



Next Meeting:

Tuesday, August 5, 6pm.
At Bullock's BBQ
Business Meeting starts at 7pm

Program:

Bring something to share! It can be an item you find interesting or maybe a bit of news, or a humorous story.

By: You!

President's Korner

Hello DFMA!

I hope everyone is doing well considering the weather as of late. The oppressive heat conditions can be deadly. Avoid the heat if possible and stay hydrated. Chantal recovery efforts are on going and you can request aid and/or offer help/supplies at Trianglemutualaid.org.

Lighting has been more frequent than I remember and it reminded me of its danger with a close strike by my home that took down a couple of large branches, tripped breakers, and killed the microwave. Luckily my antennas were disconnected. Another HAM lost a lot more than that about a week later.

Here's to hoping the weather calms down in August!

Bob Cook
W4FK
President of DFMA
73



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Some Bits of Humor:

"When you find something you would rather do than eat, you have found your vocation for life"
John White — Old Cape Cod Land Surveyor

Questions:

From the ARRL Extra Exam:
What special type of diode is capable of both amplification and oscillation?

- A. Point contact
- B. Zener
- C. Tunnel
- D. Junction

What device is typically used as a stable reference voltage in a linear voltage regulator?

- A. A Zener diode
- B. A tunnel diode
- C. An SCR
- D. A varactor diode

Interesting Items:

International Lighthouse Lightship Weekend - ILLW

Normally held on the 3rd full weekend in August
This year: 00.01 UTC 16th August 2025 to 24.00 UTC 17th August 2025 (48 hours)
Read more about it at: <https://illw.net/>

The "**Crystal Gale Effect**" was an oddball technical bug in 1977 that would shut down a Collins Power Rock radio transmitter whenever "Don't It Make My Brown Eyes Blue" was played. The phenomenon was traced to the note Crystal sang at 1:37, it triggered an unwanted parasitic resonance in the grid of the transmitter's output tubes. That would cause a fault and take the station off the air! A small tweak to the tube's design eliminated the problem. Outside of this quirky anomaly, problems with the Collins Power Rock were few. It was a state of the art AM transmitter that had great audio performance, was energy efficient and reliable.
- As reported in various news sources.

The tunnel diode is a special type of diode is capable of both amplification and oscillation. (E6B03) Tunnel diodes are capable of operating well into the microwave region. A hot-carrier diode is commonly used as a VHF / UHF mixer or detector.

Ham Radio Reports Fire; Helicopter Crew Extinguishes Just in Time. – From ARRL

With the help of amateur radio operators, a potential wildfire was averted in California on June 12 as several hams wound up in the right place at the right time while preparing for the 2025 ARRL June VHF Contest.

In addition to getting ready for the contest, they had hoped to also activate several Summits on the Air (SOTA) locations. Their day of using the Amateur Radio Service for recreation was going well until they saw smoke near the Black Buttes area and had to use it for its utility value.

"I was surprised to see smoke ahead of us," said Graham. "As we got closer, it was clear there had been a lightning hit several days ago, and we could also see flames."

Wireless service is spotty in portions of the eastern Sierra, and they didn't have a cell signal, so Debevec used his handheld ham radio to report the fire on a nearby repeater. In just seconds, Dan Patterson, W6AI, responded back. He was monitoring the Nevada County Amateur Radio Club linked repeater system in Grass Valley, California, and heard the call. He took the GPS coordinates from Graham and notified the U.S. Forest Service.

"We were monitoring the U.S. Forest Service, and it only took about 10 minutes for them to dispatch a helicopter to the area," said Graham. "We watched four firefighters rappel down, followed by a pack of equipment. The pair then walked closer to the area and started talking to the crew, who thanked them for the report.

"They put out the fires but radioed for a helicopter water drop, before they left on foot, with the gear, to a nearby pickup site," added Debevec.

After the firefighters left, the winds picked up dramatically. Had that happened earlier, the outcome could have been much worse. Amateur radio serves communities before and When All Else Fails®, and having a thriving group of trained operators active in amateur radio allowed it to facilitate emergency communications that saved the day.

It was ten years ago that Durham EOC APRS IGate station WR4AGC-5 was rebuilt by Sam KJ4VWG after

the very old laptop and TNC software died. Mark Schell (Durham Interim Fire Marshall and Emergency Management Director) and Dan Whitehead (KK4DMS) managed to provide him with a used (but much newer) laptop (Thinkpad R500) for its replacement. Currently, all this is long gone. However there is a small team of DFMA members working to reactivate the current Durham EOC Ham Station, and also provide input for the planned new EOC, although ground has not broken yet for the new building.

Some Random Thoughts:

Long before I moved to this area (an astounding two years ago) there was a local Possum Trot Net. My understanding is that it was started about 45 years ago, long before cell phones and the truly digital age. The purpose was for conversations between people going to and from the local Army base and work. With music streaming, podcasts, audio books, etc the net no longer meets and has faded away. Sadly, with the original purpose of the net gone, I don't see the net coming back.

Now, with the NC restrictions on using cellphones and wireless devices while driving there is question in my mind if we can use hand mics with our amateur radio equipment while driving. The latest change to the law proposed in <https://www.ncleg.gov/Sessions/2023/Bills/Senate/PDF/S15v1.pdf> § 20-137.3A. Unlawful use of a wireless communication device, Section c.2.f, allows for "An amateur radio operator responding to an emergency situation." Other than that situation, my reading indicates we would only be able to use hands free or a Bluetooth Headset. (Start side rant) I personally think that with all the touch screens on newer cars,, where you have to look at the screen to change the radio station, adjust climate controls, etc. I don't see an issue with holding a microphone. (End rant) What are your thoughts? I would like to hear them.

Just Ahead in Radiosport from ARRL:

August 1 -- NCCC Sprint (CW)

August 2 - 3 -- Ten-Ten International Summer Contest, SSB (phone)

August 2 - 3 -- North American QSO Party, CW (CW)

August 2 - 3 -- ARRL 222 MHz and Up Distance Contest (CW, phone, digital)

August 3 -- SARL HF Phone Contest (phone)
 August 4 -- K1USN Slow Speed Test (CW)
 August 5 -- ZL Sprint (CW, phone, digital)
 August 7 -- NRAU 10m Activity Contest (CW, phone, digital)

And More!!!

August 9 -- Maryland-DC QSO Party
 August 9 -- Kentucky State Parks on the Air
 August 13 -- VHF-UHF FT8 Activity Contest
 August 16 -- North American QSO Party, SSB
 August 17 -- Rookie Roundup – RTTY
 August 23 -- Hawaii QSO Party
 August 23 -- Ohio QSO Party
 August 30 -- U.S. Islands QSO Party
 August 30 -- World Wide Digi DX Contest
 August 30 -- Colorado QSO Party
 August 30 -- Kansas QSO Party

More contest events listed at WA7BNM:

<https://www.contestcalendar.com/index.php>

Buy – Sell – Trade

FS: Nice coax jumper for connecting HTs to antennae.

Six inches long, SMA male to UHF female (like SO-239).

Coax is very small and flexible, RG-174.
 Available in the LOM or at DFMA/OCRA meetings.
 \$4. Financing available. Beat the rush, send email to my QRZ address.
 Wilson W4BOH

Drake MN-2000 antenna tuner.

A classic, built for more power than you can give it.
 \$250, currently in the LOM
 Wilson, W4BOH
 Contact: infomet@embarqmail.com

Box of Cat.6 LAN cable.

I have a near full, I think, box of Cat.6 LAN cable.

This stuff is \$125+ at Amazon, so \$50 seems reasonable for this one.
 Estate stuff, money goes to DFMA.
 Wilson, W4BOH
 Contact: infomet@embarqmail.com

ICOM PW-1 Solid State Amplifier.

Selling for friend, good shape.
 Price \$2,000.00.
 Wilson, W4BOH
 Contact: infomet@embarqmail.com

Icom Microphones IC-HM9 and IC-HM14

NEW in boxes
 HM9 has two pin plug, for handhelds. \$20
 HM14 has 8 pin plug and 16 key keypad. \$30
 Pick up in Hillsborough OR I will mail for \$10 each.
 Wilson W4BOH
 Contact: infomet@embarqmail.com

Alliance HD-73-1 Rotator Controller SK Stuff

Untested, no rotator available, so returnable.
 Two Speed, six wire controller.
 Picture available.
 \$50, in Hillsborough.
 Wilson W4BOH
 Contact: infomet@embarqmail.com

Do you have something that you need or something you want to get rid of? There's this spot in The Link set aside just for you. Just email the appropriate info to TimKC1TWR@gmail.com and it will be included with the next issue. Make sure to include contact info and feel free to include a picture (that is yours – please no copyrighted stuff from the web).

73, Tim, KC1TWR

**Durham FM Association (DFMA)
 Member Meeting Minutes,
 July 15, 2025**

Held at Bullock's BBQ, Durham NC

The meeting was called to order at 7:02 pm.

Attending Members:

Bob W4FK, Matthew KQ4ZYW, Wilson W4BOH, Karen KD4YJZ, Dave W4SAR, Dave NA4VY, Dan KR4UB, Pat KO4QLU, Paul N2XZF, Banks W4OFZ, Robert KD8FQM, Pam KO4YAR, Tim KC1TWR, Bill WW1H, Dan KQ4GOB, JR N4JQR, Paul N0US, Jerry KR4DTD, Matthew KQ4ZYW, and Tom KR4BTP.
 Also attending was Dwayne Ayers N4MIO.

OFFICER REPORTS

President - Bob W4FK
 Member Introductions.
 Welcomed Matthew Stafford KQ4ZYW as the new Vice President.

Discussed heat as the leading cause of weather-related casualties.

Vice President -Matthew KQ4ZYW – Nothing to report.

Secretary Tim KC1TWR – Crossword Puzzle in the current Link is from The Link in 2015. He asked for anyone that might have a paragraph or two to submit for the next Link.

Treasurer - Wilson W4BOH – No report as the internet service is down at his home.

Repeater Manager - Charlie NC4CD

All repeaters are currently working as expected. The emergency generator will be exercised this coming Saturday. Durham is building a new EOC, near the current EOC at 2422 Broad St, Durham; it is still in the planning phase. We have been asked what equipment we would like to have there to be used to assist the town. We still need someone to step up to be the AUXCOMM Emergency Coordinator for the DFMA club and take the lead in this activity and as the main point of contact for the EOC to call when we are needed. Also to provide training to DFMA members on the Amateur Radio equipment in the EOC.

Old Business – None

New Business: None

The door prize drawing was held with the winners being Robert KD8FQM, Dwayne N4MIO, and Karen KD4YJZ.

The meeting concluded at 8:20 pm.

Presentation: 2025 Field Day Results presented by David Snyder W4SAR.

Minutes taken by:

Secretary Tim Rodgers KC1TWR

Durham FM Association (DFMA) Board Meeting, July 8, 2025

The meeting was canceled due to member unavailability recovering from Storm Chantel.

Web Site: dfma.org

Upcoming Events (dfma.org for details)

08/05 DFMA Meeting, Bullock's BBQ, 6pm

08/09 Cape Fear Amateur Radio Swapfest in Fayetteville, NC

08/11 OCRA Meeting, Efland Baha'i Center, 7:30pm

08/16 VE Test Session, Efland Baha'i Center, 10am

08/19 DFMA Board Meeting, 7pm on Zoom

09/02 DFMA Meeting, Bullock's BBQ, 6pm

73 – Tim KC1TWR, Newsletter Editor

Send copy to TimKc1twr@gmail.com

Deadline: one week before the Club Meeting

(Images and copy: KC1TWR or as credited)

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The DFMA Mailing Address

This is actually a mail service which costs less than a post office box and provides some extra services.

Please address any mail you have for the club to:

Durham FM Association

9169 W State St #644

Garden City ID 83714