CAARA NEWS

Cape Ann Amateur Radio Association
Gloucester, Massachusetts
MAY- 2026 EDITION

PRESIDENT'S COLUMN
By Brandon- NQ1W

Dear CAARA Members,

Spring is finally in full swing here in New England, and with the changing season comes some exciting, highly visible progress at the clubhouse.

First and foremost, we are currently in the thick of completing phase one of our new accessibility ramp and door. I know the construction has caused some temporary disruptions, but I want to extend my sincere appreciation to all of you for taking it in stride. Despite the dust and detours, we've managed to host all but one of our normal Wednesday coffee and donuts gatherings! Once the ramp and door are finished, the second part of this phase will bring a brand-new surface to our parking lot. Because the old porch was demolished and the new ramp has a smaller, more efficient footprint, we'll actually be enjoying an expanded parking area once the paving is complete.

Looking ahead to our May Members Meeting, we have a fantastic presentation lined up. Steve Umans (K8ZBE) will be giving a talk on his experiences with remote operations. He will be diving into how he runs his receivers (the ICOM 7300 and 7300 Mk2) alongside his linear amplifier (A Mercury III?). What makes this talk particularly interesting is that the Mercury IIIs was never designed with remote operations in mind. To get around this, Steve engineered a novel approach using remote actuators to operate the amp. If you have any interest in remote station control or clever ham radio problem-solving, you won't want to miss this one.

On the operating front, I'm thrilled to report that our preliminary talks with the Trustees regarding a Castles on the Air (COTA) or similar activation at the Great House on Castle Hill went incredibly well. It's a spectacular location, and we will be announcing a date and time for an initial test event, followed by a major activation, very soon. Keep an eye on caaramail for those details.

Finally, I want to end this month's letter with a massive thank you. The generosity of this club never ceases to amaze me. Your contributions to both our construction fund and the scholarship fund are what make improvements and community outreach of this scale possible. Speaking of our scholarship, keep an eye on your mailboxes—an article detailing the rich history of the CAARA scholarship will be featured in QST soon!

Thank you all for your continued support, patience, and dedication to the club.

73, Brandon NQ1W

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 jpcrockport@gmail.com . 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 443.700 repeater is now on the ATT cell tower in the Blackburn Industrial Complex with greatly enhanced performance running in fusion mode and linked to 10 other repeaters in the New England area.

The Association is one of the few amateur radio clubs that has its own clubhouse. Located at 6 Stanwood Street in Gloucester, with a variety of HF stations with beam, vertical, or G5RV antennas.

Amateur radio exams are held on REQUEST at the CAARA clubhouse. Anyone who is considering a new license or an upgrade, is welcome to test with us. Currently pre-registration is necessary. Contact the head of our VE team Bill Poulin- WZ1L if you have any questions about monthly testing.

Monthly member meetings are held on the second Saturday of each month at noon except for July and August.

Each Sunday evening at 7:00 PM, the club operates a 2 meter fm 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.

The club is open every Wednesday from 10- Noon for CAARA members and interested parties to stop by and socialize, as well as use the extensive collection of ham radio gear.

This newsletter is published under the auspices of the Cape Ann Amateur Radio Association (CAARA), However, all content is the work of individual contributors and may contain ideas, opinions or views not necessarily shared or supported by the CAARA Board of Directors or the membership.

THE EMCOMM MINUTE

By Dean- KB1PGH

So last month I covered how to mitigate RFI and EMI interference coming through your power lines and antennas into your HF rig. Now for this month I`m going to cover another sort of noise coming that can hamper your ham radio experience and that is called common mode noise.

So common mode noise is RF current flowing on the outside of the coaxial cable shield of the coax from your antenna. The common mode noise can cause RFI and can cause RF in the shack leading to feedback of what happens when your fire alarm goes off every time you transmit.

What it also can do is turn your coax into another antenna which throws off your HF antennas radial pattern. Also common mode noise can raise the receiver noise floor in your rig so it will be harder to hear weak signals. So there are a couple of steps that you can do to eliminate common mode noise.

The first is to add a common mode choke in between the antenna and the coax going down to your rig. As you can see in the photo I have common mode choke made by myantennas dot com. Its a heavy duty steel box with a couple of donut ferrites inside with the center coax cable inside wrapped around several times. This choke is well built and can easily withstand the outdoors. It has 6000 ohm`s of resistance which means no common mode noise is going down that coax.

Especially for the Off Center Fed dipoles that I use for portable HF operations. OCF antennas are more prone to common mode noise. It costs about $100.00 and is worth every penny. The next item in the photo right beneath it is a common mode coax noise filter from palomarengineers dot com.

As you can see it covers from 1 to 150 MHz with up to a 6000 ohm choking Z. It works the same way as the first one I told you about but this one you are supposed to install it in between your coax and your rig at the point of inside your shack. This one is made for indoors. This model costs around $70 .

The last one you can see in the photos is getting a bunch of ferrite clip ons and clip them on to your coax right before your HF rig. This may be a cheaper alternative if you can get a bunch of them cheap on Amazon. You can get a set of 10 Mix 31 ferrite clips ons at dxengineeering dot com for $38 .

Just make sure that you clip on as many as you can, not just one or two. So you get a higher ohm choking capacity. So hopefully these options have a good effect at lowering the RFI and EMI coming into the receiver portion of your HF rig.

So as a side note regarding the off center fed dipoles that I have been talking about earlier I have purchased another off center fed dipole antenna for my portable HF operations and I thought I would give you a quick look at it in case you are interested in buying one for your

HFs. I got the Palomar Engineers PAL OCF 4010 OCF dipole antenna. It has a 4:1 current balun and a 1:1 choke as well to combat those common mode currents that we were just discussing. It is 66 Feet long and can handle up to 500 watts. They advertise that it can transmit on the 40-30-20-17-15-12-10 and 6 meter bands.

As always a antenna tuner may be required on some of the bands. As you can see in the photo provided it is really well built to handle the outdoor weather and the wire itself is heavy duty as well. The price is around $170 . I have had good luck operating with OCF antennas off of my Buddipole mast when I go HF portable.

It sets up with a inverted V angle and I use a couple of those plastic electric fence posts that have the spike that you push into the soil so I can hang the ends of the antenna on those.

So that`s it for this month and 73, Dean

The Most Secure, Modern Computer Might Be A Mac

The Linux world is currently seeing an explosion in new users, thanks in large part to Microsoft turning its Windows operating system into the most intrusive piece of spyware in modern computing. For those who value privacy and security, Linux has long been the safe haven where there's reasonable certainty that the operating system itself isn't harvesting user data or otherwise snooping where it shouldn't be.

Yet even after solving the OS problem, a deeper issue remains: the hardware itself. Since around 2008, virtually every Intel and AMD processor has included coprocessors running closed-source code known as the Intel Management Engine (IME) or AMD Platform Security Processor (PSP).

These components operate entirely outside the user's and operating system's control. They are given privileged access to memory, storage, and networking and can retain that access even when the CPU is not running, creating systemic vulnerabilities that cannot be fully mitigated by software alone. One practical approach to minimizing exposure to opaque management subsystems like the IME or PSP is to use platforms that do not use x86 hardware in the first place. Perhaps surprisingly, the ARM-based Apple M1 and M2 computers offer a compelling option, providing a more constrained and clearly defined trust model for Linux users who prioritize privacy and security.

Before getting into why Apple Silicon can be appealing for those with this concern, we first need to address the elephant in the room: Apple's proprietary, closed-source operating system. Luckily, the Asahi Linux project has done most of the heavy lifting for those with certain Apple Silicon machines who want to go more open-source. In fact, Asahi is one of the easiest Linux installs to perform today even when compared to beginner-friendly distributions like Mint or Fedora, provided you are using fully supported M1 or M2 machines rather than attempting an install on newer, less-supported models. The installer runs as a script within macOS, eliminating the need to image a USB stick. Once the script is executed, the user simply follows the prompts, restarts the computer, and boots into the new Linux environment. Privacy-conscious users may also want to take a few optional steps, such as verifying the Asahi checksum and encrypting the installation with LUKS but these steps are not too challenging for experienced users.

Black Boxes

Changing the operating system on modern computers is the easy part, though. The hard part is determining exactly how much trust should be placed in the underlying hardware and firmware of any given system, and then deciding what to do to make improvements. This is where Apple Silicon starts to make a compelling case compared to modern x86 machines. Rather than consolidating a wide range of low-level functionality into a highly privileged black box like the IME or PSP, Apple splits these responsibilities more narrowly, with components like the Secure Enclave focusing on specific security functions instead of being given broad system access.

Like many modern systems, Apple computers include a dedicated security coprocessor alongside the main CPU, known as the Secure Enclave Processor (SEP). It runs a minimal, hardened operating system called sepOS and is isolated from the rest of the system. Its primary roles include securely storing encryption keys, handling sensitive authentication data, and performing cryptographic operations. This separation helps ensure that even if the main operating system is compromised, secrets managed by the SEP remain protected.

The Chain of Trust

To boot an Apple Silicon computer, a "chain of trust" is followed in a series of steps, each of which verifies the previous step. This is outlined in more detail in Apple's documentation, but starts with an immutable boot ROM embedded in the system-on-chip during manufacturing. It first verifies early boot stages, including the low-level bootloader and iBoot, which in turn authenticate and verify the operating system kernel and system image before completing the boot process. If any of these verification steps fail, the system halts booting to prevent unauthorized or compromised code from executing.

Perhaps obvious at this point is that Apple doesn't sign Asahi Linux images. But rather than allowing unrestricted execution like many PCs, or fully locking down the device like a smartphone, Apple's approach takes a middle way. They rely on another critical piece of "security hardware" required to authorize that third-party OS: a human user. The Asahi Linux documentation discusses this in depth, but Apple's secure boot system allows the owner of the computer to explicitly authorize additional operating systems by creating a custom boot policy within the user-approved trust chain. In practice, this means that the integrity of the boot process is still enforced, but the user ultimately decides what is trusted. If a boot component is modified outside of this trust chain, the system will refuse to execute it. In contrast to this system, where secure boot is enforced by default and only relaxed through explicit user action, x86 systems can treat these protections as optional. A motivated x86 user can achieve a comparable level of security, but they must assemble and maintain it themselves, as well as figure it out in the first place.

Reducing the Attack Surface

The limited scope of Apple's Secure Enclave gives it a much smaller attack surface compared to something like the Intel Management Engine. As mentioned before, the IME combines a wider range of functionality, including features designed for low-level remote system management. This broader scope increases its complexity and, by extension, its attack surface which has led to several high-profile vulnerabilities. Apple's Secure Enclave, by contrast, is designed with a much narrower focus.

That's not to say it's a perfect, invulnerable system since it's also a closed-source black box, but its limited responsibilities inherently reduce that attack surface.

It's also worth mentioning that there are a few other options for those who insist on x86 hardware or who refuse to trust Apple even in the most minimal amount, but who still consider the IME and its equivalents as unacceptable security risks. Some hardware manufacturers like NovaCustom and even Dell have given users the option of disabling the IME (although this doesn't remove it entirely), and some eight and ninth generation Intel machines can have their management engines partially disabled by the user as well. In fact these are the computers that my own servers are based on for this reason alone. Going even further, it is possible to get a 2018-era Thinkpad to run the open-source libreboot firmware. ‘

However, libreboot installations can become extremely cumbersome, and even then you'll be left with a computer that lacks the performance-per-watt and GPU capabilities of even the lowest-tier M1 machines. In my opinion, this compromise of placing a kernel of trust in Apple is the lesser evil for most people in most situations, at least until libreboot is able to support more modern machines and/or until the libreboot installation process is able to be streamlined.

I'll also note here that Apple is far from a perfect company. Their walled garden approach is inherently anti-consumer, and they've rightly taken some criticism for inflating hardware costs, deliberately making their computers difficult to repair, enforcing arbitrary divisions between different classes of products to encourage users to buy more devices, and maintaining a monopolistic and increasingly toxic app store.

But buying an M1 or M2 machine on the used market won't directly give Apple any money, and beyond running the Asahi installer script doesn't require interacting with any Apple software or their ecosystem in any way, beyond the initial installation. I've argued in the past that older Apple computers make excellent Linux machines for these reasons as well, and since the M1 and M2 machines eliminate the IME risk of these older computers they're an even better proposition, even without considering the massive performance gains possible.

Ultimately, though, the best choice of hardware depends on one's threat model and priorities. If the goal is to minimize exposure to IME/PSP-level risks while retaining semi-modern performance, an M1/M2 Mac with Asahi Linux is one of the best options available today. But if fully open hardware is non-negotiable, you'll need to accept older or less powerful machines… for now.

Amateur Radio to Participate in DoD

Armed Forces Day Crossband Test on May 9, 2026

Amateur radio operators will participate in the Department of Defense's Armed Forces Day (AFD) Crossband Test on May 9, 2026. The annual event will not impact any public or private communications.

For more than 50 years, military and amateur stations have participated in this interoperability exercise between the amateur and government radio services. The AFD Crossband Test provides a unique opp…

Why I Hate Plumbing

by Curtis- AA3JE

Why I hate plumbing

I was at my desk, listening to the chatter on 40 meters, when I needed a new cup of coffee. I went out to the kitchen and went to rinse my cup.

"Yikes!" Stone cold water. I looked under the sink at the "Instant Hot Water" device. The pilot light was off and it was stone dead. I got out the manual, and noticed that the warranty was for six years. It was six years to the day since I installed it. Deader than a mackerel.

We have a real hot water heater, in the basement, but it is 100 feet from the kitchen. When we moved in, it took an hour for the hot water in the kitchen to actually get hot.

So I lagged all the hot water pipes with foam insulation. This reduced it to half an hour.

Figuring this was a common problem in cold climates, I went to HOME STUFF. They had a lovely little 3 gallon, under sink, 110V hot water heater. I bought it, installed it, and it leaked.

So I pulled it out, added more Teflon tape, and reinstalled it. (Repeat three times).

Finally Bert at HOME STUFF saw me looking at the plumbing fitting board, a board where about a thousand old plumbing fittings go to die.

"Need help?" he said. I explained my problem.

"OH, that is a metric fitting, you need a metric to US adapter."

I installed the adapter, and that joint did not leak. But under the sink was still damp.

Back to Bert.

"What fitting did you use to connect up the expansion tank?"

"Expansion tank?"

A week later, the area under my sink looked like an Apollo engine bay, but I had the hot water heater, expansion tank, pressure relief drain, new electrical service and all that hooked up. Flash forward six years. The unit had died, just like the manual said it would.

Back to Bert.

"Hey Bert, where are the under sink hot water heaters?"

"You got to order them thru the Internet now."

I ordered, it came, and wonder of wonder it had the USA fittings.

So I turned off the water, delved under the sink, and discovered that the 50 year old shut off valves no longer shut off.

There followed about an hour of thrashing and screaming, and finally I got the thing installed.

Now I am waiting. It's going to leak, I know it. It's just waiting. Lurking.

Note to self, "Hire plumber" it's worth it.

Dayton Hamvention® 2026 Offers Forums for Every Ham

Dayton Hamvention 2026 features a wide range of forums to appeal to amateur radio operators of all interests, experience levels, and ages. The Hamvention Forums Committee has assembled a diverse lineup covering technical topics, operating skills, and emerging interest areas.

On opening day, Friday, May 15, there are 22 forums beginning at 9:15 AM with HamSCI: The Ham Radio Science Citizen Investigation. Learn about the Large Scale Traveling Ionospheric Disturbance Project, a version of the Personal Space Weather Station that you can build from scratch, Meteor Scatter QSO Party Results, and an upcoming collaboration with a NASA mission. The moderator is Dr. Nathaniel Frissell, W2NAF.

Another forum on Friday morning is Lightning Protection, Generators, Inverters and RFI, moderated by Jim Bacher, WB8VSU, and Gary Bishop, NQØV.

At 11 AM, ARRL The National Association for Amateur Radio® is sponsoring Salty Walt's Portable Antenna Forum. "Salty Walt" Hudson, K4OGO, will cover simple, effective, antennas you can build and take to a park, beach, or summit, and make contacts around the world! He'll also be signing copies of his newest book in the ARRL exhibit area.

Among the other forums on Friday is TAPR - Topics in Digital Radio, the Antenna Forum moderated by Tim Duffy, K3LR, and Arduino and Microcontrollers - Going the Distance, with popular ARRL author Glen Popiel, KW5GP.

Young hams will want to start off Saturday morning with the Youth Forum, sponsored by the Radio Club of America, at 9:15 AM. Student presenters include Webelos Scout Adam Grubb, KF8EKW, who is currently building a 70-centimeter EME station for his school science project. Carsten Glasbrenner, KQ4SJM, will share his interests in satellites, home brew antennas, and simple soldering kits. Other young presenters and panelists include Haley Pendell, KE2EVX; Maggie Dill, KR4FTN; Anderson Ray, K4RAY, and Violetta Latham, KN2P.

Young hams can also join in some Saturday afternoon fun with the ARRL Youth Rally Activities scheduled from 1 – 4 PM. Advance registration is recommended for those students ages 11 to 21 who want this year's Youth Rally T-shirt and badge. An ARRL Collegiate Amateur Radio Meetup will follow the Youth Rally at 4 PM.

An ARRL Membership Forum on Saturday at 11 AM will include updates on outreach to students and educators, momentum behind the Year of the Club, ARRL's partnership with America250, and current legislative advocacy efforts shaping the future of amateur radio. The forum will be moderated by ARRL Great Lakes Division Director Scott Yonally, N8SY, with presentations from ARRL President Rick

Roderick, K5UR, and ARRL CEO David Minster, NA2AA.

A handful of DX-themed forums on Saturday include The 3Y0K Bouvet DXpedition, Desecheo 2026 DXpedition: First All Solar-Powered Unattended DXpedition, and a forum with Brian Bathe, AD8FD, and Paul Ewing, N6PSE, exploring the lessons learned from DXing in adverse conditions.

Among the forums on Sunday is POTA Hacks: Little Things Add Up to Big Success, moderated by Michael Martens, KB9VBR, who will share some of his favorite Parks on the Air operating tips and hacks. Other forums will cover 3D printing for ham radio uses, the HF digital modes, and mastering CW.

Hamvention 2026 runs May 15 – 17 in Xenia, Ohio, and many more forums are spread throughout the weekend. See the entire lineup and schedule at hamvention.org/event-details/forums.

The ARRL Events app will include the full Hamvention program by the end of the month. Use it to browse the schedule of forums, find affiliated events, and preview the extensive list of exhibitors. Get ready by downloading the app at www.tripbuildermedia.com/apps/arrl or use the web version.

See what ARRL has planned for exhibits and activities at Hamvention at www.arrl.org/dayton-hamvention-2026.

The Rise and Fall of Free Dial Up Internet

In the early days of the Internet, having a high-speed IP connection in your home or even a small business was, if not impossible, certainly a rarity. Connecting to a computer in those days required you to use your phone. Early modems used acoustic couplers, but by the time most people started trying to connect, modems that plugged into your phone jack were the norm.

The problem was: whose computer did you call? There were commercial dial-up services like DIALOG that offered very expensive services, such as database searches via modem. That could be expensive. You had a fee for the phone. Then you might have a per-minute charge for the phone call, especially if the computer was in another city. Then you had to pay the service provider, which could be very expensive.

Even before the consumer Internet, this wasn't workable. Tymnet and Telenet were two services that had the answer. They maintained banks of modems practically everywhere. You dialed a local number, which was probably a "free" call included in your monthly bill, and then used a simple command to connect to a remote computer of your choice. There were other competitors, including CompuServe, which would become a major force in the fledgling consumer market.

While some local internet service providers (ISPs) had their own modem banks, when you saw the rise of national ISPs, they were riding on one of several nationwide modem systems and paying by the minute for the privilege. Eventually, some ISPs reached the scale that made dedicated modem banks worthwhile. This made it easier to offer flat-rate pricing, and the presumed likelihood of everyone dialing in at once made it possible to oversubscribe any given number of modems.

The Cost

Once consumer services like CompuServe, The Source, and AOL started operations, the cost was less, but still not inexpensive. Some early services charged higher rates during business hours, for example. There was also the cost of a phone line, and if you didn't want to tie up your home phone, you needed a second line dedicated to the modem. It all added up.

By the late 1990s, a dial-up provider might cost you $25 a month or less, not counting your phone line. That's about $60 in today's money, just for reference. But the Internet was also booming as a place to sell advertising.

Mad Men

Today, a few large companies dominate online advertising. However, in 1990, the field was crowded, and everyone was rushing to find a way to effectively advertise to Internet users.

A company called FreeInet thought it had the answer. Give people free dial-up service and make them watch ads to generate revenue. NetZero bought the company in 1998 and helped it grow explosively. You could argue that FreeInet was the first successful free dial-up company.

There were other companies in the space, too, such as Juno (which started out offering only e-mail) and BlueLight, which was run by retailer K-Mart, hoping that people would use their free Internet access to shop at K-Mart (spoiler: they didn't). K-Mart actually cobranded with a free ISP called Spinway, and it was widely reported that people who used the service were not more likely to buy from K-Mart. Instead, they went where everyone went: chat rooms, music download sites, and, of course, adult sites.

But the free market was mostly NetZero and Juno. NetZero even advertised on TV, as you can see below. NetZero even had a patent. They sued Juno over that patent, although the two companies would eventually merge.

At least the ad wasn't as suggestive as the one we remember from Juno.

Of course, this is all in the US. In the UK, where, at the time, there were no free local calls, Freeserve became a big player in free Internet access in conjunction with a major British electronics retailer.

The Product

Some free providers showed ads in a window or otherwise inserted them into your browsing experience. They could gather demographic data on where and how you were browsing, and that was also a viable product. If nothing else, if you were at a car website, the service could show you ads for cars, for example, and either charge the advertiser more or, at least, expect a better result.

There were other earlier schemes like Bigger.net, which promised lifetime access for $59. What could go wrong? There were limited tests of ad-supported access, and even a company that wanted to give you network access bundled with long-distance service. That lasted a month.

Of course, there were hacks. You could move the ad window off-screen, for example. There were programs that would keep the connection alive since most would time out rather quickly.

While Internet ad rates were artificially high, the concept made sense. At the time, people were trying to map traditional print ads' costs to the Internet. Not only was this too high, but it also overlooks the fact that the Internet is perfect for paying on performance. Just showing an ad to 1,000 people (some of whom have it blocked, anyway) isn't worth much. You want clicks or, even better, conversions.

But the dot-com crash around 2000, along with a glut of online advertising venues, saw a collapse of the ad market. Even K-Mart started offering a limited amount of free service with a cheap plan if you needed more or wanted extra features. United Online, the fusion of NetZero and Juno, also switched to a "freemium" model.

Enter Broadband

The death knell of dial-up ISPs, including the free ones, came as broadband penetrated more and more households. Why tie up a phone line and dial up at 56K when you could have a connection "always on" and with speeds at least 20 times higher? Apparently, NetZero didn't get the message, judging by the ad below.

NetZero does still exist, or at least, they have a home page. We couldn't get any of the links to work.

However, these innovative free ISPs were trailblazers on ad-supported Internet services. They were also among the first to adopt freemium pricing. Even more, we suspect it drove more people towards the Internet. Everyone loves something for free, and while you might not want to pay AOL $22 a month just to see if you would like being online, you certainly would grab a free CD and get online.

Dial-up still hangs on, though. Even AOL offered it until recently.

The following is a press release from DXLook:

After a lot of work behind the scenes, DXLook has been completely rebuilt and is now live in production.

https://dxlook.com

This isn't just an update. It's a full rewrite of the frontend — the part you interact with — designed to make the site faster, cleaner, and much easier to use across all devices.

What changed?

If you've used DXLook before, the idea is the same:

A single place to see real-time propagation using data from PSK Reporter, WSPR, RBN, DX Cluster, POTA, SOTA, APRS, and space weather.

What changed is how it feels to use it.

The site loads faster

Mobile finally behaves like a proper mobile app

Tablet users now get a real layout (not just a stretched phone view)

Widgets are cleaner and more stable

Navigation is more predictable

Nothing you rely on is gone — it just works better.

What's new for operators

A few things you'll notice right away:

Band Activity widget

A quick way to see which bands are active and where, using DXLook's data.

Improved layout and controls

Less overlap, less jumping around, more focus on the map.

Better Events page

Easier to use when planning operating activity.

Why this matters

The previous version of DXLook had grown a lot over time, and it was starting to show its limits.

This rebuild removes those limits.

It means:

Faster updates and improvements going forward

Better performance on all devices

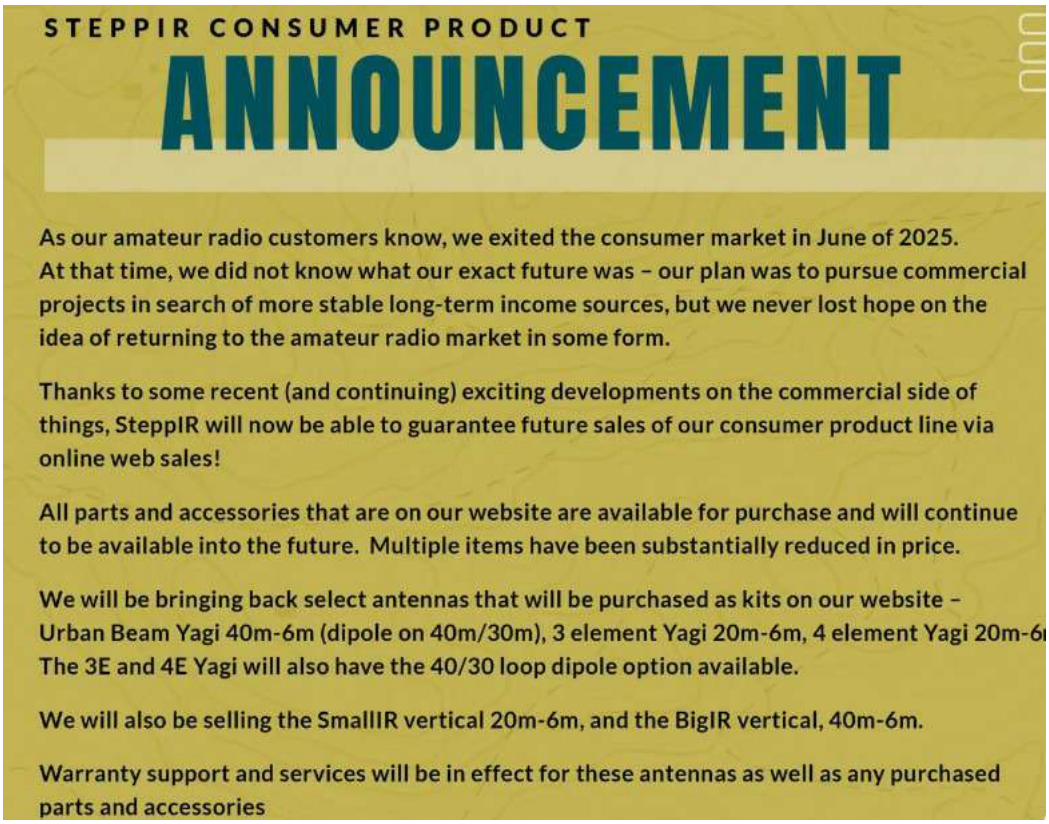
More flexibility to add new features and tools

In short, this is the foundation for what comes next.

A quick note

This is a fresh release. DXLook is a free, ad-free, web-based tool for amateur radio operators to visualize real-time propagation and activity across multiple data sources, all in one place.

Built and maintained by Rodrigo Vazquez — AK6FP / LU6ERV



Why Airlines Tell You Not to Retrieve Your Phone if It Falls Between Seats

It's frustrating when your phone falls into the cracks between airplane seats. But it could be dangerous if you try to fish it out yourself.

If you fly often, you've likely heard the line in the predeparture safety briefing advising passengers to alert a flight attendant if their phone slips between the seats rather than trying to retrieve it themselves. It may feel instinctive to reach into the narrow gap and grab it—but experts say that attempting to retrieve it without assistance can create safety risks to both yourself and the aircraft.

According to the Federal Aviation Administration (FAA), smartphones that fall between airplane seats can become lodged in the seat's mechanical components. If the seat is reclined or adjusted while the phone is trapped, the device can be crushed. That's a concern because, when damaged, the lithium batteries inside phones can overheat and enter what's known as thermal runaway—a chain reaction where the battery rapidly heats up, releases flammable gases, and can ignite. (It's part of the same reason you can't put powerbanks, computers, e-cigarettes, or other electronic devices in your checked bag.) "Damaged electronics are more susceptible to thermal runaway, so a dropped iPhone or Android is more likely to have a thermal event," says John Cox, CEO of aviation consulting firm Safety Operating Systems and a forer pilot.

That's exactly what happened on one Southwest Airlines flight departing from Denver to Houston in 2024. Although the phone caught fire while the plane was still at the gate, it ignited a seat, and all 108 passengers had to evacuate the plane via the plane's rear emergency slides while the crew extinguished the fire.

In 2025, after a passenger's phone became lodged in a seat on a Hawaiian Airlines flight from Honolulu to Tokyo and began emitting a burning smell near the end of the flight, the pilot declared an emergency, which granted the pLane priority landing at Haneda Airport.

And earlier this year, an Alaska Airlines flight from Wichita to Seattle returned to the airport after a passenger's phone and portable battery pack ignited in the cabin, sending several people for medical evaluation.

FAA data shows at least 106 verified incidents between March 3, 2006, and February 23, 2026 (the most recent reported date), in which lithium batteries in cell phones emitted smoke, caught on fire, or became extremely hot while on a plane. Those numbers have risen in recent years as more people get smartphones. Of those 106 incidents, 21 happened in 2025 alone.

According to a spokesperson from the American Airlines press office, the reason it's important to notify a crew member is because they know the seats and can access the device before it becomes a safety issue.

NEAR-Fest XXXIX - May 1 & 2, 2026

NEW THIS YEAR — DRIVE-THROUGH EXPRESS CHECK-IN

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The Comet GP-15 Tri-Band VHF/UHF Antenna - N1UV

For a little while, in addition to 2M and 70cm, I had been thinking about adding 6M capabilities to my home station. With some restrictions with what I can install (ie, no yagis!), I decided that my best option would be a vertical. Not wanting to add yet another antenna to the mix, I decided to see if there was a tri-band vertical that could replace my 2M/70cm vertical while adding 6M to the mix.

Some quick searches brought up some great options from Comet, Diamond and Alpha. Specs were very close (the Alpha also included 220MHz), but in the end, I decided to go with the Comet GP-15 simply because it was a one-piece antenna. The others screwed together in the middle (easier to ship, but I saw this as a potential failure point, especially if the antenna was installed in a windy location). Off to HRO to buy one since they were in stock.

The antenna is made out of heavy duty fiberglass and is about seven feet long. An SO-239 socket is used to connect the coax. The usual three radials come out of the base, with one exception - one of the radials is used as a 6M counterpoise and is adjustable. This radial is much longer than the other two (see picture).

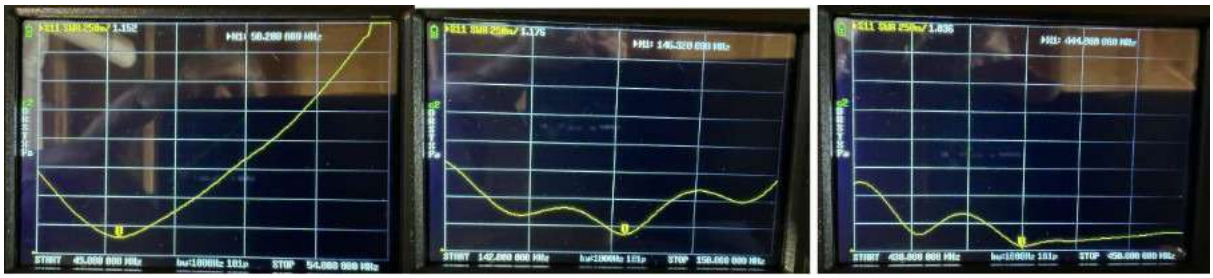
The instructions include a tuning chart that allows you to move the 6M center frequency from about 50MHz to about 53.5MHz. The bandwidth at the 1:1.5VSWR points for 6M is about 800kHz. I decided to tune the radial for a center frequency of 50.2MHz.

As a side note, this type of radial makes the antenna slightly favor the direction of that radial. Advertised gain is as follows: 6M - 3dBi; 2M - 6.2dBi; 70cm - 8.6dBi. Don't forget to subtract 2.14 from these figures if you wish to think in terms of dBd.

Installation was easy. All mounting hardware was included and ended up mounting it on a one inch blackened pipe that I already had, and which was mounted to a garden shed with standoff brackets. While I had a run of LMR400 coax to the antenna, I decided to use a short length of RG-8X as a flylead. This was necessary as the instructions called for two-turn choke at the base of the antenna.

Before connecting everything up, I decided to check the antenna out using a NanoVNA especially to tune the 6M radial, and to check VSWR back to factory specs. This was done at the base of the antenna, and not at the end of the LMR400 coax. The 6M radial needed a little bit of lengthening from what was called for in the tuning chart. Easy to spot and do using the NanoVNA.

Well, I can report that the plots came out rather good (see above, L-R 6M, 2M and 70cm).



I was happy with what I was seeing. As mentioned before, the usable (1:1.5 VSWR) bandwidth on 6M was approximately 800kHz (obviously won't cover the whole band, so you will need to decide where you'd like to operate), whereas the usable bandwidth on 2M covers the whole band, and on 70cm, covers the top 10MHz of that band (ie, the FM portion).

Time to connect up the LMR400 and head to the shack to see how it really works.

In the shack, I decided to use a Comet CF-706 diplexer. This particular diplexer allows me to split 6M off to a dedicated rig, and to pass 2M and 70cm to a second rig, thus allowing me to use these simultaneously. Firing everything up, performance was at least as good (qualitatively) as the 5/8-wave I was using.

On 6M, the antenna allowed me to make a number of local contacts. Even with cross-polarization on a couple of those contacts, I managed to reach stations to at least 60 miles out (your mileage may vary here!). There were no Es or F2 6M openings at the time of this writing to test with, but I suspect that the GP-15 should perform OK since cross polarization is less of an issue during these events.

All in all, the antenna performed better than I thought it would. In short, the GP-15 seems to be well built and engineered, and a great addition to the antenna farm.

Dayton Hamvention® 2026 Offers Forums for Every Ham

Dayton Hamvention 2026 features a wide range of forums to appeal to amateur radio operators of all interests, experience levels, and ages. The Hamvention Forums Committee has assembled a diverse lineup covering technical topics, operating skills, and emerging interest areas.

On opening day, Friday, May 15, there are 22 forums beginning at 9:15 AM with HamSCI: The Ham Radio Science Citizen Investigation. Learn about the Large Scale Traveling Ionospheric Disturbance Project, a version of the Personal Space Weather Station that you can build from scratch, Meteor Scatter QSO Party Results, and an upcoming collaboration with a NASA mission. The moderator is Dr. Nathaniel Frissell, W2NAF.

Another forum on Friday morning is Lightning Protection, Generators, Inverters and RFI, moderated by Jim Bacher, WB8VSU, and Gary Bishop, NQØV.

At 11 AM, ARRL The National Association for Amateur Radio® is sponsoring Salty Walt's Portable Antenna Forum. "Salty Walt" Hudson, K4OGO, will cover simple, effective, antennas you can build and take to a park, beach, or summit, and make contacts around the world! He'll also be signing copies of his newest book in the ARRL exhibit area.

Young hams will want to start off Saturday morning with the Youth Forum, sponsored by the Radio Club of America, at 9:15 AM. Student presenters include Webelos Scout Adam Grubb, KF8EKW, who is currently building a 70-centimeter EME station for his school science project. Carsten Glasbrenner, KQ4SJM, will share his interests in satellites, home brew antennas, and simple soldering kits. Other young presenters and panelists include Haley Pendell, KE2EVX; Maggie Dill, KR4FTN; Anderson Ray, K4RAY, and Violetta Latham, KN2P.

Club Handicap Project Progress as of May 1

The existing concrete patio has been removed, rotten sills replaced, concrete poured for the steps and landing, framing complete, and decking being applied today.

We are expecting the ramp to be ready for use by the May 9th club meeting. The paving will be done soon, I do not have a firm date yet.

Jon - K1TP