

The Old Barney Beacon

SO I HAVE MY LICENSE, NOW WHAT?

APRS—PART 5 OF A SERIES

BY R. KENNARD, N2RPQ

The Automated Packet Reporting System, known as APRS, was developed by Bob Bruninga, WB4APR. The system is now in its 25th year.

The system is often thought of as a “tracking” system to see where other users are which is one of its features but APRS does more than just that. It was developed to be a place to monitor a single channel to receive announcements, bulletins, messages, alerts and weather in addition to mapping all the activity.

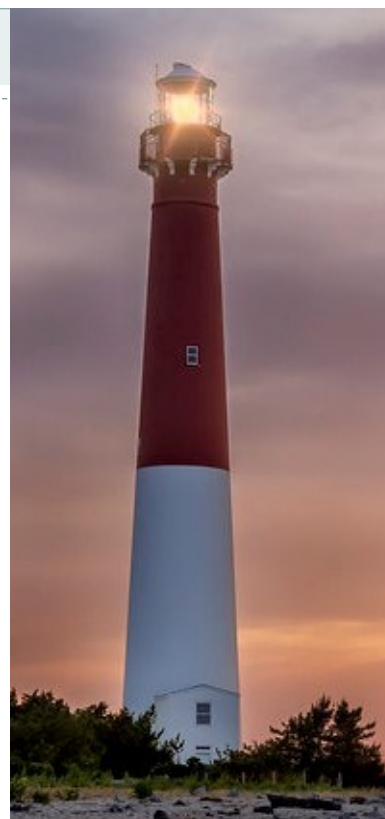
Many radios these days include APRS capability with built in modems designed to transmit and receive the messages. The frequency that is used for APRS is pre-determined around the world based on what country you live in. In North America ALL APRS traffic is sent and received on 144.390MHz.

For mobile operations APRS not only can send location information but also attach pre-determined messages to the packet transmission that can tell someone not only how far away you are from them but other information like the frequency you are currently monitoring so that they can reach out and communicate with you.

Regular messaging can also be sent to other stations in a very similar format to email. You enter the address you are sending the message to and type it in.

APRS is not only for mobile operation. It can be connected to home computers through TNC type devices. Once connected

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SDR WORLD—by Mike Libonati, WA2ACV

Because of my “Brief” demonstration of SDR radio at last months meeting; some club member asked for information on using a SDR Dongle. I am going to list some websites and YouTube videos that I always found helpful. I will list some recommendations for getting started in the wonderful world of SDR.

This is the basic website for getting started:

<https://www.rtl-sdr.com/>

In this website you will find the basics on setting up a RTL-SDR

Dongle that can be purchased from the website, you can press the RTL-SDR STORE tab at the top of the web site page. You will find setup information at the QUICK START GUIDE tab. This website is extensive and has lot of information and tutorials feel free to explore.

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Our next meeting will be on Wednesday, Aug 4, 2021 at the Stafford Community Center **IN PERSON!** The meeting time for this meeting is 7pm.

VE CORNER

There was a VE Session held on July 10th with 1 candidate who earned a new Technician's License.

August will be our last VE Session at the park. After that we will be moving the sessions back to Wed nights before the meeting at the community center.

If you are looking to upgrade your license or you know someone who needs a session please contact Tom at n2xw@arrl.net.

MOST 2021 FIELD DAY PARTICIPANTS ENTERED IN CLASS D

(as posted on [arrl.org](https://www.arrl.org) 7/15/2021)

In the second year in which rule waivers were in place for ARRL Field Day, some 4,815 entries were received at ARRL Headquarters by July 13 — the majority in Class D (Home Stations). Last year saw more than 10,213 entries and 18,886 participants. Before the pandemic, in 2019, 3,113 entries were submitted, with 36,420 total participants.

“It appears that larger groups were more the norm in pre-pandemic times, as expected,” ARRL Contest Program Manager Paul Bourque, N1SFE, observed. “From the discussions I’ve been having with participants, even though some groups gathered in larger numbers this year, many participants chose either to gather in smaller groups or to operate solo from home as Class D or Class E stations. Although I don’t think we’ll see the number of entries that we did last year, we’re close in terms of the number of participants.”

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to your radio you can transmit and receive messages from there also. There is also an internet page, aprs.fi, that you can use to see locations of all APRS transmitters on the system.

When setting up APRS you use your call sign as your identifier followed by a dash and a suffix (called an SSID) that identifies the type of station you are using. For example, a primary mobile station may be a -9, a primary home station -0, etc. There are various internet sites that contain a list of the SSIDs so that you can look up the one you need. One good page is <http://www.aprs.org/aprs11/SSIDs.txt> which lists the suggested SSIDs and also explains their use in a little more detail.

APRS can also be used on HTs. Some newer modules have it built in (just like mobiles) and others can be connected to your mobile phone with an app. APRS can even be done over internet these days.

Another popular use of APRS is transmitting weather information. Many operators connect their personal weather stations to an APRS transmitter that will send out current conditions at pre-determined intervals. How much information that is sent depends on the weather station and the set up of the operator who is hosting it.

APRS is a very powerful system and I have only touched on a little part of it. There is a lot of information available on the internet from all different sources. APRS.ORG is the official website that contains so much more valuable information.

In addition to APRS Bob Bruninga is also very dedicated to exploring other sources of power and energy choices. He has published books on both topics that are available through the ARRL or online.

APRS is a powerful messaging system is definitely a valuable resource to amateur radio.



In the Coming Issues:

- **September — Part 6— Digital Computer Modes (FT8, etc.)**
- **October—Final Part— Wrap-up (Still More to Come!)**

PRESIDENT'S MESSAGE

Finally! A meeting in person in July. It was so good to see everyone in person.

It's been a long time. Someone even commented that it was just good to see my face. Despite that we still aren't offering a vision plan!

The picnic was great! I was glad to see all those who could make it with their family members. The best moment for me was when I turned around and saw Lance standing there to surprise me.

Just over a week ago Jim K2GMT headed off for Texas. He was always a helping hand at the events that will be missed. Jim will stay on as a Trustee since we can meet electronically. Tom, N2XW has stepped up to replace Jim as the lead NCS for the weekly nets.

The next big event is the Old Barney lighthouse. I hope you can come up and support it.

Until next month...

N2RPQ

2021 ARRL CONTESTS

222MHz & Up Distance Contest

Aug 7-8

10 GHz & Up—Round 1

Aug 14-15

Rookie Roundup (RTTY)

Aug 15

Sept VHF Contest Sep 11-1

10 GHz & Up—Round 2

Sep 18-19

EME 2.3GHz & Up—Wknd 1

TBD

School Club Roundup

Oct 18-22

EME 50 to 1296 MHz—Wknd 2

TBD

Nov Sweepstakes—CW

Nov 6-8

Nov Sweepstakes—Phone

Nov 20-21

EME 50 to 1296 MHz—Wknd 3

TBD

160 Meter

Dec 3-5

10 Meter Dec 11-12

Rookie Roundup—CW

Dec 19

OLD BARNEY'S 1st ANNUAL PICNIC

On Sunday, July 18th many members of OBARC along with their family members met at A. Paul King Park in Manahawkin for a family picnic.

The weather was perfect with a nice breeze blowing across the lake. There was plenty of food thanks to the club, as well as, several members who brought snacks and desserts to share with everyone.



I was really happy to see that so many people were able to make it. It was a great day of socializing amongst everyone. Hopefully this can really become an annual event.

SDR WORLD—CONTINUED FROM PAGE 2

There are 3 YouTube's that have good videos that demonstrate the versatility of SDR. The Tech Minds YouTube Channel from a British Ham, Matt Miller M0DQW, is a good YouTube channel to subscribe to as Matt has videos on all things radio. You can spend days looking at all of his past videos.

<https://www.youtube.com/watch?v=9QzklSyKgQM>

The next You Tuber is Frugal Radio his channel has a lot of SDR configurations and information It is also a good channel to subscribe to and gather the latest goings-on in the SDR arena.

<https://www.youtube.com/watch?v=RWeWALpmtQQ>

SignalsEverywhere is another good website although there has not been any new videos in awhile. The older more dated videos are good for Nobs.

https://www.youtube.com/watch?v=B_gp78wy5jM

The information above should peak your interest and whet your appetite in joining the "World of SDR"

FIELD DAY—CONTINUED FROM PAGE 2

With about 2 weeks to go until the entry submission deadline, the tally of participants reported is 16,166. They made just north of 1 million total contacts.

Andy Goss, AA5JF, took part in the first-ever Field Day for the Augusta University Amateur Radio Club (WA4AUG), which set up in the Georgia school's Critical Event Preparedness and Response (CEPaR) Center.

"FD was already a success on Saturday, with the stations working smoothly, and lots of local visitors dropping by. An hour after sunrise on Sunday, we were counting our points, when Darby, KK4PEQ, announced he had just worked a station on 6-meter phone — just playing around on 50 MHz using the 20/15/10 tribander," Goss said. "He stayed on 6 for five QSOs, but we quickly [moved] to 10 and 15, finding those bands were open to just about everywhere, and we doubled our score in just 3 hours. What a rush!

There's still time to submit your 2021 Field Day entry. Most of this year's Field Day entries have been [submitted online](#) (worth 50 bonus points!), although some 50 paper logs have been mailed in. Participants can check the [Entries Received](#) page to make sure their entries were received and complete. If the entry status indicates "Pending documents," either the required dupe sheet (or in lieu of that, a Cabrillo log file) or supporting documentation of claimed bonus points is missing. Bourque said some 250 entries fall into that category right now. Participants can add documentation or edit their entries by following the link provided in the confirmation email sent to the email address provided upon entry, up until the entry submission deadline. Field Day entries must be submitted online or postmarked no later than 2059 UTC on July 27, 2021.

The breakdown of Field Day entries by class, as of July 13, showed 4,815 total entries, with 613 in Class A, 582 in Class B, 57 in Class C (Mobile), 2,619 in Class D, 858 in Class E, and 86 in Class F.

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For his 2021 Field Day, Scott Hanley, WA9STI, took to the woods — the Los Padres National Forest — at a site some 7,400 feet elevation in the mountains overlooking California's Central Valley. He operated as WA6LE in Class 1B. He put 358 contacts in the log on CW and phone — short of his 400-contact goal. "Almost all activity was on 20, 40, and 75/80 meters to a G5RV or end-fed 20-meter dipole," Hanley said. "Six meters did not open, so only had two local SSB contacts and only 3 contacts on 2-meter FM."

*"Many of life's failures are people who did not realize how close they were to success when they gave up."— **Thomas A. Edison***

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.

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

OLD BARNEY GEAR

You can find Old Barney Gear at all these places:

Southern Ocean Marine Sportswear (Hats & Jackets Embroidered)

79 South Main Street, Barnegat, NJ 08005

(609) 698-8868

Email: sales@soms4u.com Website: www.soms4u.com

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



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

SWAP & SHOP

The new Swap & Shop section is now available in the Members area of the website. In the very near future you will also be able to control your listings and keep them available for the members or have them listed on the public website.

We will also be happy to list any items you would like here in the newsletter. Just send your listings to n2rpq@arrl.net and I will make sure that they are added here.

OUR MEMBERS

Welcome to Our New Members:

Cassidy DeMasi (SRHARC)

Douglas Taylor— KD2WQP

NEWS FROM AROUND OUR SECTION...



OCEAN COUNTY ARES® AUGUST 2021

The next meeting of Ocean County ARES will be August 18, 2021 and will be held at the Ocean County EOC, Robert J. Miller Airpark, Berkeley Township. The meeting starts at 7:00 PM. It will be good to see everyone in person again!

Since 2009, the WX2NJ-10 Packet Winlink 1200 baud Gateway has been in service on a frequency of 145.010 MHz for those using Winlink software. At first, all users needed a TNC to connect to the gateway and as things evolved, you could also connect with TinyTrak devices and Signalink. The gateway is never busy, most likely because it does not cover a large area and packet communications required a strong, solid signal to connect.

After 12 years of 24/7 service, the packet gateway has been retired as of 7/18/2021. In its place, VARA FM has been installed on the same frequency. Narrow mode is being used and preliminary testing shows speeds of 5500 bps when connecting with an older (red transformer) Signalink. The gateway is connected to an omni vertical antenna with 50 watts output and is available 24/7. The service is EMCOMM and not PUBLIC. Emcomm is to be used only for ARES operations and training, while Public is available to everyone. As of this writing, it is the only EMCOMM gateway on the East coast according to the Winlink RMS map. All others are PUBLIC. This is hard to believe. Maybe Winlink just made a mistake on their mapping.

VARA software can be used for FM and also HF.

VARA software is free, but is limited in use and speed. A full license is \$69 and many Ocean County ARES Operators joined in on a reduced fee bulk buy.

I'm only going to discuss VARA FM in this newsletter, but the operation is very similar to HF.

To get the software, go to:

<https://rosmodem.wordpress.com/>

Download the FM Version, extract and install on your PC. There were some issues with early versions of VARA causing Windows Defender alerts, but that appears to have been resolved. You should add an exclusion to your C:\VARA FM folder if you are using Windows 10.

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To add an exclusion:

Go to Start > Settings > Update & Security > Windows Security > Virus & Threat Protection

Select Manage Settings and then under Exclusions, select Add or remove exclusions.

Select Add an exclusion and then select C:\VARA FM

There is an excellent video by Oliver Dully, K6OLI, of LAX ARES for tuning VARA:

<https://vimeo.com/user107547861/download/575962458/8fea1d862c>

Oliver also covers which sound modems or TNC's are best to use. Even the older Signalink with red transformers are effective. Newer Signalinks with black transformers are the fastest.

Last month, a powerful lightning blast hit the Harvey Cedars repeater site via the Comcast Cable connection. The Internet is not directly connected to the repeater but it is connected to an Openspot 1. The strike entered the site via an RJ45 Ethernet connection and destroyed our Router, Openspot 1, and PC, which was supplying power to the Openspot via a USB port. The router was replaced along with another Openspot 1, but the PC was simply eliminated with a 5 VDC wall wart. This may seem simplistic but we no longer have the ability to program or re-boot the openspot remotely without the PC. Some came to the rescue and donated PC's but at this time we are still evaluating to pro's and con's of having a remote computer.

We will also be adding commercial surge protection to the incoming RJ45 Ethernet Cable to try and minimize future possible surges. Many experts say that internal Ethernet lines are safe and require no surge protection, but I think Harvey Cedars is a prime example of what can happen.

Do you own a UPS for your computer? Did you look on the back of the UPS to see if you have a built-in suppressor for TV/Cable and Ethernet? If you are not utilizing these features, you should. Fiber Optic cable is safe from electrical surges, but wired coax cable for Internet is not. Use the F connections with suppressors for your input to your cable modem and the RJ45 Suppressors for the cable modem output. Think about how much equipment you could have destroyed by an incoming Ethernet strike.

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 7:30pm 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.

*** DUE TO COVID-19 MEETINGS ARE CURRENTLY BEING HELD VIA ZOOM.**

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 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

