the invention of the autopilot, designed the first fully automatic aircraft landing system, and in 1963 introduced his most famous invention of all, the Lear Jet, the world's first mass-produced, affordable business jet. (Not bad for a guy who dropped out of school after the eighth grade.)

*Sometimes it is fun to find out how some of the many things that we take for granted actually came into being!*

**AND**

*It all started with a woman's suggestion!!*

*I hope you enjoyed the story!*



## NEWS FROM AROUND OUR SECTION...



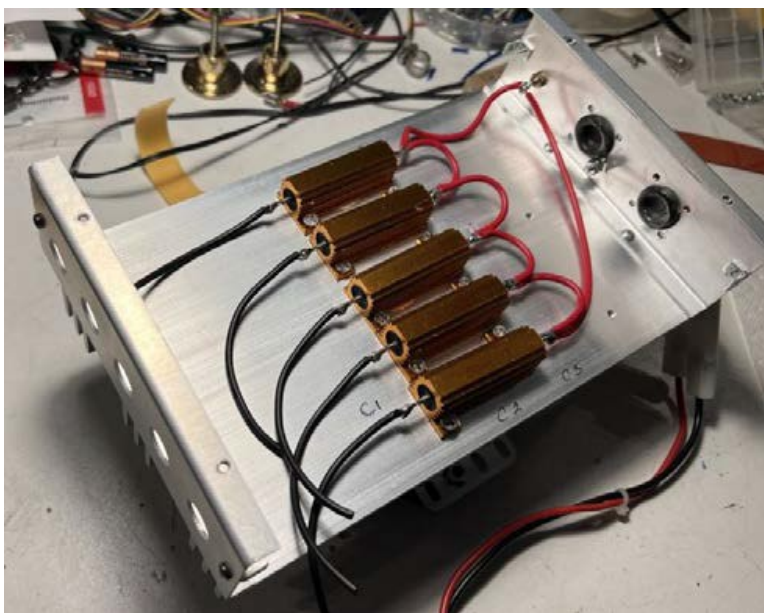
### OCEAN COUNTY ARES® MARCH 2022

On February 16th, WX2NJ conducted an Ocean County ARES Zoom Meeting. There was no specific topic, just an open forum. There was an overwhelming desire to have another fox hunt in the near future and I will be working on that. John, N2LD, also announced that he is working on the KB2UNK estate sale and will be releasing a list of all items being sold via email.

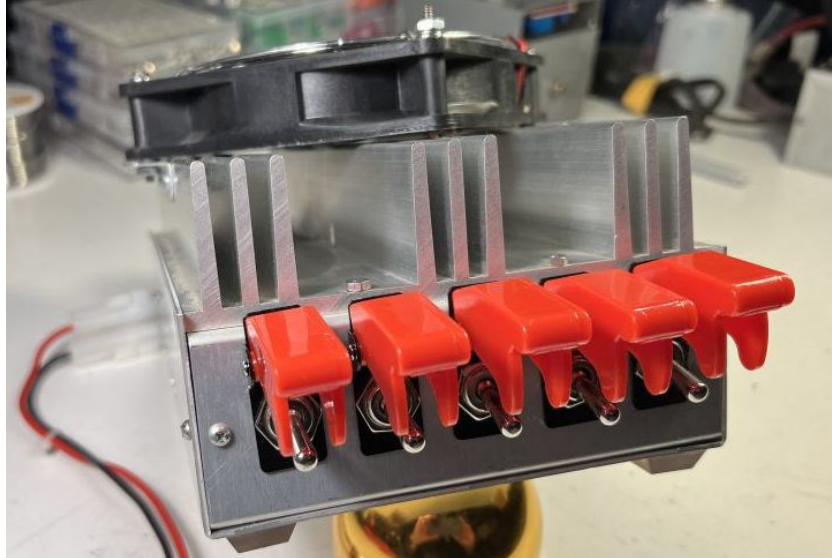
This month I would like to introduce you to a small project I was working on, which involves troubleshooting power supplies. I'm always looking for a dependable load to connect to a power supply under test and I wind up using a transceiver connected to an RF dummy load. This always turns out to be very cumbersome trying to key up a radio and take readings to troubleshoot power supply circuits.

I decided to build a dummy load bank that could be easily connected to a power source under test. I decided to use an old amplifier heat sink and chassis for my project. With a power supply output of 12.6 to 13.8 Volts DC, a 6 ohm resistor would yield a current draw of a little more than two amps. The resistor is going to get hot real quick, so I decided to use a metal shell, 50 watt power resistor.

These are readily available because they are used to load and fool turn indicators in vehicles using LED lamps. Since they were sold in lots of 5, I figured I would use all 5 for a total current draw of about 11 amps. Each would be switched into service by a small toggle switch. This would give me ability to select 2, 4, 6, 8 or 10 amps load.

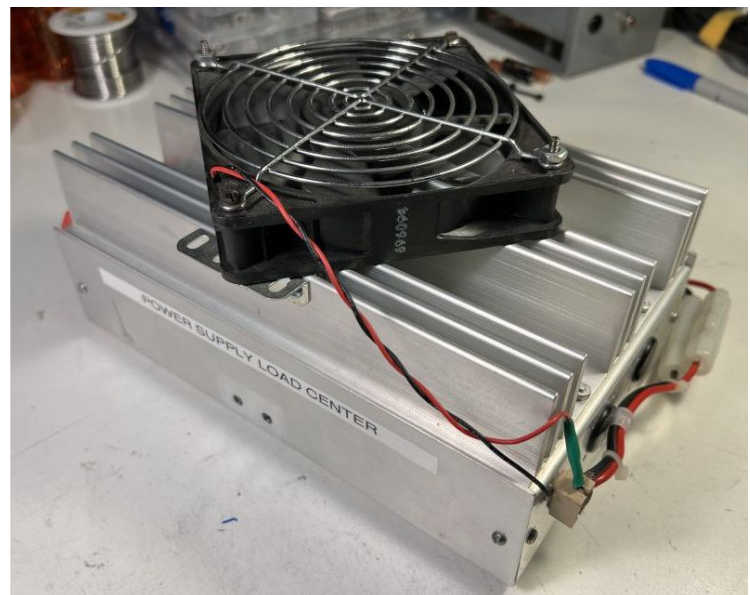
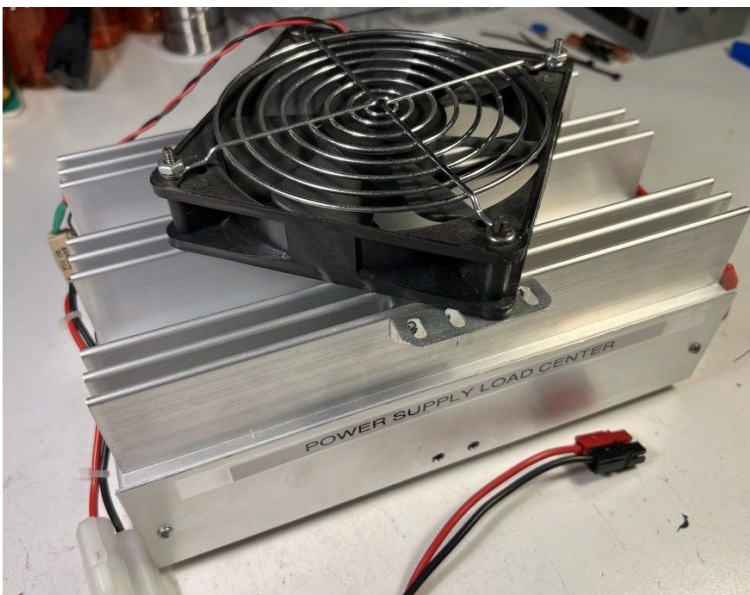


Each resistor was fastened to the bottom of the chassis/heat sink with two 6-32 tapped holes/screws. Heat sink compound was applied to the bottom of each resistor for good heat conduction. One side of each resistor is connected to the power supply output via a 30 amp PowerPole connector and 15 amp inline fuses. The other side of each resistor is connected to ground through a SPST switch. Each closed switch would then result in a little more than two amps load.



I chose the type of switch with a toggle cover to prevent inadvertently closing a switch and they were inexpensive. Only \$2 each through Amazon. A 120 mm fan was added to the heat sink to cool the chassis. A 33 ohm, 5 watt power resistor was added in series with the fan to keep the speed and noise down, while still keeping the project cool under full load.

If you want to get fancy you can add a digital voltage and current indicator. I did not because I normally use an in-line analyzer, which plugs right into the power pole.





**Southern NJ Section News March 2022**  
**Tom Preiser N2XW SNJ Section Manager**  
**n2xw@arrl.org**

I am hoping that spring is right a round the corner. It will be time to get out check those antennas and see how they have faired out from the winter snow and cold weather. Many clubs have returned to in person meting and events. This is a welcome change. There many groups planning on Foxhunts, Hamfests and getting back together for social events. Field Day also looks promising this year. Don't forget to order your Field Day shirts and gear now. This year's logo looks great.

Remember to subscribe to the ARRL Club newsletter online to see what other clubs are doing around the world.

I have also noticed quite a lot of Parks on the Air Activations. It's really a great idea to get out to a park and activate it on the air. I you hear someone calling on the radio tray to make a contact with them. For more information go to <https://parksontheair.com/>



**QSO Today Virtual Ham Expo, March 12 – 13**

ARRL Life Member Courtney Duncan, N5BF, will be the keynote speaker for the [QSO Today Virtual Ham Expo](#) on Saturday, March 12, in the QSO Today Virtual Ham Expo auditorium. The semi-annual virtual ham radio gathering will be live on March 12 – 13

This edition of the QSO Today Virtual Ham Expo will showcase a wide range of topics with appeal to newcomers and veterans alike. It's a chance to update your amateur radio knowledge and get exposed to cutting edge ham radio technology as well as practical operating and building techniques. Like a live ham radio convention or hamfest, the Expo has presentations, exhibits, and state-of-the-art "lounges" for face-to-face interaction among participants. Because it's a virtual event, you don't have to pick and choose which presentations you can attend. You can watch any one of them within 30 days of the Expo as well as explore exhibitor offerings from the comfort of your computer or other device.

**Grants**

Lots of interest has been raised on the new grant programs that are available to organizations today. There is also a bit of confusion about just what some of them are and what the differences are. Let's look at the details of the three major programs.

Grants are a great way to fund small and large projects that your club might be interested in. Spend a few minutes to look over the websites and talk with your club. This is a valuable resource that clubs can use to build amateur radio's future in an ever-changing technology world.

## ARRL Foundation Grants

These grants are awarded by the ARRL Foundation to organizations promoting amateur radio. The maximum grant is \$3000, and the specific uses of the funds are restricted to specific projects. The details of just what you can use the money for and how to apply are on the ARRL website at [Amateur Radio Grants \(arrl.org\)](http://arrl.org). There are specific times during the year to apply, and all the information is on the website.



## ARRL Club Grant Program

This program is new and still in development having just been announced in January around the time of the ARRL Board of Directors meeting. This program will allow clubs to apply for up to \$25,000 for specific projects. The details of how the funding can be used and how to apply have not been announced yet. Stay tuned for more information.

## ARDC Grants

These grants are awarded by the Amateur Radio Digital Communications Grant Program and are not managed by ARRL. There is no maximum for the grants and full details can be found at the ARDC website at [Apply for a Grant | Amateur Radio Digital Communications \(ampr.org\)](http://ampr.org). There are specific dates to apply and requirements for the groups that wish to apply.

There will be more information these programs in the near future. Start thinking about what your club can do and apply for a grant.



## RAM RADIO BOARD

By Cheryl Conley, W1CLC—Faculty Advisor

The Southern Regional HAM Radio Club has been busy making lots of contacts, getting new members, and sending and receiving QSL cards throughout January. On the 18th we had some new students come to the meeting and show interest in the club. We made over 15 contacts on the same frequency, including with people from the Florida Keys, Tennessee, and many other places around the country. Additionally, for upcoming events we are having a soldering kit workshop on February 8th and 17th! We would like to express our thanks in advance to Ira Hosid (N2WAA) for spearheading a valuable lesson about soldering. Thank you to the Old Barney members who will be joining us those days as added support. It is an important experience for the students to meet members of our community and radio community. We are expecting between 6 and 12 students to engage in the demonstration. It is also an even more special event because OBARC has offered to purchase the small electronics kit for each participant. Thank you for your generosity.



## WHO IS OLD BARNEY?

The Old Barney Amateur Radio Club (OBARC) was established in 1975 by a diverse group of individuals with a common goal of promoting Amateur Radio.

Today the group continues towards making the amateur radio hobby rewarding through participation in several events throughout the year, training sessions, VE testing and monthly meetings.

Our meetings are held at the [Ocean Acres Community Center](#), 489 Nautilus Blvd, Manahawkin, NJ 08050\*, beginning at 7:00pm on the first Wednesday of each month (except holidays). We welcome anyone (licensed or not) to come and meet with us to learn more about amateur radio.

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## SHARE YOUR KNOWLEDGE

The newsletter is open to anyone who would like to submit articles. Please join me in contributing to content and share the knowledge you have about our hobby with all our readers.

Presentations are also welcomed. We try to host a presentation at each monthly meeting covering different topics. We would even welcome “special” sessions via Zoom for presentations that are too long to host at a meeting.

Please contact me at [n2rpg@arrl.net](mailto:n2rpg@arrl.net) with any articles or to arrange a presentation.

## THE OLD BARNEY RADIO CLUB IS ARRL AFFILIATED



### Old Barney Amateur Radio Club

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Visit the ARRL at [www.arrl.org](http://www.arrl.org)

