

The Old Barney Beacon

SO I HAVE MY LICENSE, NOW WHAT?

WHAT ARE ALL THESE TERMS? HOW DO

I PICK?—PART 1 OF A SERIES

By: Rick Kennard, N2RPQ

One of the first challenges that I feel face almost all new licensees is the terminology we use in amateur radio. We have terminology for types of communication mediums, types of transmissions themselves, codes we may use in conversations and many others. While this series is going to be about the types of communications, we use geared toward what you may want to pursue with your initial equipment purchases there are so many other terms out there. In a future series we could look at some other terms and what they mean but for now I added a couple of resources to our member's area documents section that may help you if you need to see what a particular term is referring to. These are just a couple of resources I picked out. Other suggestions are welcomed and will be posted if submitted. The resources link is: <https://www.obarc.org/members/docsView.cfm?cat=Resources>.

So, what types of communications could you hear about when looking to purchase equipment? Let us do a brief description here and then we will go into more depth on each one as we continue through our series.

Here are some of the most popular:

- 2m/70cm (also referred to as VHF & UHF) – The 2m/70cm bands are used mostly for localized communications and local repeaters.

Continued on Page 3



INSIDE THIS ISSUE

Solar Cycle 25	2
VE Corner.....	2
President's Message	3
2021 Contests.....	4
ARRL Plan To Help Young Applicants with the Proposed Fee	4
Join Us On The Air.....	5
ARRL Article on 3.5GHz Band.....	5
New Committees	6
Old Barney Gear	7
Members Only Website	7
Swap & Shop.....	7
Our Members.....	7
Ocean County ARES New	8
RAM Radio Board.....	9
Southern NJ Update.....	11
Share Your Knowledge	Back

HAVE YOU RENEWED?



Thank you to all who renewed their membership!

After March your dues are considered in arrears if not paid.

In case you forgot, dues for 2021 are:

◇ \$20—Full and associate members; \$15 if you are 65 years old and older, \$10—Members of the same household of a full paying member, Full time students are exempt

Dues can be sent via “PayPal to a friend” at: treasurer@obarc.org please include your call letters in the comment section.

Our next meeting will be on Wednesday, April 7, 2021 via Zoom. Details on how to join the meeting will be emailed to you. The meeting time for this meeting is 7pm.

VE CORNER

There was a VE Session held on March 6th with 5 candidates.

Two people earned their Tech license, one earned his general license, by taking two exams, and one upgraded to Amateur Extra.

Congratulations to all who earned and/or upgraded their licenses.

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

SOLAR CYCLE 25—WHAT IS IT ALL ABOUT?

Lately you may have seen an ARRL campaign advertising Solar Cycle 25. What are solar cycles and why do we care?



Solar cycles last about 11 years. They start off and end in what is known as solar minimums, the times when there is the least solar activity occurring.

Solar cycle 25 started in December of 2019, so why now is it getting exciting? The answer is because we are getting into what should be years of solar activity. During this time the HF bands get much better. The time when hams look forward to.

For the past several years we were in the end of cycle 24 and the beginning of cycle 25. Since these were the solar minimum

Continued on Page 6

NOW WHAT? - Continued from page 1

- HF – The HF bands operate from 3-30Mhz and are used for long distance and non-repeated communications. This is where amateur radio began. HF uses lower frequencies and counts on radio wave propagation to determine how those waves travel around the earth. Many hams use HF bands to perform DX communications. DX is specifically contacting distant stations around the world using radio.
- DMR, D-Star & C4FM – All of these terms talk about digital encoding of your signal between the transmitter and receiver. Digital modes like these are conducted over the 2m/70cm bands with radios that contain special hardware and software to perform the digitization of the signal. Digital modes have the characteristics of allowing communications to travel a little further as it does not suffer from signal loss the same way as analog communications. With digital you have good sounding voice until you hit the cut off and then you do not have anything. Analog, in contrast, slowly fades away. The one thing about these modes is that they are all different and independent of each other. You either have D-Star, DMR or C4FM.
- APRS – The Automatic Packet Reporting System (APRS) was designed by Bob Bruninga, WB2APR, to be a location and messaging system. Over the years it has mostly been used as a position tracking system, however, it has abilities beyond that. As quoted from the aprs.org webpage, “**APRS is now in its 25th year!** APRS is digital communications information channel for Ham radio. As a single national channel (see map at right), it gives the mobile ham a place to monitor for 10 to 30 minutes in any area, at any time to capture what is happening in ham radio in the surrounding area. Announcements, Bulletins, Messages, Alerts, Weather, and of course a map of all this activity including [objects, frequencies, satellites, nets, meetings, Hamfests, etc.](#) The APRS network has grown to most countries with strong Amateur Radio populations.”
- FT-8 and other digital modes – These digital modes use a computer with special software that interfaces with your radio(s) to transmit digital communications over the air. Voice communications is not used with these modes. It is all done by typing and reading on the computer.

Continued on Next Page

PRESIDENT'S MESSAGE

Every month I look forward to more promising news in regards to the virus. I think we are slowly turning the corner.

April is here and flowers will start blooming, weather will continue to get warmer, and our minds are screaming to be outdoors.

We can start enjoying fresh air but we still need to be cautious.

Please keep your safety at the top of the list and then enjoy what you can!

I keep hoping that our outdoor events will happen this year. I miss being at the lighthouse and sampling, oops I mean cooking, our food at the decoy-duck show.

I'd love to even have an outdoor event for our families, but first and foremost I am going to lean on the side of your safety.

So as much as some are starting to brave the restrictions we will remain vigilant until proven safe!

Until next month...

N2RPQ

2021 ARRL CONTESTS

DX Contest—SSB	Mar 6-7
Rookie Roundup	Apr 11
June VHF Contest	Jun 12-14
Kid's Day—June	Jun 19
Field Day	Jun 26-27
IARU HF World Championship	Jul 10-11
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

NOW WHAT? - CONTINUED FROM PAGE 3

With all these choices how do you decide? What is the right one to pick? The answer is it is up to what you want to accomplish. Start out with what you want to do the most. If you want to talk to other local hams, then maybe 2m/70cm is the best for you. If you want to talk around the world maybe HF is the way to go. Do not like talking but love computers FT-8 could be your first desire. There is no wrong answer.

If you are not sure talk to other amateurs. I suggest that all new hams become members of a club. This gives you access to worlds of knowledge. Most clubs will have members who have tried or use different modes than others. They can explain it to you. They can guide you in your equipment purchases. You may find out that the most expensive is not always the best because someone else already tried it and proved it. Most amateurs love to “show off” their set-ups and would be happy to let you see and try something before you commit to it. You may find that something you did not even think of excites you more and becomes your first choice for type of communications you want to perform.

Over time you will also learn and grow in your amateur knowledge and it is not uncommon that your shack will grow also. No one says that you can only have one type of communications in your shack. You will find yourself with multiple types each that serves a different one of your needs.

This is what amateur radio is all about. You got your license. So now what? Now is the time to have fun, learn from others and enjoy amateur radio communications.



Up Next Month – Next month we will start looking at each one of the modes we talked about above, starting with 2m/70cm & local repeaters.

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 Jim Neufell, K2GMT at jvneufell@comcast.net.

“All our dreams can come true, if we have the courage to pursue them.” – Walt Disney

AMATEUR RADIO GETS A PARTIAL REPRIEVE ON 3.5 GHz

As posted on arrl.org 3/22/2021

Pending future FCC action, amateur radio secondary use of the 3.3 – 3.45 GHz band segment may continue indefinitely. The FCC, as part of a lengthy *Second Report and Order (R&O)* for commercial licensing of 3.45 – 3.55 GHz adopted on March 17, agreed with ARRL that continued access by amateur radio to 3.3 – 3.45 GHz should be allowed until consideration of the 3.1-3.45 GHz spectrum in a later proceeding. The FCC action in WT Docket 19-348 represents a partial — and temporary — reprieve from the FCC’s December 2019 proposal to remove amateur radio from the entire band, and it makes available an additional 50 megahertz than an FCC proposal last fall to allow amateur temporary use of 3.3 – 3.4 GHz.

Amateur secondary operation in the 3.45 – 3.50 GHz band must cease 90 days after public notice that the spectrum auction has closed and licensing has begun. That is expected to happen early in 2022. The FCC announced the opening of 3.45 – 3.55 GHz for auction to commercial 5G interests on March 17.

Continued on Page 12



SOLAR CYCLE 25—CONTINUED

periods the HF bands have not been that good. Now they should start picking up again.

Solar cycle 24 was the fourth smallest in intensity since recording began. Cycle 25 is also predicted to be a “fairly week one,” but still there will be activity.

So for those of you who are big HF operators it’s time to get ready. It is also a great time to look into HF if you never have. When the bands start opening up you will realize just how powerful of a mode HF can be.

The ARRL is offering Solar Cycle 25 gear if you’re looking for something to advertise! Check out their gear at <http://www.arrl.org/shop/Cycle-25/>.



ARRL CYCLE 25 GEAR AVAILABLE IN THE ARRL STORE

Information for this story taken from an article posted by KOLWC, 11/12/2020. For the full article visit: <http://kolwc.com/solar-cycle-25-has-officially-begun/#:~:text=Ham%20radios%20operators%20around%20the,start%20of%20a%20new%20cycle.>

NEW COMMITTEES FORMED

At the March general membership meeting I announced that I would like to have a couple of new committees.

They are:

Membership Committee—The purpose here would be to accept applications for prospective members and just assure the processing of getting the application approved, making sure the dues are paid, and that new member information is delivered to the applicant. This can be a one person committee and I don’t anticipate a large amount of time required. **PLEASE volunteer to be this committee if you can. All help is appreciated.**

Awards Committee—I want to start looking at awards for members who accomplish certain goals. The first one I suggested was in memory of Urb and is a mentoring award since Urb was so into teaching. Steve W2USF volunteered to head this committee and Dan offered also to be a part of it. If you are interested in being a third member of this committee please let me know.

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)



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 n2rpg@arrl.net and I will make sure that they are added here.

OUR MEMBERS

Welcome to Our New Members:

KD2BND—Diann Gentile

KD2VVL—Theresa Navarra

KD2VVK—Michael Ackerman

KD2VVM—Kyle Whited

Happy Birthday To:

Sid Weinstein, W2TCR—4/15

NEWS FROM AROUND OUR SECTION...



OCEAN COUNTY ARES® - APRIL 2021

By Robert J Murdock Sr, WX2NJ—Coordinator

On March 16th Ocean County ARES had another successful VE session at the Ocean County EOC under the direction of Lead VE, N2LD. We had 11 people at the test session with 10 passing exams. Thanks to VE examiners NJ2N, N2XW and WX2NJ. The next session is May 18th, 2021 by appointment only.

The ARRL is going to abandon the ARES Connect system as of June 2021. Ocean County ARES is no longer loading events into ARES Connect after March 2021 and has shifted member management to a local database controlled by the EC. If you know an operator who wants to join Ocean County ARES, there is an application on the WA2RES.COM website. The link is: <http://www.wa2res.com/ARES%20Registration.pdf>. Just complete the application and return to the Ocean County EC. Do NOT apply via ARES Connect.

The next meeting of Ocean County ARES will be April 21st at 7:00 PM and it will be a virtual Zoom meeting. All are invited. Zoom instructions will be sent out via groups.io a day or two before the meeting. There will be no training nets the evening of the meeting, as usual.

NJ2N is back holding digital training nets at 7:30 PM just before the ARES Voice training Nets at 8:30 PM. If the digital training net is on UHF, the regular voice net will be on VHF and if digital is on VHF, the regular voice will be on UHF. When we say digital we mean NBEMS or Narrow Band Emergency Messaging System using FLDIGI and FLMSG and the MT63-2000L mode of transfer using FM. There is a lot of info on the web regarding this mode and a Google search will bring up tons of reading material.

Winlink Wednesday is also still active and NJ2N will distribute instructions a day or two before on what the exercise is to be. You have the option to use Telnet Winlink, which is Internet connected, just to practice with Winlink. The Red Cross also has a monthly Winlink exercise held on the second Thursday of each month and once again, Telnet Winlink is acceptable.



I recently learned of a new electrical product for splicing wiring. It is called Wago 222 Series Lever-Nuts.

Continued on Next Page

They are rated for at least 20 amps and accept wire sizes of AWG 28 to AWG 12. I use them for joining power leads with Power Poles instead of having to use bulky heat shrink over butt splices. The good part is they come apart by flipping a lever and can be easily used in the field for emergency work. Thanks to K2MDW for the tip.



RAM RADIO BOARD

By Cheryl Conley, W1CLC—Faculty Advisor

The Southern Regional Amateur Radio Club (KC2RZI) has been busy. Isabell Lee & Olivia Lee have created a mock up of the club’s first QSL card. It includes an image of the school’s mascot on one side and Old Barney on the other. We enlisted the advice of several OBARC members including Tom Preiser. Our graphic artist teacher will be assigning our request to a student, and we should be able to mail out cards soon.

Manahawkin, NJ USA

Southern Regional Amateur Radio Club

105 Cedar Bridge Rd. Manahawkin, NJ 08050



KC2RZI

Location: Southern Regional High School Amateur Radio Club

CQ ZONE: 5 ITU: 8 GRID: FM29ur COUNTY: Ocean

KC2RZI confirming QSO with _____

DATE: _____

Time (UTC): _____

RST: _____

MHz: _____

Student Operator: _____

Generously supported by the Old Barney Amateur Radio Club

Pls QSL or Tnx QSL 73, SRARC Students

Front View (above) and Back View (left)
of the Club’s new QSL Card

We also have made progress on our ham shack and have been able to make some contacts. Rick Kennard, N2RPQ, programmed the VHF radio that was donated by Mike Schmidt, KD2TCK.

Continued on Next Page



Station KC2RZI—Southern Regional Amateur Radio Club
Manahawkin, NJ

Thanks to our superhero dynamic duo Ira Hosid, N2WAA & Bob Wick, N2HM, we've organized our VHF and HF rigs and have practiced making contacts. Gone are the days where Bob Wick would throw a lasso out the second story window of the classroom and tie us off.

We had our first in-person meeting on March 16th, and we were able to teach one of our newest members some of the basics and lingo. She is a member of the ROTC and is curious about communications and aircrafts. Colonel Potts also stopped by to say hello as well. We were able to listen in on two stations, one from Florida and one from Minnesota station. We were unable to break through the long lines of traffic. We also used the 40 meter to contact Bob Wick from his mobile unit.

Our next meeting will be on March 30th, and if anyone is interested in listening out for us, we will operate both radios from 2:15pm to 3pm. It would be great if we can get a few quick contacts for the students. We could make a contact, exchange a question, and move on to another to give them a varied experience.

The Southern Regional Home & School Association, who generously donated to our antenna expenses, is hosting a flea market in the Rt. 9 parking lot in April. The club officers were thinking of renting a table to sell some simple household items that will sell. We probably will only have a table with 50 items because what we don't sell, will have to come back home. If we can raise a few dollars we would like to purchase a world map for our bulletin board. This way we can add color coded pins to mark off our contacts year by year. We are also looking to entice new members in with a future pizza GOTA day (post Covid, of course).

Our ham shack is coming along very nicely thanks to the generous donations of time and equipment from the OBARC members. We really look official and students are getting curious. Thank you for your support.



Southern NJ Section News April 2021
Tom Preiser N2XW SNJ Section Manager
n2xw@arri.org

Many amateur radio clubs continue to be active even with all the restrictions on meeting. Clubs have put together many activities to keep members active. Some Clubs are running contests while others continue to have educational presentations online. There has also been a great increase in those taking Amateur Radio tests. Many clubs have resumed testing in some shape or form. It looks like many have taken time during quarantine to study for their Technician license or upgrade. Some tests are given outside while others are in large rooms spread apart with good ventilation. It seems that candidates don't mind traveling to take the tests either. Some people have driven almost two hours to take a test.

In other news about testing, **contrary to what you may have heard or read, the collection of application fees for the amateur radio service and certain other services will NOT begin on April 19, 2021.** Although April 19, 2021 is the date the rules in the FCC Report and Order adopted last December generally take effect – i.e., one month after the R&O was published in the March 19, 2021 Federal Register – certain parts of those rules, including collection of the application fees for the amateur radio service, will NOT begin on that date.

The effective date for new amateur radio fees has **not yet been established**. The FCC explicitly states in the published Notice that the fees will not take effect until:

- * the requisite notice has been provided to Congress; AND
- * the FCC's information technology systems and internal procedures have been updated; AND
- * the Commission publishes [FUTURE] notice(s) in the Federal Register announcing the effective date of such rules.

The League's counsel for FCC matters estimates that the effective start date for collecting the fees will be sometime this summer, but regardless of the exact timing we will have advance notice.

Keep in mind that one can only renew their amateur license within 90 days in advance of the expiration date. If you, or a club station license you are trustee for, are within that 90-day window now, I'd renew as soon as possible to avoid the new fee.

Continued on next page

If you are thinking of switching to a vanity call sign, I'd also seriously suggest you apply for that special call sign sooner rather than later. (Of course, if you are an Extra class seeking a new shorter 1X2 or 2X1 call sign, competition for those calls in the future MIGHT be a bit less due to the new fees! We'll see...)

Remember to check the latest editions of "QST" and "On the Air" Magazine to see the latest information on Solar Cycle 25. Solar Cycle 25 is finally here, so now is a good time to review some basics, including what solar minimums and sunspots are and why they're important for amateur radio. After reviewing what we know from Cycles 23 and 24, we'll be able to make some predictions about what we can expect from Solar Cycle 25.

Remember to take some time to get on the radio. Lets keep those airwaves active.

REPRIEVE—CONTINUED FROM PAGE 5

The FCC stated that "While we adopt our proposal to bifurcate the band, we adjust our proposal and set 3450 MHz as the frequency at which the band will be split." It agreed "with the ARRL's assessment that the guard band is not necessary from a technical standpoint. We also recognize that the nature of amateur equipment realities makes the 50 megahertz at 3400-3450 MHz particularly valuable to amateur operators because it means existing equipment can continue to operate in the band for the time being."

This allows "amateur operations to continue in the lower portion of the band while the [FCC and federal government users] continue to analyze whether that spectrum can be reallocated for flexible use," the FCC said. The FCC had proposed splitting the band at 3.4 GHz, permitting amateur use in 100 megahertz of spectrum "while also providing a buffer to protect flexible-use operations at the lower edge of the 3.45 GHz band."

"We therefore allow secondary amateur operations to continue in the 3.4 – 3.45 GHz portion of the band," the FCC said. "We emphasize, however, that amateur licensees remain secondary users, and those that operate on frequencies close to the 3450 MHz band edge must do so with particular caution to avoid causing harmful interference to flexible-use licensees in the 3.45 GHz Service, which hold primary status. In light of these considerations, while amateur operations between 3450 MHz and 3500 MHz must cease within 90 days of the public notice announcing the close of the auction for the 3.45 GHz Service, as specified in the *Report and Order*; amateur operations may continue between 3300 MHz and 3450 MHz while the Commission, NTIA, and the DoD continue to analyze whether that spectrum can be reallocated for commercial wireless use."

"There is no expectation that such operations will be accommodated in future planning for commercial wireless operations in this spectrum, or that amateur operators will receive more than a short period of notice before their operations must cease," the FCC said.

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

PO Box 117
Manahawkin, NJ 08050

E-mail: n2ob@arrl.net

Visit the ARRL at www.arrl.org

