

CAARA NEWS



Cape Ann Amateur Radio Association
NOVEMBER 2018 Edition



PRESIDENT'S COLUMN

by Hank- W4RIG.

We approved the 2019 Budget at the October Members Meeting with 16 members Present and voting. This is the same budget we used in 2018 and we look forward to another good year for CAARA and the activities of our members with Public Service and Emergency Preparedness.

We have had two highly successful breakfasts and luncheon meetings in support of our Scholarship Program and Fellowship. We will continue with the breakfast and luncheon programs especially encouraging our members to attend the monthly meetings on the second Saturday of each month and Sunday breakfasts. Kudos to Bill Morris our chief cook and the kitchen crew with Tony Marks and Dave Linsky. We will try to hold two breakfasts and one luncheon each month as long as members and friends support those activities.

We also have dedicated members who support our Community Service Projects and the Tuesday evening workshops. More fun as we consider the potential for the annual Christmas Party and Winter Field Day in January. Other training and workshop opportunities are welcome - feel free to suggest more activities at 6 Stanwood Street.

INFORMATION DESK

by Dean- KB1PGH

Well lets start with the ARRL calendar of events for November. First there is the CW sweepstakes on November 3-5, then the phone sweepstakes on November 17-19 and the 160 meter CW contest on November 30 through December 2. So there's a couple of activities which will get you on the radio.



Next we have a couple of New England FCC amateur radio license stats from the ARRL New England Division Director Tom Frenaye K1KI. At the end of 2017 there were 13,427 hams in New England. There were 469 new licenses issued and 140 upgraded licenses. Nationwide there was only 0.7% growth in licenses in 2017. There were 32,200 new licenses but 27,000 licenses expired as well.

Next I'll think I'll go sideways and bring up the subject of NVIS or Near Vertical Incidence skywave. The old timers call it "Cloudburning". This happens a lot on 160, 80 and 40 meters. Now this is not ground wave it is sky wave or a high angle of radiation of 90 degrees which is straight up. Dipole antennas low to the ground work great for NVIS. You would use NVIS for close in contacts out to a couple hundred miles. Like me working Vermont from Gloucester on 40 meters when I do my HF portable ops.



My inverted V dipole is only 18 high at the top and 4 feet on the ends. Working NVIS has its advantages such as you can use low power and have less fading and have a better signal to noise ratio compared to long haul DX propagation. So give NVIS a try and see what you can get. Speaking of DX. The second half of the "sporadic E" season will be starting up in November and lasting into December.

So don't forget to start monitoring 50.125 MHz USB. You can also start to monitor the CB bands. If you hear CB skip you can be sure that 10 meters will be open and maybe 6 meters. The 10 meter band also has a few



CAARA Newsletter
Cape Ann Amateur Radio Association
6 Stanwood Street
Gloucester, MA 01930

CAARA Newsletter is a monthly publication of the Cape Ann Amateur Radio Association (CAARA).

It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to CAARA members, and space is available. Material is accepted on a first come, first serve basis. Articles and other materials may be submitted by internet to Jon at k1tp@arrl.net. If possible, material should be in Word format. Material may also be submitted as hard copy to Jon-K1TP or any Club Officer.

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Jon Cunningham- K1TP Editor
Dean Burgess- KB1PGH Reporter

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Welcome to CAARA:

CAARA, an ARRL affiliated club, operates the 2 meter W1GLO repeater on 145.130 MHz with antennas located on the ATT cell tower in the Blackburn Industrial Complex in Gloucester Massachusetts. It has an average effective radius of 60 miles, and serves Eastern Massachusetts, Cape Cod, Rhode Island, Southern New Hampshire, and maritime mobile stations.

CAARA also operates the W1GLO repeater on 224.900 located at the CAARA clubhouse.

The former W1RK 443.700 repeater is now on the ATT cell tower in the Blackburn Industrial Complex with greatly enhanced performance.

The Association is one of the few amateur radio clubs that has its own clubhouse. Located at 6 Stanwood Street in Gloucester, it includes a permanent HF station with beam, vertical/wire antennas along with an operating 2 meter packet station as well as 2/440 meter voice and 220 MHz Transceivers.

Amateur radio exams are held on the second Sunday of each month at 10:00 AM at the CAARA clubhouse. Anyone who is considering a new license or an upgrade, is welcome to test with us. Pre-registration necessary. Contact the head of our VE team Rick Maybury-WZ1B if you have any questions about monthly testing.

Monthly member meetings are held on the second Saturday of each month at noon.

Each Sunday evening at 9:00 PM, the club operates a 2 meter net on 145.130. This is an open and informal net which disseminates club news and prepares operators for emergency communications work. All are invited to check into the net as club membership is not a requirement.



repeaters that you can monitor for when the band opens up. You can also program in 29.6 and 29.62 MHz FM which if you hear activity there it's likely that 6 meters will be open as well. For

the prepping reminder of the month please make sure that all of your smoke detectors and carbon monoxide detectors are working and have fresh batteries in them. It's also a good idea to have at least one decent sized home fire extinguisher as well.

That's it for now, 73,
Dean KB1PGH

PRODUCT REPORTS

by Dean- KB1PGH

As we all know switching power supplies create a lot of RFI. For years I used an Alinco supply working portable and it created a bunch of RFI has which would interfere with reception on the HF bands. The Alinco supply had a knob on it where you could move the RFI to a different frequency.

Well I have finally found a switching power supply that does not create any RFI as far as I can tell. I recently purchased the SS 30 M model power supply from Astron. This power supply is RFI resistant on the HF bands because it has a EMI filter built in. I have used it in my portable HF operations and what a difference between the Astron and the Alinco I used to use.

There is no RFI or EMI anywhere in HF reception. The SS 30 M is a very simple supply with only one set of binding posts in the back. You can also choose to have the Voltage and Amperage lighted LED meters on it like mine has or one that does not.

The meter lighting is bright even during the day. The build quality is good and the size is typical for a switching power supply. It of course has over voltage protection as well. It also has a voltage adjust on the right side of the case as well.



The Astron SS series power supplies come in different amperage levels for whatever amperage your radio uses. The cost of the SS 30 M supply is \$149.00 and you can get them at www.dxengineering.com. Just remember to get the SS series because those are the ones who have the EMI filters installed. I highly recommend getting the Astron SS supply if you want quiet reception on the HF bands. Once you use these you won't believe how much RFI and EMI noise you had to put up with.

The Origin of "73"

This account by L.R. Moreau first appeared in the SPARK GAP TIMES, the journal of the Old Timers Club of the USA. I feel it might help put an end to those "73's," "Very best 73's," and "Seventy-thirds" used on the bands by "them wot don't know no better."

The traditional expression "73" dates from early land-line telegraph days. You can find it in the earliest editions of the "numerical codes," with definitions that are variations on the same idea. "73" indicated that the end, or signature, was coming up.

The *National Telegraphic Review Operator's Guide*, first published in April 1857, shows "73," meaning, "My love to you"! Succeeding issues continued to give this definition. Yet some of the other numeric codes in use back then had the same meanings as today.

Before long, the meaning of "73" drifted away from "My love to you." Another publication, the *National Telegraphic Convention*, defined "73" as a vague sign of fraternalism—just a friendly greeting between operators. It was so used on all wires for many years.

In 1859, the Western Union Company set up the "92 Code," a list of numerals from 1 to 92 that referred to a series of prepared phrases for use on the wires. In the 92 Code, "73" changes from a fraternal sign to a flowery "Accept my compliments"—in keeping with the florid language of the era.

Telegraphy manuals published between 1859 and 1900 show variations of this more straightforward meaning. Dodge's *The Telegrapher Instructor* shows it as "compliments," but Theodore Edison's *Telegraphy Self-Taught* reports a return to "accept my compliments." Finally, a 1908 edition of the Dodge manual gives today's definition, "best regards," though a backward look in another part of that work also lists "compliments."

"Best regards" has remained the literal definition of "73" ever since, but more recently "73" has re-acquired overtones of a warmer meaning. Amateurs use it today as James Reid intended so long ago—as a friendly word between operators.

submitted by H. Pain, G3ATH to (and appearing in) the Southwestern Virginia Wireless Assoc. March '93 "Groundwave". Bill Svec, WA4BKW, edits "Groundwave."

Wood Heat

by Curt- AA3JE

If you have been following the saga, you are aware that I have spent a LOT of effort hauling wood out of the forest, cutting it, splitting it, stacking it, moving it when stacking location proved offensive to my wife, and paying to get the 30 year old stove and chimney overhauled.



I do not remember saying why, exactly.

The answer is that in New Hampshire, in the far North, the most meaningful thing you deal with is W*I*N*T*E*R.

The average monthly fall and winter, MAX/MIN temperatures here are,

NOV	DEC	JAN	FEB	MAR	APR
43/27	31/13	27/7	32/10	42/21	55/32

So my average monthly fuel usage is (gallons per month)

NOV	DEC	JAN	FEB	MAR	APR
124	155	245	196	186	150

This adds up to about 1200 gallons a winter. Given that fuel oil runs about \$2.50-\$3.00 a gallon delivered, this is a mighty expense.

So the hope was that running the wood stove might cut down on the heating oil bill a little. One gallon of oil produces about 140,000 BTU, so, 1200 gallons means 168 million BTUs per winter. Since one cord of dry wood produces 22 million BTUs when burnt, this means that seven and a half cords of wood would produce the same heat as 1200 gallons of oil, more or less.

That is a stack of wood 10 feet long, 10 feet wide and 10 feet high. Weighing 14 tons.
(be advised you will lift this a minimum of four times, when cutting, splitting, stacking, AND burning).

As is usual for me, I had not actually talked to anyone who had heated with wood in this quantity at this rate for a whole winter.

It would have been wise to do this.

Now winter fuel consumption is estimated by degree days (average inside temperature – average outside temperature) x number of days. Up here, it is easy to get an average outside temperature of -10 in January, so that is 80 degree days for a single day.

That means running the stove flat out all day, which means feeding it every 2-3 hours or so.

So material handling issues matter, as you will be hauling 100 pounds of logs a day, lifting them, and shoving them into the stove. Starting at 6 AM and running till 10 PM.

This may explain why heating with wood is somehow less attractive than expected.

It also explains flannel, and low interior temperatures in winter.

Next time we will discuss certain essential safety practices. Also splinter removal.

CAN U HELP?

C.A.A.R.A. NEEDS BUBBLE WRAP!

Jake W1LDL & Chris K1TAT have been carefully sorting, organizing, boxing, cleaning and storing the recently received items at CAARA.

They have gladly volunteered many dozens of hours on this project. (Including more than one Tue. evening until 2:00 am) And all day Sundays as well.

Jake & Chris are approaching the next phase of this project, which is listing items on Ebay to raise funds to help CAARA.

By saving and bringing your no longer needed bubble wrap to CAARA when you visit, you will be helping Jake & Chris and you will be helping CAARA as well.

Every piece of bubble wrap, no matter how small, that you bring to CAARA will save CAARA from having to spend money to buy it.

Please consider bringing it with you when you visit at a Tuesday open house.

The good news is that several CAARA members have been saving up their extra bubble wrap and they have been bringing it in when they visit CAARA.

But Jake & Chris will be using it all up soon on this very worthwhile project to help CAARA. So more bubble wrap will be needed, and soon!

WOULD YOU PLEASE LOOK AROUND YOUR HOUSE, APARTMENT, OR GARAGE FOR BADLY NEEDED BUBBLE WRAP?

How about dropping in to CAARA on an upcoming Tue. evening from about 6:00 pm and afterwards?

There are lots of good thing happening at CAARA!

If you would like, you could also ask Jake & Chris how you can help them with this ongoing fundraiser which Jake & Chris are working on.

Or perhaps there is some other way that you may wish to help CAARA.

Perhaps you would like to write a newsletter article and email it to Jon K1TP.

Be prepared to make many new friends and to be involved in a fine Amateur Radio Club - YOUR CLUB!

October Annual Meeting and Lunch



VP6D Ducie Island DXpedition Approaches 115,000 Contacts; Shutdown Set for November 1

The VP6D Ducie Island DXpedition continues to operate on all bands that are open and, as of October 30, reports more than 113,200 contacts in the log. Most contacts (63,800) have been on CW, with about 28,500 on SSB and 20,911 on digital modes. The operators have merged their N1MM and FT8 logs and uploaded them to the VP6D website and log server. VP6D will continue operating on 6-meter Earth-Moon-Earth at moonrise until October 31.

CLUB BREAKFAST



PHOTO ABOVE: Tony- N1JEI and Bill-W1WMM in the kitchen getting ready for the gang.

BOTTOM LEFT: It doesn't get much better than this....breakfast served in the radio room to Gardi- KA1BTK

Don't forget, we have two breakfasts per month at the club on Sunday mornings. One benefits the High School Scholarship fund and the other raises money for building improvement.





**SCHOLARSHIP BREAKFAST HAD A GOOD TURNOUT AND
OVER \$100 DOLLARS PROFIT PUT INTO THE SCHOLARSHIP
FUND ACCOUNT.**

As of September 30, 2018

Category	Actual	2019 Budget	Difference
INCOME	288.00	8,200.00	-7,912.00
DONATIONS	168.00	3,500.00	-3,332.00
DUES	20.00	3,200.00	-3,180.00
FUNDRAISING	100.00	1,500.00	-1,400.00
MISC INC	0.00	0.00	0.00
EXPENSES	245.45	8,200.00	7,954.55
BUILDING	-50.00	1,000.00	1,050.00
EQUIPMENT	0.00	1,000.00	1,000.00
INSURANCE	0.00	1,600.00	1,600.00
LEGAL	0.00	200.00	200.00
MISC EXP	3.24	400.00	396.76
UTILITIES	292.21	4,000.00	3,707.79
Net Difference:	42.55	0.00	42.55

This report has annotations. Move the mouse pointer over the amounts to see them.

ACCOUNT BALANCES

Account	8/31/2018 Balance	9/30/2018 Balance
ASSETS		
Cash and Bank Accounts		
Citizens	8,747.76	8,818.62
IFS CD	7,500.00	7,500.00
PayPal	1,286.28	1,403.04
Cash	33.00	0.00
TOTAL Cash and Bank Accounts	17,567.04	17,721.66
TOTAL ASSETS	17,567.04	17,721.66



BOARD MEETING: The new Board at the October Meeting setting the budget which was later approved at the general meeting and lunch.

PUBLIC SERVICE ROAD RACES

Sunday, November 4th YUKANRUN - Ocean View - 5K & Half Marathon Ipswich, MA

Sunday, November 25th Santa Claus Parade Gloucester, MA

Sunday, December 2nd YUKANRUN - Merrython - Gloucester, MA

Why should you participate in race events?

It helps the club financially, we receive a donation for each race. You are using amateur radio to provide a needed public service to ensure the safety and smooth running of a public event in local communities.

I would but I do not have a radio.

No excuse, we have loaner radio's available with a mag mount that will work in your car just by just plugging it into the cigarette lighter socket. We have loaner hand held radios as well!

I don't have transportation.

No excuse, we will pick you up and drop you off at your house.

I do not have the time to spare for a whole race.

Well, you can commit to a time slot, for just two hours. We will bend over backwards to get you to participate.



FT8 to be Permitted in 2019 ARRL RTTY Roundup

The ARRL Contest Branch has announced that participants in the 2019 [ARRL RTTY Roundup](#) will be permitted to use the new FT8 protocol, which is part of the [WSJT-X](#) software suite. The RTTY Roundup takes place January 5 - 6, 2019.

"Even though digital modes other than RTTY have been permitted in the RTTY Roundup for 30 years, FT8 was excluded in 2018, because it could not manage the required exchanges," ARRL Contest Branch Manager Bart Jahnke, W9JJ, said. "Through the work of the *WSJT-X* development team, the latest version of FT8 can handle the necessary exchanges that earlier versions were unable to do."

Some limitations will apply to FT8 entrants. Participants must use [WSJT-X version 2.0](#) or later to ensure they are able to transmit and receive the exchange messages the event requires. No unattended operation, including QSO/macro automations, will be allowed. Neither is FT8's Fox and Hounds mode; each contact must be carried out in a one-to-one mode, manually accepting/logging each contact.

Because ARRL contest rules regarding spotting assistance prohibit the use of "automated, multi-channel decoders" by Single-Operator entrants, stations using software that decodes *more than one* FT8 signal at a time will have to enter as Single-Operator Unlimited or as Multioperator, just as PSK participants have had to do in the past when using *fldigi* or *DigiPan* software.

The Contest Branch is encouraging participants to spread out to help increase decoding and contact success.

"This is a great opportunity for beginners interested in digital mode contesting," Jahnke said. [Complete rules](#) are on the ARRL website. Read [more](#).

Short "Practice Contest" Set for ARRL RTTY Roundup Participants Planning to Use FT8

A 1-hour "practice contest" will be held next week on Wednesday, October 24, 0200 - 0300 UTC (Thursday, October 25, in North

American time zones). Use dial frequency 7.078 kHz, moving up in 2 kHz increments if interference is too great.

To participate, you must use [WSJT-X version 2.0.0-rc3](#), a beta-test version. Installation packages for Windows, Linux, and macOS are near the bottom of the page. A full release of *WSJT-X* 2.0 is targeted for release on December 10. FT8 co-developer Joe Taylor, K1JT, advises reading the revised [Quick-Start Guide](#) before using *WSJT-X* 2.0.

Some important reminders:

1. On the "Settings/Advanced tab", check the boxes that say "Always generate 77-bit messages," "Decode only 77-bit messages," and "ARRL RTTY Roundup." In the field labeled "Exch," enter the 2- or 3-letter abbreviation for your state or province (US/Canadian stations), or enter DX if you are not in the US or Canada.
2. Be sure that 7.078 appears in your drop-down frequency list for FT8 mode. You might need to do a reset on the Settings/Frequencies tab. If the subband starting at 7.078 becomes overcrowded, move to a higher dial frequency in 2 kHz increments -- 7.080, 7.082, etc. Type Ctrl+Shift+F12 to move up by 2 kHz, or Ctrl+Shift+F11 to move down by 2 kHz.
3. Do not use a compound or nonstandard call sign in this event.

Planning is under way for one or more dedicated FT8 contests to be held in the next few months. -- *Thanks to Joe Taylor, K1JT*

Scouting's Jamboree on the Air (JOTA) Looking Forward to Successful 2018 Event

Some 450 sites in the US are among nearly 3,000 locations around the world that will host Jamboree on the Air (JOTA) or Jamboree on the Internet (JOTI) stations over the October 19 - 21 weekend.

"It looks [like it will] exceed last year's registration number by next weekend," JOTA Coordinator Jim Wilson, K5ND, said.

It be activated for JOTA is the [Voice of America \(VOA\) Museum](#) in West Chester, Ohio, which hosts the West Chester Amateur Radio Association's club station [WC8VOA](#). WCARA member Jocelyn Brault, KD8VRX, grew up in Canada, where, as a 12-year-old, he took part in a JOTA event, making a friend in France and becoming pen pals. Years later, he became a Scout leader and a radio amateur. The station in the VOA station has been hosting JOTA for the past 5 years and allows anyone in Scouting to participate from the museum.

"For JOTA last year, we had over 100 Scouts stop by and get on the air," he recounted. "They could also explore the VOA Museum." Brault said that at one point, stations in five states conducted an on-the-air roundtable, sharing stories and experiences. "That was a great way to do it. It made it much more fun for the Scouts and for us as well. I'm looking forward to repeating the experience again this year," he said.

Wilson urged JOTA station coordinators to review the [best practices](#) and to try taking some [video](#) of JOTA-JOTI activity.

"Last year, the event saw 1.5 million Scouts and Girl Scouts on the air from 150 countries with nearly 17,000 Amateur Radio operators helping to make that possible," Wilson said. "This is a superb way to introduce Scouts to the technology, fun, and magic of Amateur Radio." Wilson suggested that radio amateurs could help by making room for the Scout stations operating around the JOTA [frequencies](#) as well as by answering their CQs and engaging Scouts in conversations.

The [Worked All Germany Contest](#) takes place this weekend, and contest sponsors have designated [contest-free frequencies](#) to avoid the JOTA frequencies.

Eastern Massachusetts Section's Operation Equinox Tests HF Capability in Seaside Communities

Operation Equinox was conducted on Sunday, October 1, to test the emergency readiness of HF systems of the ARES organization in the seaside communities of Gloucester and Rockport, north of Boston, Massachusetts. Ron Draper, WA1QZK, reported that the basic plan was to set up portable equipment and practice members' emergency communications response plans on a more individual level, as opposed to ARRL Field Day, which tends to focus on a group effort.

Draper noted the opportunity for members to vigorously check out their HF stations in portable, simulated disaster situations. Members set up their HF antennas, found and replaced bad coax jumpers and cables, and tried new antennas. Members also garnered experience with 12 V batteries, and their assets and limitations. "Grab 'n' go" kits both for HF and VHF systems were checked as well as kits for personal needs such as food and water for 2-3 days for self-sufficiency.

The Gloucester and Rockport ARES members learned about the needs and protocols of their served agencies. They were advised to have visible ID badges and day packs with the personal items necessary, along with notebooks containing phone numbers of key contacts for local and state officials. Draper recommended the use of tents to limit exposure to the elements. Exercise set up went quickly and efficiently. He commended the group for a "great response for a first time short notice."

ARISS Plan Under Consideration for NASA's Deep Space Gateway Program

Amateur Radio on the International Space Station (ARISS) International delegates were pleased to learn last week that an ARISS plan is under consideration by NASA's Deep Space Gateway (DSG) program. NASA Gateway Utilization Manager John Guidi, ex-KF4YUI, informed those attending the annual ARISS International in-person meeting, held in College Park, Maryland, that ARISS is the only noncommercial entity whose ideas are under study by the program. The ARISS plan focuses on Amateur Radio communication, including optical communication channels, as well as equipment development, team cooperation, education, and public outreach.

"Naturally, because the NASA Deep Space Gateway program is so new and has yet to be fleshed out, ARISS needs to follow NASA's lead in being open to how the DSG program flows," ARRL ARISS-US Delegate Rosalie White, K1STO, explained. "ARISS's first moves need to be loose enough that the plan, development, and execution can go in ways that dovetail with what is needed."

The Deep Space Gateway would be a small outpost orbiting the moon that would act as a "spaceport for human and robotic exploration to the moon and beyond," NASA has said. Crewed by four people, it would provide an operational platform for further exploring the lunar surface and a hub to deeper space destinations. NASA hopes to have the completed Gateway in lunar orbit as early as 2024.

The ARISS-International annual meeting on October 17 – 19 ran back to back with the first-ever ARISS Education Summit, held October 15 – 16. At the international sessions, ARISS delegates and team members from around the world presented and listened to talks on all aspects of ARISS, from operations to education to hardware — current and upgrades — to future projects. The team heard the latest news on HamTV, the Interoperable Radio System, and the antenna change-out required by the European Space Agency's Bartolomeo platform, and proposed Astrobee activities, HamTV II, and Radio-Pi projects.

Astrobee is a robot that will fly around the ISS with the astronauts to help scientists and engineers develop and test technologies for use in zero-gravity, aid astronauts with routine chores, and offer Houston flight controllers additional eyes and ears on the spacecraft.

Team members enjoyed viewing a live-streamed ARISS contact in Belgium. Team members unable to travel to Maryland were able to teleconference into the sessions.

On hand for the earlier ARISS Education Summit were teachers from the US and elsewhere; ARISS-US Education Committee members; STEM educators from College Park Airport Museum; education leaders from various NASA entities, including the Space Communications and Navigation (SCaN) office, nearby Goddard Space Flight Center (GSFC), and the manager of the ISS US National Laboratory — Center for the Advancement of Science in Space (CASIS); a group of SCaN-sponsored mid-Atlantic teachers, and University of Maryland educators and students. Attendees saw a demonstration of ARISS slow-scan television (SSTV) and several ham satellite contacts. ARISS-US Education Committee teacher Melissa Pore, KM4CZN, arrived from Virginia with eight of her students, who talked about their ARISS-related STEM studies.

Other committee members who were part of a panel session discussing educator perspectives on ARISS also gave presentations on the ARISS education proposal process and on-orbit prediction programs. Astronaut Paul Richards, KC5ZSZ, led a discussion on space and education; CASIS's Dan Barstow,

Ham Aid Kits Positioned to Deploy as Typhoon Yutu Ravages Central Pacific Islands

In a little more than one day, the cyclone that became Super Typhoon Yutu grew from tropical storm to a Category 5 monster. Yutu is said to be the strongest storm on record to hit the Northern Mariana Islands, home to about 55,000 people. The storm made landfall on Wednesday evening (October 24), destroying homes, wreaking severe wind and storm-surge damage and flooding, and knocking out water, power, and telecommunications on the islands. Utilities could remain down for an extended period.

Before reaching the islands, Yutu's sustained winds were reported to be 175 MPH. The storm is now tracking northwest toward the Philippines and Taiwan.

ARRL Emergency Preparedness Manager Mike Corey, KI1U, said that four ARRL HF/VHF Ham Aid kits in Guam are available for use in the Commonwealth of the Northern Mariana Islands (CNMI), a US territory. Another seven kits are positioned in Hawaii. Corey said that radio amateurs in Guam and Hawaii are attempting to get in touch with hams who can assist on Saipan, part of the CNMI. Amateur Radio teams that had planned to operate in the CQ World Wide DX SSB Contest from Saipan this weekend have cancelled their trips.

"There is a small group of radio amateurs on Saipan who do VHF work," Corey said. "We are in process of reaching out to them, as well as to radio amateurs who go to Saipan and Tinian for the CQ WW DX SSB event."

While Guam is reporting no serious communication issues, public service communication on Saipan is offline. Several stations in Hawaii, including large contest stations, have HF capability to Guam and Saipan, and three stations have agreed to pass traffic to Guam/Saipan if needed, Corey said. These include the five-position contest station station of Lloyd Cabral, KH6LC, on Hawaii's Big Island; the station of Doug Morgan, KH6U, on Oahu, and the six-position contest stations of Kimo Chung, KH7U, and the Koolau Amateur Radio Club, KH6J, on Oahu.

According to information received by ARRL from the Amateur Radio community in Hawaii, Guam, and Saipan, one station was showing up on DMR, but that would likely be of little use if the internet is down. One PATOR-4-equipped station is available on Guam, and Winlink (radio email) gateways exist in Hawaii.

"There are no transportation arrangements available to ARRL at this time to move Ham Aid kits from Hawaii to Guam," Corey said. "We don't intend to move them unless we have operators in Guam/Saipan to use them."



Yaesu FT-991A: First impressions

By Dan KB6NU

I recently acquired a Yaesu FT-991A and have been able to play with it over the past couple of days. Since I already own an ICOM IC-7300, it's inevitable that I should compare the two. They are alike in many ways, but quite different, too.

One of the obvious similarities is the size. They are both compact rigs, with the FT-991A being slightly smaller. They both cost about the same. Gigaparts is selling the FT-991A for \$1180, while the IC-7300 costs \$980.



The other similarity is that both radios have a color display with band scope. That's where the similarity ends, though. The IC-7300's display is larger and has a higher resolution than the FT-991A's display. That allows the IC-7300 to display a lot more information than the FT-991A, and thereby, making it much more usable.

The other big difference, for me, is that the IC-7300 offers touchscreen tuning. You can tap a signal on the IC-7300 band scope, and the radio tunes to that frequency. The FT-991A does not have that capability.

The FT-991A display is less capable in other ways, too. The narrowest bandwidth the FT-991A can display is 50 kHz, 25 kHz on either side of the center frequency. I've had the IC-7300's band scope down to 10 kHz bandwidth. This kind of resolution really lets you find open frequencies in a contest or a pileup.

I'm guessing that the IC-7300 can offer more resolution because it has a more powerful processor than the FT-991A. Another indication that this is the case is that the IC-7300 refreshes the band scope faster than the FT-991A. The upshot is that the IC-7300 is nicer to use.

The receivers seem comparable. Sherwood Engineering rates the IC-7300 receiver higher than the FT-991 (not the FT-991A), but I'm not sure that I'm good enough to tell the difference. The receiver sounded a little noisier to me, but that could have been that it just sounded different. The FT-991A's DSP filtering seemed just as effective as the IC-7300's filtering. When I set the narrow filter setting to 500 Hz and turned it on, it effectively eliminated nearby signals.

It may be because I've been an ICOM user for many years now, and have become used to how ICOM does things, but the IC-7300 seems easier to use in other ways, too. The IC-7300's tuning dial, for example, is larger than the tuning dial on the FT-991A. I think the larger tuning dial has a nicer feel.



In other ways, the IC-7300 seems easier to use than the FT-991A. For example, to automatically zero beat a CW signal on the FT-991A, you have to call up the menu system, page over to the appropriate page, then touch the screen. To do this on the IC-7300, all you have to do is hit the AUTO TUNE button.

The biggest difference between the two radios is that the FT-991A includes the 2 m and 70 cm bands, while the IC-7300 does not. That's a very attractive feature if you'd like to operate the satellites. Here's a video of KG6AJH working the AO-92 satellite using an FT-991A:

I think that the bottom line is that the IC-7300 is a better HF rig, while the big advantage of owning the FT-991A is its 2m and 70 cm coverage. I may hang on to the FT-991A and give satellite operation a try, but I'm not a big VHF/UHF guy.



The openSPOT2 is a standalone digital radio internet gateway (hotspot) designed mainly for amateur radio. You can talk with others on digital radio networks by using an openSPOT2, Wi-Fi internet access, and your radio.

Compatible digital radio protocols and networks*

DMR (BrandMeister, DMRplus, DMR-MARC, Phoenix, XLX)

D-STAR (DCS, REF/DPlus, XRF/DExtra, XLX)

System Fusion/C4FM (FCS, YSFReflector)

NXDN (NXDNReflector)

P25 (P25Reflector)

POCSAG (DAPNET)

Key features

Web-based easy and fast Quick Setup

No additional hardware required, works out of the box without a computer

All accessories included you need to have the openSPOT2 up and running (USB-C cable, 120V/230V USB power supply)

Built-in Wi-Fi and radio antenna

Designed for 24/7 continuous use even in your vehicle with extreme fast bootup and USB power supply tolerance

2 year warranty with official support in email / community forum

I ordered one and can hardly wait to get it and totally baffle and confuse myself trying to make it work. My first attempt at trying out this mode and I will tell you how it went next issue with a mini-review....

Jon K1TP

TUESDAY EVENING RANDOM SHOTS



The club is open Tuesday evening from around 5-9pm, sometimes later. The photo above is Chris building a antenna balun for Richard. Stop by and enjoy the club facility.



CAPE ANN AMATEUR RADIO ASSOCIATION

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www.caara.net

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224.900 & 443.700

NOVEMBER 2018

S	M	T	W	T	F	S
		Open House-5- 10pm		1	2	3
4 CLUB BUILDING FUND BREAKFAST	5	6 Open House-5- 10pm	7	8	9	10 BOD Meet Member- Lunch- Noon
11	12	13 Open House-5- 10pm	14	15	16	17
18 CLUB SCHOLAR- SHIP BREAKFAST	19	20 Open House-5- 10pm	21	22	23	24
25	26	27 Open House-5- 10pm	28	29	30	