The Link

Newsletter of the Durham FM Association

October 2025



Next Meeting:

Tuesday, October 7, 6pm at Bullock's BBQ. Business Meeting starts at 7pm

Program: Parks On The Air

By: Matthew Stafford KQ4ZYW Matthew will cover APRS and other forms such as FT8 and FT4.

Have you considered that digital modes are great when you have a sore throat and speaking is hard?

President's Korner

Hello DFMA!

Spooky season has arrived! Welcome to October my fellow ghouls and goblins. Time for cooler weather, changing leaves, and everything pumpkin spice if you are so inclined. Time to start planning

for wires in trees as soon as the leaves drop. Makes it so much easier to launch and pull lines. Time to look for branches that may drop on your antennas as well. Here's to hoping that the scary weather stays away and that everyone has a happy October!



Bob Cook W4FK President of DFMA

Notice:

Due to the Federal Shutdown -The Federal Communications Commission, which issues Amateur Radio Service licenses, issued a Public Notice on Tuesday, September 30, indicating that it would suspend most operations following a shutdown. "Aside from a few emergency and auction filing systems, all other Commission electronic filing systems will be unavailable to the

In this Issue

Next Meeting
President's Corner
Interesting Items
(Various articles and news)
Bits of Humor
Radiosport from ARRL
Buy-Sell-Swap
DFMA Mtg Minutes
DFMA Board Mtg Minutes

public until normal agency operations resume," said the FCC Notice.

Interesting Items:

NCVEC Question Pool Committee
Removes Extra-Class Question
E6D07 From Use.

The National Conference of Volunteer Examiner Coordinators (NCVEC) Question Pool Committee (QPC) has announced the immediate removal of Extra-Class

question E6D07 from the Element 4 Extra-Class question pool and from use on examinations. The decision was made after it was determined that the question contained more than one correct answer. (Darn! That would have improved by odds to guess the right answer on that one!)

Here it is in case you were wondering"

E6D07 (D) What is the current that flows in the primary winding of a transformer when there is no load on the secondary winding?

- A. Stabilizing current
- B. Direct current
- C. Excitation current
- D. Magnetizing current

In Radiogram News:

In May 2025, amateur radio organizations like Radio Relay International (RRI) and the National Traffic System (NTS) announced a new "Certified" (C) radiogram precedence. This new message class is intended to improve accountability and speed for certain radiograms. The change took effect on June 1, 2025.

Handy on the web dipole calculator: https://www.hamradio247.com/blog/dipole-calculator

Let me know if you have a better website for this.

Interesting history of W1TS:

Donald H. Mix W1TS *1901-1973* A Bristol, CT native, Don was an early natural for the new radio/wireless world. There have been questions about who this man was. The answer quite simply, Mix was one of the greatest Dx'ers who ever picked up a key. An ARRL HQ employee, he wrote occasionally for QST, an all-time favorite QST article was by W1TS "Ivory Tower Confessions" in which he talked about Dxing with a dipole. (July 59 QST) A must read.

Our operator Don Mix, known throughout the amateur fraternity as the "sleepless wonder of 1TS" A tall lanky Connecticut Yankee, redheaded and freckle faced and a superhuman performer behind a radio key!

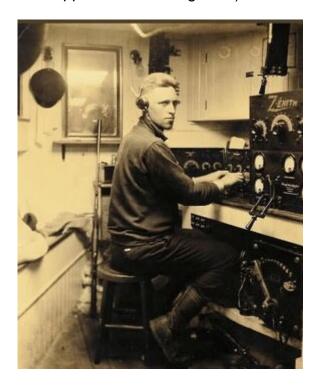
It all began back in 1923 when Commander Donald B. MacMillian, the noted Arctic explorer, was preparing for another of his journeys to the Far North with the Schooner Bowdoin -WNP- This was to be his ninth expedition, eight times before he had made the long journey above the Arctic Circle and there was nothing he feared more than the isolation, the relentless, inescapable realization of being out off from the civilized world for a year or more.

'It has spelled disaster for many an expedition' MacMillian said.. In 1922 he had carried a radio receiver along, listening to the general traffic of the air. But this was tantalizing rather than useful. What was needed was two-way communication.

About that time Commander MacMillian met Hiram Percy Maxim, President of the ARRL. They talked about his problem and Maxim suggested that radio amateurs would undoubtedly be overjoyed to help. MacMillian was keenly interested, but unfortunately there was no money to provide a radio station aboard the vessel and an operator to run it. Scripted from Calling CQ, chapter four Clinton DeSoto An agreement was worked out, the League offered to help in securing apparatus and to pay the expenses of an amateur

operator for the duration of the trip. So it happened that when the MacMillian Arctic Expedition sailed from Wiscasset, ME on June 23, 1923 - aboard the tight little auxiliary schooner Bowdoin, there was hand picked Don Mix W1TS, an operator from the A.R.R.L. There was also a complete two hundred meter station donated by CDR E.F. MacDonald of the Zenith Radio Corporation.

Besides standing his watch as a member of the seven-man crew through the months that followed, Mix transmitted a weekly five hundred word message to the North American newspaper Alliance, stood regular watches for incoming press, handled the expedition's personal message traffic and sent back lists of calls of the other amateurs that he heard. Despite the static and aurora borealis, despite the two hundred meter wavelength, despite the handicaps of cramped quarters and insufficient fuel supplies, the expedition was in contact with home until its return in September 1924. "No polar expedition will attempt to go north again without radio equipment," predicted MacMillian on his return and he was right. (As a young ham your author built and enjoyed a 6V6 transmitter Don Mix designed and featured in QST supplement license guides)



From Ken KB1Z concerning MacMillian:

I'm very familiar with Mac and his wife (author of "green water" the most noted female adventurer of Greenland). Mac was not allowed to write a book by contractual agreement with the highly "questionable" Peary. Mac and Mariam sailed up the Mystic River (I think 1959 or there-abouts) after donating the "Bowdin" to the Mystic seaport museum. Mac designed it with a special shape to withstand being frozen in the ice, truly a one of a kind ship. Mystic Seaport Stripped the boat and sold all the accessories including the ships bell to the open market, then junked the ship! The folks in Maine were so angry that they organized a "Mac society" and when folks heard the "Mystic Story" they volunteered to sell or to give every part back, and rebuilt the ship in Maine. I tracked it to the Maine Maritime academy in Castine Me, where it is now docked having just returned from Nova Scotia when we boarded. It is a training ship for the academy, fully preserved.

Some Bits of Humor:

Heard on KFAT radio in California, "Just two things in life, money can't buy. True love and home grown tomatoes."



Cartoon Courtesy of radioworld.co.uk

Dear Optimist, Pessimist, and Realist, While you guys were arguing about the glass of water, I drank it. Sincerely, The Opportunist

A sign seen recently:
"I AM LOST! - done
I've gone to look for myself.
If I should return before I get back, please ask
me to wait."



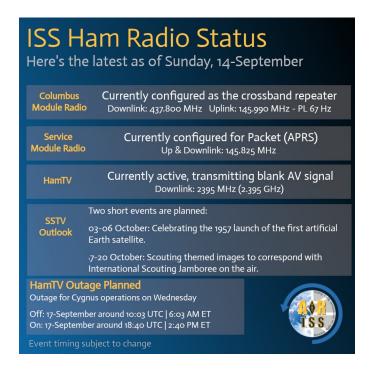
Do you have some old fire extinguishers? Why not make a duplexer out of them?

What was the first song transmitted from outer space?

In 1983 on board the Columbia shuttle, Slim Dusty's cover of Waltzing Matilda, was the first song transmitted from space to the earth



International Space Station (ISS) info:



Space Week SSTV Event

Series 29 will start 03-Oct. with some unique operations, so read carefully below!

This series of **6 images** will be transmitted from the ISS on 145.800 MHz using PD120 encoding.

Transmissions will be in **2 windows** to allow for a school event. Times are tentative:



Fri. 03-Oct. to Sat. 04-Oct: Start Fri. 14:00 UTC | 10:00 AM Eastern End Sat. 10:00 UTC | 6:00 AM Eastern

Second Window

Sat. 04-Oct. to Mon o6-Oct: Start: Sat. 11:00 UTC | 7:00 AM Eastern End: Mon. Time TBD

The same images will be sent in both windows.



SSTV

Series 29

Just Ahead in Radiosport from ARRL:

October 1 -- UKEICC 80-Meter Contest (phone)

October 3 -- URC DX RTTY Contest (digital)

October 4 - 5 -- Collegiate QSO Party

October 4 - 5 -- Oceania DX Contest, Phone (phone)

October 4 - 5 -- California QSO Party (CW, phone)

October 5 -- UBA ON Contest, SSB (phone)

School Club Roundup: Third full school week of October More at:

https://www.arrl.org/files/file/Contest%20Corral/2025/October%202025%20Corral.pdf

More contest events listed at WA7BNM:

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

ARRL Simulated Emergency Test (SET)

ARRL's Simulated Emergency Test (SET) is October 4 - 5, 2025, and this nationwide exercise is the chance to test your personal emergencyoperating skills and the readiness of your communications equipment and accessories in a simulated emergency-like deployment.

ARRL Field Organization Leaders at the section and local levels, and many other volunteers that are active in public service and emergency communications, are developing simulated emergency-like scenarios in consultation with a variety of agencies and organizations for whom radio amateurs are known to provide service during emergencies.

Please remember that station readiness and personal training and practice are tenets of the Amateur Radio Service. Any time we spend on the air will contribute to developing and practicing our personal radio communication capability.

The ARRL's Amateur Radio Emergency Service ® (ARES®), the National Traffic System (NTS), the Radio Amateur Civil Emergency Service (RACES), SKYWARN ™, Community Emergency Response Team (CERT), Salvation Army Team Emergency Radio Network (SATERN), and other allied groups and public-service oriented radio amateurs are among those who are eligible to participate in the simulated exercise and to practice emergency operation plans, nets and procedures.

For the 2025 Simulated Emergency Test, there will be bonus points for cooperation with Army MARS stations and sharing information between MARS and amateur radio stations. Please refer to the reporting form to calculate the bonus points.

See the guidelines and more information at: https://www.arrl.org/simulated-emergency-test

The Link

More interesting items:

A good website showing many things you can do with Ham Radio.

https://www.besthamradio.com/unexpected-things-you-can-do-with-ham-radio/

QRZ New Ham Jumpstart Program - Revised
This used to be a free radio, but the price is still excellent!

Through a partnership with GigaParts, this program is designed to lower the barrier to entry into amateur radio by providing new hams with a high quality radio for only \$17.99 (plus tax and shipping). Effective February 28, 2025, new hams will be entitled to a 70% discount on the Explorer QRZ-1 VHF/UHF handheld transceiver, as well as a variety of accessories

https://www.qrz.com/jumpstart

Radio Orienteering Beginner Classes

Dates: Three consecutive Saturdays — October 4, 11, and 18

Class 1: A short beginner course with constantly operating transmitters. You will learn how to use your receiver.

Class 2: A longer beginner course with "cycling" transmitters. You will learn how to locate radio-orienteering "foxes" efficiently.

Class 3: Go solo on a "cycling" beginner course to practice your skills.

We will be hiking the courses together as a group, so please arrive on time to avoid getting left behind.

Those who complete the first two class sessions should have all the skills needed to participate in BOK's 80m radio-orienteering practice events.

https://backwoodsok.org/store/Radio-Orienteering-Beginner-Classes-Fall-2025-p784017849

<u>The Battleship Iowa Amateur Radio Association's</u> (BIARA)

NI6BB will celebrate the U.S. Navy's 250th birthday with radio operations from October 4 - 19, 2025. Frequencies will be on or near those listed on the front page of BIARA.ORG | Battleship lowa Amateur Radio Association. Modes will be at the discretion of the individual control operators manning NI6BB. Operating hours are expected to be between 1400 and 2400 UTC (0700 and 1700 local Pacific Time). QSLs will be available per the

detailed instructions found on the website. For additional information, please contact w6hb@biara.org.

Working DX at my house wastes a lot of water.

Working DX at my house wastes a lot of water. Yes, you read that right. We have an electronic faucet in the kitchen the turns on when you touch it. Every time I key up my radio, the faucet turns on. It does not turn off again on a second key-up. No amount of ferrite chokes on the wires or plumbing stops it. I've been getting better at manually turning off the faucet but I still occasionally forget. I can say with confidence that ham radio wastes water.... at least at my house. From Mike Black of Ham Radio For Beginners

A shape-changing antenna for more versatile sensing and communication – from MIT

This is for those of you that like to experiment with antenna designs.

You can adjust the frequency range of this durable, inexpensive antenna by squeezing or stretching its structure.

MIT researchers have developed a re-configurable antenna that dynamically adjusts its frequency range by changing its physical shape, making it more versatile for communications and sensing than static antennas.

A user can stretch, bend, or compress the antenna to make reversible changes to its radiation properties, enabling a device to operate in a wider frequency range without the need for complex, moving parts. With an adjustable frequency range, a re-configurable antenna could adapt to changing environmental conditions and reduce the need for multiple antennas.

The result is a simplified design for a reconfigurable antenna that could be used for applications like energy transfer in wearable devices, motion tracking and sensing for augmented reality, or wireless communication across a wide range of network protocols.

In addition, the researchers developed an editing tool so users can generate customized metamaterial antennas, which can be fabricated using a laser cutter.

"Usually, when we think of antennas, we think of static antennas — they are fabricated to have

specific properties and that is it. However, by using auxetic metamaterials, which can deform into three different geometric states, we can seamlessly change the properties of the antenna by changing its geometry, without fabricating a new structure. In addition, we can use changes in the antenna's radio frequency properties, due to changes in the metamaterial geometry, as a new method of sensing for interaction design," says lead author Marwa AlAlawi, a mechanical engineering graduate student at MIT.

The full article is at:

https://news.mit.edu/2025/shape-changingantenna-more-versatile-sensing-andcommunication-0818

Reminder- RF Exposure Calculator Keep in mind this is now required more then before if adjusting your antenna, or a change in your antenna and/or radio equipment. https://www.arrl.org/rf-exposure-calculator#

Have you heard of a <u>Ham Gentleman's VHF/UHF</u> Walking Stick Antenna?

In the May 2016 issue of QST, John Portune, W6NBC, and Ernie Sloan, W6ND wrote a nice article about this. Go ahead, and look it up!



Figure 1 — John, W6NBC, holding the gentleman ham's walking stick in an operating position and as a walking stick.



Upcoming Activities:

- October 12 Maysville Hamfest, Maysville Community Building, 703 8th St., Maysville NC. Info can be found at http://www.maysvillehamfest.org/
- October 18 -- Winston-Salem, held at the Robin Hood Road Baptist Church, 5422 Robinhood Road. Information can be found at http://w4nc.com/
- November 16 Benson held at the American Legion Building.

This Hamfest has the best hamburgers among all of the North Carolina Hamfests. It also has an excellent flea market with used equipment. Information on the Hamfest can be found at https://www.jars.net/jarsfest-2025/

Buy - Sell - Trade

Heathkit Mohawk and Apache

Classics from the age of chrome. Condition unknown, but looking OK. \$100 each. Proceeds to DFMA Wilson W4BOH

TenTec Century 21, another classic.

Great little CW transceiver, with antenna tuner, \$150 Proceeds to OCRA.
Wilson W4BOH

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@embargmail.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@embargmail.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 are offering to others?

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

Web Site: dfma.org

Upcoming Events (dfma.org for details)

09/02 DFMA Meeting, Bullock's BBQ, 6pm 09/08 OCRA Meeting, Efland Baha'i Center, 7:30pm

09/16 DFMA Board Meeting, 7pm on Zoom 10/07 DFMA Meeting, Bullock's BBQ, 6pm 10/18 VE Test Session, Efland Baha'i Center, 10am

73 - Tim KC1TWR, Newsletter Editor

Send copy to <u>TimKc1twr@gmail.com</u>

Deadline: one week before the Club Meeting
(Images and copy: KC1TWR or as credited)
© Copyright 2025 Durham FM Association, Inc.

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

Durham FM Association (DFMA) Member Meeting Minutes, September 2, 2025

Held at Bullock's BBQ, Durham NC

The meeting was called to order at 7:10 pm.

Member Introductions.

Vice President – Matthew KQ4ZYW stated the presentation this evening will be about POTA. He also mentioned the presentation next month with be about the Possum Trot Net, and will be presented by Charlie NC4CD.

Secretary Tim KC1TWR stated the previous meeting minutes were distributed in the copy of The Link sent out on September 1st. He also hoped everyone enjoyed the 100-year-old cartoon picture.

Durham EOC: Bobby W4FK reported a few weeks ago he, Charlie NC4CD and some others went to the current Durham EOC and checked out the antennas. The dual band VHF/UHF antennas were good, the HF antenna not so much.

Treasurer - Wilson W4BOH - stated this was going to be disappointing, but the Board had taken a vote and decided not to give financial information at the meetings anymore, so their going deep secret. Any member who would like to know the current club finances can contact him for that information. He also stated the club made \$145 from items he sold at the Shelby Hamfest.

Repeater Manager - Charlie NC4CD stated the 220 repeater has been fixed. A newer Allstar device was determined to have an audio problem, and the old device we put back in. Charie is also hoping to get some of the still active old Possum Trot members to attend next month.

Bobby W4FK ran the "Porch pirate door prize pursuit". Bob KF4NTC, Michael AA4YH, Paul N2XZF were the participants, with Bill WW1H as the Pirate and wore the Pirate Hat on his Ball Cap. Bill was successful and pirated the bag from the first participant, thus letting the other two participants keep their bags, and concluding the event.

The business portion of the meeting concluded at 7:25 pm

Show and Tell: Bobby W4FK brought in the transformer from a broken microwave and passed that around.

Presentation: Matthew KQ4ZYW gave a presentation on Parks On The Air (POTA)

Attending Members on Zoom:

KR4NU Richmond Wright

KR4RON Ron Craig

W4SAR/KD4YJZ Dave and Karen Snyder

Attending Members in Person:

KO4QLU Patrick Connelly N2XZF Paul Robertson NC4CD Charles Durst KD8FQM Robert Carr W4FK **Bobby Cook** KO4ZYW Matthew Stafford KC1TWR Tim Rodgers Charles Anoia KW4KZ

KF4WBK Ralph "Chip" Blach N4JQR James "JR" Reid AA4YH Michael Clark KR4UB Dan Eddleman W4BOH Wilson Lamb

WA4UJM Wallace "Wally" Pasour

NA4VY David Belt
KO4YAR Pam Miller
KQ4GOB Daniel Berzinskas
WW1H Bill Berzinskas
K4DJW David Warwick

KR4BTP Thomas Beckett
KF4NTC Bob Annechiarico
N0US Paul Schnoes

The meeting concluded at 8:31 pm.

Minutes taken by: Secretary Tim Rodgers KC1TWR

Durham FM Association (DFMA) Board Meeting Minutes, September 16, 2025

Held on Zoom

The meeting was called to order at 7:00 pm.

Attending Members:

Bob Cook W4FK (Pres), Matthew Stafford KQ4ZYW (VP), Wilson Lamb W4BOH (Treas), Tim Rodgers KC1TWR (Sec), Charlie Durst NC4CD (Repeater Mgr.), and Members-at-Large: Paul Robertson N2XZF, Pat Connelly KO4QLU, Dave Snyder W4SAR, and Karen Snyder KD4YJZ.

Minutes: Tim reported he had not gotten around to typing up the minutes from the last Board meeting.

Zoom: Matthew reported he worked with Wilson and the club now has a paid Zoom account, so no 40-minute restrictions.

Finances: Wilson reported on the club's finances. (Members may contact Wilson directly for the details.)

Mailbox: After much discussion Charlie will check the cost and availability of a post office box local to Wilson.

Bylaws: After discussion to remind where we stand on this revision, Tim will send out the revised draft to the general membership, which can then be brought to the membership, and voted on, at the next Regular Members Meeting.

LID: Plan is to re institute the LID Award in January. Charlie saw, and appreciated, another club's LID and will see where that was made.

Generator: Charlie reported that the generator move and installation project is finished. He noted the generator is capable of over 80-amp service, the site only draws 10 amps. He recommended engaging E & W Electrical, LLC for twice a year maintenance and load test at the cost of \$575 annually. He made the motion, and Karen seconded, and the motion was approved by all.

Scouts Activity: Charlie wanted to know if the club was interested in participating in a Boy Scouts amateur radio merit badge event on October 18th in Durham. The Board did express interest, and Charlie agreed to gather more details about expectations and requirements.

WRAL TV Towers: Charlie learned that plans are moving forward to reinstall repeaters on the WRAL tower in Raleigh, including a 288 repeater, DMR repeater, PCRN, and 442.95. The other tower will be a backup for 288 and DMR., with tower crews expected to handle the installation. The elevators are now working, with tower crews expected to handle the installation.

AUXCOMM/DFMA: Bob verified he is the AUXCOMM lead for DFMA.

Club ARRL: Tim reported the club has 46 of 72 members as active members of ARRL, meaning the club is still affiliated.

Member list: Tim stated he is working on the member list and will purge those who are no longer members.

Zoom AI: Paul questioned using the Zoom AI, as that makes all discussion public. The Board agreed this should be shut off. Matthew has taken that action item.

Zoom recordings: To make it easier to compile the meeting minutes, Matthew will use Zoom to record future Board meetings so the Secretary can use them to create the meeting minutes.

Club Presentation: Matthew is looking for assistance with a presentation about Digital Radio for the next meeting. He has been in contact with Charles Harris KQ4TNF about FT4/FT8, and Sam about APRS. Matthew would really like to have a live demonstration at the meeting.

The meeting concluded at 7:59 pm.

Minutes taken by: Secretary Tim Rodgers KC1TWR