



# Mars News

The Prez Sez..... June 2012

## Prez Sez June 2012

Hello Everyone,

Time is sure zipping along these days. Just when we have digested the last month's events, a new lot of exciting happenings is bearing down upon us.

First major MARS event for this month will be the ARRL Field Day operations at Belk Scout Camp. We will be meeting at the site for Friday afternoon setup of the antenna & towers, and then on to setting up the operation positions and the equipment. This will help us eliminate any major problems without rushing around early Saturday morning. We will tweak the set up on Saturday morning and be ready for lunch at 12pm and start of operations at 2pm local.

As mentioned previously, we hope to set up 4 operating stations plus a GOTA station this year. With the addition of the 4<sup>th</sup> station,



Andy Hawkins

this will entail more help from the membership to keep the operation running smoothly. Please sign up at the Google forms site sent out by Kevin-K4YYD, earlier this month. If there is a slot taken that you wished to operate at, get with the signer and discuss sharing or swapping operating times. We will do our best to accommodate anyone wishing to operate the radios.

The second major event at MARS this month is the next Club Meeting. **This month it will be held at 7:00PM**. Shelly Eaves -KJ4ATK has

done us proud and the subject is Basic Skywarn. This is being presented by the Greer office of NOAA. The class has been revamped and improved; this means that if you have taken it before there should be new material that will benefit you. We will follow up with the Advanced Skywarn class later on in the year.

We also had our first Hamfest meeting of the year. This looks to be an exciting year and we have some changes that will be of interest to all. Stay Tuned.....

Here's wishing you a safe and happy June and good wishes for July 4<sup>th</sup>.

73

Andy- K4GKK

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## *High Atop Spencer Mt. It's The 145.230 Repeater!*

By Jeff Blythe – KA4WYC

Over two years in the planning and some really major expense of equipment, this antenna project was a long time coming. Several years ago the Repeater Committee looked around at a plan to start to replace our entire Repeater System. Some have been up for 25-30 years with little to no major repairs! Repeaters, controllers, and antennas are just some of the equipment needed. Earl – K4KAY is the Repeater Chairman, with too many members on the Committee to name here.

The best repeater for our purpose was found to be a Commercial Kenwood TKR-750, a 2-meter Repeater and the TKR-850

for the 440 repeater. Several repeaters were purchased and the 2- meter repeater was programmed for the 146.940, 145.290, and 145.230 repeaters. Just in case one of our ex-

– WA2EDN burned in the repeater at Earl’s QTH. I picked up the repeater at a Club meeting and with the help of Scott Weaver – W4EV, and headed up to Spencer Mt., to begin the installation. The 145.230 was a Johnson rack mounted repeater. Using card inserts it had a controller by RLC – LINK ‘CLUB’. Again, some of the technology is almost 25+ years old!



*Ground crew gets safety briefing*

isting repeaters went down, it could be taken out to a repeater site and be up on the air with little tuning. It just so happened that the 5.23 repeater was the first to get a Kenwood Repeater. Earl with the help of Dr. Bill Heybruck



### **The Grid**

After some cleaning and re-wiring we were able to get a ‘new’ used cabinet that was ‘Re-purposed’! The Johnson repeater was moved over to another aisle and the new cabinet was placed in our spot. We started setting up the new Kenwood Repeater. The TKR -750 has an external controller but very few bells and whistles; so the RLC was wired to the Kenwood. Now the real reason for our antenna

change; the SWR was high. The DB-226, a DB Products antenna was OVER 30 YEARS OLD! At first it was on top of the tower, and then re-located to the Charlotte side of the WBTV Tower at 100 ft., plus. We were sandwiched between the tower and a Grid Analog TV antenna. Oh boy!!!! Coverage was through the tower towards Lincolnton and though the Grid Antenna towards Charlotte.



## Waiting and waiting.....

Now enter Don Shaw-KK4AOI, a WBTV Engineer, who was over the Spencer Mt. site. I had been in contact with Don about the site in general and the new repeater we put in. When we found that the SWR was high and that we may need to have it checked out and go up the tower, I also asked about the possibility of moving out from under the Grid antenna. So we meet up on Spencer and the planning started. Don stated there might be a vacated spot on top of the tower and we could use it. The an-

tenna mount and feedline wasn't being used. It faced the Charlotte side of the tower. With the 'go-ahead' from Don, Earl found the Comprod 870 - 4 bay dipole, 9 dB gain, 29 ft. long antenna. Made for severe conditions on top of a



*Grid dish*

1300 ft. mountain, this was a BEAST of an antenna!! So the antenna was ordered, and we waited... oh, we waited. Winter came, the antenna came, oh, we waited!! Several weeks ago Don contacted me again, and asked if we were still interested in continuing with the Antenna Project? No only yes, BUT HECK YES!! Don stated early on, he had a Tower Climbing Company we would use, as he had some work that needed to be completed too.



*David Haas  
Haas & Herron  
Electronics  
PO box 1070, Kings  
Mtn., NC 28086*

## Getting closer!

Now enter David Haas, our tower climber. So we set a meeting, again, at the Tower site to discuss our approach to the antenna install. My heart sank as David stated he didn't think the antenna would go on the railing at the top of the tower! OH MY!!!! Along with that, the feedline had a jumper broken off of the abandoned antenna. My thoughts turned to, maybe water in the feedline. Things weren't looking good. But David was willing to go ahead and try the install. I had asked David if I could help at the top of the tower. With 25 years of climbing Amateur and Commercial towers, I was hoping for a

miracle!!! We set a date for the install; I contacted Earl and a few others as a 'Ground Crew'. This one could, and this one couldn't. David had a conflict ... RAIN, we're in a darn DROUGHT, and it RAINS!!! No folks, I'm not known for my patience, not one bit! THE DATE comes open, all is set, I have been in close contact with Earl, and David. Now only I can plan an antenna install of the same week as a Hurricane churns up in the Atlantic, go figure...! I talk to David the night before, Charlotte was to have scattered showers, but nothing bad

all day of Friday June 1st. David offered some suggestions, and the more I thought about it, the install was changed again to Friday June 8th! Sunday's 10 day forecast showed some clouds for Friday, yeah, RIGHT!! Wednesday showed Friday was to be a BE-U-T-FUL DAY!! OMG!! It really was going to happen!



*Jeff and Dave get their tools*

## Today's the day

June 8<sup>th</sup>, day of the Install, finally!! Oh hand we had Earl - K4KAY, Dr. Bill, - WA2EDN, Jodie - KI4CXO, Butch - WB4KJV, Larry - KJ4TIO, Ben - WB2RHM and Ms. Anne - W1FE (just kidding about Anna's call, Ben had a tag made up with that on it!) Ben and Anne did a fine job of photo- documentation of the event. As well as Larry! Thanks all! David gave a brief but detailed safety meeting and how he wanted things done on the ground. He had a winch to do the heavy lifting. David had pre-attached a line to the antenna that attaches to the carbineer. There were pulleys and clamps, carabiners etc., and ropes galore. One safety line for personnel only, no lifting equipment at all on it! I had my climbing harness on and David said, "Are you ready?" He just didn't know!!! The climb is not too bad, but lots of 'things' to catch you on the way up! David warned about wearing a hard hat, boy am I glad I did!! Some of you

saw my 'Tower Climbing' program several years ago; well this was it in practice! Whew what a climb, but **WHAT A VIEW!!!** We made it to the top, David rigged for a pulley and radioed to the



*Antenna ready for launch*

You can't imagine my anticipation seeing that antenna SLOWLY rise to the top of the tower!!! But there it is, just below us. David calls, 'All Stop!' We needed to loosen the tag line, which keeps the antenna out from the base of the tower and other antennas that could be in our way. PROBLEM: The tag line had gotten around the main line, lots of weight on the antenna and tag line. So I pick up the antenna to take the weight off the pulley. David said that I would have the antenna, **ALL BY MYSELF!!** I said, 'Go ahead, after 6 months, I AIN'T LETTING MY ANTENNA GO ANYWHERE!!' Really it wasn't much weight at all. I set an element on my shoulder and picked up slack on the tag line. David had it free and attached the tag line from the antenna to the Gin Pole. Piece of cake..!

ground crew, we were going to send down the small rope, to attach the larger rope and several bags of tools and special Fall Arrest lines. The winch made light work of this. Next, it was time for the Gin Pole, to help hold the Antenna above our heads. The existing mount provided a 3" pipe to drop the Gin Pole into. That now in place it was time for the Antenna!! OMG!



## Up it goes

As David pulled the Gin Pole line, I let the antenna rise up to the mount. PROBLEM: The antenna was off to one side. The more I tried to move the top of the antenna over, the harder it got! What gives...? Our Antenna was laying on the side of the tower, the elements were pointing sideways! Then I swiveled the element straight out away from the tower, and if by magic it rotated in place right into the mount! FIT LIKE A GLOVE!! Quickly I attached the other two clamps, David takes a rest as the bottom element sets on the top clamp. We all rest...! David asks if we need to go any higher with the antenna. Duh! Bare with me

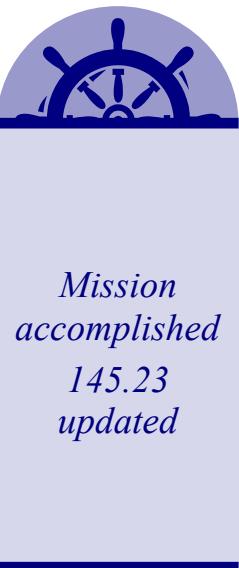
folks; WE are on a tower 1,300ft above Sea Level, WE are 205ft above the base of the tower, WE ARE 29ft TO THE TIP OF THE ANTENNA, what's another FOOT????? Ok David, lets go up a few feet. Clamps tight, the only thing left is attaching the feedline to the antenna jumper. Next is weatherproofing the connector. We already had lightning protection, but would it matter.... We were the tallest antenna up there!!! I radioed Earl and Dr. Bill to head to the building to turn the repeater on. They already had the new feedline connected to the Repeater, and with a flip of the switch, the Repeater came to life!



## Good reports



Since the installation we have had extremely good reports all around the area. Lincolnton hams are using HT's where there wasn't even good signals at all before. I'm able to use a HT anywhere in the house in Clover, SC. I plan on moving the PETN from the 145.350 repeater at 8 o'clock to the 145.230 repeater on June 20<sup>th</sup>, my night to call the Net, so come on by. As a reminder, this repeater utilizes a 118.8 tone to minimize interference.



A SPECIAL THANKS to Don Shaw, David Haas, Earl and everyone who helped make this antenna project possible!!!! To Scott W4EV for some fine Engineering, and Tim N4IB for taking a picture of the inside of the feedline, prior to using THAT feedline. Enjoy the 5.23 Repeater and let me know how good it works for you!! 73 Jeff KA4WYC

## **Public Service Committee News from Mary Hunt, N4MH, Chairperson**

**Our largest Public Service Event is right around the corner. -- The MS Break Away to the Beach will be held on September 22 and 23, 2012.**

On Saturday we will have two start sites this year – Monroe, NC and Kershaw, SC. Both routes will meet up in Hartsville, SC and continue on as one route to Florence, SC where we will over night.

On Sunday we will have two start sites – Florence, SC and Green Seas, SC with the end point being at Sunset Beach. The route from Florence is 100 miles and Green Sea is 50 miles. The cyclists will be taken by bus from Florence to Green Sea. Their bicycles will be transported to Green Sea on Saturday night.

The Columbia Amateur Radio Club will again be helping us with the route from Kershaw to Hartsville, SC. They will also be bringing the SC Heart Trailer that will be used for Net Control.

**The rest stops for Saturday on the Monroe route are listed below,. Please note that these rest stops are subject to change.,**

Rest Stop #1 – Stack Road VFD – at Mile 12.4  
Rest Stop #2 – Davis Residence – at Mile 18.8  
Rest Stop #3 – Central High School in Pageland – Mile 28.9  
Rest Stop #4 – Fairview Baptist church – Mile 35.4  
Rest Stop #5 – Bay Springs VFD – Mile 46.4  
Rest Stop #6 – Easterling Residence – Mile 56  
Rest Stop #7 – Lunch Stop – Coker College, Hartsville, SC Mile 66.4  
Rest Stop #8 – Darlington County Schools – Mile 80.2  
Rest Stop #9 – Lighthouse Church – Mile 90.3  
Finish – Francis Marion University – Mile 101.3

**Rest Stops for Sunday are:**

Rest Stop #1 – Williams Residence – Mile 9.9  
Rest Stop #2 – Marion Fire Department – Mile 17.4  
Rest Stop #3 – Gapway Baptist Church – Mile 26.7  
Rest Stop #4 – Sunny Mart Exxon – Mile 34.8  
Rest Stop #5 , Start Site for 50 Mile Ride and Lunch Stop for 100 Mile Ride – Green Sea Floyds Elementary School – Mile 48.5  
Rest Stop #6 – The Todd House – Mile 60.6 and 12.1  
Rest Stop #7 – Guideway Elementary School – Mile 73.0 and 24.5  
Rest Stop #8 – Outdoor Wildlife Bait & Tackle – Mile 78.7 and 30.2  
Rest Stop #9 – Calabash FD – Mile 89.2 and 40.7  
Finish – The Village at Sunset Beach – Mile 99.1 and 50.6

## **Public Service Committee News from Mary Hunt, N4MH, Chairperson (Cont.)**

We need volunteers for SAG vehicles, Sweep Vehicle and Rest Stop Volunteers. If you cannot work both days but can work just one day, we will be glad to have your help with the event.

To sign up for the event go out to Elena's website: [www.ridemaps.com](http://www.ridemaps.com). From this website you will also be given a link to go over to the MS Web Site and register. We register at the MS Web Site for MS insurance coverage. Once you have signed up for the event and all route maps are final, Elena will be sending you a password so you can go in and download the route maps. This will be closer to the event date so we can ensure you have the latest and greatest maps.

Wednesday, June 6 was our monthly CCTTA Event. We had 315 cyclists participating in the event. Thanks to the following volunteers: Tom Hunt, KA3VVJ; Dave Holbrook, KC4YPB; Perry Garris, KF4UV; Auford Neal, KU4PF; John Eigenbrode, W3SA; Stan Bagwell, KJ4ZL; and Bryan Ferdinand, K4NET. If you participated in the event last year and may not be able to work every event this year and still have your Marshall's shirt, please return it to me. We are short some of the Marshall shirts. Our next CCTTA event is July 11. If you are interested in working an event and have never worked one before, you are required to work one training event and another ham.



### **Red Cross**

### **Lake Norman Excursion**

The Red Cross Lake Norman Excursion is happening on Saturday July 14, starting and ending at Lowes Headquarters in Mooresville. The event is also a training ride for cyclists getting ready for the MS-150 in September. Like last year there is a 40 mile, a 65 mile, and a 100 mile route which all overlap each other much of the way. These last few years we have been providing radio comms at each of the Rest Stops, and have been suggesting that we need more eyes and ears along the route.

This year a few changes are being made. This year the route is basically the same, there are six (6) Rest Stops instead of the five last year, and the Red Cross comms truck (ECRV) is still scheduled for net control at Lowes if it isn't deployed to some disaster response. In addition, the Red Cross Emergency Response Vehicle 'ERV', and the Mooresville Red Cross 'old ERV' (a former ambulance painted red and white) will be at points along the route for supplies or bicycle pick up. These trucks will have both Ham and Red Cross radios that can be reached from the ECRV net control. Now Hear This... they would also like to have some SAGs on the route which are Radio Active. Our own pickups or cars are good for use, - but- in that part of Iredell/Rowan/Catawba counties we need a mobile rig and a decent antenna for reliable coverage. Probably about 4 SAGs would be good. More details will be available soon, 4 of the Rest Stops will be the same as last year, 1 has moved from last year, and 1 is an added location.

As I get more details I will be more available on the M2MEN at 9:00PM, my email is [wb2nhq@arrl.net](mailto:wb2nhq@arrl.net), if you would like to come play radio with us that Saturday morning.

73, John WB2NHQ

## Aptalis CF Cycle For Life®

Join us for the Charlotte region's inaugural Aptalis CF Cycle For Life® ride on July 21, 2012 in Waxhaw, NC! With two route options, a 35-mile and 65-mile, cyclists will ride along miles of cycle-friendly roads rolling beside undeveloped farmland and beautiful scenic views. Cross into South Carolina's piedmont region on the 65 mile route and enjoy a taste of Lancaster County! The Cystic Fibrosis Foundation needs hams at rest stops, as SAG vehicles and also to shadow event directors. They're expecting more than 100 riders and the event will be good practice for the big MS bike ride in September. The CF ride was originally scheduled for hamfest weekend, but the CF leadership couldn't have the event without us. So they moved the ride to July 21 to accommodate MARS!

Cystic fibrosis is an inherited chronic disease that affects the lungs and digestive system of about 30,000 children and adults in the United States (70,000 worldwide). Victims of CF are lucky to live into their 30's and 40's. Since 1955, the Cystic Fibrosis Foundation has been the driving force behind the pursuit of a cure. If you'd like to volunteer for this event or need more info, contact Tim Slay, N4IB at [n4ib@arrl.org](mailto:n4ib@arrl.org).

Tim Slay  
Telecom Director  
704-382-4646



## Where's The Net?

A lot of people have been asking "Where's the net and when?" Below is a small listing of known nets in our area on local machines. I know there are some new 6m nets going on, but do not have the information to share at this time. This list will be updated monthly as I receive new information. If you have any other nets you would like to see listed, please contact: Bryan - K4NET @ [hamk4net@gmail.com](mailto:hamk4net@gmail.com)

73-  
Bryan  
K4NET

Day	Time (EST)	Frequency (no tone unless listed)	Offset	Host	What
Nightly	9pm	146.940 (no PL 118.8 during net)	minus 600khz	Various	Metro 2m Emergency Net
Nightly	8pm	145.35	minus 600khz	Various	PET Net
Saturday	8:30pm	145.410 (PL136.5)	minus 600khz	KI4HOC - Benny	Dixie Radio Pirates Net - Ragchew and Trivia
Saturday	7pm	145.29 (Alt 145.230 pl 118.8)	minus 600khz	N4MIU- Jerry	ARES Training Net
Sunday	8pm	147.505 (Alt 147.525)	Simplex	AJ4CN - Fred	East Meck Emerg Resp Net
Monday	8pm	224.540 -Mt Mitchell	minus 1.6mhz	Various	224 Ragchew Net
Thursday	8pm	224.400 (alt 224.020)	minus 1.6mhz	K4NET - Bryan	224 Jabber Net - Tech Net

## MARS CLUB MEETING 5/29/2012

*The meeting was called to order by Andy – K4GKK at 7:35PM.*

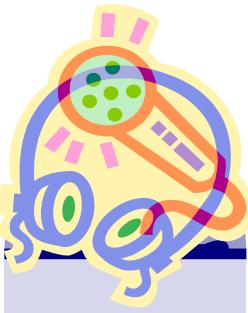
**Visitors:**

Fran O'Neal, KF4LLE and Mike Folk

**New Member:** Ariel Gil, AJ4UW

**Upgrades:**

Congratulations to Sandy Jones, KK4DAW on her upgrade to General.



**Bring a  
side dish  
please**



**Other News:**

Tom Hunt reported that the club earned \$7,400 at the Hamfest which represents an increase of \$2,000 over last year.

**Field Day** this year is June 23 -24 and is being held again at Belk Scout Camp. We will be running four stations this year: Phone, CW, Digital and GOTA.

**Countdown to  
Field Day**



**Field Day**

A cookout will take place on Saturday June 23<sup>rd</sup> at noon as the official kick-off for Field Day. The club is providing hamburgers, hot dogs, buns, drinks and paper products. Those that plan to attend are asked to bring a side dish.



Technician class starts in July and will be held at Woodlawn Baptist Church.

The June club meeting will be devoted to Basic Skywarn training and will begin at 7:00pm.

## MARS CLUB MEETING 5/29/2012 CONT.

### Meeting Topic: Packet Radio

Seth O'Neal, KF4LLF and Bill Newsome, AC4ZR gave an informative presentation on packet radio. Packet radio involves sending and receiving messages over the radio through the use of a computer. Packet radio is much faster than CW or RTTY, is spectrum efficient and employs error correction. Packet establishes a "private

connection" between two stations while sharing a frequency with other stations. The components of a packet station are simply a computer, TNC, radio and antenna. A packet station can connect to a single packet station or a networked BBS station. Packet radio frequencies are 145.010 and 145.090. Packet radio involves the use of various TNC commands. Packet computer programs

include the following and can be run on just about any operation system other than Windows 7:

Packet 6.2  
Winpack  
Hyper Terminal  
WinLink  
Outpost

Windows 7 is only compatible with WinLink and Outpost. A good reference website for packet radio is [www.packetradio.org](http://www.packetradio.org).



Standing: Seth O'Neal and Bill Newsome

*The meeting was adjourned at approximately 9:15PM*

*Submitted by Kevin Keyes –  
K4YYD  
Secretary MARS*

## MARS BOARD MEETING 6/05/2012

Meeting called to order at 6:35 pm.

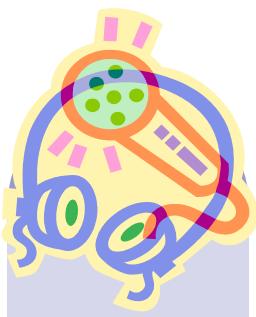
Attendees included :

Andy Hawkins – K4GKK;  
John White – WB2NHQ;  
Tom Hunt – KA3VVJ;  
Kevin Keyes – K4YYD;  
Dave Holbrook – KC4YPB;  
Bryan Ferdinand – K4NET;  
George Hohas - W4GEH;  
Barry May – KC4SSS;  
Shelley Eaves – KJ4ATK

Bryan proposed the minutes for the Board Meeting of May 1, 2012 be accepted as presented and Barry seconded.

### Treasurer's Report:

Tom presented the treasurer's report. Barry proposed to accept, seconded by Bryan and approved by the Board. The proposed budget for 2012/2013 was discussed at length. Following a few minor changes, the budget was approved to be presented to the membership at the June club meeting.



### Vice President's Report:

*Topics for upcoming meetings:*

**June:** Basic Skywarn to start at 7pm

**July:** Greg Houser with Charlotte EOC

**August:** MS-150 Bike Tour

**September:** Advanced Skywarn



Vice-President Shelly Eaves KJ4ATK

### Secretary's Report:

121 total current paid members including 4 life members.

### Committee Reports:

#### Public Service Committee:

Next CCTTA is June 6th & July 11<sup>th</sup> at Lowes Motor Speedway. Lake Norman Bike Excursion is July 14<sup>th</sup>. Cystic Fibrosis bike ride is July 21<sup>st</sup> in Waxhaw. MS Bike Ride September 22 and 23<sup>rd</sup>.

#### Equipment Committee:

Andy continues to log serial numbers of equipment for insurance purposes. Bryan proposed swapping the TS-60 radio for a Dell D-620 laptop. Andy made motion to

approve this transaction and Dave seconded. The club has purchased an A4-S antenna for phone use on the 10, 15 and 20 meter bands.

## MARS BOARD MEETING 6/05/2012 CONT.

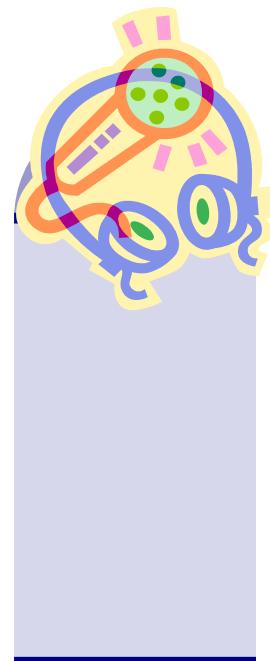
### Repeater Committee:

Bryan is liaison to the repeater committee. Bryan is liaison to the repeater committee. No changes since last meeting.

### Field Day signup is

available online as is signup for cookout attendance and side dish items. The A4-S antenna will be used on the phone station on the 10, 15 and 20 meter phone bands. The A-3 antenna will be used on the CW station.

**Old Business:** *none*



*The meeting was adjourned at approximately 8:35PM*

*Submitted by Kevin Keyes –  
K4YYD  
Secretary MARS*

## MECKLENBURG AMATEUR RADIO SOCIETY

### Club Repeaters

Input	Output	Offset (KHz)	Autopatch	Tone
146.34	146.94	-600	No	118.8
144.69	145.29	-600	No	118.8
144.63	145.23	-600	No	118.8
222.8	224.4	-1600	No	none
449.6	444.6	+5000	No	118.8

**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



[www.w4bfb.org](http://www.w4bfb.org)



**Newsletter Editor:**  
Sandra Jones, KK4DAW  
8824 Gelligum Drive  
Charlotte, NC 28277

w4bfbeditor@w4bfb.org

### Club Officers and Board of Directors

#### President

Andy Hawkins, K4GKK, k4gkk@w4bfb.org

#### Vice President

Shelley Eaves, KJ4ATK, kj4atk@w4bfb.org

#### Secretary

Kevin Keyes, K4YYD, k4yyd@w4bfb.org

#### Treasurer

Tom Hunt, KA3VVJ, ka3vvj@w4bfb.org

#### Directors

Bryan Ferdinand, K4NET, k4net@w4bfb.org

George Hohas, W4GEH, w4geh@w4bfb.org

Dave Holbrook, KC4YPB, kc4ypb@w4bfb.org

Barry May, KC4SSS, kc4sss@w4bfb.org

John White, WB2NHQ, wb2nhq@w4bfb.org

#### Newsletter Editor

Sandra Jones, KK4DAW, w4bfbeditor@w4bfb.org

### Mecklenburg 2m Emergency Net

9:00 PM local time, daily on 146.94

(-600)

Alternate frequencies announced