The Link

Newsletter of the Durham FM Association

September 2024



Next Meeting:

Tuesday, September 3, 6pm. At Bullock's BBQ

Program:

Tell (and no show needed)

By:

You and fellow DFMA Members

Charlie, NC4CD noted: "I have heard many interesting stories from the guys at our table and I am sure there are many more that I have not heard."

The suggested topic is "How you got into ham radio."

If that is very short in your case, feel free to expand this into other topics like "What are you planning for the coming year?" and "What we can do in DFMA to bring in new hams?"

If you give some thought to this in advance, this could be a fun and informative meeting for all. Do plan to limit yourself to 5 or 10 minutes.

73, Dee, KU4GC

President's Corner

At the time of writing the weather had been recently almost chilly and now it's Florida hot! Hopefully it's cooled down some when you read this.

As a club member you have opportunities not afforded to most people and the club needs people who would like to take advantage of such opportunities.



One of those opportunities we offer is learning to be a net control operator. It's not that difficult and can be a useful skill to know. Please check into the Thursday Night net and contact me or one the other net controls about joining the exciting world of being a Net Control Station!

Bob Cook, W4FK

President of DFMA

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Elections Results - Almost no Change

After last meeting's elections, your DFMA Board now consists of:

President: Bob Cook, W4FK Vice President: Chris Ferrer,

Treasurer: Jack Hill, KM4MBG Secretary: Wilson Lamb,

W4B0H

Repeater Manager: Charlie Durst, NC4CD

- At Large Board Members (2yrs)

Karen Snyder, KD4YJZ Dan Eddleman, KR4UB

- At Large Board Members (1yr remaining))

Paul Robertson, N2XZF Patrick Connely, K04QLU

If these names seem very familiar, then that's not surprising. Except for your secretary, all are the same as last year. (Pam, KO4YAR decided not to run again - thank you Pam for your service - and Wilson, W4BOH agreed to run for the vacancy - thank you Wilson!). Is this lack of new people good or bad?

Obviously, it's good to have people who know what needs to be done. On the other hand, people do wear out and it's nice to have people with fresh ideas. I think it is vital for the DFMA to have more members actively involved. So, maybe it's time for you to step up. Even our "new" secretary was the DFMA president for many years, so he has bent over backwards to serve the club.

So, if there's even a small chance that you could find the time to get more involved, the time to get started is now. In the DFMA, the Board makes all decisions. (Formal membership power is in the selection of Board members.) So to dip your toes in, attend some DFMA Board meetings. They are virtual and normally on the third Tuesday of the month. Meetings are open and any DFMA may attend - just ask any Board member to get the information for the video connection. By attending Board meetings, you'll have a better idea if and how you can contribute. Then, when the next DFMA elections rolls around, you'll know what is at stake and what it would take to serve the Club. You'll also find out it's not "hard", but does require some time.

DFMA Ancient History

I was searching for some paperwork the other day and found this picture, a real trip down memory lane. Sidney Edwards, W4QWM, and yours truly, WA4WTX from 1961 until 2007 and NC4CD since then were working on the Hillsborough repeater. This picture would have been made in the mid-seventies. It is amazing what time does to a person's hair. It goes from brown to gray to white and then disappears. And the sideburns go away too. Sidney was already ahead of me then on the hair loss but I am catching up!!



Sid, W4QWM & Charlie, WA4WTX (now) NC4CD courtesy of NC4CD

For a bit of history, Charlie Blair, K4RSH, was in dental school at UNC and wanted to build a repeater. He put his first repeater, on 146.22-146.82, on the Granville Towers dormitories in Chapel Hill. The 146.22 receiver was on one building and the 146.82 transmitter with a 330 watt power amplifier was on one of the other buildings. He hung a cable between the two roof-tops. It did not work well with a third of a kilowatt, two antennas at the same elevation, and

no cavities. Charlie then found the site at Hillsborough, secured a land lease, and built a 180 foot tall Rohn 25G tower. He also bought a duplexer and used a single commercial grade antenna. The repeater was a used General Electric Master Pro with a 5894 vacuum tube in the transmitter. Running 75 watts with a decent duplexer and single antenna and good elevation made 22-82 a good repeater. When Charlie graduated from UNC he sold the repeater to the DFMA.

Unfortunately our 22-82 repeater was about half way between repeaters on 22-82 at Wilmington to the east and Roaring Gap to the west on a mountain top. Many QSO's keyed two repeaters. The solution was to change the frequency of Hillsborough so, after much discussion and deliberation, we moved the Hillsborough repeater to 147.825-147.225. Fortunately, we eliminated the co-channel interference and over all these years, we never had a problem with another 825-225 repeater on our "clear channel."

Going back to the photograph, the building was probably 6' x 6'. With the equipment in the building, only two people could be inside at one time. If more than two people were there and it rained, someone was going to get wet! The duplexer can be seen at the top of the rack. We are still using that same duplexer today on 825-225 and have one just like it on 145.45 at TV Hill. These duplexers have tripled in price since ours were purchased. The building was not air conditioned so summer repair work was hot. We had a repeater controller that did not work well when the temperature went below freezing so we used a small space heater to keep things working properly. We modified a telephone answering machine to work as a voice ID but it was a maintenance nightmare in hot and cold weather extremes.

In the 70's, phone calls between Durham, Raleigh, Hillsborough, and Chapel Hill were "long distance" calls, not local calls. Cell phones did not exist then so we installed an autopatch. To avoid the long distance charges, we utilized a phone line in the Research Triangle Park that had free calling to all of the towns. The line was at the Triangle Universities Computation Center (TUCC) where one of our members, Joe Ragland, W4BZL, SK worked. They had a tower to microwave computer traffic to Duke, UNC, and NC State. We added two 440 MHz. yagi antennas pointed toward Hillsborough for a full duplex link for the phone line. The repeater and autopatch stayed busy until cell phones were available in the 80's and 90's.

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Over the years, DFMA has expanded its repeater operations to the VA Hospital in Durham. TV Hill north of Durham, and Rougemont/Red Mountain. In addition to 147.225, Hillsborough has repeaters on 224.26 with world-wide linking via the internet, and a digital DMR repeater with connections to over 60 digital repeaters in the Carolinas and Virginia via the PRN Network System. Local autopatch is still available and a back-up generator is being added to provide operation during lengthy power outages if needed. The VA Hospital repeater on 444.45 has back-up generator power and rock-solid coverage throughout the VA and Duke Hospitals. The 145.45 and 444.1 repeaters previously on the VA Hospital were moved to TV Hill, north of Durham. A 160' tall tower on the highest ground in Durham county made a great home for these repeaters. We also have a repeater on 53.61 at TV Hill now. TV Hill has autopatch, emergency back-up power, remote bases on 2 meters and 220 MHz., IRLP, and Echolink. We have come a long way since the early 70's!!

73 de NC4CD

Minutes

Durham FM Association (DFMA)
Board Meeting Minutes 4/18/2023 - Pending
Durham FM Association (DFMA)
Board Meeting Minutes 5/16/2023 - Pending
Durham FM Association (DFMA)

Club Meeting Minutes 6/6/2023 - Pending

Durham FM Association (DFMA)
Board Meeting Minutes 6/20/2023 - Pending
Durham FM Association (DFMA)
Club Meeting Minutes 7/18/2023 - Pending
Durham FM Association (DFMA)
Board Meeting Minutes 8/15/2023 - (no quorum)
Durham FM Association (DFMA)
Board Meeting Minutes 9/19/2023 - Pending
Durham FM Association (DFMA)
Board Meeting Minutes 10/17/2023 - Pending
Durham FM Association (DFMA)
Board Meeting Minutes 11/21/2023 - Pending
Durham FM Association (DFMA)
Board Meeting Minutes 11/21/2023 - Pending
Durham FM Association (DFMA)
Board Meeting Minutes 1/16/2024 - Pending
Durham FM Association (DFMA)

Durham FM Association (DFMA) DFMA Club Meeting July 16, 2024 Secretary - Pam (KO4YAR)

Board Meeting Minutes 4/16/2024 - Pending

President: Bob (W4FK)

The meeting was called to order at 7:00 pm

Attending: Banks (W40FZ), Bill (WW1HKY4ZC), Daniel (KA4GOB), John (KM4MDR), Bob (KD8FQM), Pat (KO4QLU), Bob (W4FK), Charlie (NC4CD), Dan (KR4UB), Jack (KM4MBG), Lenore (KF4PAB), Wilson (W4BOH), Jim (WB4YYY), Sue (KA4AVM), Pam (KO4YAR), Dee (KU4GC), Robert (K6GRR), Paul (N2XZF), Dave (W4SAR), Karen (KD4YJZ), Ronnie (K4JDR), Butch (KF4AUF).

Attending online: Tim (KC1TWR), Tom (K2UCU)

OFFICER REPORTS

President - Bob

Bob spoke with Chris, Chris had nothing to report.

Vice President - Chris

Secretary - Pam - Nothing to report.

Treasurer – Jack

Elections will be held in August. Jack will endeavor to make the rolls up to date.

Dee - Nominating Committee

Please let Dee know if you are interested in running for any office. Multiple people can run for any office. Dee also reminded us of the Cary Swap Fest..

Repeater Manager – Charlie

WNC group is going to launch another high-altitude balloon Wednesday the 18th at approximately 9 am.

Internet failed at TV Hill, so Echo Link was down and the Morning Brew net was off. Spectrum repaired it by replacing the modem.

Field Day Coordinator - Dave

We did better on points than last year. Last year's total of QSO and Bonus points was 5,028 This year's total was 7,038 points. CW Operators made 1,000 QSO's. The goal is to compete, have fun and learn new things.

Door Prizes were awarded to Bob (KD8FQM), Bob (W4FK), Wilson and John.

Program

The presentation was about the Carolina440 linked repeater system and was presented by Ronnie Casey (K4JDR) and Butch Henion (KF4AUF)

Bob closed the meeting at approximately 8:00.

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Durham FM Association (DFMA)

DFMA Club Meeting 8/6/24 - notes by KU4GC **Location: Bullock's BBQ and Live Streaming**

Attending

(In Person): Pat (KO4QLU), Paul (N2XZF), Charlie (NC4CD), Dave (W4SAR), Karen (KD4YJZ), Robert (KD8FQM), Jack (KM4MBG), Lenore (KF4PAB), Bob (J6GRR), Dee, (KU4GC), Tim (KC1TWR), Paul (N0US), JR (N4JQR), Jeremy (K2HJX), Ted (KQ4AAP), Bill (WW1H), Daniel (KQ4GOB), Chip (KF4WBK), Dan (KR4UB), and Darrick (KE4SLW).

(Live Stream check in): Tom (K2UCU) and Sam (KJ4VWG).

A total of 22 attended, all of them licensed.

President - Bob W4FK, called the meeting to order at 7:00pm. The meeting got underway with the normal round of self-introductions.

OFFICER REPORTS

Vice President – Chris KY40U, was not able to attend.

Treasurer – Jack KM4MBG, reported that there were plenty of membership renewals.

Secretary - Pam KO4YAR, was not able to attend.

Repeater Manager – Charlie NC4CD, reported that the power feed for the power amp in the 220 repeater had been repaired. The Generac backup generator for the Hillsborough site is waiting on the electrician. He also noted that the site needed cleanup and help from someone with a "weed eater" was needed.

Field Day Coordinator - Dave W4SAR, reported that we had another successful Field Day. Everyone seemed to enjoy it. Some interest had been shown in erecting a tower and maybe, if there were enough people to help, that is a consideration for next time.

President - Bob W4FK, reviewed some of the accomplishments of the past year including the Club Picnic and the new banner.

Announcements:

Dee KU4GC, read an email he had received from a parent looking for help for a 12 year old who wanted to become a ham. Several suggestions were made including reference to an online course.

Elections: The nominations were: President: Bob Cook, W4FK

Vice President: Chris Ferrer, KY40U Treasurer: Jack Hill, KM4MBG Secretary: Wilson Lamb, W4BOH
Repeater Manager: Charlie Durst, NC4CD
At Large Board Members (two slots) Karen Snyder, KD4YJZ (2yr term)
Dan Eddleman, KR4UB (2yr term)
Since there were no additional nominations from the floor, the slate was elected by unanimous consent.

Door Prizes:

Daniel KQ4GOB, won a flashlight. Dave W4SAR, won an Allen key set. JR N4JQR, won a telescoping magnetic pickup tool. Chip KF4WBK, won a set of metallic markers.

PROGRAM - Intro to Amateur Radio Support for Public Service Events

By: Jeremy Lindsley, K2HJX

The Volunteer Coordinator for Ham Public Service North Carolina (HPSNC), Jeremy presented on what is involved in supporting public service events. In this area it is mostly bike rides. For that, hams at rest stops and in SAG vehicles as well as net controls and shadows for race organizers are needed. He also went over the recommended gear and noted that some of that could be lent to volunteers if they did not have their own. It can be rewarding and a lot of fun.

Bob W4FK, adjourned the meeting at about 8:15pm

Buy - Sell - Trade

AnyTone AT-D878UV. It is fully programmed for this area. Works great and looks like new in box with accessories that come with it. I can reprogram it for whomever gets it changing their call and DMR id number if needed. I use it with a hotspot which could be changed with software on the their web site. Full info is available on web site

WWW.bridgecomsystems.com

Price \$175.00. Sidney, W4QWM,

edwards.sidney@gmail.com

[Note: Sidney is one of the founding members of the DFMA.]

The following equipment was donated to OCRA and Wilson, W4BOH is overseeing its disposition.

Heathkit SB-300-Simple but very effective ham band receiver. Amazing condition, \$150.

Kenwood TS-850-Solid state transceiver, the K3 of the 90s. Recently tested, GREAT receiver, HI-FI analog audio and excellent filters, with speaker and PS, \$700. - **SOLD**

Hallicrafters SX-99-Vintage Receiver, works but needs love. Easy to work on. \$50. - **SOLD**

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Please contact **Wilson**, **W4BOH** by email: infomet@embarqmail.com

if interested or to get more info.

(Note. It is hard to keep up with Wilson's inventory and he has received even more equipment recently. If you are interested in used equipment, it could be worth your while contacting him. - Dee, KU4GC, editor)

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 ku4gc@amsat.org 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, Dee, KU4GC

Web Site: dfma.org

73 – Dee, KU4GC, Editor Lenore, KF4PAB, Proofreader

Send copy to ku4gc@amsat.org
Deadline: one week before the Club Meeting
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The DFMA Mailing Address

The DFMA has a new mailing address. This is 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

Upcoming Events (dfma.org for details)

09/03 DFMA Meeting, Bullock's BBQ, 6pm 09/09 OCRA Meeting, Efland Baha'i Center, 7:30pm 09/20 DFMA Board Meeting, virtual, 7pm 10/01 DFMA Meeting, Bullock's BBQ, 6pm