Graduation Issue

PLANO AMATEUR RADIO KLUB

MAY WWW.K5PRK.N 2026

- Build your own tuner
- Digital Voice for EmComm?!

PARK HERE

Officers

(your answers begin here)

President	Mike Tharp KG5TJF	president@k5prk.net
Vice President	Bruce Cameron K6IL	vp@k5prk.net
Secretary	Damon Koch K5OCH	secretary@k5prk.net
Treasurer	B. J. Watkins K5BJW	treasurer@k5prk.net
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Public Relations	Rob Forson K5WFR	pr@k5prk.net
Newsletter	Lonnie Webb KG5WHQ	newsletter@k5prk.net

EXPERIMENT AND HAVE FUN WITH YOUR RADIO

Learn more about the club at https://k5prk.net

Interact with the club at https://www.facebook.com/groups/k5prk

Have a groups.io conversation with the club at https://k5prk.groups.io/g/main

Are you ready to read the content in the newsletter? It's all technician accessible.

YOU HAVE BEEN DEPUITIZED AS ROVING JUNIOR NEWSLETTER REPORTER EXTRAORDINAIRE!

Go photograph, experiment, solder, attempt to antenna your lawn chairs. Just write it all down and send the information to newsletter@k5prk.net

PARK REPEATERS

The Plano Amateur Radio Klub operates five repeaters, which are located in Allen, Texas about 180 feet above ground level. All licensed amateur operators are welcome to join us on the air.

Our repeaters are open.

147.180 MHz + PL 107.2
K5PRK VHF
Voice Repeater

444.250 MHz + PL 79.7
K5PRK UHF
Voice Repeater

441.575 MHz +
DStar UHF
Digital Voice Port B

1295.000 MHz – 20.000
DStar 23cm
Digital Voice Port B

1255.000 MHz
DStar 23cm Digital Data

Broadcastify
K5PRK 444.250
K5PRK 147.18

If you notice problems with any of the club's repeaters, contact communications@k5prk.net via email with a detailed descriptiion of the issue.

FROM THE PRESIDENT

Mike Tharp KG5TJF and son Curtis launch day

Building a 2026 Strategy for Plano Amateur Radio Klub

By Mike Tharp KG5TJF
president@k5prk.net

Hello to one and all!

Rob Forson is working hard to promote this year's Field Day. He has reached out to many Cub and Boy Scout troops as well as multiple schools to let them know about our activities this year.

The intent is to showcase what can be done with our hobby. In addition to the GOTA station, we also will be demonstrating how to track the twice-a-day balloon launches from the NWS; Digital mobile radio and if there are satellites passing close enough—satellite communications. Rob is also going to keep track of the Richardson Club's activities and if they do a high-altitude balloon launch, we will demonstrate how to extend UHF and VHF using high-altitude repeaters.

If you can manage it, please come out between 1:00pm and 7:00pm on Saturday, June 27th or between 9:00 am and noon on the 28th. Even if we only get a few invitees to show up, we will need volunteers from the club to help with our demonstrations.

I know that this is an early request. I just want to make sure that our members have the chance to plan for Field Day.

On the cover: *Rob Forson K5WFR drove down for a personal guided tour of the new 1.25 million watt weather radar system at Texas A&M and ran into two members (Katherine and Ian) of PARK.*

ACTIVITIES

Outreach and Education Steering Committee

By Asif Ahmed K5SIF
activies@k5prk.net

- 1st Monday 7:00 PM PaRK Board of Directors Meeting
- 3rd Monday 7:00 PM PaRK General Meeting
- CollinARES Training Nets; Go to www.collinares.net for link and details.
- Weekly PARK "Casual" Net, Wednesdays at 2000 local on PARK Repeater (K5PRK) 147.180 (+) 107.2.
- Digitally Speaking Net – Sunday@2pm – 147.12 Repeater Richardson ARC
- Texas Statewide DMR Net – Wed@7:3,0pm – 440.375 DMR Repeater TG3148 Richardson ARC
- DARC ECOMM Net 2nd Monday each month at 19;00 CT https://w5fc.org/club-activities/event-calendar
- DARC Geek Net 4th Monday each Month at 19:00 CT
- ARRL NTS Traffic Net Dail 18;30 Local Time
- Wednesday Nights 20:00 ET. Feld Hell Club 10.142MHZ
- VHF-UHF FT8 Activity Contest-NA APR 9th 70CM 0000Z-0500Z
- NCCC FT4 Sprint:MAR 20 to 2400Z, APR 5
- Walk for the Bacon QRP Contest CW Mar 19th 20M 0000-0100Z
- Walk for the Bacon QRP Contest CW
- Apr 2 19th 40M 0200-0301Z
- McKinney ARC Sidewalk Sale, Last Saturday of the Month
- Garland ARC Swap Shop3rd Saturday of the month.

Additionally,

- Hands on mentoring will include BJ's Antenna builds, Tim's Satellite Work and Dave's CW expertise.
- May 16 is N5SAC's Technician License Prep Class & Test.
- June 27 is N5SAC's General License Prep Class & Test.

You can count on me to facilitate. reach out to me at activies@k5prk.net or groups.io.

Next Meeting: May 18, 2026

MINUTES

PARK BOARD OF DIRECTORS MEETING MINUTES

Plano Amateur Radio Klub
Board of Directors Meeting
May 4, 2026

Present:
Mike Tharp KG5TJF, President
Bruce Cameron K6IL, Vice President
Damon Koch K5OCH, Secretary
B. J. Watkins K5BJW, Treasurer
Rob Forson K5WFR, Public Relations Director
Miranda Schwarck KE5YZP, Communications Director
Tim Johnson K5TCJ, Immediate Past President
James McCormick KG5KBP, Webmaster
Lonnie Webb KG5WHQ, Newsletter Editor
Kathleen Forson KT5KMF
Ian Duncan AE5ID

Absent:
Asif Ahmed K5SIF, Activities Director

President
Brought meeting to order at 7:10 PM

Vice President
Updated program schedule:
• May—Tim Johnson Amateur Satellites
• June—Field Day
• July—Club auction
• August—Air Force MARS
• September—Ed Fong and a new tri-band antenna design
• October—open (officer elections)
• November—open
• December—club Christmas party
Gathering interest for a presentation on D-Star.

Secretary
April club meeting minutes posted to the board and submitted to the newsletter.

Treasurer
• Treasurer report presented. We have money stuck in PayPal before we can close the account.
• Digital Ocean is still not debiting our PayPal account. James is still paying them.

Public Relations
• ARRL Field Day training is the same as last year. Sending invites to Plano city management and the Collin County Judge along with local scout troops and school clubs. So far approaching 200 recipients.
• Field Day draft flyer presented and will be sent to area schools by May 15. We are pushing for maximum attendance 2-6 Saturday and 9-12 Sunday. Still need a fieldday@k5prk.net email address.

Communications
• Working with the Sachse hospital contact for a REACT test and some hardware maintenance. MCP Plano is also waiting for the same contact.
• Still working to schedule the laptop upgrade at the water tower. There may be coax available at the water tower. Miranda will find out.

Activities
n/a absent

Website
• Considering moving to a new web provider/DNS service. DreamHost will host us for free as a non-profit.
• B.J. motioned for Ian and James to explore transitioning our website and domain to Dream Host. Lonnie seconded. Unanimous vote to approve.

Newsletter
• Please submit your ideas, pictures, and articles to the newsletter.

Old Business
• Website and groups.io acceptable usepolicies
• B.J. presented a draft acceptable use policy for repeater and groups.io Tim mentioned we should amend the policy to include club social media groups.
• Ian mentioned an amendment to use names as mentioned in the ULS. Intermod issue – We need to go to the tower and inspect/clean all connections and grounds etc to see if this solves the problem. We can also enable split tone but this is still under discussion. The belief is that this is an RF leak problem and needs physical inspection and maintenance to resolve.
• REACT: The area hospitals have a REACT requirement for integrating amateur radio into their emergency plans and drills. How can the club leverage this? Discussion on hold for now.

New Business
• Can we track D-Star usage? This is a question for **Fred WD5ERD**. Miranda reached out and Fred confirmed tracking is possible.
• DFW Ham Fest: There are tables available for local clubs for promotional use, but there will be no selling from those tables. We will ask for volunteers at the general meeting to man a table. We don't have enough people currently committed to occupy a table for both days. Rob will submit for a promotional table. Club auction is coming up. Time to start looking for items to submit for the auction.

Field Day
• Richardson will be launching a balloon this year; we can track it. We can also explore crossband repeat and SSTV.
• Katherine suggested a fox hunt with students and scouts.
• Aircraft tracking, but we need a good screen for it.
• GOTA station – in a large area since Rob is reaching out to so many organizations and groups.

Adjourn
Lonnie motioned to adjourn, B.J. second. Adjourned at 8:25 PM

MEETING MINUTES

April 20, 2026 General Meeting Minutes

Call to Order at 7:00 p.m. Since tonight's presenter logged in remotely over Zoom, we are inverting the program and business meeting order.

Program—Flex Radio, From the Polar Explorer to Aurora, **Tony Brock Fisher, K1KP**

Break

50/50 Raffle
- Won by **BJ Watkins K5BJW**

President **Mike Tharp KG5TJF**
- Opened the business meeting with roll call.
- 25 present,21 members 4 guests.

Vice President **Bruce Cameron K6IL**
- May—**Tim Johnson** Amateur Satellites
- June—**Mike Tharp**—Field Day
- July—PARK Auction
- August—**Bruce Cameron**—Air Force Mars
- September—**Edison Fong**—Triband Antenna Design.

If you would like to present, please email me at VP@k5prk.net

Secretary **Damon Koch K5OCH**
- April board minutes are posted.

Treasurer **B. J. Watkins K5BJW**
- Finance report presented.

Communications **Director Miranda Schwarck KE5YZP**
- No report

Newsletter Editor **Lonnie Webb KG5WHQ**
- Please submit your ideas, pictures, and articles to the newsletter.

Public Relations Director **Rob Forson K5WFR**
- Absent / Continuing to gather contact information for area Scout troops and schools. We hope to have a lot of students show up at Field Day to hear about amateur radio, so if you can make it out to Field Day this year to help show the kids around, it will be very appreciated and rewarding.

Webmaster **James McCormick KG5KBP**
- Absent / No report

Activities Director **Asif Ahmed K5SIF**
- The Einstein school in Plano is interested in receiving ARRL training materials and possibly a Technician training class.
- DFW HAM Expo this year is June 5-6 at Vista Ridge Mall in Lewisville.
- Local activities list is printed in the newsletter.
- The Sachse club is hosting two license classes this spring:

Class: Technician License Prep Class
Date: May 16, 2026
Time: 9a--approx 6p
Location: Sachse EOC at Fire Station 1, Sachse, TX
Lunch is provided
A cost may be required for materials.
URL: https://tinyurl.com/tech-class2026

Class: General License Prep Class
Date: June 27, 2026
Time: 9a--approx 6p
Location: Sachse EOC at Fire Station 1,Sachse,TX
Lunch is provided
A cost may be required for materials.
URL:https://tinyurl.com/general-class2026

VE Coordinator **Daryl Morgeson AF5QJ**
- One test tonight, 10-year-old student Ethan passed his Technician exam. His proud grandpa brought him for testing.
- Interested in informal Saturday morning breakfast? We meet at Poor Richard's SE corner of Park and Ave K at 7:00 AM.

Field Day **Mike Tharp KG5TJF**
- Russel Creek Pavilion reserved for Field Day and Mike is working with the city for approval to operate overnight.

Old Business
None

New Business:
- Copyright violation notice—We will not be responding further until we hear from proper legal counsel who is licensed to practice law in Texas. Their last communication was an email demanding payment to a bank account in Switzerland.

Adjourn
- Meeting adjourned at 8:33 PM .

UPCOMING SPEAKERS

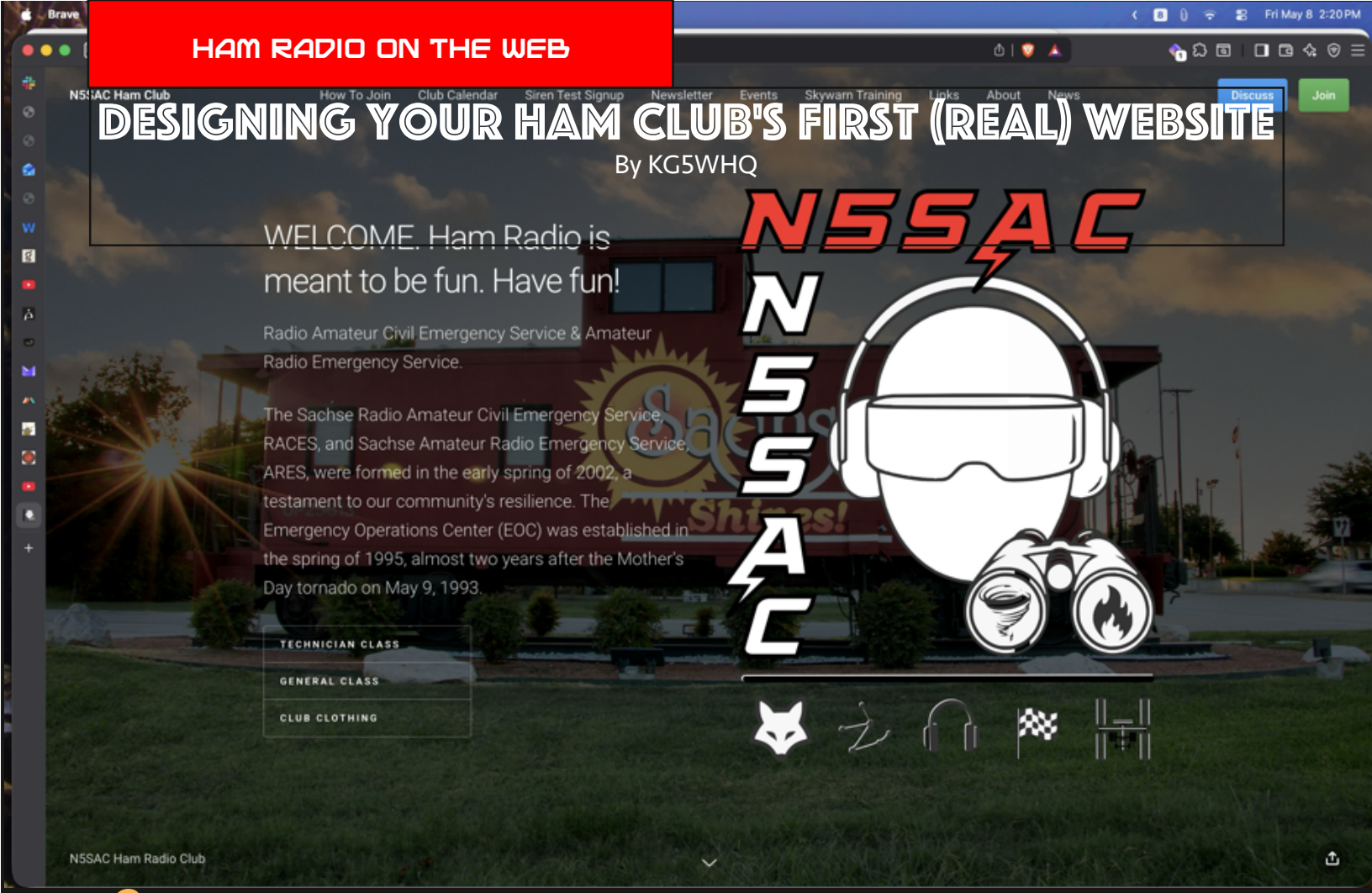
By Bruce Cameron K6IL
VP@k5prk.net

May our own Tim Johnson K5TCJ—working satellites
June—Field Day
July—Auction
August Bruce Cameron—AF Mars
September Edison Fong—his new Triband Beam
October—Open
November—Open
December—Christmas Party

If anyone knows of someone or you might want to present, please let me know.

DESIGNING YOUR HAM CLUB'S FIRST (REAL) WEBSITE

By KG5WHQ



One of the things that comes up in the life of a new ham club is outreach—bringing in the new members. It follows, as it did for us over at N5SAC, that you simply are not doing the job if you cannot be found on the web. That's where we will start, but at the end of the process, we will have a free-standing high-grade site that is a service to all our members. Anything else is a failure.

That deserves a caveat: the blind. There are far superior tools in automation and physical readers than I am able to compete with as a developer. I now, with some frustration, call uncle and yield to those services that already sit on the computers of the blind ham. They require that we provide ALT-TEXT attributes and IDs to images that otherwise cannot be spoken by screen readers. Some of the visually handicapped are poorly-sighted. As much as possible, make the visuals high contrast for their benefit.

STEP ZERO: NO COMMITTEES

Take input from a committee, but by all means keep them off your critical path and far away from the development console. You can't get anything done that way. It will set you back; somebody will make a disastrous change, costing you a week of work. They won't tell you what they did because "you should just know." Worse, they might get mad and take their ball and go home—probably with your SSH keys!

Save your sanity. No development committees.

STEP 1: GET A CHEAP DOMAIN NAME

These days, hover.com is a gold standard with all the services to grow as you do. You can point it to anything you want.

STEP 2: PROTOTYPE OR GOOGLE, ETC. THE BLIND ALLEY

We built a prototype on Google Sites. It was free to our 501.3c and probably is to yours, too. But the interface is criminally limited. You just can't do what you want done. When you look at other ham radio websites, and you think, "That is so cool! I could do that! It would be easy!" Google says, "Ah, hold my beer while I spill yours."

You will find that you just can't get things done with Google Sites. You are better off with WordPress.com, but if you go that way, go with the full monte. We opted for a self-hosted WordPress installation and it fits like a cozy ham-sized glove. Only with a self-hosted option can you do the custom things that you will find you want as a developer.

STEP 3: AFTER YOU PROTOTYPE

Stand up a virtual host you can spin up and trust it will be maintained and backed up. If you choose to "save money" by being your own web host, understand all the 24-hour demands that go with it. A gold standard I have used is DigitalOcean.com. DreamHost is an option as well as dozens of others. Buyer beware: they are not created equally.

STEP 4: THE SECOND PROTOTYPE

Make a fully functional HTML landing page(or pages if needed). It should be static and well-oiled.

Build on a template you already like. Play on HTML template sites for an hour. Explore the ideas that have already been built. You will find templates you like that do the things you like on other ham club sites. You will also find styles you prefer.

Your mission becomes marrying that functionality on top of the look you like.

For the aesthetic I liked, I chose the Slides template. It gave me a look and feel I could bolt a blog and other services onto. I'm going to let HamClubOnline, Groups.io, and Ham.Live do what they do well as capsules. Those are free existing services widely accepted in ham circles. So I make them HTML menu buttons.

Uniformly, it is accepted that the website menu gets you within three clicks of the tasks members are looking for.

Build on top of a paradigm everyone knows. I mean, think about it: What should every serious website have? Functionality-wise, you want a Home page because everyone eventually needs to go back to the beginning or top. Stick that menu option where you instinctively know it must live—in the upper left of the top bar. Don't mess with a hamburger menu on your prototype. You can add that later, and we will.

One of the things my chosen template does well is responsive design. That means it already knows how to reformat for phones and tablets. Screen resolution has already been taken into consideration.

We always want to know when and where the meetings are. Stick a Meetings option on the menu. Likewise, your visitors want to know how to contact the club. A Contact button can link straight to your email addresses. Your eyes already know that it belongs somewhere to the right—alongside About. "About" always belongs on the far right(don't know why, but it is less desirable than being able to go back "home").

Why do we need an about button? There are easy questions that "about" can tell your potential new club members about meetings, repeaters, skills, and tutorials your club provides. What is the service to the community you provide? This is a good place to introduce that topic.

Your website is your new member brochure—do a sales job. It is also your member's reference, etc.

STEP 5: USE EXISTING SERVICES

I mentioned using other known services as capsules for the purpose they serve. Definitely use other services your area hams are already comfortable with and incorporate those into the site. For example, there are two forums that hams universally gravitate to: Groups.io and Discord.com. Products that your potential members already use. If your members have accounts there, then they already know how to use it. Integration is often as easy as a link, and the free tiers provide plenty of functionality.

If your club uses hamcluboneline.com, consider how you can integrate. It may be more work than it is worth. Let them deal with payment processing for memberships and so on.

As much as possible, I use Ham.Live to give my nets a text chat, share images, and handle check-ins.

Other services I incorporated into the website, I

ended up building with WordPress plugins. Stub those elements that come up in the menu on your HTML page.

STEP 6: MVP 

When you feel you have a minimally viable product(MVP), put it up for your committee to discuss. You never know, they might have good feedback. Remind them that you will be implementing your MVP first.

STEP 7: CONVERT YOUR STATIC PAGE FUNCTIONALITY TO A WORDPRESS THEME

This is the secret sauce of a WordPress site and a later step of site evolution. To be fair, it was every bit of a year before we got this far. Things with the club were evolving organically, and every bit of the "wouldn't it be cool if" that was in the back of my mind became worthless during that year.

A tip: write down every what-if-we idea the committee speaks up about. "What if we have meetings online?" "What if we do testing on the website?" "What if we become an email host?"

90% of that will never be needed. You wrote it down, you acted interested. Always evaluate those great ideas against volunteer time. YOUR time.

A tip: Use photos. Photos communicate better than words. Plus, people love to see themselves in print or on your news site. This is your club's news site.

The process of converting a solid site to a theme is very involved. I will cover that separately.

PUBLIC RELATIONS

By Ron Forson K5WFR
pr@k5prk.net

Working on the Field Day invitation emails and flyers to be emailed and distributed. I will be mentioning that sizable scholarships are available to licensed students so hoping to have a respectable turnout. It would be great if we have a good club presence in case we experience periodic crowds.

Rob
K5WFR

In April, PaRK showcased the upcoming Flex radio system to an intense and ravenous cadre of wild ham radio operators. In spite of this dangerous environment, a good time was had by all.

Why Digital Voice Still Isn't Ready for Emergency Communications in Amateur Radio

By Greg Kent KK6AXF, N5SAC Radio Officer

We've all seen the buzz around digital in amateur radio—D-Star, DMR, Yaesu System Fusion/WIRES-X, P25, NXDN, hotspots, dongles, and now open-source vocoder projects. Technically it's exciting, and for tinkering it's fantastic.

But when the topic turns to **emergency communications**, the hard truth is: **we don't have a usable, reliable digital standard in ham radio that we can count on when things go bad**.

Recent discussions in our own club about AMBE dongles, DVSI chips, and open-source vocoders are a perfect illustration of why.

COMMERCIAL RADIO: STANDARDS FIRST, FEATURES SECOND

In the commercial and public-safety world, standards come first:

- **P25 Phase 1 (IMBE) and Phase 2 (AMBE)**

APCO P25 defines not just a digital mode, but a whole ecosystem: vocoder, channel structure, signaling, identifiers, trunking behavior, and inter-system interfaces (ISSI/CSSI). Vendors compete, but they all have to talk P25 in a compatible way.

- **DMR (Tier II/III)**

ETSI's DMR spec similarly defines vocoder, slotting, signaling, and services. A Motorola, Hytera, or Tait DMR subscriber can go onto a properly configured DMR system and it just works.

- **NXDN, etc.**

Same idea: documented air interface, defined vocoder (AMBE+2), predictable behavior. Regional and statewide systems are engineered around a **single, shared standard.**

On top of that, agencies do **planning and coordination:** "This county is P25 Phase 1/2 on these bands; these talkgroups are for mutual aid." When a big fire or tornado hits, they already know what mode, what talkgroup, and what radios will be used across departments.

Result: **interoperability is engineered in up front.**

AMATEUR RADIO DIGITAL: MODE ISLANDS AND CODEC SILOS

Ham radio went a different direction.

Instead of choosing one digital voice standard and building around it, we now have:

- **D-Star** (ICOM's flavor of digital, AMBE-based)
- **DMR** (ham-adapted from commercial, but fragmented between networks and codeplug conventions)
- **Yaesu System Fusion/WIRES-X**
- **P25** (used by some hams, mostly with surplus gear)
- **NXDN** in a few pockets
- Proprietary and open-source **hotspot ecosystems** that glue all of this together in ad-hoc ways

Each of these:

- Uses **incompatible voice framing and signaling**
- Often uses a **proprietary AMBE/AMBE+2 vocoder** from DVSI

● Assumes **its own infrastructure** (repeaters, reflectors, talkgroups, rooms, etc.)

From a hobby tinkering standpoint, this is fun. From an **emergency communications** standpoint, it's chaos:

● A D-Star handheld **cannot** talk directly to a DMR handheld

● A Fusion radio **cannot** talk directly to a P25 radio

● Bridging between them usually requires **homebrew software, Internet-dependent hotspots, or racks of $900 USB vocoder dongles hanging off a server**

That might be great for experimentation on a good day. It's not what you want to depend on on a **bad** day.

THE VOCODER PROBLEM: CLOSED, EXPENSIVE, AND FRAGMENTED

At the core of nearly all these systems is the **AMBE family of vocoders** from DVSI:

● P25 Phase 1: IMBE

● P25 Phase 2: an AMBE variant

● NXDN: AMBE+2

● Many DMR implementations: AMBE+2 or close cousins

● D-Star/Fusion: AMBE derivatives as well

To do "legal" or standards-compliant encoding/decoding today, you generally need DVSI silicon or licensed firmware:

● ICOM USB dongles and similar devices are on the order of hundreds of dollars each

● Some experimenters stack multiple dongles behind a server just to handle a few channels

● Alternatives (like multi-channel European boards) still hinge on the same proprietary core

That's exactly what kicked off the discussion quoted above: how to avoid a fragile pile of USB dongles as your dependency just to move digital voice around.

Open-source folks are now working hard on clean-room MBE/AMBE implementations, reverse-engineering chip behavior and reading standards line-by-line. The legal consensus is that the early patent layer is expiring or expired, and that a careful, spec-driven, non-chip-specific implementation is defensible.

That's promising for the long term.

But **right now**, for a typical ARES/RACES group:

● You're not going to build and maintain custom, open-source vocoder stacks in the field

● You're not going to run a mission-critical gateway that depends on half a dozen proprietary USB devices and a fragile server

● You can't count on every responder showing up with the same digital mode and codec

WHY THIS FAILS THE EMERGENCY COMMUNICATIONS TEST

For emergency communications, we need:

1. Interoperability

Everyone involved in the incident must be able to talk to everyone else, or at least to a common hub, without needing to know which digital island they're on.

2. Simplicity

In an activation you don't have time for "which reflector is that repeater linked to" or "which talkgroup is your county using today." You want: *set the frequency, set the tone (if any), talk.*

3. Resilience

The system must tolerate **power failures, Internet loss, and individual device failures.** A stack of vocoder dongles, Software-Defined Radios, and VPN-linked reflectors is a fascinating lab project; it is not a robust disaster-time backbone.

4. Predictable Audio Quality and Behavior

Public safety already lives with P25's "robotic" and "underwater" audio at 2450 bps. That's with tightly controlled deployments and professional radios. Hams layering consumer gear, hobby hotspots, and mixed-mode repeaters on top of that do not improve the situation.

Given where we are today, **analog FM still wins all four of those criteria** for amateur emergency communications:

● Any VHF/UHF FM handheld

can talk to any other on the same frequency

- Repeaters are simple, well-understood, and often hardened
- There is no codec licensing, no dongles, no mode wars
- Audio degrades gracefully: noisy but intelligible, instead of dropping straight to digital hash

NEXT MEETING:

MAY 18, 2026 7PM AT

FIRST UNITED METHODIST CHURCH, PLANO, TX

WHAT WOULD HAVE TO CHANGE?

Digital can be useful for emergency communications, but we'd need to make some hard choices as a community:

- **Pick at least one open, common standard for ham emcomm**

Not "everything to everything," but a defined baseline: for example, "on VHF/UHF regional emcomm, we use Analog FM plus <one specific digital mode> with <this specific vocoder and framing>."

- **Insist on an open, well-documented vocoder path**

Either:

Fully expired patents and a published spec, or

A community-accepted, clean-room implementation that can be run in software without licensing dongles.

Without that, every deployment is held hostage to one vendor's silicon.

- **Engineer for failure, not just for features**

Any proposed digital standard for emcomm should answer blunt questions:

What happens when the Internet goes down?

What happens when a vocoder server dies?

How is a new operator, from another county, supposed to get on the air in under 60 seconds?

- **Document and train**

The commercial world spends years and millions on interoperability planning around P25, DMR, and NXDN. If we want digital to be part of emcomm, we need repeatable playbooks, not just interesting code repositories and YouTube demos.

WHERE WE ARE TODAY

Today, in amateur radio:

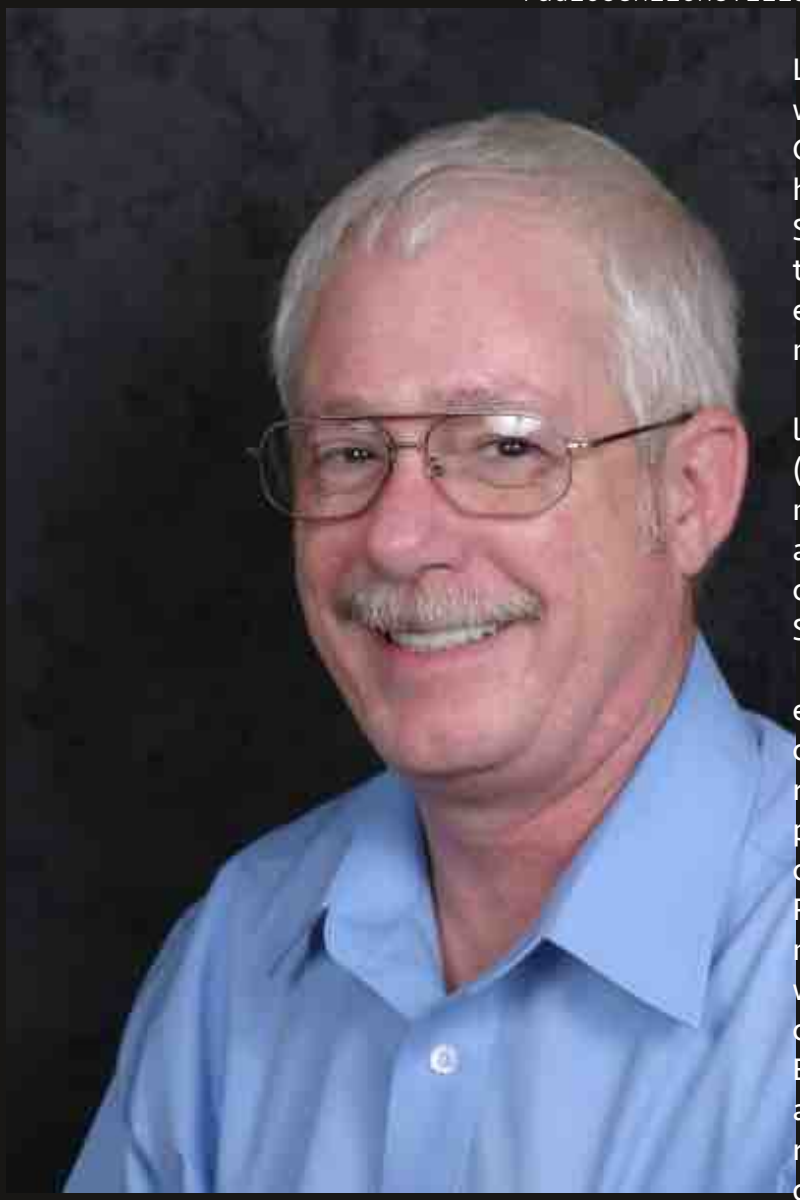
- Digital voice is a fantastic playground for experimentation.
- Open-source vocoder work is encouraging and important.
- But we do not yet have a simple, open, interoperable digital standard we can count on for emergency communications.

Until those pieces come together—a shared standard, an open or at least an affordable vocoder path, and real-world deployment plans—**analog FM remains the only universal lingua franca** we can reliably lean on when everything else is falling apart.

And that's the core struggle: we've raced ahead in experimenting with digital, but we've never stopped to agree on **one** way to do it, end-to-end, that we can put in the binder next to our ICS forms and actually use when the sirens go off.

WHO IS THIS N5LOC?

By Shawn Borton KJ5LXB
radio@shilohsvillage.com



*N5SAC's club radio frequency on VHF is actually that of the repeater that preceded W5SRA. Not surprisingly, **Jeffrey Locke N5LOC** was my very first contact quite a few moons ago! As you read, ham radio in Sachse, TX has much to thank Jeff for.—ed*

N5SAC owes a great debt to **Jeff Locke**. Mr. Locke is a retired Air Force Master Sergeant who served from 1974 – 1994 in places such as Greenland, Turkey, The Netherlands, and right here in Texas. It was in Texas, and specifically Sachse, where he got his license in 2010 under the call sign **KF5IJH**. He would earn his General class license later that year and took a new call sign, **N5LOC**.

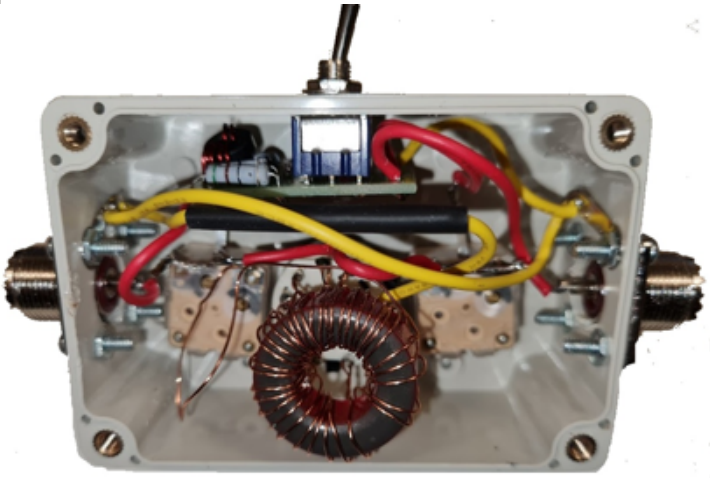
The following year, Mr. Locke helped establish the Sachse Amateur Radio Association (SARA) alongside fellow ham and next door neighbor, **John Findley W5INF**. They extended an invitation to fellow hams they had heard on the air and this initial group became SARA's charter members.

Also starting in 2011, Mr. Locke purchased equipment for setting up a repeater and secured a frequency pair for use by SARA. The repeater also supported the mission of Dallas County RACES by hosting nets and other weather-related communications. Eventually, SARA acquired their own repeater with a different frequency pair, which can still be heard on the air today.

The N5LOC repeater fell silent for a number of years until N5SAC club officers approached Mr. Locke seeking permission to use the frequency pair, to which he graciously agreed. Today, the N5SAC radio club is proud to honor Mr. Locke's commitment to community service by operating a new repeater dedicated to emergency communications on the same frequency pair he established.

BUILD YOUR OWN ANTENNA TUNER

by Bob Fryer VK1ERF



[Via: Digital Shack.org]

This Antenna Tuner is otherwise known as :

QRP Manual Days Antenna Tune Tuner DIY Kit 1-30Mhz
or
QRP Manual DIY Antenna Tuner Kit 1 -30Mhz

This little QRP (low power) Antenna tuner has been around for a while and it is sold as a Kit from Aliexpress, Amazon, Ebay, Banggood to name a few. The price ranges from $8.00 through to $60 (discounted for the same group of components.

The design is actually quite simple, building on some existing designs and reference documents such as . It is in effect a T-Topology Antenna tuner.

What lets this kit down however is some of the errors in the kit parts, and the almost non-existent instructions. I say almost non-existent, as in most cases, there are no instructions from most suppliers, you have to do a lot of googling to find the instructions, and when you do, you get about 7 pages, mainly written in Google Translated Chinese to English. In fact I think I got more fun out of trying to work out the original words or sentence meanings than building the kit.

Now I have had my say and I will state that I took it as a challenge to complete the project and get it working. I am glad I did as I learnt some things on the way. It does work and due to space restrictions, I am using a 21m resonant Dipole with an 80m 3watt Transceiver and achieving 1:1.3 SWR with this tuner.

Now if you have arrived on this Website looking for some decent instructions, then you have come to the right place. When I set out, I decided to photograph everything, as well as re-write the instructions. So you will find that we have now gone from 7 pages of instructions to 32+ pages (with some helpful hints).

If you find I have made any errors or mistakes, please let me know in the comments below.

NOTE: A revised document is currently underway. As Rob points out in the comments there is yet another fatal flaw in the project where the taps need to be reversed. I had already realised this and corrected my unit last year, but have been slow on updating the instructions. If you understand what this means, you can still build this project and correct, but if not, I hope to have the instructions corrected in the next month or so which should be version 2.2

https://www.digitalshack.org/qrp-1-30mhz-antenna-tuner/

NEXT MEETING:
MAY 18, 2026 7PM AT FIRST UNITED METHODIST CHURCH

MONDAY

JULY 20TH 2026

7PM

UNITED METHODIST CHURCH
PLANO

You are invited to the

K5PRK
ANNUAL
HAM RADIO
EQUIPMENT
AUCTION

Google Put What on my Computer??

By Jenny List

[Via: Hackaday.com]

It's been a story of the last week or so if you follow the kind of news channels a Hackaday scribe does, that Google have quietly installed an LLM as part of the Chrome browser. Reports vary as to when they did this because there's a lot of confusion online with their online Gemini features also present in the browser, but it seems Chrome users are noticing its effect through slower performance and hefty disk access. Given that Chrome is by far the most popular web browser, this means that billions of users will have downloaded the four gigabyte Gemini Nano model, and now have an LLM they didn't know about. It will be used to provide advanced auto-correct and other text suggestion features that their online version of Gemini would presumably be overburdened with, and since it's available through a set of in-browser APIs we expect that it will find its way into a lot of websites, online applications, and plugins.

It's caused a bit of a fuss in some circles, and we think, with some justification. When billions of computers unwittingly install an extremely energy intensive software component the effect on global power consumption will be significant, with a consequent uptick in the carbon footprint of computing. It's not a phenomenon restricted to Chrome, as an example Siri has used a local LLM on Apple devices for a while now. We've seen rumblings of discontent and talk of getting European climate regulators involved, but perhaps instead it's time to have a conversation about local AI models. The key is not whether or not they are a good thing to have, but when and how they operate.

While many of us are sick to death of AI slop and have not been lured into AI psychosis by an over-reinforcing chatbot, the fact remains that LLMs can do some useful things, they're here to stay whether we like it or not, and having one under your control on your own computer doesn't have to be a bad thing. Install Llama.cpp on your machine, and you've got an LLM of your very own, upon which your usage data isn't going to be sold, and your content isn't going to reinforce the finest plagiarism device the world has ever seen.

OPT-IN AND OPT-OUT

The concerning development with the Chrome LLM is that not only has it been installed without the user's consent, it runs without their consent too, and they can't use it for anything except what Google Chrome wants it to be used for. Unlike the Llama.cpp mentioned above, it's not under their control, instead it's a compute-hungry monster ultimately controlled by Google. The prospect of a future in which multiple pieces of everyday software install their own similarly out-of-control multi-gigabyte CPU-munchers is a concerning one. Anyone who remembers Microsoft's Clippy grabbing all the resources in a 1990s desktop as its stuttering animation played its course will know where this is going.

If local LLMs are an inevitability, what's needed is a way to make them like any other application, one that the user chooses and installs themselves. Such an LLM could make its services available to applications such as a web browser if the user allows it to, but not run unless asked. It's fairly obvious that installing Llama.cpp or similar is beyond many users, but it shouldn't lie beyond the bounds of possibility to package something like it as an application they can install.

We know that the previous paragraph is pie-in-the-sky wishful thinking, and that as the person who knows computers in your family your next few Christmases will be spent wrestling with six different LLMs running on some elderly family member's PC. But perhaps in Clippy lies the answer. If the consumer can learn to associate built-in AI features with their computer grinding to a halt just as they did with an office assistant thirty years ago, then perhaps they'll demand change. We can hope.

JOIN THE ARRL

American Radio Relay League (ARRL) is the leading organization for radio enthusiasts across the United States. The ARRL invites you to join a vibrant community of innovators, communicators, and explorers who connect the world through the airwaves. Whether you're passionate about emergency communications, cutting-edge technology, or simply connecting with fellow hams across the globe, the ARRL offers unparalleled resources, training, and opportunities to fuel your curiosity.

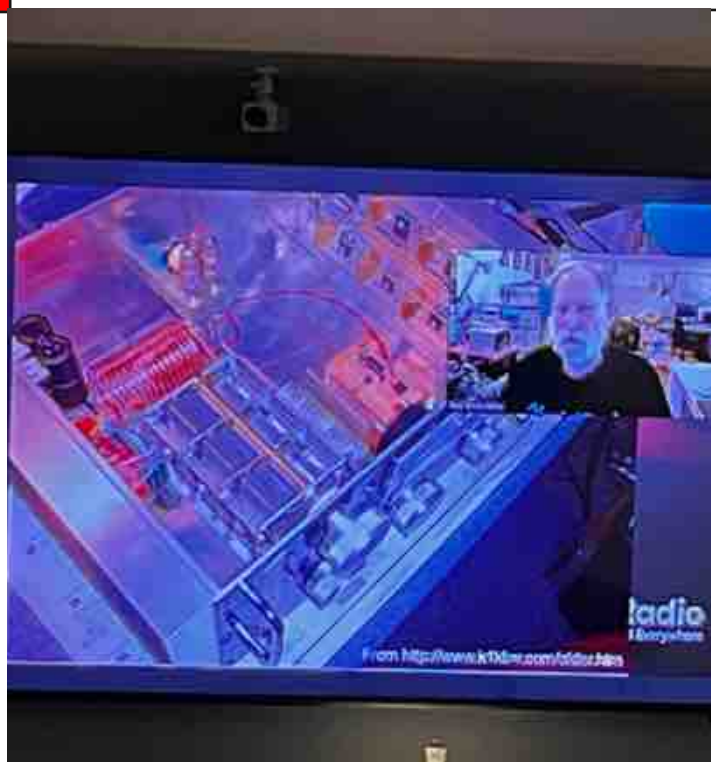
By becoming a member, you'll gain access to exclusive publications like QST, hands-on support for licensing and operating, and a network of over 150,000 members who share your passion.

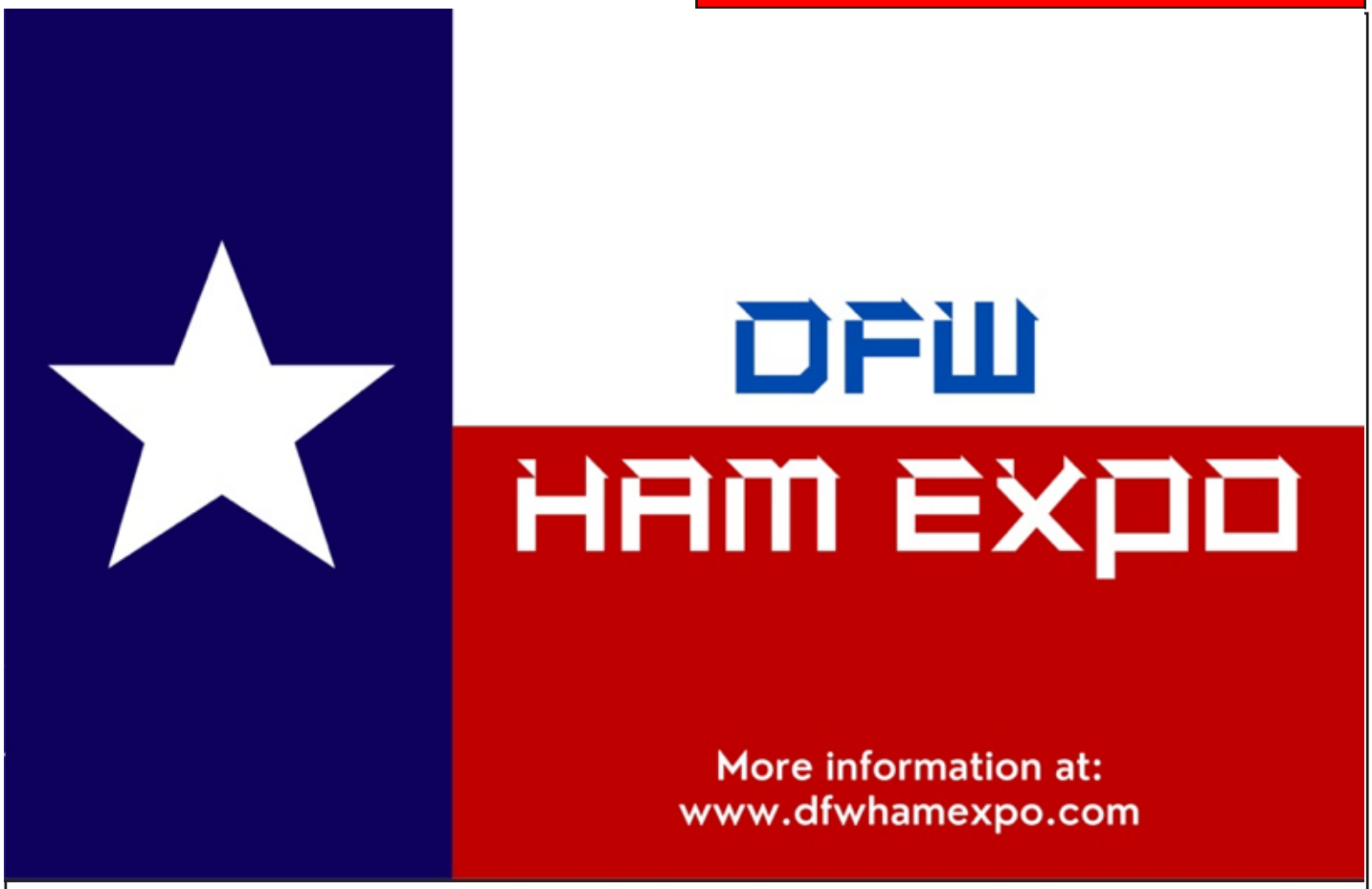
ARRL has an active lobby in government and aggressively acts for our benefit sharing our voices in Congress.

Additionally, the the ARRL equipment insurance program is quite superior. Investigate it and stor you receipts away in accordance with their requirements. When lightning strikes you will want them.

Join the ARRL today and amplify your voice in a timeless hobby that bridges distances, builds skills, and creates lifelong friendships—your adventure in amateur radio starts here!

LAST MEETING





DFW Ham Expo Features For 2026

EVERYTHING IN ONE (HUGE) SPACE

WE'RE EXPANDING AGAIN TO THE NEW NTX ARENA AT VISTA MALL! WE HAVE THE ENTIRE FIRST FLOOR 25,000 SQ. FT. AREA, WITH PLENTY OF TABLES (AND AIR CONDITIONING!) AND A MORE CONVENIENT DIRECT ENTRANCE FROM THE PARKING AREA.

SATURDAY OUTDOOR TAILGATING

SHOW UP EARLY (7AM) AND STAKE OUT YOUR SPOT IN OUR LARGE OUTDOOR TAILGATING AREA. ONLY $10 PER VEHICLE.

FOOD AND FRIENDS

DFW HAM EXPO IS **ADDING A CONVENIENT CONCESSIONS SHOP, COFFEE CART, AND OUTDOOR FOOD TRUCK** ADJACENT TO OUR NEW SOCIAL AREA. PLUS EASY ACCESS TO THE **VISTA MALL FOOD COURT** AND YOU CAN COME AND GO WITH YOUR ADMISSION PASS.

HAM RADIO VENDORS

HAM RADIO OUTLET AND OTHER COMMERCIAL VENDORS WILL BE AT DFW HAM EXPO BOTH DAYS! COME SHOP FOR THE LATEST IN NEW HAM GEAR. **UPDATE:** WE HAD JUST OVER 100 VENDOR TABLES IN LAST YEAR'S 2025 DFW HAM EXPO, AND WE'RE PAST THAT MILESTONE WITH OVER 5 WEEKS TO GO UNTIL 2026!

GREAT PRIZES

MANY GREAT PRIZES FOR 2026! (DOOR PRIZE ANNOUNCEMENT COMING SOON) LOTS OF OTHER PRIZES!

RADIO AND ANTENNA TESTING

TEST THAT PROSPECTIVE ITEM BEFORE YOU BUY! MIKE AE5IV HAS THE EQUIPMENT AND WILL BE GLAD TO HELP.

MORE INFO: https://www.dfwhamexpo.com

MAY 16

SPONSORED BY SACHSE FIRE-RESCUE AND N5SAC.ORG

TEENS, SCOUTS, ADULTS, and RETIREES

FREE ALL-DAY CLASS AND TESTING SESSION WITH LUNCH PROVIDED

PARTICIPANTS CAN QUALIFY TO RECEIVE A FCC RADIO LICENSE

TEENS USE S.T.E.M. AND GAIN A MEANS TO COMMUNICATE DURING DISASTERS AND FOR RADIO ADVENTURES. USE YOUR PHONE TO REGISTER WITH THIS URL OR QR CODE:

https://tinyurl.com/techclass2026

GET ON THE AIR AND HAVE FUN!

SUMMIT PARKS JAMBOREE WEATHER HELP

TALK TO THE WORLD!

FREE ALL-DAY CLASS AND TESTING SESSION
WITH LUNCH PROVIDED

JUNE 27

GENERAL FCC LICENSE CLASS
SPONSORED BY SACHSE FIRE-RESCUE AND N5SAC.ORG

PREREQUISITE: FCC TECHNICIAN LICENSE REQUIRED

HTTPS://TINYURL.COM/GENERALCLASS2026

REGISTER WITH THIS URL OR QR CODE:

SUMMIT PARKS JAMBOREE WEATHER HELP

CLUB CALENDAR

MAY

Sunday 26	Monday 27	Tuesday 28
1p Military Veterans D-Star Net @ REF026A **2p** Texas RACES Net (HF) @ 7.255MHz **7p** Intl D-Star Net @ REF001C **8p** K5TIT D-Star Net @ REF33B	**7:30p** Texas ARES Net @ 3.873 MHz **8:30p** MARC Simplex net	**7p** HAM (Mesquite) InfoNet @ WJ5J (145.310 PL 110.9) **7:30p** Ark-La-Tex D-Star Net @ REF048B **8p** Texas D-Star Net @ REF004B **8p** Lucas Open Net
3 **1p** Military Veterans D-Star Net @ REF026A **7p** DARC (Dallas) Meeting on the Air **7p** Intl D-Star Net @ REF001C **8p** K5TIT D-Star Net @ REF33B **9p** Collin County ARES @ WD5ERD	**4** **7p K5PRK Board Meeting @ Dickies on 14th** **7p** GARC (Garland) Club Meeting **7:30p** Texas ARES Net @ 3.873 MHz **7:30p** RWK -- Meeting on the Air @ 147.12, PL110.9 **8:30p** MARC Simplex net	**5** **7p** DARC (Dallas) General Meeting **7p** HAM (Mesquite) InfoNet @ WJ5J (145.310 PL 110.9) **7:30p** Ark-La-Tex D-Star Net @ REF048B **8p** Texas D-Star Net @ REF004B **8p** Lucas Open Net
10 **1p** Military Veterans D-Star Net @ REF026A **2p** Texas RACES Net (HF) @ 7.255MHz **7p** Intl D-Star Net @ REF001C **8p** K5TIT D-Star Net @ REF33B	**11** **7:30p** Texas ARES Net @ 3.873 MHz **8:30p** MARC Simplex net	**12** **7p** HAM (Mesquite) InfoNet @ WJ5J (145.310 PL 110.9) **7:30p** Ark-La-Tex D-Star Net @ REF048B **8p** Texas D-Star Net @ REF004B **8p** Lucas Open Net
17 **Dayton Hamvention** **World Telecommunication and Information Society Day** **1p** Military Veterans D-Star Net @ REF026A **7p** DARC(Dallas) Meeting On The Air **7p** Intl D-Star Net @ REF001C **8p** K5TIT D-Star Net @ REF33B **9p** Collin County ARES Training Net @ W5MRC	**18** **6p VE Testing @ K5PRK** **7p K5PRK Regular Monthly Meeting** **8p** American Legion Post 315 Radio Club Net @ W5SRA **8:30p** MARC Simplex net	**19** **7p** HAM (Mesquite) InfoNet @ WJ5J (145.310 PL 110.9) **7:30p** Ark-La-Tex D-Star Net @ REF048B **8p** Texas D-Star Net @ REF004B **8p** Lucas Open Net
1p Military Veterans D-Star Net @ REF026A **2p** Texas RACES Net (HF) @ 7.255 MHz **7p** Intl D-Star Net @ REF001C **8p** K5TIT D-Star Net @ REF33B **24** **1p** Military Veterans D-Star Net@REF026A **7p** Intl D-Star Net@REF001C **8p** K5TIT D-Star Net@REF33B **31**	**25** **7p** DARC (Dallas) Geek Net **7p** GARC (Garland) Club Meeting **7:30p** Texas ARES Net @ 3.873 MHz **8:30p** MARC Simplex net	**TDEM Conference** **26** **7p** HAM (Mesquite) InfoNet @ WJ5J (145.310 PL 110.9) **7:30p** Ark-La-Tex D-Star Net @ REF048B **8p** Texas D-Star Net @ REF004B **8p** Lucas Open Net

CLUB CALENDAR

MAY

Wednesday 29	Thursday 30	Friday 1	Saturday 2
6:50p NTx Readiness QST Net @ 7.27750 MHz LSB **8p** N5SAC Weekly Info Net @ N5SAC **8p PARK Informal Net @ 147.180+ MHz, (107.2)**	**11a** GARC (Garland) Crony Lunch @ Judy's Cafe **7p** HAM (Mesquite) Monthly Meeting **8p** GARC (Garland) InfoNet **8p** Denton County ARES Training Net	***8:30,9a*** North Texas Hospital Radio Club weekly check in	**12p** Garland "Hands-On" Gathering **7p** DARC (Dallas) Tech Net **9p** Saturday Night D-STAR Net@REF029A
6 **6:50p** NTx Readiness QST Net @ 7.27750 MHz LSB **8p** N5SAC Weekly Info Net @ N5SAC **8p PARK Informal Net @ 147.180+ MHz, (107.2)**	**7** **11a** GARC (Garland) Crony Lunch @ Judy's Cafe **8p** GARC (Garland) InfoNet **8p** Denton County ARES Training Net	**8** ***8:30,9a*** North Texas Hospital Radio Club weekly check in	**9** Armed Forces Day Crossband Test **9a** W5YI VE Test Session @ Wylie **7p** DARC (Dallas) Tech Net **9p** Saturday Night D-STAR Net@REF029
13 **6:50p** NTx Readiness QST Net @ 7.27750 MHz LSB **8p** N5SAC Weekly Info Net @ N5SAC **8p PARK Informal Net @ 147.180+ MHz, (107.2)** **8:30p** NTx ARES Net	**14** Four Days In May (begins) **11a** GARC (Garland) Crony Lunch @ Judy's Cafe **8p** GARC (Garland) InfoNet **8p** Denton County ARES Training Net	**15** Dayton Hamvention ***8:30,9a*** North Texas Hospital Radio Club weekly check in	**16** Dayton Hamvention EMS Open House @ FS1 7a CERT Xtreme Green Heritage Pk 9a-5p N5SAC Technician Class/Test **9a** W5SRA Laurel VE Test Session **9a** GARC (Garland) ECC Open House **7p** DARC (Dallas) Tech Net **9p** Saturday Night D-STAR Net@REF029A
20 **6:50p** NTx Readiness QST Net @ 7.27750 MHz LSB **7p** Murphy CERT Net @ W5SRA **8p** N5SAC Weekly Info Net @ N5SAC **8p PARK Informal Net @ 147.180+ MHz, (107.2)**	**21** **11a** GARC (Garland) Crony Lunch @ Judy's Cafe **8p** GARC (Garland) InfoNet **8p** Denton County ARES Training Net	**22** ***8:30,9a*** North Texas Hospital Radio Club weekly check in	**23** **7p** DARC (Dallas) Tech Net **9p** Saturday Night D-STAR Net @ REF029A
27 TDEM Conference **6:50p** NTx Readiness QST Net @ 7.27750 MHz LSB **8p** N5SAC Weekly Info Net @ N5SAC **8p PARK Informal Net @ 147.180+ MHz, (107.2)**	**28** TDEM Conference **11a** GARC (Garland) Crony Lunch @ Judy's Cafe **12p Fourth Thursday Lunch** **7p** N5SAC Club Meeting@North Pointe **8p** GARC (Garland) InfoNet **8p** Denton County ARES Training Net	**29** TDEM Conference Radio Fiesta *Schertz, Texas* ***8:30,9a*** North Texas Hospital Radio Club weekly check in	**30** Radio Fiesta *Schertz, Texas* **7p** DARC (Dallas) Tech Net **9p** Saturday Night D-STAR Net @ REF029A

POLICY UPDATE

Stated Policy for Groups.io Membership

By **B.J. Watkins K5BJW**
treasurer@k5prk.net

This policy sits before the board awaiting review and approval.

This is the official mailing list for the Plano Amateur Radio Klub in Plano, Tx.
Main@K5PRK.groups.io

This not an anonymous public forum. Your Legal Name (not a nickname, moniker or e-mail address) and Call Sign are required in the "Display Name" field.

All those interested in Amateur Radio (licensed or not) are welcome here. If you don't have a call sign, your full real name is required. All postings by a member who is not a licensed operator will be moderated prior to posting. If the post does not adhere to the below listed rules, posting will be denied and it will be removed.

Any application for membership that does not adhere to these requirements will be denied.

Moderation will be removed once the member is licensed.

Posting Rules:

All posts shall be presented in a considerate manner consistent with good amateur practices. Remember, it's a hobby. Any language used should be the same as if you were on the air in church or in the presence of children.

There will be NO discussions of religion, politics, or anything of a sexual nature. There are minors present on this site.

Members shall not make any post to offer, sell, or represent any item or service that is not related to the ham radio hobby.

Any post that is determined by a moderator of the site to be in violation of these terms will be immediately removed from the site.

Gross or continued violations of these policies can result in the membership being revoked by a moderator and the member and all postings being removed from the site.

These rules and caveats also apply to any web-site or social media accounts maintained by the Plano Amateur Radio Klub.

More information can be found on our webpage at: https://k5prk.net/

We also have a presence on Facebook at: https://www.facebook.com/groups/k5prk

PARK operates five repeaters in Allen, Texas at about 180 feet AGL on the water tower near the NE corner of US Highway 75 and E. Bethany Dr.

All repeaters are open and all licensed Amateurs are welcome to join us on the air.

147.180 MHz + (PL 107.2)
K5PRK VHF Voice repeater

444.250 MHz + (PL 79.7)
K5PRK UHF Voice repeater

441.575 MHz +
DStar UHF Digital Voice Port B

1295.000 MHz -20.000
DStar 23 cm Digital Voice Port A

1255.000MHz
DStar 23 cm Digital Data

More information is available on our Repeater Page