

NARA Newsletter



President's Message – Randy VE7FAA

Welcome to the December NARA newsletter. From the club executive and newsletter crew, early Happy Christmas wishes to all.

The NARA Christmas dinner returns. It will be held on Thursday, Dec. 8, at 5:30 pm at the Nanaimo south end Smitty's, 117-50 Tenth Street. That's at the northwest corner of Tenth Street and the Island Highway South. Please let Jack VE7GDE know if you will be attending (ve7gde@gmail.com). There's lots of parking.

The end of the year always invites reflection on past events and future hopes. For NARA, 2022 was a mix of drama and progress. The clubhouse fire in March, as devastating as that was, also proved to be an effective catalyst for change which continues.

Annual amateur radio events in 2022 — Field Day, the Canada Day and other contests, Bathtub and the bike race support — took on a new and invigorated feel. Participation and interest are up and, thanks to the generous bequest of silent key Bob Smits (formerly VE7HS), the club's finances are secure.

NARA is on track to make 2023 another great year. The club will take up new residence at 719 Nanaimo Lakes Road, home of the Royal Canadian Air Cadets 205 Collishaw Squadron. Once details are worked out NARA members will be invited for meetings and other events.

And 2023 should bring more change. Since I've reached the term limit as president as defined by the NARA bylaws, this will be my last year as club president. A change in leadership is an important step, and one we ask members to keep in mind as the club moves through 2023.

Thanks to everyone, and there are many, who've made 2022 a great year for NARA in the face of adversity.

News from the NARA AGM

At the annual general meeting in November the following were elected to the club's executive:

Vice President: Jack VE7GDE for a two-year term

Secretary: Devan VE7LSE for a two-year term

Directors: Steve VE7TTF, Ward VE7CYA and Mason VE7PMD (one-year terms)

November SSB Sweepstakes Contest

VE7NA made a seven-hour skirmish into the ARRL November SSB Sweepstakes contest on Saturday, Nov. 19. VE7NA's location was the cabin of VA7DXX/G0NDB near Ladysmith. In attendance were Devan VE7LSE (with VE7Annika and VE7Julia), Bernie VE7IAD, Len VA7LGM, Gerry VE7BGP, and hosts Rosemary G0NDB and David VA7DXX. The 20m band and above produced some great contacts, but the lower bands of 40m and 80m were disappointing with propagation not too good and with seemingly not too much West coast activity. Rosemary's pizza and fries seemed to go down very well at around 5 pm and there was a definite lull in the operating around that time.



Devan VE7LSE operating with Gerry VE7BGP taking a break

NARA Stickers and Clothing

NARA stickers in two sizes are now available. The small sticker is \$1, and the larger sticker is \$2. To buy stickers,

please contact any member of the executive. For NARA branded clothing or related information please check out <http://www.ve7na.ca/member-purchases/>. To order contact Lanaya VE7NAY at ve7nay@outlook.com.

Every home should have one!

Emergency Management BC has recently put out a pictorial guide for homeowners about items regarded as essential for a grab-and-go kit. It is well worth reviewing. Exactly what should go in your own grab-and-go kit is up to you but this is a good start.



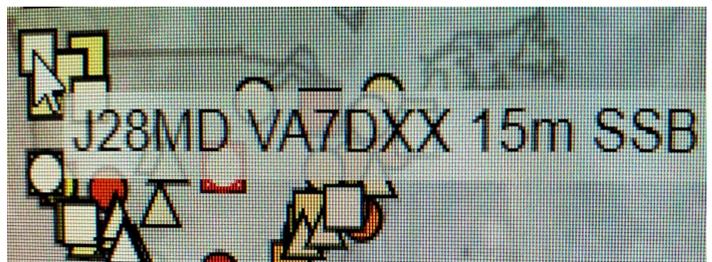
How is DX – David VA7DXX

DXpedition activity typically decreases over the Christmas/New Year period and this season is no exception. However, through December a five-man team will activate Bangladesh under the callsign S21DX (IOTA AS-140). Other trips include Norfolk Island by ZL1MTO using the callsign VK9MTO, the Solomon Islands (H44SHD), and Gabon (TR8CR).

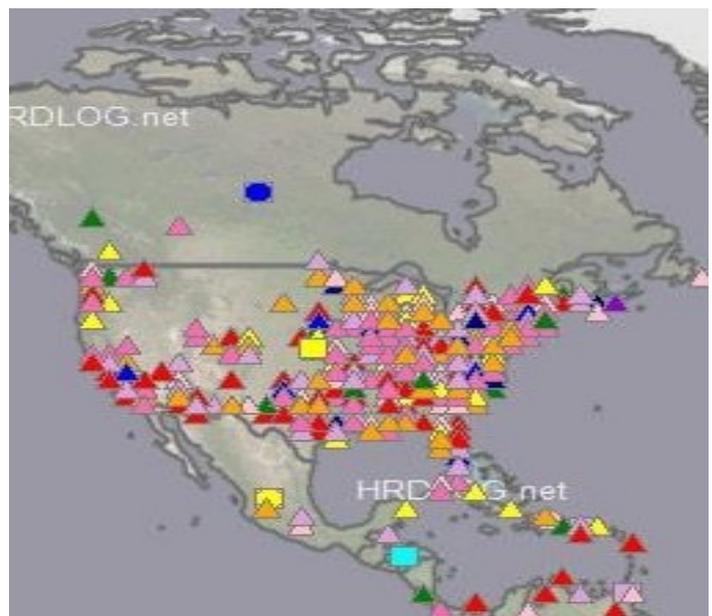
After months of anticipation, I did manage to work J28MD in Djibouti, a new country for me. This is how I got on with this DXpedition:

- 80m – heard at 329 on CW at their greyline
- 40m – heard at 539 on CW (probably long path)
- 30m – heard on CW at 559 but not worked
- 20m - worked on CW
- 17m – heard briefly at 569 on CW but they closed down
- 15m – worked on CW and SSB
- 12m and 10m – not heard

On some days during the J28MD DXpedition their operators happened to be on the right bands at the right time of day for the Pacific Northwest. On other days not so much. HF radio conditions are changing all the time and the trick is to be in the right place (band and mode) at the right time of day. The DXpedition had an almost live online log, which was very handy to help avoid duplicate contacts when asking, “Am I in their log? Should I call again?” The J28MD online log was very well done. About one minute after a contact you could see your callsign pop up on a map. Not many DXpeditions have live logs like this, but they are always fun.



The J28MD DXpedition made 91,356 contacts in 10 days with 22,501 different stations of which 13.5 per cent were in North America. As the map shows most of these North American contacts were on the east side of the continent. I know of several VE7s who also made it through the huge European pileups, including Gabor VE7JH in Crofton who made contact on 15m SSB.



Distribution of J28MD contacts across North America

The much-anticipated one-man DXpedition to Crozet Island by F6CUK should start around Dec. 20 using a yet to be announced FT8/c callsign. The latest on this Crozet one-man DXpedition is that the operation will be permitted for 19 hours/day and on HF only until Jan. 26.

NARA Tech Talks

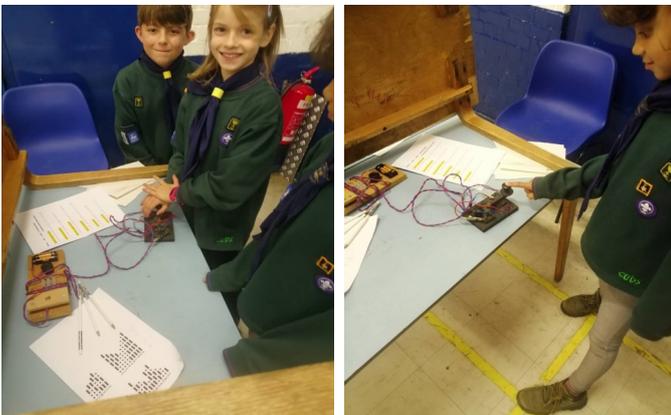
NARA is looking for a new coordinator for its tech talks. The website is www.artt.ca. If you can volunteer, please contact Devan VE7LSE at ve7lse@gmail.com.

AREDN News

Further AREDN nodes planned for spring include: Two nodes at Cottle Hill in central Nanaimo thanks to Island Comms, plus nodes at the VE7KU repeater site at Mount Cokely to allow connections to Port Alberni.

Cub Scouts in London – David VA7DXX

Our niece in London is a Cub Scout leader. She recently contacted Rosemary, GONDB, to get some help with a Morse code class which she was arranging. We supplied some short phrases and Rosemary translated them into dots and dashes for the class. This proved to be not only fun but quite a success. Maybe a few budding radio hams as well! Thanks to Elliot, Kira, and Amelia and their parents for giving us permission to use the pictures.



Cub Scouts in London having fun practicing their morse

NARA on-the-air events

Two upcoming NARA on-air events include:

- The RAC Canada Winter contest starts at 5 pm on Friday, Dec. 17. This is a 24-hour somewhat relaxed contest on both phone and CW. It will take place at VA7DXX's cabin near Ladysmith. Please contact Devan VE7LSE if you plan to attend.
- Winter Field Day takes place on Jan. 28-29. The club intends to operate at the Royal Canadian Air Cadets 205 Collishaw Squadron location on Nanaimo Lakes Road in south Nanaimo. Expect further details in the January newsletter.

New NARA Shack

The new NARA radio room at the 205 Collishaw Squadron site will soon be ready for NARA use. The room needs carpet and painting, and work will be undertaken soon. The NARA training group will put on a Basic course for the cadets in January or February.

Ellen White W1YL – SK

Sad news from the world of the American Radio Relay League. Ellen White, W1YL, who worked for the ARRL for 26 years, died at the age of 95 in early November at her home in Florida. Ellen was licensed in 1946. She married W1CW and their son became K4OJ. David VA7DXX had the pleasure of meeting Ellen numerous times and still has a lapel badge she gave to him which was in Spanish. Translated it read 'CW spoken here.' Ellen was a member of FOC (First Class CW Operators' Club) and a member of the CQ Hall of Fame amongst other notable amateur radio achievements. Earlier in life Ellen had been a station engineer (unheard of for a woman to do that job at the time) and announcer for broadcast stations in San Diego and Hawaii. A truly remarkable woman, a trailblazer, who retired from the ARRL as Deputy Communications Manager and in retirement became the editor of ARRL's 'How's DX' column.



Ellen White W1YL

ZS6BKW Antenna at VA7WPM

NARA Member Mike VA7WPM has set up his first HF station, so David VA7DXX and Mike raised a ZS6BKW antenna at Mike's location in mid-November to a height of about 60 feet.

The ZS6BKW antenna is an optimized G5RV antenna. Mike's first HF contact on 80m SSB was with Devan VE7LSE. Expect to hear Mike on some of the local HF nets on his 100-watt ICOM radio.



Mike VA7WPM hauling up one side of his ZS6BKW antenna

Joe Walsh is 75

For fans of the band The Eagles, guitarist Joe Walsh celebrated his 75th birthday on Nov. 20. Joe is a keen radio amateur, call sign WB6ACU. He is also a keen supporter of the American Radio Relay League, in fact a life member. Joe last visited ARRL HQ in 2017 to record some messages for radio which the ARRL could use for publicity. In the past Joe has also contributed equipment to the ARRL's HQ station, W1AW. As Joe says on his QRZ.com page, "take it easy."



Amateur Radio Satellites By Bruce VE7PTN and Ward VE7CYA

This is the first in a series introducing amateur radio satellite operations. We hope to inspire you to try this fascinating activity if you have not already. Perhaps you have heard about working satellites, have yet to try it, and want to know more. Or maybe you gave it a try once but with limited or no success gave up in frustration. Even if you have already operated satellites and want to step up your game, you may find some useful information in these articles.

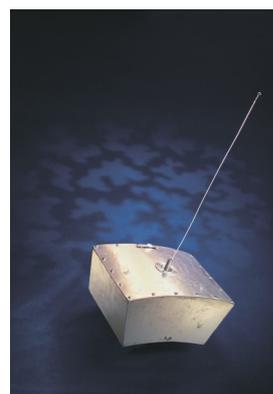
Like most amateur radio activities, satellite operation is fun yet challenging. It is essentially cross-band repeater operation with this twist: the repeater is travelling at more than 27,000 km/h at an altitude of about 300 kilometers, it will only be "visible" for 10 minutes, and the operating frequencies will be constantly shifting.

Once you have the hang of satellite operating you can often combine it with contests and events such as Field Day to earn extra points. Of course, your satellite QSOs can be applied for various awards such as Worked All States and VUCC.

The most coveted award for satellite work is the Continental United States (ConUS) Gridmaster. This is awarded to operators who confirm contacts for each of the 488 four-digit Maidenhead grid squares that cover the lower continental states. It is sponsored by AMSAT, the Radio Amateur Satellite Corporation and is free to apply.

With a very active and supportive satellite operator community many operators will shift to the rarer grid squares, often in remote locations, so that other operators can make contact to earn that grid.

The first satellite that included amateur radio gear was launched in 1961, only four years after the first ever satellite launch.



Since then there have been many Orbiting Satellites Carrying Amateur Radio (OSCAR), sometimes as one component of a multipurpose payload, and more recently as dedicated amateur radio "cube sats" (less than one cubic foot).

OSCAR 1 was launched in 1961

There are two basic types of satellites: FM and Linear. FM satellites, as the names suggests, use frequency modulation and provide a single channel uplink and downlink for their crossband repeater. The operation of these satellites is the most straightforward and are a therefore a good type for beginners.

Linear satellites use SSB modulation and have a wide pass band on the repeater to provide between five and 12 simultaneous channels — even more on some. Linear satellites are typically “inverting” transponders, where the uplink is inverted with respect to both the modulation (e.g. LSB uplink becomes USB on the downlink), and the passband (e.g., an uplink that is high in the passband will be in the lower portion of the downlink passband). These characteristics complicate the operation but once you get the hang of it they offer several advantages, such as great range and ability to shop around for operators or grid squares of interest.

The most important part of satellite operations is being able to reliably receive signals. There's no point in transmitting until you are sure that you can hear “the bird” (i.e. the satellite). Many new operators start by blindly transmitting when a satellite is overhead and do nothing but disrupt other QSOs and get a bad name for themselves. You want to avoid being an “alligator” — all mouth and no ears — and the first step on that road is learning about receiving and knowing how to listen.

Next month we cover just that, receiving and listening. *Meanwhile, here are some helpful resources:*

- *Heavens Above website (<https://www.heavens-above.com>) - real time satellite tracking website; set location using link in top right then select “Amateur Radio Satellites- All Passes” from the menu on left*
- *ISS Detector website (<https://www.issdetector.com>) - smartphone app for real time and offline satellite tracking*
- *AMSAT website (<https://www.amsat.org>) - North American amateur satellite organization; serious satellite operators are*

members of AMSAT which supports amateur radio in space including the construction/inflight operation of the satellites (think of it as the repeater association equivalent for satellites)

- *FM satellite frequency guide AMSAT(<https://www.amsat.org/fm-satellite-frequency-summary/>)*

About the authors:

Bruce Patten VE7PTN was licensed in 2021 and satellite operations are his main amateur radio activity. He now has more than 1,300 satellite QSOs and 350 confirmed grid squares. He is over 60 per cent of the way to achieving his ConUS Gridmaster status. His home satellite station is an Icom IC-9700 transceiver, M2 LEO Pack antenna system, Alfa-Spid RAS rotator and MacBook laptop running MacDoppler for radio tuning and satellite tracking. Bruce has conducted satellite roving throughout BC, Alberta, Yukon and the Northwest Territories.

Ward Clapham VE7CYA was licensed in 1989. He began operating satellites in mid-2022. He now has more than 525 satellite QSOs and 134 confirmed grid squares. His home satellite station is an Icom IC-9700 transceiver, M2 LEO Pack antenna system, Yaesu G5500 rotator and Windows laptop interfaced with a CSN Technologies S.A.T. for radio tuning and satellite tracking.



VE7CYA’s mobile satellite station also used for roving

Pacific NW DX Convention 2023

The PNW DX Convention returns to Vancouver in 2023. It will have been five years since it was last in BC. The dates are Aug. 11-13 in New Westminister. The convention is sponsored by the ORCA DX and Contest Club.

The volunteer group of NARA members producing this newsletter would like to thank all those who provided material for this month’s issue. Special thanks to VE7CYA and VE7PTN for their satellite article.

The NARA newsletter is normally published on the last Friday of the month preceding the month of issue.

News items and comments should be mailed to:

news@ve7na.ca