



### Next Meeting:

**Tuesday, December 6**

**Bullock's BBQ 6:00pm**

**Celebration of the Holidays & the DFMA's 40<sup>th</sup> Year**

Continuing a tradition of having the DFMA pick up the tab for our December Holiday Dinner Meeting, we will meet at Bullock's Barbecue Restaurant in Durham starting at 6:00pm. You will be able to order from the menu. Bring your spouse or friend!

This is our Holiday Meeting! In that tradition you may (optionally):



+ Bring a child's Christmas gift to be distributed to Durham's needy. If wrapped, mark gender and age range on the outside. If not wrapped, that's fine too. If you have one -- a gift bag would work too.

+ The Club will make its annual gift to the Durham Rescue Mission. We will be passing the "hat" for personal contributions.

(Note: in past years some people have dropped a check in the hat. We can forward it and the cancelled check can be handy at tax time.

Also, if you are not in a position to donate anything this year, please come anyway. Or if you are making a special effort through your church or at the office, don't feel pressured to do more than you really should. Your presence at this meeting is a gift to all of us.)

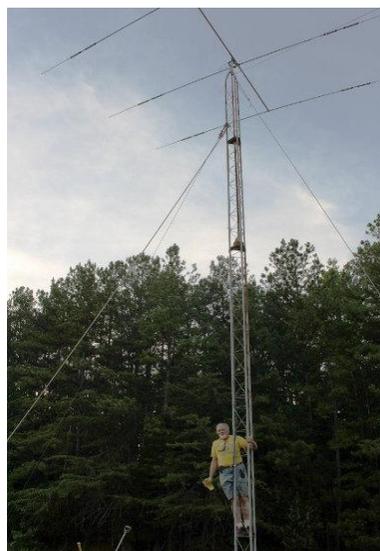
### Program



There will be no program as such. However, this is also the DFMA's 40<sup>th</sup> year and you may also think of this meeting as a celebration of the DFMA's 40<sup>th</sup> Birthday. Along those lines, be ready to share an anecdote from the DFMA's past. Help the new members appreciate our rich tradition.

## OCRA/DFMA Joint Field Day Reaches Impressive Goals

Our goal with this year's Field Day operation was to advance into the top 10 of the national rankings after placing 18th in 2010. We did that handily, placing 6th out of 2,632 total participants! Look in the December edition of QST where the top 10 contestants are prominently displayed on the opening page of the article on the 2011 Field Day results.



**Field Day - W4BOH  
Audition for "Ham Band"?**

Among the other achievements, we again placed 1st in the North Carolina Section out of 73, and 1st place in the Roanoke Division out of 2,632. Of those stations running QRP, we placed #3 nationally out of 290. We made 1779 QSO's, with our 5x multiplier for QRP and our bonus points, our grand total was 17,035 points.

This rise to excellence began three years ago, when the Orange County Radio Amateurs and the

Durham FM Association pooled their resources, rather than compete with each other. This synergy fueled a truly competitive operation- but also one in which all the participants enjoyed their participation.

The band captains and their operators took lessons learned from previous years to build ever more efficient antenna systems. We have many technically gifted members (not to slight anyone else, but Steve W3AHL in particular) who used their skills and equipment to



**WQ8U & N1LN operating CW  
in the MCU**

address and minimize inter-station interference, and to assure clean signals. Numerous club members gladly helped with the onerous work in putting up antennas, and also tearing down at the end when we were all tired. Dee and M.K. did a capital job keeping us all fed and hydrated-- armies and Field Day operations march on their stomachs!

Most of all, it was the enthusiastic willingness of the two clubs to work together that made this all possible. Rather than being rivals, we've drawn together and Field Day has become less of a burdensome exercise and more something that we enjoy being a part of.

I look forward to the continuing partnership; we are speaking of raising the goal to place in the top 5

nationally next year. Also, we will use DFMA's call sign NC4FD, starting a rotation of the club calls in the coming years.

73, Dave W4SAR,  
OCRA/DFMA Field Day Coordinator

### A Very BIG Thank You to ALL

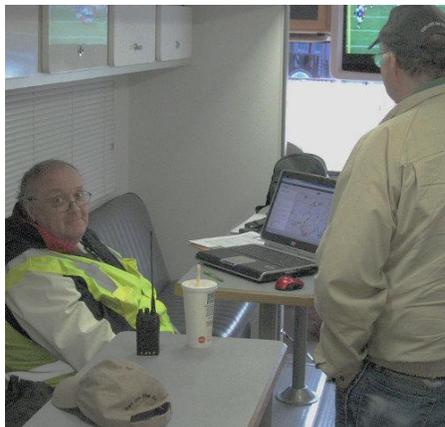
A Very BIG Thank you to ALL who participated in last month's **Habitat for Humanity Halloween Hoot Bike Event**. What a way to start the day with cold and windy rain as a few brave souls who wanted to ride their bicycles came out for a great cause. We were ready and if I didn't get to see all of you personally, I want to express my Thanks for a job well done. Everything worked fairly well on our end with some unexpected last minute changes but you remain flexible and go with your best.



Before dawn in the MCU:  
KK4PH operating with K0OUX, K4XRM,  
N8MOF & W4BOH looking on  
(photo: KG4DPS)

Next year we'll refine things even more and hope the weather is better. The final count was out of 525 riders registered, only 142 actually participated in the ride, with only 2 riders not finishing the ride in time allotted, not counting those who where SAG'ed in during the ride due to broken cycles or other reasons. No medical issues except for some "spills" during the "off-road" portion of the route near Durham Co Stadium on a slippery section. Again a Big THANKS to our Durham ARES members and our neighbors from Orange Co ARES who helped out this year again and the DFMA for the use of the MCU which is always appreciated during these events.

73's  
Randy K4XRM



K4XRM & K14MXP active in the  
Durham County Sheriff's Van

### From the Archives (thanks to NC4CD)

[Written by Charlie Durst, then WA4WTX, for the February 1991 Link, John Fish, N4SHX (sk) editor]

### "DFMA Twenty Years Old"

Twenty years ago this month the Durham FM Association was formed as a local FM club with a project of building a 440 repeater and autopatch. This group met monthly and by April had thirteen members. The thirteen original members were:  
Charlie Durst, WA4WTX [NC4CD]  
Sid Edwards, W4QWM  
Joe Edwards, W4EL [sk]  
Mick Rankin, W4ZUS [sk]  
Herman Cone, WD4DBB [N4CH, Goode, VA]  
Jack Martin, K4DWQ [sk]  
John Kerr, WA4CAK [W4CDR]  
Bill Sims, K4RUQ [W4AK]  
Don Elliott, W4TMP  
Dock McKenzie, K4CHS [Columbia, MO]  
Phil Talbert, WB4JFE [Sonora, CA]  
Hugh Fisher, WB4NIF [?]  
Jim Godwin ?

Of those thirteen, Charlie, Sid, Mick, Herman, Jack, John, Bill, and Don are still in the area. Doc is in Columbia Missouri, Phil is in Miami; and the whereabouts of Hugh and Jim is unknown. Joe Edwards passed away several years ago.

Many changes have occurred over the twenty years. One immediately noticed was the price of the mailing the club newsletter. The first DFMA newsletters were mailed for only eight cents!

After three years the DFMA had grown to 50 members. The club had purchased the 22-82 Hillsborough repeater from Charlie Blair, K4RSH, who moved to Kings Mtn. when he finished dental school at UNC. His 22-82 machine was known as WB4QFZ and our 440 machine as WB4QFT. Later our repeater became WR4AGC. Herman built Pocket Mates and Allie Bell built synthesizers.

In 1977, due to increased interference with the Roaring Gap and Wilmington on 22-82, the DFMA decided to change the Hillsborough repeater to 147.825-147.225. It was a bold move to a 15 kHz. split frequency when very few others had done so but it has worked out well for us. 225 has remained a relatively clear channel with wide area coverage.

In 1974 WB4DBB built a repeater for 220 MHz. In 1975 he moved it to Hillsborough from its original Durham site. The current equipment was built in 76 and 77 and has worked great since then. Coverage was

comparable with 225. By 1978, membership had reached 100. The club had repeaters on 147, 220, and 444 MHz.

In 1984, I-40 came through Hillsborough on the way to I-85. The Hillsborough repeater, tower, and building had to be moved over a few hundred feet to make way for the access road. The tower grew from 140 to 178 feet in the process.

Also in 1984 the DFMA incorporated its first RC-850 repeater controller on the 225 machine. In 1987 an RC-850 was incorporated in the 444.1 machine and an RC-85 was used in a new machine on 144.85-145.45. These two machines were installed on the roof of the VA Hospital in Durham.

In 1988, it appeared that we might lose the Hillsborough repeater site. After much negotiation, we were able to retain the site. In 1989 a digital voice recorder was added to 225. The new ID's sounded great and the voice mailbox was a great convenience. Late in 1989 we added linking to a Greensboro repeater with multi-band remote bases.

Further improvements are being made to our repeaters. The 224 repeater is being rebuilt to incorporate a solid state 110 watt transmitter, multiple receiver sites voting and multi-band remote bases. The 45 machine will also get the 110 watt transmitter and receiver voting.

The DFMA has grown to over 140 members. Its equipment is state-of-the-art. Our repeaters have the reputation of being "the friendly repeaters", and it cost 29 cents to mail the newsletter! [now 44 cents!].

[Transcription and editorial additions: KU4GC, 12/2011]

## Time to pay your DFMA Dues

Your DFMA *dues* are *due* in January. A PDF of the dues form(s) is attached with this mailing (a form is enclosed with the hard-copy mailing). You can always find the form on our web page: [dfma.org](http://dfma.org) (click on Membership at the top to get to the right page). They are still \$12 a year – a real bargain. Twenty years ago they were \$12 a year!

## Club Meeting Minutes

Durham FM Association (DFMA)

DFMA Meeting - 11/1/11 - KU4GC Secretary

**Location:** Bullock's BBQ, Durham

**Attending:** Dewey, WA4AHR; Sue, KA4AVM; Wilson, W4BOH; Dick, KK4CCX; Terry, WD4CEE; Charlie, NC4CD; Justin, KD4CPM; Adriano, KV7D;

Edwin, KK4DDM; Dan, KK4DMS; Doug, K1DUG; Michael, KK4EIB; Dee, KU4GC; Wayne, KJ4GDW; Mike, KW4HF; Rhett, KE4HIH; Mary, KI4LDQ; MK, W4MKR; Nick, K4NYW; Lad, W4ORD; Jim, KB4OT; Vic, K0OUX; Lowell, KK4PH; Joanna, KE4QOZ; Ken, KI4QXJ; Bill, KI4RAN; Bob, W4RWC; Dave, W4SAR; Derek, KO4T; Mac, WQ8U; Dan, KR4UB; Don, KE4UVJ; Rich, KD6VK; Woody, K3VSA; Sam, KJ4VWG; Dave, NA4VY; Karen, KD4YJZ; Jim, WB4YYY; Pres

A total of 39 attending, including 38 hams.

**President** - Bob, W4RWC, called the meeting to order at 7:00pm and started with a round of self-introductions.

## REPORTS

**Vic President** - Wilson, W4BOH

The next meeting, 12/6, will be our Holiday Meeting. As in previous years, the Club will pick up the tab. However, members may bring gifts for children (new, unwrapped, or wrapped with external marking indicating gender and age range of intended recipient.) These will be relayed to Social Services. We will also take up a collection for the Durham Rescue Mission.

**Treasurer** - MK, W4MKR

Financial balances.

Members: 88 (by the end of the meeting)

**Secretary** - Dee, KU4GC

The minutes, as shown in the latest Link, were approved without corrections.

**Repeater Manager** - Charlie, NC4CD

In response to questions, Charlie explained the "Error" message coming from the repeaters. Essentially, the controller was interpreting voice and DTMF codes, which in turn, did not represent appropriate controller commands.

## ARES

Dee, in Randy's (K4XRM), absence, reported on the ARES communications support efforts for the Halloween Habitat for Humanity Bike Ride. He singled out Steve, W3AHL, and Lowell, KK4PH, for technical preparation and support. He also thanked all of the 22 hams from the DFMA and OCRA for event day participation including supporting the rest stops, riding in the sweep vehicles, being shadows for the Ride VIPs, and providing net control, tracking, and simplex communications support from the Sheriff's Van and the MCU. He also thanked the many people who had improved APRS digipeater coverage since last year's

event. This included Sam, KJ4VWG, who set up a digipeater at the Central Park School for Children (W4CPS); Steve, W3AHL, and Charlie, NC4CD, who set up digipeaters on towers on Gibbs Lane (WR4AGC-3) and Red Mountain (W4UNC). This resulted in a new DFMA digipeater in Orange County and a new OCRA digipeater in Durham County. Equipment for these projects had multiple donors.

## **Field Day Coordinator - Dave, W4SAR**

Dave reported that we had met our goal of breaking into the top 10 Field Day entrants. We ended up ranked #6 nationally out of 2632 entries and #1 in North Carolina out of 73 entries. We can do even better next year.

## **Other Announcements**

+ Woody, K3VSA, noted that OCRA was celebrating its 20th anniversary. He thanked the DFMA for its ongoing support and cooperation with OCRA. There will be an anniversary celebration at the next OCRA meeting (11/14) and all are welcome..

+ Lad, W4ORD, invited everyone to join him at the Occoneechee Speedway Event on Saturday (11/5). He will have a shelter set up. The event includes an antique car show and a chance to visit the original NASCAR track. He also mentioned the OCRA Christmas Dinner on 12/12. All are invited (but need to sign up with Lad).

## **Door Prizes**

Joanna, KE4QOZ, won a soldering aid with magnifying glass. Mike, KW4HF, won wire-stripping pliers.

## **PROGRAM**

Nick England, K4NYW, presented a fascinating program on "The 1950's Internet - The US Navy Radio Communications System"

Nick started by giving a few historical examples of how lack of communications had affected battles. He then described the extraordinary worldwide system the US Navy built in the 50's that provided amazing services that foreshadowed much of what we now take for granted on the Internet. This included voice, text, and images mostly encrypted and robust. Nick also brought a few samples of Navy equipment as well as showing pictures of his vast personal collection.

**Meeting adjourned.**

## **Board Meeting Minutes**

**Durham FM Association (DFMA)**

**DFMA Board Meeting - 11/15/11 - KU4GC Secretary**

**Location:** 2019 Front Street, Durham

**Attending:** Charlie, NC4CD; MK, W4MKR; Dee, KU4GC; Rhett, KE4HIH; Joanna, KE4QOZ; Bob,

W4RWC; Ken, KI4QXJ; Vic, K0OUX; Paul, KE4OXN; Michael, KK4EIB

**President - Bob, W4RWC**, called the meeting to order at 7:30pm. Minutes of the 11/1 Club Meeting were approved as distributed.

## **Announcement:**

Rhett, KE4HIH, reminded everyone that the next meeting is our Christmas Party. Toys for kids (to be forwarded to Durham Social Services) are encouraged. The Club will make its annual gift to the Durham Rescue Mission and the "hat" will be passed at the meeting for personal contributions.

## **REPORTS**

**Treasurer - MK, W4MKR**

Financial balances.

Current members: 88.

**Secretary - Dee, KU4GC**

(Minutes of the past Club meeting approved earlier, minutes of the last Board meeting approved at the Club meeting). Dee asked for contributions to the Link (and the web page). He also announced plans to republish select material from old Link's since Charlie had lent him his archive.

He also suggested that the next meeting double as a 40th Birthday Party for the DFMA. He hoped that old timers would be ready to share a few reminiscences. Charlie offered to bring the old Lids from The Hill.

**Repeater Manager - Charlie, NC4CD**

The autopatch has been in use, not in a good way. First, a person called a variation of 911 that triggered Charlie's short cut and resulted in his being called. The person claimed someone was trying to kill him. Charlie forwarded the information to the Durham Police. The person was located and had apparently strayed from a Durham group home. The same person used autopatch 911 (successfully) at a later date, claiming the "Gambino Mafia" was out to get him. There was general discussion about whether we should make 911 autopatch harder to use, but it was felt that it would be bad to make true emergency use more difficult because of one, probably ill, person. It was suggested that maybe he could be found and relieved of his radio.

**Hamfest Chair - Paul, KE4OXN**

Paul reported that May 26th is open at the Little River Community Complex and asked for a check for the \$50 deposit to hold that date. Rates were the same as the

\$60/hour charged last year (after a last minute increase). It still seems to be best deal around. Rates for admission, tables, etc. should be the same as last year. Dee noted that we probably did not have enough tickets for this year and need to order more. (Who purchased them last time?)

### MCU

Lowell, KK4PH, was not present but through email reported that he has started the process of getting the Tar Heel antenna lift mechanism fixed under warranty. (It had failed to lower after the Habitat Bike Ride deployment.)

### ARES

There was no official representation, but Dee, noted again, the success of the ham support of the Habitat Bike Ride. People were already thanked at the last DFMA meeting but, in summary, over 22 hams from the DFMA and OCRA came to help out and because of lots of hard work by Sam, Steve and Lowell, APRS was working better than ever. And thanks again to OCRA for the use of their 442.150 repeater which worked very well. One person who has not received enough thanks for getting things organized (and participating) is Randy, K4XRM, our EC.

One another note, Orange County EC, Laurie, N1YXU, has resigned effective at the end of the year. Her energy and her enthusiasm for ARES and cooperation with Durham ARES will be missed.

### NEW BUSINESS

- + The Board decided to skip (as in most previous years) the December Board Meeting. If anything urgent comes up, a meeting can be called.
- + The Board also decided to move future Board Meetings to 7:00pm (from 7:30).

### General Discussion

Michael, KK4EIB, started a discussion on membership and publicity for DurHamFest. Paul noted that mailings had been tried and were rather expensive, but had not shown any obvious results. Dee noted that email addresses were collected on DurHamFest stubs and were used to email reminders just before the event. Vic said the real question is "what do people like?" (Answers are welcome.)

Dee suggested that members invite hams who are likely to become DFMA members to the December Holiday Meeting (for a free meal).

**Meeting adjourned.**

### On the Web

How about a 160 meter beam under the Christmas tree? See the amazing OH8X station in Finland.  
<http://www.radioarcala.com/nbHome/tabid/194/Default.aspx>  
Thanks to Jim, W4KSZ

### Upcoming Events (dfma.org for details)

- 12/06 6pm Holiday DFMA Meeting, Bullocks BBQ
- 12/10 10am VE Testing, Orange County EOC
- 12/12 6pm OCRA Holiday Dinner, Exchange Club, Hillsborough
- 1/03/2012 6pm DFMA Meeting, Bullocks BBQ

### Buy - Sell - Trade

#### WANTED: AM Transmitter

Looking for a 100 watt class "Hollow State" (vacuum tube) AM transmitter in working condition.

Viking II, Apache, DX-100, etc.

Mods OK but documentation would be appreciated.

Thanks - Dick WA2ROC

#### Group Coax Buy

We can still get the LMR-400 equivalent for **50 cents/ft**, delivered, in 1000' quantities. *The price shown is retail, so don't faint.*

[http://moonblinkwifi.com/pd\\_lmr400\\_type.cfm](http://moonblinkwifi.com/pd_lmr400_type.cfm)

I don't need any more, but if we can get an order for 1000' or more, I'm willing to handle it. Contact:

Wilson - W4BOH [infomet@embarqmail.com](mailto:infomet@embarqmail.com)

73 - Dee, KU4GC, editor

Send copy to [ku4gc@amsat.org](mailto:ku4gc@amsat.org)

Deadline: one week before the Club Meeting

(Photos KU4GC or as credited)

**Web Page: dfma.org**