NARA Newsletter



President's Message – Randy VE7FAA

Members of NARA have had a great summer. A series of fun and successful events wrapped up on Sunday, Aug. 28, as NARA coordinated radio communications for the Unpaved Bike Race around the lower reaches of Mount Benson.

The race was preceded by four events: Field Day in June; the July 1 Canada Day contest; Bathtub race communications later in July; and a multi-day campout/work party in August in the north Island with other Island clubs. The camaraderie, experience, fun, and learning at all events exemplify the strengths and potential of the NARA membership. Huge gratitude to all who organized and participated in these events.

As fall approaches it's back to school and business for NARA. The next general meetings is Sept. 8. This will be a hybrid meetings so members can attend either in person or via Zoom. Details will be emailed to the membership.

In regard to school, the club is putting on a Basic instruction course this fall, between October and December. If you know someone wanting to get their amateur radio certificate, please let them know. Also, NARA's DMR repeater should be online soon. Once up and running details will be announced. Plans are also in the works to resume tech talks and build projects this fall. Additional discussions about the possibility of setting up a remote HF station and a 220 club repeater mean there's a lot going on at NARA that will take us into 2023.

One agenda item at upcoming NARA meetings will be finding a new location for the club. Discussions with the city continue, and various other options are being considered. For those not aware, the old site at Wingrove Street and the adjacent recreation facility, burned out in March of this year, will be torn down.

The NARA executive — myself, vice president Jack, secretary Devan, treasurer Chris, and directors Steve, Ward, and Mike — hope everyone had a great summer and express gratitude for all your efforts, time, and energy that make NARA a club we can all be proud of as part of the Amateur Radio Service.

NIARS 2022 Camp out

August was a good month for the Amateur Radio Service on the North Island and the Island Trunk System.

While all Island clubs do a lot of infrastructure work at this time of year, the focus in early August was on the north Island

repeater sites under NIARS (the North Island Amateur Radio Society).

Of the repeater sites in the north Island, the one at Newcastle Ridge, high in the mountains west of the Town of Sayward, is perhaps most important to the ITS. Its 220 MHz link to Nanaimo is crucial for the ITS to be able to cover the entire 460-kilometre length of Vancouver Island. A new metal sea can replaced the old wooden building there two years ago, but other north Island sites also require annual maintenance and upkeep.



The Woss Island Trunk Repeater site

So it was that 28 amateurs from throughout the Island came together for a work party, campout, socializing, sharing good food, POTA activations, and a whole lot of fun. Club members came from Victoria, Duncan, Nanaimo, Salt Spring Island, Parksville/Qualicum, Comox, Campbell River, and of course north Island communities such as Port McNeill. One participant coined the term "hamaraderie" to define the experience.

To quote Nanaimo club member Devan Banman, VE7LSE, "The camping and company (were) awesome!"

The Woss repeater site, VE7RWV, which had been down for several months, required the most attention. A fuse had corroded and failed, and the battery bank was in bad shape.

"Batteries were replaced and a new charge controller installed with a low-voltage cut-out to protect our new batteries," said Devan.

At the Newcastle site, VE7RNC, a plaque naming donors who made the 2020 sea can swap-out possible was installed. The plaque was made, donated, and installed by NARA member Darryl VA7DDU. Otherwise, all was well there.

But the building at the Shelley Mountain repeater site, VE7RNI, near Port McNeill needs a new roof. Temporary fixes were done, measurements were taken, and that work will be a big part of the 2023 NIARS campout and work party. Plans are already in motion for that event and people are already signing up. If you want to join in next year email Devan at VE7LSE@shaw.ca.

"We hope to make this an annual event and planning will start soon for next year. Anyone interested is welcome to join us," said Devan. "Thanks to everyone who came out to the event and for all the hard work done by the volunteers at each repeater site."

Anyone who can donate to NIARS to assist with the Shelley Mountain repeater site roof replacement can go to niars.ca/donations. E-transfers can be made at niars269@gmail.com.

Bike Race – 28 August

The skills, knowledge, and organizing abilities of NARA members to provide communication support for community events is well known through many years of participating in the annual Bathtub race.

And those same radio and organizational skills were put to excellent use once more on the last Sunday of August at the Mid Island Velo Association's "Unpaved" bicycle race. Cyclists raced along winding stretches on various dirt road circuits at the southern base of Mount Benson. Access to the logging roads was granted for the day by Mosaic Forest Management.

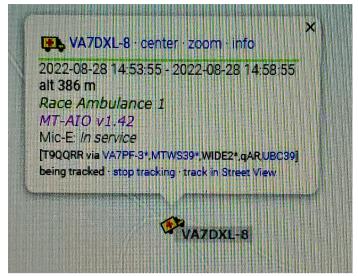
More than a dozen NARA members at stations spread out along the lengthy course provided radio links for race officials. The VA7ITS repeater at the top of Mount Benson was used as the primary frequency and taken off the Island Trunk for the day.



The Okay Backside Bridge Checkpoint

NARA also provided APRS tracking units (courtesy of David VA7DXX and programmed by Devan VE7LSE) with magmount antennas for the medic vehicle and sweep truck. APRS tracking

was also set up at the first aid station and an APRS beacon and digipeater were located at the southernmost checkpoint.



The race ambulance showing on the APRS map

Important information during the race, in one case about an injured cyclist (the only one), was relayed as required. The injuries were not serious. Toward the end of the race NARA also passed along information about keys lost by a rider on the course. Amazingly, they were found.

Net control was located at the start/finish line with the race organizers, but it was a poor location for the Mount Benson UHF repeater, VA7ITS, as it was plagued by multipath noise. And, as with every such experience, the learning is an integral part of the process..



The Net Control station at the Start/Finish location

Great thanks to David VA7DXX and Mike VA7WPM who donated much of their time to organize this and did such an excellent job to make it work so well.

How is DX – David VA7DXX

Rosemary and I had some DX visitors in early August. Ole LA2RR and Karin LA8UW came to stay with us for a few days prior to an Alaskan cruise. In the picture below are Tim Ellen VE6SH (president of the IARU, who was on the same flight as Ole and Karin into Nanaimo), Karin LA8UW, and Ole LA2RR (vice president of the IARU). Karin has won many gold medals in IARU direction-finding competitions and is thus considered an expert in this sport. Ole and Karin were previously on the Island in June 2018, when they visited the NARA field day site.



L to R: Tim VE6SH, Karin LA8UW and Ole LA2RR

While Ole and Karin were staying with us there was an exceptional DX opening on the 6m band on the morning of Aug. 6. VE7SL, VE7DAY, VE7SNC, VE7DX, VE7KAJ, VE7TOM, and many west coast US stations were making the most of it, working into the UK and parts of Europe. This activity was all on FT8 and the screen-shot below shows the activity. You need some power and decent antennas for these types of openings. Despite that I did see UK and European stations on my wire antenna, which illustrates the strength of this amazing opening! One of the best openings to Europe on 6m for a long time.

```
171845
                      OV3T VE7SL R+00
              1420
          0.1
171845
                      CO W7FI
71845
     06.08.22 17:19:14 UTC
               206 ~ K6BV DK8NE -08
171900 -15 -0.2
                                                     G
                580 ~ K6SR2
                            DKSNE -18
171900 -18 0.2
                    ~ VE7SI DL1YM -11
           0.1 2591
    06.08.22 17:19:29 UTC
           0.1 2192 ~ LY1CX NOOT R-18
                                                     U
           0.1 1420 ~ OV3T VE7SL R+00
                                                     C
      -6
                431 ~ MDOCCE VETTOM R-08
                                                     C
171915
           0.1
           0.1 1132
                      CQ DX K7LNP DN30
                                                     U
                      LB5WB W7FN CN88
           0.1 1654
                                                     TJ
171915
       -4 -0.4
               1983
                      LASAJA KJ2U R-17
                                                     U
 171915 -12 0.2 1904
                      SP2ERZ VE7DAY R-11
           0.1 2744
                      SP2EWQ WIYY R-10
                                                     U
    - 06.08.22 17:19:44 UTC
 171930 -15
                                            6m
           0.1 2592
                    ~ K6BV DL1YM -21
                580 ~ K6SRZ DK8NE
           0.2
 171930 -19 -0.1
                206
                      K6BV DK8NE -08
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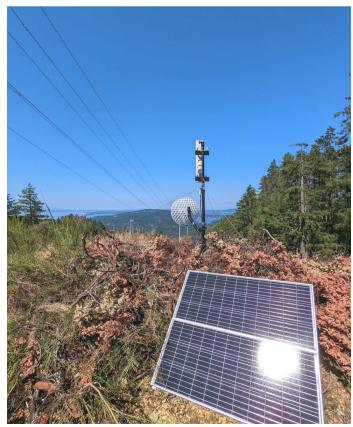
Six German stations showing on FT8 during the 6m opening

There is a Dxpedition to the Spratly Islands, in the South China Sea, starting mid-September for about two weeks. The four-man team will use callsign DXONE. The Islands are rare for DXers, and this would be a good one to catch.

This solar cycle, number 25, which began in December 2019, is apparently getting rather more active than NASA predicted. The sun's activity is measured in terms of sunspots and already these are exceeding expectations. Sounds to me like this is an ideal time to dust off your HF rig and put up some HF antennas! The maximum part of cycle 25 is expected to be between July 2025 and March 2026, but don't delay as the bands are in quite good shape.

AREDN Update

The build-out of the mid Island AREDN network is moving along with stations linking into the mesh across some significant distances over water. At the north end of Salt Spring Island a remote solar-powered AREDN station with a sector antenna for local connections has been combined with a medium-sized dish that connects to the NARA sector antennas on Mount Benson. The Salt Spring station is entirely powered by two 100-watt solar panels feeding a 100 ah LiFePo battery that can keep the system running for up to five days. We are very interested to see how this configuration handles Island solar conditions through the winter months. Thanks to Andrew VE7ASI, Scott VA7EFZ, and Devan VE7LSE for setting up this new AREDN node.



The New AREDN site on Salt Spring Island

There is also a station from the Sunshine Coast which connects to the Mount Benson sector antennas using an adapted satellite TV offset dish combined with a Mikrotik LDF AREDN feed horn replacement unit.



The NARA Mount Benson 5 GHz sector antennas

Both stations are out at the effective limits for connecting to Mount Benson, but even without a high signal-to-noise-ratio figure there is still reasonable connectivity and speed to link with a variety of services available on the mesh.

In the Parksville/Qualicum Beach area some get togethers are planned for this fall to provide mentoring for AREDN enthusiasts wanting practical experience in making mesh connections. While flashing Ubiquiti and Mikrotik WiFi hardware is quite easy, it is like most technical topics; it's a lot easier once you see someone else doing it and then walking you through the steps.



Showing the white Mikrotik hAP with an AREDN IP phone

There have been two major upgrade releases of AREDN firmware over the last few months which address a variety of issues that have been identified as beneficial

upgrades. One of the best is that the process for uploading new firmware copies into a node has been greatly simplified. The option now exists to simply click a button to download a list of recent AREDN updates. You can then show a list of available upgrades, select from that list, the selected firmware will be downloaded onto the node, the unit will automatically reboot a couple of times, and you are running the latest upgrade.

Swap Meet in Victoria

The Westcoast Amateur Radio Association (WARA) in Victoria is holding a swap meet on Sept. 25, a Sunday. The venue is the Da Vinci Centre at 195 Bay Street, Victoria. General admission starts at 10 am. Full information is available at https://www.ve7vic.ca/swap-and-shop/swap-meet-test/

Next NARA Meeting

The next NARA general meeting takes place Sept. 8. This will be a hybrid meeting allowing members to attend either in person or via Zoom. Watch your email for further information.

NARA Basic Exam Course

NARA is putting on a Basic exam training course this fall starting on Oct. 8 and continuing with weekly two hour sessions until early December. The course is somewhat visual in its presentation and will include typical questions from the ISED exam bank. The course will be handled by VA7DXX, VA7WPM, VE7LSE and VE7TOM as instructors.

The club will further advertise this course locally and on social media. If you know anyone who might be interested in taking this NARA online Zoom course please have them contact Mike VA7WPM at keelcove@shaw.ca for full details.

The volunteer group of NARA members producing this newsletter would like to thank all those who provided material for this month's issue.

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