MECKLENBURG AMATEUR RADIO SOCIETY

Volume 63, Issue 11

Mars News

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Prez Sez for November 2012

Hello Fellow Members,

I hope this note finds you all in good spirits and enjoying this great weather we have been experiencing. I also hope that you have been indulging in the Amateur Radio hobby; I had a "go" at contesting when the CQ World Wide SSB contest was held a couple of weekends ago. Needless to say I was not too hot, but I did enjoy working a few stations in Europe and learning that my signal is getting out.

June of this year saw the club operating the ARRL field day out at the Belk Scout Camp in Mint Hill. We did send in our logs and finally the results have been published in QST, (The ARRL Journal). W4BFB was a 3A category Station. This meant we operated 3 main stations plus a GOTA station, all of which operated on either emergency generator or battery power.

W4BFB made 866 contacts and submitted a total of 3154 points.

W4BFB was #3 in North Carolina in our category.

W4BFB was #8 in the Roanoke Division in out category.

W4BFB was #105 in the 3A category out of a total of 316.

Andy Hawkins

W4BFB was #584 country wide in all categories with a total entry of 2617 stations.

I think this is something to be proud of, and goes to show what we can do when we all work together. I am looking forward to next year's Field Day where I hope we can improve on the score. Thank you to all who participated at the last Field day.

November is our election meeting, where a new slate is chosen for next year's board. There will not be any robo calls for your vote. The ballot will be posted in this newsletter for those who wish to vote but cannot make the meeting. Otherwise, ballots will be handed out at the next meeting and the 2013 board of directors will be chosen.

Bryan Ferdinand, K4NET, will present a short presentation on EchoLink that is now active in Charlotte.

December 1st is our annual Christmas Party at Central United Methodist Church on Albemarle Road. Mary Hunt, N4MH is taking reservations; please see the article further down in this newsletter. The Christmas Party acts as our final club meeting of the year, as the end of December becomes quite hectic with other festivities.

Until next time...

Best 73

Andy Hawkins, K4GKK

Choosing Your Packet Radio Program

Greetings Amateurs!

In this article, we'll talk about choosing the appropriate program for you to use as a Packet Radio operator. In last month's article, we included a link at the bottom for beginners to learn more about Packet Radio. Hopefully you've visited that link and perhaps gained a better perspective of what a station needs to get on the air. Most packeteers use a Terminal Node Controller (TNC) or a sound card modem to interface between the computer and the radio. The software you choose to use with your TNC or sound card can greatly impact how easy or how difficult your initial setup is going to be.

While there are many different programs to choose from, some are licensed and require a registration fee, while others are free. There are also different purposes for certain programs. We'll highlight only a few of them in this article, since over the years there have been so many. In many instances, you might not even consider using a downloaded program at all. There are a few programs included with your computer. We'll also focus on Microsoft Windows®, rather than Mac® or Linux. Your computer's operating system may create limits for what software is available. Keep in mind that Packet Radio has been around for 30 years! Newer operating systems may not be able to run older programs that once were highlighted as some of the best.

Let's start with WinPack 6.8, a 32-bit application that is intended to be used as a "terminal" program with a few enhanced features. These extras allow you to do more than just connect to a station and send lines of text. A terminal program is a program that will communicate directly to the TNC or sound card modem, providing your station with lines of text that are directly sent and received (like command lines). Terminal programs have the advantage of giving you more of a direct feeling of communication. We call this a "keyboard" conversation. Text is sent line by line and received in the same manner. WinPack 6.8 is customizable to allow for some automation of the text that is sent and received using scripts. In the program's settings, you can configure WinPack 6.8 to automatically connect to other stations such as BBS's, DX Clusters, or even your favorite ham buddy's station across town. It also supports several methods of interfacing to Packet Radio. It can be configured to link with Telnet connections, PC to TNC connections, AGW sound card modem software interfaces, or even be run alongside BPQ32 Node software. WinPack 6.8 also includes a "software mailbox" for accepting messages when the station operator is not available. This is especially useful when a sound card modem is used rather than a Terminal Node Controller (TNC). Most TNC's have built-in mailbox memory that offers message storage even when the computer is powered off. Sound card modems do not have a mailbox feature. WinPack 6.8 also eliminates the necessity to have the TNC store messages when you aren't around the keyboard to answer a connecting station. The only downside is you must run the program 24/7 to keep your WinPack mailbox active. Search: "WinPack 6.8 Manual" on Google® for more information.

A well recognized program (especially in the ARES community) is Outpost Packet Message Manager, or Outpost PMM. This program remains up to date with its developers continuing to support it today. Outpost PMM is unique in that its layout is very much like an email application. Outpost's main initiative is to send and receive complete messages. This does have advantages for the Packet Radio community when RF traffic is busy. Rather than typing your message line by line "on the fly" while you are connected to a BBS or mailbox, you can remain disconnected while typing. Once finished, send your message to its destination using an automated send/receive schedule.

If you've ever used Microsoft's Outlook Express email program, you'll get the same feel when using Outpost PMM. This means of communication is excellent for message handling, but doesn't specialize direct keyboard QSO's. If you're looking for a "keyboard to keyboard" style of communication, Outpost PMM does have a simple terminal interface as part of the program, but the terminal lacks enhanced features. One of the greatest challenges of Outpost PMM is the initial setup of the program. If you're more than just a node hop away from your local BBS or ham buddy, configuring Outpost to automatically connect to your destination for the first time can be a bit of trial and error. Once finished, the settings are saved and you'll never have to do it again. Visit: http://www.outpostpm.org/ for more information.

RMS Express, Paclink, and Airmail are all programs that communicate with the WinLink 2000 Global Radio Email System. Each program behaves differently, but all have a similar purpose. The primary objective is to send and receive email using various modes of amateur radio communication including Packet Radio. Once configured, these applications also have an email based visual appearance. These programs DO send emails. The disadvantage is: keyboard conversations are eliminated as well as BBS messaging, DX Clusters, and any other feature related to Packet Radio. In other words, Packet Radio is used as a medium to connect and send email. Visit: http://www.winlink.org/ for more information.

Another link that was provided in last month's newsletter was a link to several software titles that have been part of Packet Radio's history. Some links are broken as servers were changed or ham operators moved on. Other software versions are now outdated and aren't recommended. In case you missed the link, here it is again: http://www.dxzone.com/catalog/Software/Packet/

As promised in the previous article of the newsletter, we mentioned that we would provide you with a list of nodes that are currently online and available for connection. Also included, are Bulletin Board Systems, DX Cluster Nodes, and RMS Gateways for WinLink 2000 users.

There are many frequencies out there that are being used for Packet Radio! The key is finding them. Since the radios used for packet do not transmit all the time, scanning for active packet frequencies in your area can be a challenge. Instead, we're listing stations and frequencies primarily serving areas in and around the Carolina's regional area.

Keep in mind that NOT ALL nodes may be heard from your location. It is best to choose a node closest to where you live. On the other hand, some prefer to choose by frequencies that have the most end-user traffic. Although 145.010 is intended primarily for "BBS/Node" traffic, some end-users have chosen to setup their stations here. However, using 145.090 is the preferred frequency for end-users.

Packet Radio Node/BBS/Cluster List – 145.010 / 145.090 / 223.400 / 446.500

Alias	Callsign	Type	Location	Frequency
ALTNC	AC4ZR-6	NODE	ALTAN, NC	145.010
APEXNC	K4RTP-2	NODE	APEX, NC	145.010
BBS2MT	WW1R-8	BBS	NEWTON, NC	145.010
BLADEN	NN4NC-9	BPQ NODE	BLADENBORO, NC	145.010
CLAYNC	W4RAL-4	NODE	CLAY, NC	145.010
CLT	W4BFB-5	NODE	UPTOWN CHARLOTTE	145.010
CLT220	W4BFB-7	NODE	UPTOWN CHARLOTTE	223.400
CLT440	W4BFB-14	NODE	UPTOWN CHARLOTTE	446.500
CLT442	KE4IYH-14	NODE	NORTHEAST CHARLOTTE	446.500
CLTBBS	W4BFB-9	BBS	RED CROSS, CHARLOTTE	**145.01, 223, & 446**
CLTNE	KE4IYH-4	NODE	NORTHEAST CHARLOTTE	145.090
CONCRD	KF4LLF-6	GATEWAY	GATE TO CONCORD, NC	**145.090, & 446.500**
FM144	AC4ZR-4	NODE	FORT MILL, SC	145.010
HILLNC	W1REP-3	BPQ NODE	HILLSBOROUGH, NC	145.010
HVLBBS	K4QC	BBS	HENDERSONVILLE, NC	145.010
K4WC-7	K4WC-7	*KA-NODE	CONCORD, NC	**145.090, & 446.500**
LSC	AC4ZR-1	BPQ NODE	LANCASTER, SC	**145.01, 223, & 446**
LSCBBS	AC4ZR	BBS	LANCASTER, SC	**145.01, 223, & 446**
LSCDX	AC4ZR-15	DXCLUSTER	LANCASTER, SC	**145.01, 223, & 446**
LT1MTN	WW1R-2	BPQ NODE	LITTLE MTN, NC	**145.010, & 446.500**
MON7NC	NC4UC	*KA-NODE	MONROE, NC	**145.010, & 446.500**
NCBBS	NN4NC	BBS	CLARKTON, NC	145.010
NCHVL	K4QC-1	BPQ NODE	HENDERSONVILLE, NC	**145.01, 223, & 446**
NCRMS	NN4NC-10	RMS GATE	CLARKTON, NC	145.010
OCABBS	W1REP	BBS	HILLSBOROUGH, NC	145.010
POOR	N4MGQ-9	NODE	POOR MTN, VIRGINIA	145.090
RKYDX	KF4LLF-8	DXCLUSTER	CONCORD, NC	**145.090, & 446.500**
RKYRMS	KF4LLF-10	RMS GATE	CONCORD, NC	**145.090, & 446.500**
RKYRVR	KF4LLF-7	BPQ NODE	CONCORD, NC	**145.090, & 446.500**
SHELBY	W4NYR-5	KNET-NODE	SHELBY, NC	145.010
SIRED	W3OA-5	*V-NODE	MOORESVILLE, NC	145.090
STK09	AC4ZR-7	NODE	SAURATOWN MTN, NC	145.090
STKU	AC4ZR-9	NODE	SAURATOWN MTN, NC	446.500
W3OA-10	W3OA-10	RMS GATE	MOORESVILLE, NC	145.090
W4LN-10	W4LN-10	RMS GATE	SAURATOWN MTN, NC	446.500
W4ERT-7	W4ERT-7	*KA-NODE	TAYLORSVILLE, NC	145.090

*NOTE: KA-Nodes and Virtual Nodes are "stand-alone" nodes. They are not programmed to allow auto-routing across the RF packet system. If you connect to a KA-Node, you will be limited to the distance that KA-Node can hear only by direct connection. Linking nodes is possible, but you must connect to each node one by one.

Frequencies listed in BOLD indicate stations that maintain access to packet radio on more than one frequency.

If you have questions, comments, or concerns feel free to email: KF4LLF@gmail.com or AC4ZR@yahoo.com for more information. Hope to see you soon on Packet Radio!

73,

DE KF4LLF, Seth O'Neal

Hohas and Lemay operate Special event station.

George Hohas W4GEH and Bill LaMay K3RMW operated Special event station W4K on Wednesday, Oct 10, 2012. The special event was in honor of the canonization of the patron saint of ham radio, St. Maximillian Kolbe.

The event was held at St Matthews parish in south Charlotte. The equipment used were George's Ten Tec Jupiter and Hercules II amplifier. An inverted V antenna, the apex at the top of the parish's flag pole, was cut for the 20 meter band. 260 contacts were logged. Cliff Wagoner W3ZL also assisted during the morning hours.

Further information can be seen in the enclosed article and link to the story as featured in the Diocesan newspaper.

Please check out the story package from last week's event. It can be viewed here: http://catholicnewsherald.com/42-news/rokstories/2554-students-at-st-matthew-discover-ham-radio-and-its-patron-saint

Searchlight
The Simplest DX Antenna Ever?

A fixed station antenna has one principal task: Get your transmitter's power into the other station's receiver. But the antenna can't do that if most of the power is being radiated up into the sky, "sucked" into nearby house wiring, heating up a lossy "matching network," or being dissipated in inefficient Ground Radials.

Worse, still, neighborhoods are becoming increasingly "antenna unfriendly." And that means that BEAM antennas, whether on a rooftop or on a tower, are nearing extinction in many locations. And the "old standby" of a dipole or its many variations may not be suitable because of either physical constraints or antenna restrictions.

Searchlight is the first antenna designed specifically to overcome *all* these issues – and many more!

Because of its asymmetrical design, Searchlight radiates more energy toward the horizon, where it should go – just like a Searchlight directs a light beam where you want to see.

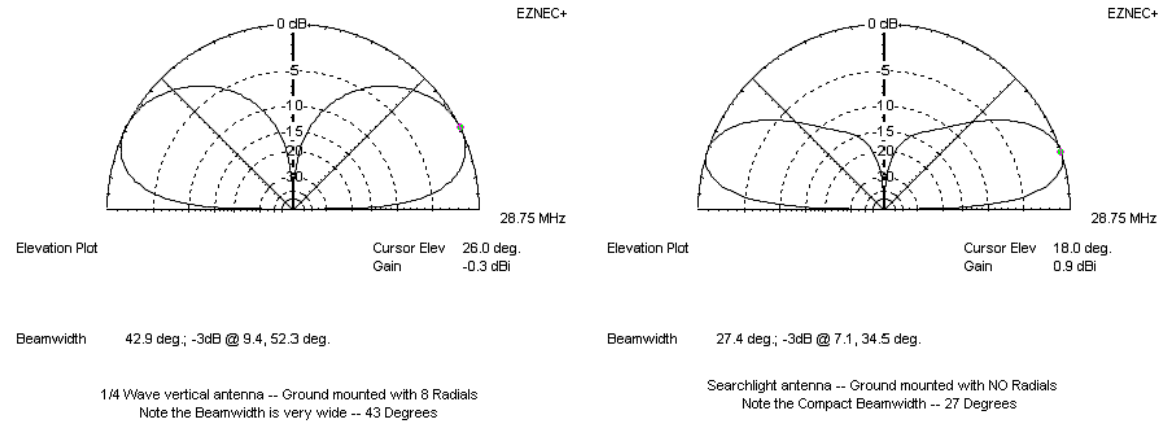
Searchlight virtually eliminates spurious "common mode" signals that waste power and can send much of your transmitter's signal INSIDE the house, where it can wreak havoc with household devices like Radios, TVs, or sound systems.

And, unlike conventional Vertical antenna designs, Searchlight requires no lossy, space-consuming radials.

Finally, Searchlight's design entirely eliminates lossy "matching networks."

The result? Searchlight radiates virtually *ALL* your signal where you want it to go! And it "consumes" an absolute minimum of real estate.

Beam Comparison:



The diagram on the left is a "side view" generated by world-famous EZNEC antenna modeling software. It shows radiated power from a typical ground-mounted quarter wave 10 Meter band antenna with 8 full-sized radials. Notice that much of the radiated power is radiated upward.. That's great if you want to talk to aircraft; not so great if you want to work DX! Also note that the gain figure does not include consideration of matching network losses, since a properly matched vertical has an input impedance of around 30 Ohms. (Note: If YOUR antenna reads 50 Ohms, then about 20 Ohms is ground loss resistance and the antenna efficiency is only about 60%!)

The EZNEC Searchlight diagram on the right shows a similar "side view." Notice that the beam height is much "tighter" and almost NONE of the power is radiated into the sky. The gain is also over higher. And the input impedance is 50 Ohms, so none of your power is wasted in "warming the earthworms."

Common Mode Rejection

"Common Mode" signals are RF signals that travel *from* the antenna on the *outside* of the coaxial cable back into the radio "shack." This energy is often not radiated at all, but is absorbed by the environment – including TVs and Home Entertainment systems!

All antennas experience a certain amount of common mode signal degradation, but it is especially present in (usually CB) vertical antennas that claim, "No radials required". With *those* antennas, the coax feed line is often taking the place of the radials and a significant portion of the radiation is carried (imperfectly) on random lengths of coax cable.

Integral to the Searchlight design are common mode rejection filters that all-but-eliminate this pesky, power-wasting problem and guarantee that a maximum amount of power is radiated where YOU want it to go.

Bandwidth and VSWR

A typical ¼ wave base station antenna has an inherent input impedance of about 30 Ohms. This is a substantial mismatch with 50-Ohm coaxial cable. The antenna builder is faced with two options. The first is to accept poor Voltage Standing Wave Ratio (VSWR) and deteriorated efficiency. The second is to utilize lossy matching networks to "smooth out" the VSWR at the expense of reduced radiation and, usually, reduced bandwidth.

Many "tall and narrow" base station antennas – such as some CB antennas and the well-known "J Pole" -- offer improved *theoretical* gain over a ¼ wave antenna because they are typically ½ to ¾ wavelength tall. But these designs all require either complex "Gamma" matching networks OR use transformers and coils to match the impedance of

the antenna to the 50-Ohm coaxial cable. This results in reduced bandwidth as well as the potential loss of much of their "gain."

Searchlight's unique configuration provides an operating bandwidth that is typically 20%. Please see the "Mystery" section for additional comments. This robust bandwidth means that, as the antenna is moved to new locations, it is unlikely to require re-tuning.

Gain

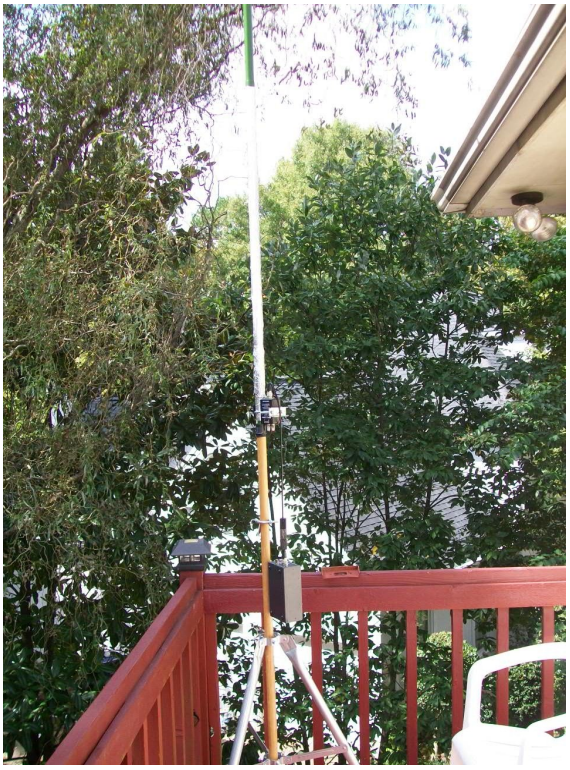
The Searchlight radiation pattern is omni-directional within 1%. Gain is dependent upon the height of the base and also upon the conductivity of the soil. On 10 meters, with average soil and at a height of 5 ft above ground, gain is about 1.1 dBi at an angle of about 18 degrees. At a height of 35 ft, gain is about 3.3 dBi at a DX-efficient radiation angle of just 9 degrees.

Physical Size

The Searchlight is approximately 3/8 wavelength tall. That's about 15 feet on 10 Meters and about 35 Inches on 2 Meters.

Physical models have been built for both these bands. Here are photos:

Two Meter Searchlight on test bench



Ten Meter Searchlight on back deck

Construction

The Two Meter device is built using ½" white PVC pipe (OD= 0.84") that is approximately 35" long. The Tee illustrated was simply what I had on hand to join two pieces of PVC together. (It is NOT there to "let the RF out!") A couple of ferrite beads at the base reduces common mode current to negligible levels.

I based the Ten Meter device on a commercial antenna by LDG Electronics called the S9-18. This is an 18' tall device composed of a number of telescoping elements. The finished Searchlight antenna is about 15' tall. LDG supplies a 1:1 current balun with the antenna, and that was used to control common mode currents.

The Searchlight design is under development. I will be delighted to provide more specific design information to any Ham that wishes to build and/or experiment with these concepts for personal and non-commercial purposes. Please contact me at my call sign @yahoo.com.

A Mystery

All of the initial design work was done using EZNEC Antenna Modeling Software. This software has been used around the world to design tens of thousands of antennas. In all but a rare handful of cases, "As Built" results agree extremely well with the models.

This antenna is in that rare category of designs for which EZNEC and "As Built" results are dramatically different.

All of the EZNEC Searchlight models that I have made show VSWR bandwidths that are on the order of 5% or so. That figure is consistent with physical measurements of "conventional" antennas such as dipoles, ¼ wave verticals, etc.

But the MEASURED bandwidth of every Searchlight that I have constructed has been anywhere from twice to as much as 7 times that amount!

I am not aware of any antenna design – with the exception of HUGE antennas such as the log-periodic OR resistively loaded antennas – that consistently provides this bandwidth.

And I do not know WHY!

I have submitted detailed designs to a PhD Physics Professor specializing in antenna design, and also to one of Marconi's top antenna engineers. Neither can explain the "excess bandwidth" except to state that it must be "measurement error," or excessive resistance in the physical models.

While it is always possible that either of these, or both, may be present, I have also shared the design concept with an "across the pond" Ham. Using his own versions of this design, and his own test equipment, he has also experienced the same "excess bandwidth" phenomenon.

Any constructive suggestions are WELCOME!

73

Bill Miller
KT4YE
704-845-5026

Official MARS 2013 Proxy Ballot

Mecklenburg Amateur Radio Society – W4BFB –

Notice of Annual Business Meeting to Elect 2013 MARS Officers and Directors

On Tuesday November 27th, 2012, a business meeting of MARS will be held immediately prior to the regular monthly club meeting, for the purpose of holding the annual election of MARS Officers and Directors. The current slate of declared candidates is:

President:

___ Andy Hawkins, K4GKK ___ (write in)_____

Vice President:

___ Mitch Barbato, KX4MB ___ (write in)_____

Secretary:

___ Sandra Jones, KK4DAW ___ (write in) _____

Treasurer:

___ Tom Hunt, KA3VVJ ___ (write in) _____

Directors: Two (2) 2-year Directorships:

(Select or use write-in for two only)

___ Stan Bagwell, AJ4ZL ___ (write in) _____

___ Steven Burke, KI4FAQ ___ (write in) _____

___ Charles Comerford, KK4HOK ___ (write in) _____

___ Shelley Eaves, KJ4ATK ___ (write in) _____

___ George Hohas, W4GEH ___ (write in) _____

To submit a paper proxy, you may present one at the meeting, or mail one to:

MARS
C/O Kevin Keyes, K4YYD
12200 Parks Farm Ln.
Charlotte, NC 28277

OR using email: BALLOT@W4BFB.org

NOTE: Mailed or electronic Proxies must be received before Monday, November 26th .

NAME:_____DATE:_____CALLSIGN:_____

You may use this notice as a written proxy, by printing it, signing it, and returning it to K4YYD with a checkmark next to those candidates you will be voting for, a cross-out through the name of those you vote against, and/or a write-in name for alternate candidate(s). (Write-ins are subject to qualification review, their agreement to hold office if elected, and a seconded nomination at the election.)

To cast an email proxy: you may send an email containing your name, call sign, plus the names of your choices for positions to:

BALLOT@W4BFB.org

73, MARS Nomination and Election Committee

Public Service Committee News from Mary Hunt, N4MH, Chairperson

VE Test Session will be held on Saturday, November 17 at 9 am.
Location: East Baptist Church, East Monroe Road
Test Fee is $10.00
Bring Picture ID, plus original and copy of any CSCE's and/or current license.
Arrive at 8:30 am to complete paperwork.
Any questions, call 704-948-7373.

MARS HOLIDAY PARTY

From Mary Hunt, N4MH

Make your plans now to attend the

2012 MARS Holiday Party.

The party will be held on Saturday, December 1, 2012 at 6:00 pm at the Central United Methodist Church, 6030 Albemarle Road. We will eat at 6:30 pm.

We are having the event catered again this year by Sports Page Food & Spirits.

Our menu for the evening served buffet style will be:

Ham
Turkey & Dressing
Tossed Salad
Green Beans
Mashed Potatoes
Banana Pudding
Iced Tea. and soft drinks

Cost is $5.00 per person for the party. Please see Mary Hunt at the November meeting to make/pay for your reservation. You can also mail your reservations to Mary at 16007 Wynfield Creek Parkway, Huntersville, NC 28078. NOTE: Last day to make a reservation is Tuesday, November 27, 2012

Last year we had a few members bring extra desserts for the event and they were enjoyed by all. If you would like to bring a dessert, please let Mary know.

MARS CLUB MEETING 10/30/2012
The meeting was called to order by Andy – K4GKK at 7:35 PM

We welcome the following new member:
Stefanie Comerford KK4LZR
Congratulations to Stefanie as well on her new Technician license!

Visitors:
Robert Rivera
Ron VanDerNoord
James Arnette

Mary Hunt, N4MH, reminded everyone about the Christmas party on December 1, 2012 as well as the upcoming VE Test Session.
Bryan Ferdinand, K4NET, spoke about EchoLink, repeaters, and waiting for connections on both. He thanked Mike Wentz KE4EHC for donating the audio compressor.
Bill Miller, KT4YE, showed everyone his antenna and explained about sunspots becoming more frequent. He encouraged people to see him individually if they were interested.

Meeting Topic:
John White, WB2NHQ, presented "W4BFB Go-Box Packet Station" with Seth O'Neal, KF4LLF, who was originally supposed to make the presentation but got knocked out of his flight by hurricane Sandy.

I. Equipment
II. Basic Packet Programs
III. Basic Packet Commands

The purpose of the presentation was to provide setup and operating instructions for a user of the packet radio in the Go-Box.
He listed the following website as important: http://w4bfb.no-ip.org

Andy Hawkins reminded folks that Geek Fest is looking for volunteers at CPCC on November 13, 2012.

The meeting was adjourned at approximately 9:15 PM.
Submitted by Sandra Jones, KK4DAW, for the secretary in absentia.

Minutes for Board Meeting of November 6, 2012

1. Meeting called to order at 6:40 pm.
   Present: Andy Hawkins – K4GKK; Tom Hunt – KA3VVJ; Kevin Keyes – K4YYD; Dave Holbrook – KC4YPB; George Hohas - W4GEH; John White, WB2NHQ; Shelley Eaves, KJ4ATK, Bryan Ferdinand, K4NET

   Not present: Barry May – KC4SSS

2. Tom proposed the minutes for the Board Meeting of October 9, 2012 be accepted as presented and Shelley seconded.

3. Treasurer's Report:
   Tom presented the treasurer's report. Dave motioned to accept, seconded by Shelley and approved by the Board.

4. Vice President's Report:
   Shelley reported that elections are taking place at this month's club meeting. Time permitting, Bryan may do an EchoLink presentation or Andy may present a slideshow of a past amateur radio event.

5. Secretary's Report:
   138 total current paid members including 4 life members.

6. Committee Reports:

   Repeater Committee:
   Bryan reported that firmware upgrades are coming to repeater controllers. Committee plans to swap our the 145.23 repeater at some point in the near future and there are plans to move the 145.29 repeater in order to offer better coverage. EchoLink on the 146.94 repeater is working well.

   Public Service Committee:
   No upcoming public service events

   Equipment Committee:
   Andy continues to inventory club equipment.

   Grants & Resources:

Kevin has contacted the ARRL requesting a list of tax attorneys in Charlotte with ties to amateur radio. The Board is interested in exploring changing the club's tax status from

501(c)(7) to 501(c)(3) which will allow contributors to make tax deductible donations to the club.

Field Day Committee:
Andy reported that the club came in 3rd place in the state in the 3A Class which is quite an accomplishment. Bryan reported that the club received a recall notice on the new Honda generator. Bryan will attempt the repair if the required repair can be easily fixed.

Entertainment Committee:
Christmas Party to be held on December 1st at Central UMC, 630 Albemarle Rd in Charlotte. The party starts at 6:00 and dinner is served beginning at 6:30. Sports Page catering will again provide ham, turkey & dressing, tossed salad, mashed potatoes, green beans and banana pudding.

Hamfest:
Bryan is looking into setting up a PayPal account for online ticket purchases. Bryan reported that the club is using social media (Twitter and Facebook) for the first time to distribute up to the minute Hamfest information. Bryan also reported that Flex Radio has expressed an interest in setting up a display booth. George reported that this year's tickets will have a liability disclaimer printed on the back. Next Hamfest meeting is November 14th at the Red Cross building.

Old Business:

Elections:
2013 club elections will be held at the November club meeting. John and Dave presented the Board with a slate of candidates to be presented at the November club meeting.

Candidates are as follows:
President – Andy Hawkins, K4GKK
Vice President – Mitch Barbato, KX4MB
Secretary – Sandra Jones, KK4DAW
Treasurer – Tom Hunt, KA3VVJ
Director – Charles Comerford, KK4HOK
Director – Steven Burke, KI4FAQ
Director – Stan Bagwell, AJ4ZL
Director – George Hohas, W4GEH
Director – Shelley Eaves, KJ4ATK

The nominating committee made a motion to the Board to waive the time period requirement and approve the candidacy of Charles Comerford for a Director position. The Board approved the motion.

Andy reported that the club will be handing over QSL bureau responsibilities to CDXA after discussing the matter with current bureau manager, Bill Harding, K4AHK.

New Business:

George reported that the Town of Matthews' fire chief is looking for a ham liaison in order for the town to meet its FEMA certification. This could potentially open up the possibility of placing a new club repeater on the town's tower. Dave to discuss this issue further with the fire chief.

The Board is working on getting a new net manager and possibly an assistant net manager by the end of the year to replace current net manager, Don Eaves, KJ4ATJ.

There being no further business, George motioned to adjourn the meeting at 8:55 seconded by Bryan.

Submitted by Kevin Keyes, K4YYD
Secretary MARS

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

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Barry May, KC4SSS, kc4sss@w4bfb.org
John White, WB2NHQ, wb2nhq@w4bfb.org

Newsletter Editor
Sandra Jones, KK4DAW, w4bfbeditor@w4bfb.org

Mecklenburg 2m Emergency Net
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Newsletter Editor:
Sandra Jones, KK4DAW
8824 Gelligum Drive
Charlotte, NC 28277

w4bfbeditor@w4bfb.org