NPARC
NiagaraPeninsula
AmateurRadioClub

Spring 2026 Feedline

Hello fellow HAMS and welcome to the Spring Edition of FEEDLINE. I wish to bring a bit of the past and the future into each edition and hope you enjoy the read.

On February 7th NPARC was recognized by MPP Wayne Gates for the 45th BIG EVENT the club has hosted. We thank MPP Gates for attending the event.


Ontario

On behalf of
The Province of Ontario

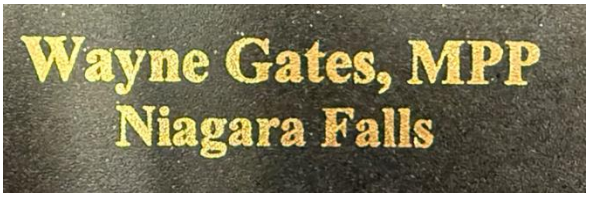
I am pleased to offer my congratulations to the

Niagara Peninsula Amateur Radio Club

in recognition of your
45th Anniversary
February 7th, 2026

Thank you for 45 years of contributions to our community!
Here's to many more.

Wayne Gates, MPP
Niagara Falls Riding



MESSAGE FROM THE PRESIDENT

The success of our club is starting to show !

It has been several years since we attempted to conduct a “Big Event” Hamfest and Flea market as we did so many times in the past. The challenge could have been daunting for a lot of other clubs that have suffered declining membership, tired leadership, and a general tiredness from the COVID era that can still hang over us from time to time.

Some said we couldn’t do it, and some said we shouldn’t do it. In spite of the many challenges, we did do it. Many hours of deliberations by the “Big Event” planning committee, individual members chasing down solutions to problems, generous anonymous “in kind” donations, and significant buy-in by the membership, at large, proved to ourselves and the world that we are back. Big Time.

The 45th “Big Event” of 2026 was a huge financial success. It was also a huge success for the club that brought achievement, excitement, surprise, and the best of volunteer spirit.

I want to thank everyone who participated in the 45th “Big Event” for 2026.

We couldn’t have done it without you. Everything that you, the membership, whether big or small, did to make this event a success is hugely appreciated. Summer Field Day is coming up quickly and preparations are starting to take shape.

This event is a great way to shake the cobwebs off the radios and antennas to get started for a whole summer of amateur radio. We hope this field day will be as interesting and challenging as those of the past. Let me know if you are interested in participating or setting up for Summer Field Day. I look forward to your input.

Paul VE3WRP

Discovering Amateur Radio In Bonaire

By Paul Walker VE3WRP

On a recent trip to Bonaire for some relaxation and scuba diving, I had a moment or two, to consider what it would be like to operate an amateur radio on the island.

I found the idea had a certain amount of intrigue to it. Small island, beautiful beaches, lots of saltwater to bounce a signal off of, warm temperatures, a nice steady breeze to keep thing from getting too hot for starters, and close to South America for some really good exotic contacts. Not to mention of course, there are all those great seaside restaurants to watch the sunset while having a margarita and dinner.

So, I started to dig around a bit. Casually at first, but as time went on, it became more of a "thing" for me. I wanted to know what the amateur radio scene on the island was like. Did amateur radio exist on the island? Could I see any antennas scrapping that big beautiful blue sky?

Well, it wasn't long before I got my first answer. Lise and I had been touring the island most of the day in a 4×4 Toyota Hilux pickup truck when we found ourselves on a very bumpy dirt road with lots of ruts and potholes. We had been photographing the wildlife and now found ourselves in front of the Flamingo sanctuary on the east side of the island. It was at this point that I saw a SteppIR MonsterIR on a telescoping tower. I wanted to take a closer look, but was told that the property was private and off limits as the rehabilitation center wanted the flamingos they were treating to have as little contact with humans as possible.

Later, I was able to find out that the amateur radio scene in Bonaire is small – very small. Just 10 to fifteen guys. But those guys do a wonderful job of keeping amateur radio alive on the island. As evidenced by the quite sophisticated stations that can be rented. The prices are not cheap but when you see the facilities they provide, the costs can be understandable especially when you consider the shipping cost for starters.

The contesting ability of the teams on the island are impressive to say the least, with published scores for various high profile contests they have entered into range into the millions for final points scores from thousands of contacts.

When we finally got back home, I was able to do some research and found out more about amateur radio in Bonaire.

So what does it take for a Canadian Amateur Radio Operator to play radio on the island?

I asked Google's AI Gemini what I needed to do to play radio in Bonaire instead of wading through very dense and dry websites trying to cobble together enough information and this is what I got back.

Canadian amateur radio operators can operate on the island of Bonaire without applying for a local permit for up to **three months** by utilizing the CEPT reciprocal agreement. Bonaire (part of the Caribbean Netherlands) is a signatory to CEPT, and Canada participates in this program through Radio Amateurs of Canada (RAC). [1, 2, 3, 4]

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Key Regulatory Requirements

- **Operating Duration:** You may operate for a maximum of **three months** using your home credentials. For stays exceeding three months, you must apply for a local authorization from the Dutch Authority for Digital Infrastructure (RDI).
- **Permit Type:** While the CEPT agreement allows for temporary operation, Canadian amateurs typically must obtain a **CEPT permit** from Radio Amateurs of Canada before traveling to demonstrate their qualifications.
- **License Class Restrictions:**
  - To access **HF frequencies** (below 30 MHz), you must hold a Canadian license equivalent to a US "Advanced" or "Extra" class.
  - If your Canadian certificate only includes Basic qualifications without Honours, you may be restricted to **VHF frequencies** and above.
- **Identification:** While operating, you must use the Bonaire prefix **PJ4/** followed by your Canadian call sign (e.g., PJ4/VA3XYZ).
- **Required Documentation:** You must carry your valid Canadian Amateur Radio Operator Certificate, proof of Canadian citizenship (passport), and your CEPT permit at all times while operating. [1, 2, 3, 4, 5, 6, 7, 8, 9]

So, if you have ever daydreamed about operating a very high end and sophisticated contest station on a DX expedition to a warm sunny Caribbean island, then you would be hard pressed to find a better location than Bonaire.

Have you ever dreamed of operation on a once-in-a-lifetime DX expedition? Let us know what you think on Groups.io You never know what could happen when we all put our heads together.

[1] https://pj4g.com
[2] https://english.rijksdienstcn.com
[3] https://www.rac.ca
[4] https://pj4g.com
[5] https://www.rac.ca
[6] https://www.rac.ca
[7] https://ised-isde.canada.ca
[8] https://www.rac.ca
[9] https://www.rac.ca

Hope you Enjoyed ! Paul VE3WRP

Search and Rescue - Open House

CASARA Niagara at Niagara District Airport
468 Niagara Stone Road, Building #3
Niagara on the Lake, Ontario

Thursday, April 30, 2026 6:30 to 8:30 pm

Ramp tour of aircraft and opportunity for photos,

SAR equipment demonstrations (weather permitting).

Win a prize if you can locate an Emergency Transmitter.

Learn how Air based Search and Rescue operates in Canada.

For more information contact: casarabook@gmail.com

CASARA is looking for radio operators and drone participants, not just pilots, but ground crew. They also have a mobile S&R vehicle that has radio facilities.

A new member would have to take their introduction courses to qualify, but some amateurs might find participation interesting;

When they were located in Welland, NPARC had a relationship with them, but that was many years ago. We did participate in a downed aircraft search, similar to what we would call a fox hunt, pre-covid, some years ago.

Please drop by the Open House if you are interested !

Glenn VE3NDW

NPARC General Members Meeting March 12, 2026

Black Creek Community Centre at QEW and Netherby Rd.

The meeting was called to order at 7:00pm by Derek, VA3RFQ,

Treasurer. Geddie, VE3CJX, Secretary were present. Paul, VE3WRP, President and Carl, VA3CK, Vice president were absent with notice.

The meeting was not on-line.

In total, 18 were in attendance. There was no quorum and therefore the business agenda could not proceed.

We proceeded with the demonstration by Asraf Botros ending about 9:15pm.

The demonstration focused on the U-Console programmable microcomputer and features of interest, connections to components in a modern SDR shack and in portable radio operation.

Keywords included: Trixie, LORA, GPS, USB, power consumption, receive only, windows integration: Raspberry Pi, Linux, open source software.

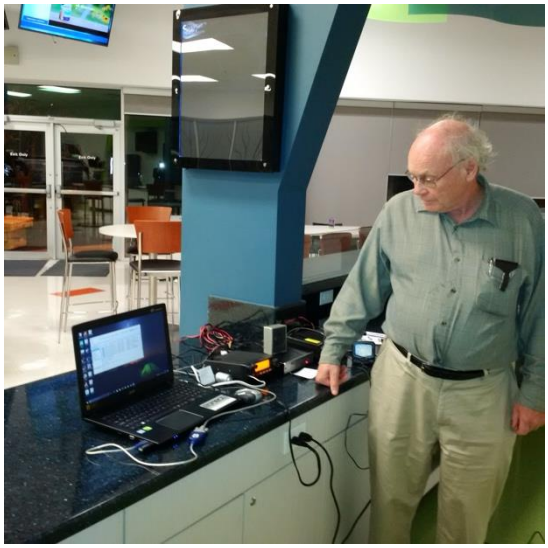
Some U-Console web references might include:

uconsole.net and https://en.wikipedia.org/wiki/Open-source_software_development.

Minutes prepared by: Geddie, VE3CJX, Secretary.

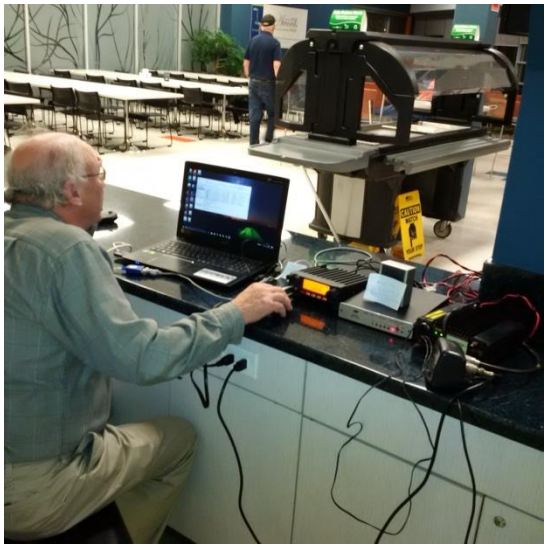
Geddie also shared a bit more information about Roy Blake with some photos that she discovered

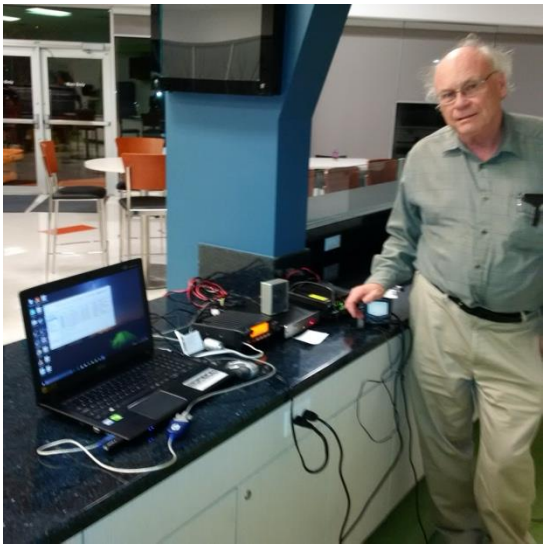
Roy taught electronics for over 30 years at Niagara College in Welland, where he was a shop steward in the Ontario Public Service Employees Union, and wrote several communications technology textbooks which were taught around the world.



He loved teaching, which let him combine his knowledge of technology with his ability to relate to people to contribute positively to society and the lives of others. He was active in his community as part of the Unitarian Congregation of Niagara, the Niagara Peninsula Amateur Radio Club, PROBUS, and the Niagara College Retirees Association.

He continued as a technologist into his retirement, voluntarily using his skills for all these organizations and helping sundry other people with their technical problems.





UPCOMING EVENTS!

ARRL Field Day 2026 is scheduled for June 27–28, 2026, operating from 1800 UTC Saturday to 2059 UTC Sunday. It is amateur radio's premier emergency preparedness exercise and operating event, with 2026 featuring a special focus on the America250 celebration. Participants set up stations in field locations to test autonomous, portable capabilities. ARRL +2

Key Details for Field Day 2026

- **Dates:** June 27–28, 2026.
- **Theme:** "Amateur Radio: A National Resource," celebrating America's 250th anniversary.
- **Location:** Find local stations or clubs using the ARRL Field Day Station Locator.
- **Rules & Participation:** Primarily, this is a communication exercise, not a contest, though it is often operated like one. Participants can check official rules at ARRL Field Day.
- **Bonus Points:** Use the hashtag #ARRLFD on social media (Facebook, Twitter, Instagram, LinkedIn, or YouTube) for 100 bonus points.
- **Merchandise:** Official 2026 gear with a patriotic theme is available through the ARRL Shop. ARRL +4

How to Participate

- **Join a Group:** Find a local amateur radio club, such as the Five Flags Amateur Radio Association or the Cascade Amateur Radio Enthusiasts, that is organizing an event.
- **Operate Alone or Small Group:** Use the "1B" or "1D" categories to operate from home or a temporary, portable location.
- **GOTA Station:** Encourage newcomers or inactive hams to use the "Get On The Air" (GOTA) station.
- **Report Results:** Submit your results via the web app or mail within 30 days of the event. ARRL +5

The 29th Annual Ontario QSO Party 2026

To be held on the third full weekend of April
1800Z April 18 to 0300Z April 19, 2026
and 1200Z to 2000Z April 19, 2026

Submit Activation Plan for "Who's On" Page

2026 Rules Changes:
Phone QSO's now count the same as CW QSO's (2 points)
addition of VE3RHQ as bonus station
County line proximity definition (250m)
Fixed County Line Category added.
Adjustment of contest times (2 hours moved from Saturday to Sunday)

2025 Final Results

The OQP counts towards the State QSO Party Challenge.

Welcome to the Ontario QSO Party (OQP). This event is held annually on the third full weekend of April. Beginning in 1998 under the thoughtful guidance of Bob Chandler VE3SRE it quickly became a popular event among Ontario hams and beyond. In 2006 the organization of the party was turned over to Contest Club Ontario (CCO) who now manage the event.

In the contest, stations outside Ontario make as many contacts with Ontario amateur radio stations as possible. Ontario stations contact as many amateur radio stations as possible both in Ontario and world-wide. See the full set of rules for the contest exchange, frequencies, modes and categories.

The ON QSO Party scoreboard URL: ***https://contestonlinescore.com/scoreboard/?contest_id=166***

OQP Group

Join the Ontario QSO Party discussion group and find out what your friends are up to. How to join this group:

Go to https://groups.io/g/OQP and click on Join.

Software

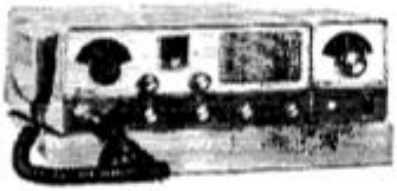
Logging software and support files for OQP

Recent Equipment

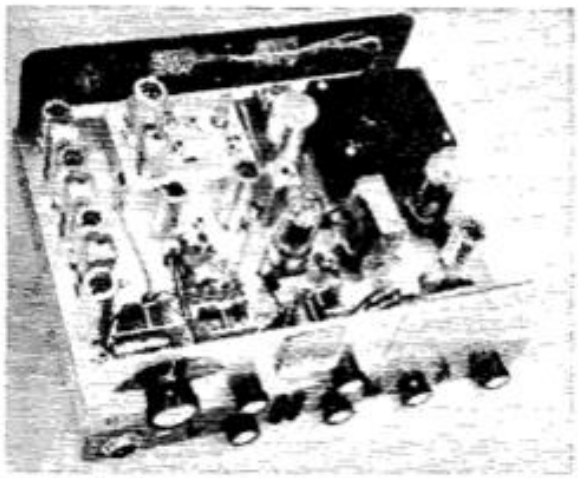
To acquaint you with the technical features of current amateur gear.

Blast from the Past

The Knight-Kit TR-106 Transceiver



THE TR-106 is a 6-meter transceiver kit covering 50 to 52 Mc. The transmitter portion uses the familiar 2E26 at an input power of 15 watts. The receiver portion is dual conversion, with a crystal-controlled converter featuring a nuvistor r.f. amplifier in the front end. The transceiver contains a built-in spot switch, push-to-talk control, a.c. and d.c. power supplies, multiple-position crystal switch, internal speaker, and provisions for a matching v.f.o.



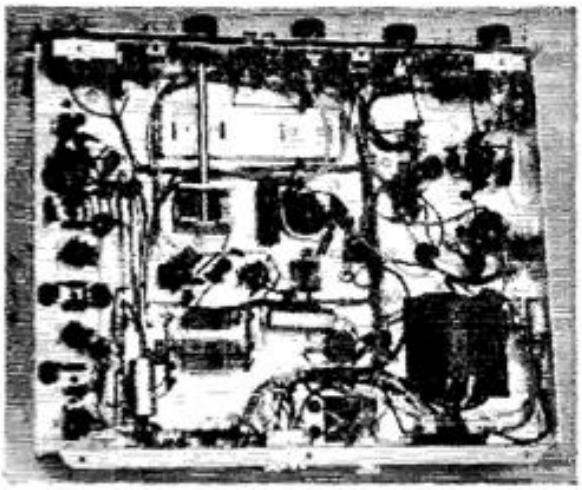
Top-chassis view of the TR-106. The converter chassis is the small box at the rear of the main chassis. The transistors for the inverter are mounted on the back panel.

Transmitter

Fig. 1 shows a block diagram of the transmitter with the receiver components at the top and the transmitter components at the bottom. The Colpitts oscillator, V_9, uses 8-Mc. crystals in the grid circuit. The plate circuit is tuned to the third harmonic. The resonant frequency of this circuit is controlled by the MULT control on the front panel. In the next stage, V_8, the 24-Mc. signal is doubled to the output frequency. The plate circuit of the doubler uses an inductively-coupled double-tuned circuit. This stage is stagger tuned to obtain a 2-megacycle bandwidth. The final, V_7, operates straight through at 50 Mc. using a combination of grid-leak and cathode bias. The latter protects the tube if grid drive is lost. The output circuit is a pi network designed to work into an impedance of 30 to 90 ohms. Transmitter tune-up is merely a matter of tuning all stages for maximum output. A combination S meter and peak-reading r.f. voltmeter is provided for this purpose. Transmitter alignment requires (not furnished) a dummy load and 3 crystals.

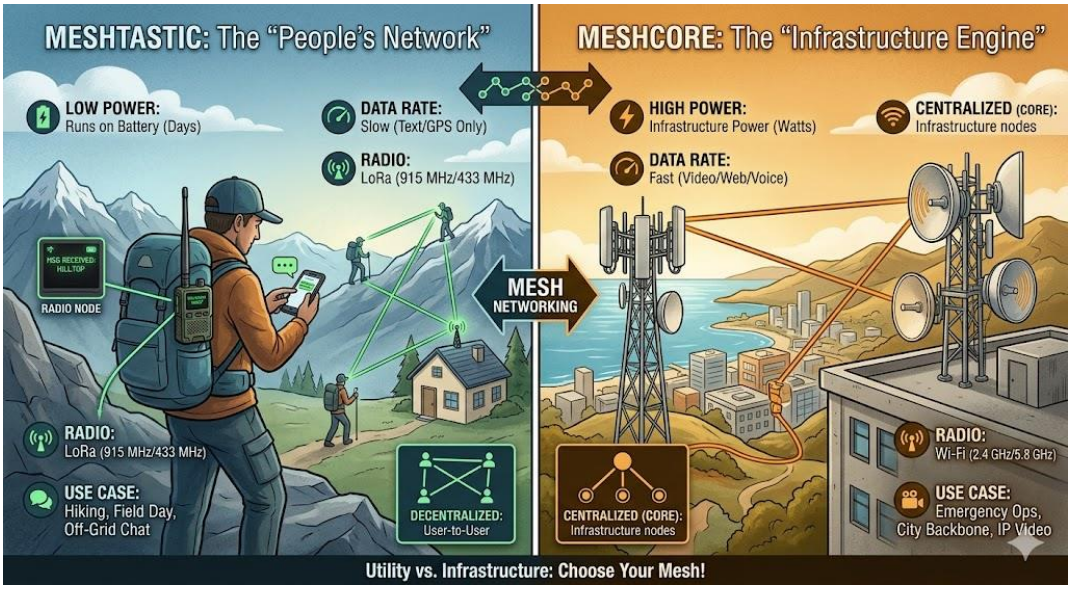
Receiver

The receiver uses a crystal-controlled converter which is factory wired and aligned. Installation of the converter requires two bolts and soldering of four wires. A six-meter signal at the converter input is mixed with the signal from the crystal oscillator to obtain an output of 15.6 to 17.6 Mc. which is fed to the second mixer, V_{1A}. The local oscillator, V_{1B}, is coupled to the mixer by interelectrode capacitance, producing a signal at 1650 kc. This signal is fed to a two-stage i.f. amplifier, V_2 and V_3, which uses three double-tuned circuits. The amplified signal is then detected by V_4, and at this point the a.g.c. bias is obtained and applied to the i.f. amplifiers. Also combined in V_4 is a series-gate noise limiter activated by a switch on the rear panel. The detected output is fed to the a.f.



The bottom view of the TR-106 showing the wiring harness. The transmitter is in the center, the receiver on the left, the audio on the right.

During our most recent meeting the topic of MESHTASTIC vs MESHCORE was up for discussion and to the applicability of either technology to our club. It was interesting and I wanted to provide a tutorial on both technologies.



Building the Mesh: Understanding Meshtastic vs. MeshCore

For the modern ham or radio enthusiast, "mesh networking" has become the latest frontier. Moving away from the traditional hub-and-spoke model of repeaters, mesh networks allow devices to talk to one another directly, passing data along like a digital bucket brigade. However, as you start looking into off-grid communications, you'll likely run into two names that sound similar but serve very different purposes: **Meshtastic** and **MeshCore**. Let's break down what sets them apart so you can choose the right tool for your next project.

Meshtastic: The "People's Network"

If you've seen those small, battery-powered OLED screens clipped to backpacks lately, you're looking at **Meshtastic**.
Meshtastic is an open-source project designed to run on low-power **LoRa (Long Range)** radio hardware. It is built for long-range, low-bandwidth text communication and GPS tracking without any infrastructure.

- **Hardware:** Cheap, off-the-shelf ESP32 LoRa boards (like Heltec or LilyGo).
- **The Vibe:** Think of it as an off-grid WhatsApp. It's perfect for hiking, community emergency alerts, or neighborhood "chat" networks.
- **Strengths:** * **Low Power:** Can run for days on a single lithium battery.
    - **Ease of Use:** Connects to your smartphone via Bluetooth to provide a slick messaging interface.
    - **Encryption:** Features robust AES-256 encryption by default.

MeshCore: The "Infrastructure Engine"

While Meshtastic is a specific *application*, **MeshCore** is more of a *framework*. Specifically, it refers to the core networking logic used within certain mesh ecosystems—most notably the **AREDN** (Amateur Radio Emergency Data Network) or high-speed multimedia (HSMM) environments.

MeshCore (often associated with the **Meshmerize** or **BMX7** protocols in some circles) is designed to handle high-bandwidth data over Wi-Fi-based frequencies (like 2.4GHz and 5.8GHz ham bands).

- **Hardware:** Modified commercial wireless gear (Ubiquiti, Mikrotik, or GL.iNet routers).
- **The Vibe:** This is "high-speed" mesh. It's used to link EOCs (Emergency Operation Centers), stream IP camera feeds, or provide VoIP services across a city.
- **Strengths:**
  - **High Bandwidth:** Can handle megabits of data, not just text bytes.
  - **Self-Healing:** Extremely fast at rerouting data if one node goes offline.
  - **Scalability:** Built to handle complex network topologies.

The Comparison at a Glance

Feature	Meshtastic	MeshCore (High-Speed Mesh)
Primary Radio	LoRa (915 MHz / 433 MHz)	Wi-Fi (2.4 GHz / 5.8 GHz)
Power Consumption	Very Low (milliwatts)	Moderate (Watts)
Data Rate	Slow (Text/GPS only)	Fast (Video/Web/Voice)
Range (Point-to-Point)	Exceptional (Miles with tiny antennas)	Line-of-sight dependent
Best For	Hikers, tactical comms, low-power IoT	Emergency infrastructure, high-speed data

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Which One Should You Use?

The choice usually comes down to **utility vs. infrastructure**.

- **Choose Meshtastic** if you want to keep track of your buddies during a Field Day event or want a low-cost "always-on" messaging network for your local club that works even when the power grid fails. It's accessible, cheap, and very "plug-and-play."
- **Choose MeshCore/High-Speed Mesh** if your goal is to build a robust backbone for your county. If you need to send large files, host a private club website over the air, or provide internet-like services during a disaster, the high-bandwidth approach is the way to go.

Note for Hams: Remember that while Meshtastic uses ISM bands (meaning no license is required for basic use), using MeshCore on "Amateur Only" frequencies requires a technician license or higher and strictly forbids encryption—whereas Meshtastic on ISM bands thrives on it! Whether you're tinkering with LoRa or re-flashing Ubiquiti routers, both technologies represent the future of resilient, community-owned communications. Why not try both?

de Tony VE3ZAV

Stay Cool and Stay Safe: A Summer Guide for the Amateur Radio Shack

Summer is the "Golden Hour" for amateur radio. Between the long days, sporadic-E propagation on 6 meters, and the camaraderie of **ARRL Field Day (June 27-28, 2026)**, there is no better time to be on the air.
However, summer also brings unique hazards—from blistering heat and lightning to the logistical chaos of portable setups. To keep your signal strong and your health intact, here is a safety checklist for our club members.

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1. The Human "Heatsink": Personal Safety

Before you worry about your SWR, worry about your hydration. Operating a contest from a tent or a parked car can lead to heat exhaustion faster than you'd think.

- **Hydrate Early:** Don't wait until you're thirsty. If you are operating outdoors, aim for 8 ounces of water every 20 minutes.
- **The 101 Critical Days:** We are currently in the "101 Critical Days of Summer" (Memorial Day to Labor Day). This is the peak window for preventable outdoor injuries. If you feel lightheaded or stop sweating, **QRT immediately** and seek shade.
- **Tick & Bug Defense:** If you're stringing a dipole in the woods, use DEET-based repellents and wear light-colored clothing to spot ticks easily.

2. Rig Maintenance: Avoiding Thermal Meltdown

Your transceiver is essentially a specialized heater that happens to output RF. High ambient temperatures make it harder for your rig to shed that heat.

- **Give it Space:** Never stack equipment directly on top of a transceiver during summer operations. Use the wire "bail" or stand to lift the radio and allow airflow underneath.
- **Back Off the Power:** For high-duty cycle modes like **FT8 or RTTY**, consider dropping your power to 50–80 watts. The difference in your signal is negligible (less than 1 dB), but it significantly extends the life of your finals.
- **External Cooling:** If you're operating a "shack-in-a-box" (like an IC-705 or FT-818) in the sun, a small 12V computer fan can be a lifesaver for the heat sink.

3. Sky-High Hazards: Lightning & Weather

Summer thunderstorms move fast. By the time you hear thunder, you are already within striking distance.

- **The "Unplug" Rule:** Lightning arrestors (like Polyphasers) are excellent, but **physically disconnecting** your coax and power leads remains the gold standard. During a storm, move your coax connectors away from the radio—don't just leave them sitting on the desk.

- **Tower Safety:** Never climb a tower if a storm is within 20 miles. Also, remember: **Alcohol and towers do not mix.** Save the cold beer for *after* the antenna is tuned and you're back on the ground.

4. Portable Operations & Field Day Protocol

Setting up a temporary station introduces risks that a permanent shack doesn't have.

- **RF Exposure (MPE):** Per the latest FCC rules, all hams must conduct an RF exposure evaluation. In a portable setup, ensure your antenna is high enough or far enough away that "curious onlookers" aren't standing in a high-RF field. Use caution tape or cones to mark off your antenna perimeter.
- **Generator Safety:** Keep generators at least 20 feet away from your operating tent to prevent **Carbon Monoxide (CO)** poisoning. Never refuel a hot generator; let it cool for 5 minutes first to avoid a flash fire.
- **Trip Hazards:** Flag your guy wires with "Caution" tape or bright ribbons. At night, a stray guy wire becomes an invisible clothesline for unsuspecting club members.

Safety Officer Tip: For this year's Field Day, we recommend appointing a dedicated Safety Officer. Not only does it keep us safe, but it also earns the club a **100-point bonus** on the ARRL scorecard!

Stay safe, stay hydrated, and we'll see you on the air!

de Tony VE3ZAV

In Summary …. I hope you have enjoyed this edition of Feedline and remember; this is a newsletter that needs YOUR material to make it a success !

I wish you all a SAFE and enjoyable SPRING season and chat soon !

73's VE3ZAV Tony

NEXT CLUB MEETING : Thursday May 14, 2026
Black Creek Community Centre

NPARC Repeaters

VE3NRS
147.240+ 107.2 tone

Yaesu System Fusion Auto / Auto analog / digital – no wires-x

VE3WCD
147.300+ 107.2 tone
Yaesu System Fusion Auto / FM analog

VE3RNR
443.175+ 107.2 tone
Yaesu System Fusion Auto / Auto analog / digital – wires-x

Repeaters Update from Repeater Chair John va3wm

Just a brief repeaters update. All 3 NPARC repeaters are operational.

VE3NRS (FM and C4FM digital), VE3WCD (FM) and VE3RNR (FM and C4FM digital with wires-x) operate with reliable 100% availability.

Any questions or concern may be sent to John va3wm at repeaterchair@nparc.ca. Info may be found at https://nparc.ca/repeater-list/.

Club Nets

Monday, 8 pm, VE3RAF, 145.190+, 107.2 Hz: Community Communication Service Net
- A controlled net dedicated to community service work.

Wednesday, 8 pm, VE3NRS, 145.240+, 107.2 Hz: Social Net
- An informal net for general discussion of ham radio and other things.

All amateurs are very welcome at both nets.