



MECKLENBURG AMATEUR  
RADIO SOCIETY, INC

# MARS News

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JUNE 2007

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## A letter from the President

Hey Everyone,

I hope you all had a *great* time last month at our Mini Field Day on May 19th. What could be better than spending a sunny day with family and friends, having a picnic, and being able to get on the radio to talk to people all over the world? For myself, there is nothing any finer. Gosh, I think that that was the most



club members that I have seen attend a gathering in a long while. We had a great time together. We all got to see the new Jupiter and the digital station in operation. And *wow*, talk about all that food, it sure was wonderful. I think there was something good there for everyone to eat. We had all kinds of recipes. One thing for sure is that we have some marvelous cooks in our club. Or maybe I should say we *have some great hams that have wives that cook great*. Hi Hi

This month, our annual ARRL Field Day effort is coming up on June 23rd and 24th. Our Field Day will be held at the same location as Mini Field Day. We are planning to set up our stations early on Saturday the 23<sup>rd</sup> so we can be on the air, making contacts, starting at 2:00 pm. Around 5:00 pm we will be grilling up some hot dogs. The club will be supplying the hot dogs, buns, condiments (ketchup, mustard, mayo), and cold drinks. We need you to bring out your families and also bring a side dish or dessert to share with us. Please *RSVP by June 21st* to Jeff, KA4WYC, at <mailto:jblythe@cetlink.net> to let us know who is coming with you and what will you be bringing to share. Let's show our families it's fun being hams.

While meeting fellow members and eating hot dogs is fun to do..... what MARS' Field Day needs most of all, right now, is operators. We need you to sign-up and come out to help support our effort by taking an active role making on-air contacts. If you do not feel confident about operating a station, don't worry; an experienced control operator will be there to show you how it is done and then let you go at your own pace. But, we do need your help...so please plan on coming out to make Field Day 2007 another successful event.

Also, a reminder: Make sure you pay your club dues by July 1<sup>st</sup>; you will get 18 months of membership for your dues instead of the normal 12 months. Wow - what a savings! *But the bonus expires on July 1<sup>st</sup>.*

We have a great club and I look forward to doing all that I can do to keep it that way.

## Letter from the President (cont.)

Most of all.... I would like to say 'Thank you for being a member of W4BFB'.

73,

Jodie

KI4CXO

## Club Membership

Membership continues to grow. By the end of June we will have 141 members. Since the last newsletter, the following people have been added to the roster.

Mike William N4ILK

Red Davies AI4XM

Josh Fisher W4WJF (W4GRW's son)

James Hyman KI4DQX

If you upgrade or change your call sign. Please let the club know so we can help you spread the word. We also need to keep our database up to date.

73,

Jeff Blythe - KA4WYC

## Get On The Air with NC4DP!

"CQ CQ November Charlie 4 Delta Papa , Field Day"

NC4DP is normally the Discovery Place callsign. But on June 23 – 24, it's our Get On The Air (GOTA) field day callsign. As you come to the MARS RV at Field Day, stop by to visit. We plan to use 20, 40, & 75 Meter Dipoles with the GOTA station. As you know, I love to get kids, scouts, teens, and XYL's on the air. I hope each one can add at least 20 QSOs to the log (with a little help if they need it). Bring your family !

73 de WB2NHQ



# May and June Club Meetings

The W4BFB club was fortunate to have Vince DeCarlo KF4ZOQ from the National Weather Service give an advanced Skywarn presentation. As always, it was a great presentation. I don't think it is possible to get through one of Vince's presentations without learning something new.

One new topic that Vince covered was the new 'Enhanced Fujita' scale for quantifying the strength of tornados. This new scale will be replacing the old Fujita scale. The new 'EF' scale tries to eliminate some of the limitations of the old 'F' scale. For one thing,, the old F scale tended to overstate the wind speeds in tornados. In addition, the old scale did not provide any way to account for differences in construction when estimating wind speeds based on structural damage. The new EF scale now provides a list of structure types along with charts that describe levels of damage and the corresponding estimated ranges of winds required to cause that damage. So, with this enhanced scale, coming up with the estimated winds will be a little more complicated. But, once the winds are estimated, the number should be more meaningful.

Here is the web site for the Enhanced Fujita Scale: <http://www.spc.noaa.gov/efscale> .

Vince also talked about the National Weather Service's efforts to improve the communication of warnings and watches. In particular, they are trying to better communicate the affected location. Up until now, everything has been done by county. This method has some pretty serious limitations as counties are fairly large and often weather straddles county boundaries. So the warning areas are often much larger than necessary. Repeated non-relevant warnings tend to cause people to take them less seriously. By communicating the actual affected areas rather than the counties containing the affected areas the National Weather Service hopes to ensure that people are properly warned when they should be and are not bothered by warnings otherwise. Thanks Vince for a very interesting presentation.

Also in May's meeting, the club gave Mac K4PDY a lifetime membership award. Congratulations Mac and thanks for everything you have done for the club over the many years you have been a member.

For the June meeting we will have an Emergency Management presentation given by Steve Norman. Make sure you don't miss it!

73,

Richard

K4KRW



Vince DeCarlo talking about the Enhanced Fujita Scale for tornados



Mac (K4PDY) receiving his lifetime membership award

# Field Day 2007 - Be There!

ARRL Field Day begins on Saturday June 23 at 2PM and runs for 24 consecutive hours. The W4BFB Field Day committee has been preparing for several months to make sure equipment is ready, generators have been checked and tested, and a plan of action is in place. All the club needs now is your participation.

For 2007, there will be some changes from previous W4BFB Field Day efforts. First of all we have a new location. The field day location is the Scout barn behind Back Creek Presbyterian Church. The Church is on Back Creek Church Road near where University Blvd. crosses Interstate 485.

The club did a trial run at the new Field Day site when we held the Mini Field Day event. We had a great time. Everyone was very impressed by the site. The barn offers excellent cover and shelter from the June sun, and provides protection from those thunderstorms too. It should be a great place to hold the event.

Secondly, we are changing our classification from 3A to 2A. So we will have two full time HF contesting stations rather than the three we have operated in the past. One will be operating Phone (SSB) and the other will be digital modes and CW.

We will have two bonus stations operating at the site. One GOTA (Get on the Air) station and a VHF station will be set up. The GOTA station is our chance to be ambassadors for the amateur radio service. We can give interested visitors or hams interested in upgrading a chance to be bitten by the HF bug. The VHF station will be in place in case 6 meters opens up.

At this point, what the club really needs is operators. Simple math shows that just for the 2 HF stations to operate for 24 hours with one hour shifts will require 48 operator hours. Please send an email to [fieldday@w4fbf.org](mailto:fieldday@w4fbf.org) to sign up for a shift, or let us know what time of day you will be available. The club has set aside 3 prizes for a drawing. If you operate a station for at least a one hour shift, you can participate in the drawing. You get an additional chance for each additional hour you work.

We will begin setup Saturday morning at 10AM. The talk in frequency will be the 146.940 repeater.

On Saturday June 23rd at 5:00 PM we are going to have a small picnic. You may bring your family. This was originally intended for the setup crews. But, Jodie asked that other Club Members be able to come too. So what Jodie wants, Jodie gets!! We will grill hot dogs. The club will also provide condiments, drinks and paper products. What we need from you is to know how many are you bringing and what kind of side dish(es) you will bring (After Mini Field Day, we know what everyone is capable of. So no sandbagging :-)). We had soooo much great food at the Mini Field Day Picnic. (Jeff went back 3 times!)



# Field Day (Cont.)

*RSVP deadline is June 21st. Please contact us so we will know how much to bring in the way of food and drinks.*

So call or email Jeff - KA4WYC and let him know you are coming and what you would like to bring! And come and operate!! Here is Jeff's contact information.

Email: [jblythe@cetlink.net](mailto:jblythe@cetlink.net)

Cell: 704-577-3619 (Best way to reach Jeff)

73,

Bill Fisher (W4GRW)

and

Jeff Blythe (KA4WYC)

## Renew Your Membership Before July 1st!

Hey! It's that time again! Yep your Club Dues are DUE! But this year will be more of a bargain if you renew in a timely manner. At the May Board of Directors meeting, we voted to change the existing renewal period (from July 1st to June 30th) to (January 1st to December 31st). So to make a smooth transition it was decided to give 6 months of free Membership to everyone who renews before July 1st. This means if you renew now, you will get a year and a half of Membership in the Mecklenburg Amateur Radio Society. The next renewal period will be January 1st 2009!! What a deal!!! This is up to a \$12.00 savings!! That's like a 1/4 tank of gas!! Don't you know!

For your convenience, we have included an application at the back of this newsletter. Fill it out and mail it to me, my address is on the bottom left side of the form. Or come to Field Day and catch me there. Oh and don't forget the money!!

Any licensed Amateur up to the age of 64 is \$20.00 per year. If you are a Student under 18 or are 65 and over is \$14.00 per year. If you are a Family of licensed Amateurs, residing at the one address, the Family Membership dues is \$25.00 per year.

I hope you decide to renew your Membership. We are having a great time at our meetings and events. So, send in your dues and come be a part of the fun!

As a sad note, after July 31st, those Members not renewing will be dropped from the Membership Roster.

Oh NOOOO – no Newsletter!!! AAAARRRRRRGGGGGG (as Charlie Brown would say!)

For more information please check out the bottom of the Application form or contact me!

73 - Jeff KA4WYC - W4BFB Secretary.

## D-Star Forum & New D-Star Repeater

I had the pleasure of attending a D-Star forum held by Steve Koone (KA4YMY). The forum was presented on the evening of Thursday June 14th at 7:00 PM at the Salvation Army building on Archedale. Somewhere around 20 people attended the forum.

Steve and Ken Johnson (KC4YOZ) have been planning to put a D-Star repeater in place for months now. Originally Steve hoped to homebrew a D-Star repeater using a Kenwood repeater and a non-ICOM controller card.

The homebrew approach would offer a significant cost savings and Steve feels he would also end up with a more durable repeater. However, the work on the controller card is not complete and may not be complete even by year end. So Steve bought an ICOM D-Star repeater in order to be able to put one in place in the near term.

Steve brought the new repeater to the forum. He gave a wonderful presentation in which he explained where the technology was as this point. Having already purchased a D-Star HT (IC-91AD), I was very interested in understanding what D-Star gave me in the way of new capabilities.

The intended goals for D-Star are providing digital voice and data transfer capabilities. In addition, there is a desire to allow operators to contact hams in far away cities or states via a communications gateway that links D-Star repeaters. Easy GPS integration seems to be another goal.

Steve's presentation made it clear that D-Star is a work in progress. It was originally developed for the amateur radio community in Japan. They use D-Star very differently than the way we will. So, it will require some work to adapt D-Star to meet our operational requirements. For example: there is a lot of interest in using D-Star's data capabilities for transmitting data in emergency communications situations. It is not used for this in Japan.

The data capabilities in D-Star's standard mode are quite limited. You can only transmit a short amount of text (somewhere in the neighborhood of 200 characters at a time). You may not send binary files in this mode. But, this text data can be transmitted along with the digitized voice. So, for example, your radio could send your GPS coordinates every time you keyed up. There is an additional D-Star simplex repeater that operates on the 1.2 GHz band that can send larger amounts of data including binary files.

It sounds like the networking technology used to link D-Star repeaters via ICOM's D-Star gateway still needs a lot of work to make it stable and robust. In addition, the servers controlling this gateway tech-



**Steve Koone (KA4YMY) addresses the D-Star forum attendees**

## D-Star (Cont.)

nology are actually owned by ICOM. So, are other manufactures going to be interested in making D-Star capable radios and repeaters that have to operate through a network controlled by ICOM?

Steve talked a little about the D-Star forums held at Dayton this year. The forums were so popular that extra loudspeakers had to be placed outside of the forum room so hams who could not fit in the presentation hall could still hear the presentation. So, even though this technology is in its infancy, it is clearly attracting many interested hams.

Steve also mentioned that ICOM is selling a lot of D-Star radios. With the recent licensing changes, you would think the market pressure would be on the HF rigs. But, apparently there is huge demand for the D-Star radios. Also, apparently, other radio manufacturers are noticing this.

Being that D-Star is in its infancy and will require a lot of work before it will meet usability expectations of the users, there are many hams working to understand and improve the technology. Steve talked a fair amount about these people and what they were working on. Some, like the K5TIT club have been working with ICOM to bring D-Star up in the United States. Others are working to create enhancements of and alternatives to ICOM's D-Star solutions. So, there really is a lot of pioneering work being done.

After the forum, Steve and Ken installed the new repeater at a tower on Hood Road (former channel 36 transmitter site). The repeater operates on 444.025 +. Steve, Ken, Mike (W4DXL) and I talked for about a half hour. From a digital voice perspective, I was very impressed with the repeater. I live near Providence and Rae road and was able to use the repeater with my IC-91AD HT running 1 watt from within my house. I cannot hit any analog repeaters in this area on low power with the HT from within my house. Testing by the K5TIT group is suggesting that range may be increased by as much as 15% over analog with D-Star.

Steve will be taking the repeater down sometime in the near future to have some work done on it by a ham in Greensboro who is an expert at optimizing these repeaters. So, the real testing can begin once these changes are in place.

There are already discussions going on concerning Steve and Ken giving a D-Star presentation at the W4BFB club. When the details get worked out, I highly suggest you set that date aside on your calendar. Steve's presentation was extremely interesting and was a goldmine of information on D-Star. I can't wait to see what happens with D-Star in Charlotte over the next 6 months.

73,

Richard - K4KRW



**D-Star 440 Mhz Repeater (Transmitter on left)**



**D-Star Repeater Controller**



# Board Meeting Minutes

Jodie started at 7 pm. Those present were; Jodie, Jeff, Greg, Andy, Kevin, Bill, Paul, and Ben. Don was absent.

Greg spoke on the budget. He provided a balance sheet.

Jeff spoke on Membership and dues renewal. As of 6-07 we have 135 members and climbing. Now is the time to renew memberships. If a member renews before July 1<sup>st</sup> they will receive 18 months of membership. If they renew their dues on or after July 1<sup>st</sup>, they will have to pay through the end of they year and then have to renew January 1st (please see the article on Renewal of Dues in this issue of the newsletter).

Repeater Committee – Jeff spoke on the interference on area repeaters. It has been cleared up for now. Ben gave a report on intermod to our 5.23 repeater from one of the users on Spencer Mt. This too has been cleared up.

Kevin brought up some ideas for getting additional revenues for the Club. ( If you have any ideas, please contact Kevin.)

Jodie stated we needed more members to help do small tasks for the Club. (See Jodie if you want to help.)

Equipment and inventory Committee. A new key is needed for the cabinet with the manuals of the equipment. Greg or Jeff will assist in this.

Jodie talked about information on the club Christmas party. Several new sites were discussed as well as what kind of meal to have. Music and dancing was brought up as something members have enjoyed in the past.

Greg brought a proposed budget. He went over each line item of the budget. Greg made a motion for earmarking an initial \$5,000.00 of the club's invested assets for Repeater upgrades. Andy made a motion to adopt the new budget, as presented by Greg, with minor changes. This was passed by unanimous vote of the Board and will be brought to the Club Membership for a vote at the June Club Meeting.

Old Business – Ben bought the AT-1000 antenna tuner to be used at the Club station with the new Ten Tec Radio. The old Nye Viking tuner is to be sold on EBay. If any club member wants to buy it, contact Bill – W4GRW.

Paul and Andy brought up the renovation of the Club Room. They got new ceiling tiles and painted the grid system. Bill and Jeff discussed better lighting. A discussion was held on throwing away the old rig boxes long the back wall. Some of the new rig's boxes need to be kept for warranty issues. By majority vote, it was decided to get rid of the old boxes. A concern was brought up about painting the walls. Block walls are to be painted white. The carpet on the walls will be left alone, for now. The QSL sorting boxes are to be reduced in size.

## Board Meeting (Cont.)

New Business - Club Members are needed for Field Day operations. Bill gave a rundown of operation. Jodie talked about fixing food for Field Day. A discussion was held on how much food and who would be able to eat. This was decided to have hot dogs only, with the club providing bun, dogs, and condiments. (We are asking Club members to bring a side dish to eat @ 5 PM. Jeff will handle the food set-up and be the contact person for eating. It was suggested that you RSVP the number of people you are bringing and what side dishes.)

Bill made a motion to close, with Paul seconded. The Meeting was adjourned at 9:30 PM.

73, Jeff Blythe - KA4WYC

## Mini Field Day a Success!

The W4BFB club held a Mini Field Day event on May the 19th. This event was created so the club could have a trial run at operating in Field Day like conditions at our new Field Day location. The new location is the Scout barn behind Back Creek Presbyterian Church. The Church located on Back Creek Church Road near University Blvd. and Interstate 485.

The barn proved to be a wonderful place to operate out of. Two stations were set up. The club's Jupiter was set for SSB phone operations at the back of the barn. A PSK31 station was set up at the front of the barn. Both stations were connected to their own tribander beam.

A good sized crowd showed up for the event. Over 70 individuals signed the attendance sheet at the event. Everyone loved the new location. There was plenty of room to operate. There was also plenty of room for members to sit and talk and enjoy each other's company.

Almost everyone brought a side dish, desert or salad to the event. If anyone left hungry, it was clearly their own fault. The food was wonderful. A few members were even overheard exchanging recipes.

If you missed Mini Field Day, please try to make it to Field Day. It should be a lot of fun.

73,

Richard

K4KRW



**Great food, Great company**



**Jodie had a contact with Saudi Arabia**

# Club Antenna Tuner For Sale

Nye Viking MB-V 1.5KW antenna tuner

1.8-30 MHZ

Original price \$800

W4BFB Member Price \$375

Must be purchased before July 6th. After that date, the tuner will be listed on EBay.

Please contact Bill W4GRW @ [wvfisher@gmail.com](mailto:wvfisher@gmail.com), or call 980.253.5805



# MARS ID Badges? Where is yours?

- Yet another reason to come to Field Day!

Over the past six months, we have been taking pictures and making new club badges for every MARS member, new and old.

You really should be wearing your *new* ID badge to all

MARS functions and club meetings (e.g. Field Day); just because you know your name and call, does not mean that everyone else does! ;-)

We have produced somewhere over 70 of the new MARS ID badges and a lot of you are sporting them – Thanks.

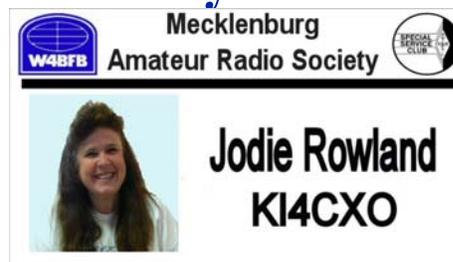
But some of you have not come to a club meeting, or the Hamfest, or mini-Field Day, etc. to have your photo taken. If you can do so, please come to a club meeting *soon* to have your new club badge photo taken so we can create a badge for you.

However - some of you *have* had your photo taken, and we *have* made your badge..... and you *have not* picked it up yet. The following badges are ready for pick-up:

AE4AT	K1CY	K4PVS	KD4GCF	KD4ITI
KE4CSZ	KF4NJP	KF4VOO	KI4YV	KU4PF
N4DOX	N4PAC	N8PAM	W4CLT	W4FKT
W4PVT				

Badges are available for pick-up at all club meetings and will be available at Field Day. Thanks.

73 – WB2RHM



# Membership Renewal Application



## Mecklenburg Amateur Radio Society W4BFB Membership Application/Renewal/Info



New Membership  Membership Renewal  Information Update

Individual (\$20.00 per year\*)  Student/Associate/over 65 (\$14.00 per year\*\*)   
Family Membership (covers all hams in family): (\$25.00 per year\*\*\*)  Family membership (65+): (\$19.00 per year\*\*\*\*)

Name  Address

City  State  Zip Code  DOB(mm/yy)

Home Phone  Work Phone (optional)  Cell (optional)

Internet E-mail Address

Callsign(s)  Class  Expiration

Occupation/Company (optional)

ARRL Member?  YES → Expiration Date from QST Label (mm/yy)  ;  NO → [Click: How to Join the ARRL](#)

>>>>>> Do you have a Club room key?  NO; YES → Key Number

Newsletter Delivery Method:  via E-mail;  Other (Contact secretary for options)

Other Clubs: ARES@:  W4CQ:  CDXA:  UCARS:  SkyWarn:  Other:

Membership in the Society is open to any person interested in Amateur Radio. An Amateur Radio license is not required for membership. Only members holding a valid Amateur Radio license may vote in society elections; only members over 18 years of age may become a club officer or committee chairperson. Every current member is sent a monthly newsletter via email. Only current society members may operate society equipment, following a checkout and instruction session, and subject to FCC rules and regulations. It is the responsibility of every member to notify the club secretary of address and/or email changes.

MARS holds a regular meeting monthly. See: <http://www.W4BFB.org> for information about the scheduling and location.

To be a MARS member, you must submit a completed application/renewal/update form and pay the annual dues required. Your appropriate MARS dues amount may be determined by consulting the membership options below:

The annual membership year is from January 1\* thru December 31\*.

\*Any licensed Amateur less than 65: the lesser of \$20.00, or \$2.00 per full month remaining in the then current membership year.

\*\*Any licensed Amateur OVER 65, any licensed Amateur UNDER 18, any unlicensed person (non-voting Associate member): the lesser of \$14.00 or \$1.50 per full month remaining in the then current membership year.

\*\*\*All licensed Amateurs <65 residing at one address: the lesser of \$25 or \$2.25 per full month left in the then current membership year.

\*\*\*\*All licensed Amateurs (65+) residing at one address: the lesser of \$19 or \$1.60 per full month left in the then current membership year.

*With the submittal of this application, and appropriate fees, I do hereby agree to abide by the By-Laws and Standing Rules of the Society as well as the rules and regulations of the Federal Communications Commission.*

Signature:  Call:  Date:

Make checks payable to Mecklenburg Amateur Radio Society, Inc. and send to:

JEFF BLYTHE, KA4WYC  
1122 PINE KNOT CT  
CLOVER, SC 29710-9677

Date Entered:  Check Number:  Amount:   
Version: 6/15/2007 ©2007 W4BFB-Mecklenburg Amateur Radio Society

## Mecklenburg Amateur Radio Society— <http://www.w4bfb.org>

**Club Meetings** The Mecklenburg Amateur Radio Society meets on the last Tuesday of each month at 7:30 PM

We meet at:

East Baptist Church  
6850 Monroe Rd  
Charlotte, NC 28212

(Next to East Mecklenburg High School, near Conference Drive)

**Clubroom** Red Cross Building  
2425 Park Rd, Room 023  
Charlotte, NC 28203  
(704) 334-3900

**Club Repeaters** 146.34/146.94 (w/autopatch)  
146.63/145.23 (no autopatch)  
144.69/145.29 (no autopatch)  
222.80/224.40 (no autopatch)  
449.600/444.600 (no autopatch) PL 100.00

### Mecklenburg 2m Emergency Net

9:00 PM local time, daily on 146.34/146.94 featuring the ARRL Audio News feed on Sunday night.

Alternate frequencies announced

## Club Officers and Board of Directors

### President

Jodie Rowland, KI4CXO, [ki4cxo@w4bfb.org](mailto:ki4cxo@w4bfb.org)

### Vice President

Don Biltcliffe, N4IZ, [n4iz@w4bfb.org](mailto:n4iz@w4bfb.org)

### Secretary

Jeff Blythe, KA4WYC, [ka4wyc@w4bfb.org](mailto:ka4wyc@w4bfb.org)

### Treasurer

Greg Onachila, KG4IOE, [kg4ioe@w4bfb.org](mailto:kg4ioe@w4bfb.org)

### Directors

Paul Ponak, AD4IE, [ad4ie@w4bfb.org](mailto:ad4ie@w4bfb.org)

Ben Antanaitis, WB2RHM, [wb2rh@w4bfb.org](mailto:wb2rh@w4bfb.org)

Kevin Keyes, KI4KFS, [ki4kfs@w4bfb.org](mailto:ki4kfs@w4bfb.org)

Andy Hawkins, G4GKK, [g4gkk@w4bfb.org](mailto:g4gkk@w4bfb.org)

Bill Fisher, W4GRW, [w4grw@w4bfb.org](mailto:w4grw@w4bfb.org)



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