



The Amplifier

Tar River Amateur Radio Club

March 2007

President	Robin Keller, WA4WPD	252-459-9345
Vice President	Marty Young, W4MY	252-824-7976
Secretary	Les Zavadil, W4FRA	252-446-7816
Treasurer	Fred Winner, KE4LXW	252-459-4332
VE Director	Bill Thomas, N2BT	252-442-6131
Newsletter Editor	Les Zavadil, W4FRA	252-446-7816

WEB SITE: www.tarriverarc.org

Next Meeting

The March meeting of the Tar River Amateur Radio Club will be held Monday, March 5, at BODDIE NOELL ENTERPRISES, located at 1021 Noell Lane in Rocky Mount. The meeting will start at 7:00 p.m. Please enter the building through the main entrance. Parking is available in front of the building or in the parking lot. The March program will be on Band Plans by Robin, WA4WPD.

2007 VE Exam Schedule

Bill, N2BT

The Tar River Amateur Radio Club, Rocky Mount, NC, will hold ARRL/VEC Amateur Radio Exams in 2007 as follows.

	August 4
April 7	October 6
June 2	December 1

Exams will start at 9 a.m. and will be held at

The Braswell Memorial Library
727 N. Grace Street (corner of Grace and Peachtree Streets)
Rocky Mount, NC 27804

Please bring the following items when attending a testing session.

- Photo identification (drivers license)
- Social Security Number
- Original amateur radio license
- Copy of amateur radio license
- Original certificate(s) of successful completion
- Copy of certificate(s) of successful completion
- Test fee of \$14 payable to ARRL/VEC (checks preferred)

For further information visit our club website at www.TarRiverARC.org or contact

Bill Thomas N2BT
VE Team Coordinator
Rocky Mount, NC
(252)-442-6131

Email: N2BT@arrl.net

THIS NEWSLETTER MAY BE REPUBLISHED OR REPRODUCED BY CLUB MEMBERS IN WHOLE OR IN PART IN ANY FORM WITHOUT ADDITIONAL PERMISSION.

President's Corner

Robin, WA4WPD

Wow. March already. Spring time is in the air. Field Day is approaching. More on that later.

The executive committee met. The club now has a budget. It will be presented at the meeting.

The NC QSO party will be over by the time you read this. I know of three club members that plan to participate. I'm hoping for an update.

The club should also have some new Generals and Extras. There is a special VE session on the 24th. I know of a few paper upgrades and some will be taking their written.

As of this writing there are fourteen scouts wished to participate in the April Skywarn meeting. None of the other groups have contacted me. I will confer with the scouts just before the meeting. For now the meeting is still set for Boddie-Noell. If this changes it will be announced at the club meeting and the E-Mail reflector.

The Nash General EOC is on go. Nash General has issued procedures necessary to get badge access to the radio room. Anyone wishing to be a control OP for this EOC will have to do three things.

First there is a NGH procedural booklet to read and sign. This explains the codes used at NGH and procedures to follow.

Second you MUST submit to a background check.

Third, when everything passes you have to have a picture ID taken.

A Nash General ID badge will be issued to each individual that passes. This card will get one into the hospital and through all doors necessary to get into the radio room.

This does not mean that guest are not allowed. But in order to get into the radio room guest will have to be escorted. Understand that this is an ARES function. Fred (KE4LXW) can update everyone on ARES participation.

Now to Field Day. There have been several folks saying we need a change of venue. I agree. It's fun at Boddie-Noell. But our opportunities to learn seem to have played out. I propose that we change gears. There are two EOC's in the area with full HF gear. What about running class "F". At both sites. Yes I know this will have to be two separate Field Day sites, each having to submit logs. But..... They will not be any set up (OK... it takes 10 minutes). All we have to is show up and operate. With that said, several folks want to have a cook out that Saturday for lunch. The monies the club will save should easily pay for the cook

out. What y'all think? Any and all other ideas will be entertained. This will be discussed at the meeting. There will be some logistic issues to figure out.

The meeting this month will be Band Plans. I'll try to make it un-boring.

See y'all at the meeting.

Upcoming Hamfests

March 25 – Kinston, NC

April 1 – RARSfest, Raleigh, NC

April 15 – Chesapeake, VA

April 21 – Morganton, NC

April 27-28 – SVHFS Conference, Atlanta

May 12 – Reidsville, NC

Contests

March 3 - 6

ARRL International DX Contest

DARC 10-Meter Digital "Corona"

Open Ukraine RTTY Championship

Spartan Sprint – CW

March 10 - 12

RSGB Commonwealth Contest – CW

Wisconsin QSO Party

Oklahoma QSO Party

Idaho QSO Party

North American RTTY Sprint

EA PSK31 Contest

AGCW QRP Contest – CW

March 17 - 18

Russian DX Contest

Virginia QSO Party

10-10 Mobile Contest

CLARA & Family 2007 HF Contest

9KCC Contest

BARTG Spring RTTY Contest

March 24 - 26

CQ WW WPX Contest – SSB

EU EME Contest – CW/SSB

ARRL NC Section News

GLOBALSTAR SATELLITE PROBLEMS

Our served agencies are increasingly relying on satellite phones for back up communications and some think it has lessened the need for HF and the other services provided by amateur radio. You should refer your emergency management contacts to a recent SEC filing made by Globalstar. The performance of the S-band power amplifiers in the company's satellites is degrading, likely to due radiation exposure. Globalstar is working to reorient the satellites in order to reduce the impact of the problems and plans to start replacing the satellites in 2009. But there is apparently a

significant chance that the new satellites won't be up in time and that sometime in 2008 substantially all of the Company's currently in-orbit satellites will cease to be able to support two-way communications services!

UPDATED ARES PRESENTATION AVAILABLE

I enjoyed visiting folks in the eastern part of our state during the Area 1 & 2 meeting in Columbia, NC. We're lucky to have such a strong ARES organization in that part of our state that is so vulnerable to hurricanes. I shared a revised version of my ARES introduction and Susan, WA4AKB, will be posting it on www.ncarrl.org. I've added some comments about the vulnerabilities of the public carrier networks and satellite services during disasters. The key point I make is that recent advances in telecommunications technology have given our public network greater capability, but NOT better reliability. In fact, in some ways the public networks are LESS reliable. Amateur Radio is more important than ever!
FROM THE SECTION TRAFFIC MANAGER -- Dave Roy, W4DNA

I know that some of our traffic handlers get frustrated sometimes by the volume of redundant traffic that moves into the section. We do seem to get a lot of the "Congratulations on your license renewal" kinds of messages. Some people even use this as an excuse not to get involved in traffic handling. But I believe the content of the message is irrelevant. Our business as NTS traffic handlers is to pass and deliver the traffic accurately and efficiently. If you want to "get good" at handling traffic, then you need to get involved in traffic handling. Step up to the HF nets and support your local traffic nets. "Get good" at what, in the end, is what we are all about -- organized communication -- passing traffic!

QCWA SCHOLARSHIP

Congratulations to North Carolina's own Reid Morine, W4RSM, for winning a memorial scholarship from QCWA! Reid is the son of our Section PIC, Bill Morine, N2COP. Reid will be majoring in engineering at UNCW.

SKYWARN CLASSES IN AREA 11

Iredell County ARES is sponsoring Skywarn Spotter Training on March 17th from 10am to 3pm at the Iredell County Agricultural Center, 444 Bristol Drive in Statesville. Basic, Advanced and Radar classes will all be offered. If you're interested, email Catherine McDaniel, WB4CAT at wb4cat@roadrunner.com.

NC QSO PARTY

What better way to note the passing of Morse Code testing than to spend the weekend operating CW

during a contest? Or Phone? The North Carolina QSO Party will be February 25, from Noon to 10pm. The QSO party is sponsored each year by the Forsythe Amateur Radio Club, W4NC. More information is available at www.w4nc.com.

NEW "EMERGENCY RADIO" FOCUS FROM ARRL

2007 publicity efforts from headquarters include a focus on Amateur Radio's emergency communications capability, both as a resource to the community and individual families. Check out the new web site at www.emergencyradio.org.

MEDIA HITS

Our outstanding Public Information Coordinator is at it again! Thanks to Bill Morine, N2COP, for some outstanding coverage of the Morse Code changes. The Wilmington (NC) Star-News (NY Times owned, 58,000 circulation) did a front page story above the fold on Saturday (Feb. 10th) on the last Morse Code VE session in the area. The Wilmington ABC-TV affiliate came out and the VE session was the lead story at 6 PM and the #2 story at 11 PM!

UPCOMING HAMFESTS & MEETINGS

February 17: Area 13 ARES Meeting, Lincolnton

March 10-11: North Carolina Section Convention/Charlotte Hamfest

March 25: Down East Hamfest, Kinston, NC

March 31: State ARES Meeting, Raleigh (time & location TBA)

April 1: North Carolina State Convention/Raleigh Hamfest

JANUARY TRAFFIC

W0UCE 978 (BPL), W4EAT 572 (BPL), W2EAG 343, W4UEF 318, KI4YV 150, N3BW 141, KE4JHJ 99, WA4OBR 96, K4IWW 91, W4DNA 78, KD4FUN 60, WA2YBM 58, W4FAL 53, K4RLD 52, W3HL 35, W4NCD 33, KE4AHC 29, W4EHF 28, W4TTO 28, W4LN 15, KI4PNL 12, KF4VXJ 9, W4CC 5

JANUARY PUBLIC SERVICE HONOR ROLL

W4DNA 150, W4TTO 148, K4RLD 140, W4EAT 130, W4FAL 130, WA2YBM 125, K4IWW 120, W0UCE 120, KE4JHJ 110, W2EAG 110, W4NCD 101, KD4FUN 90, KI4YV 90, W4LN 75.

ARRL North Carolina Section

Section Manager: Timothy B. Slay, N4IB

n4ib@arrl.org

2007 Club Dues/ARRL Dues

This is just a reminder to everyone that the 2007 TRARC dues are now due... \$15 per yr for

individuals \$6 per additional family member for family's.

If you are interested in becoming a 'new' ARRL member, we now have a special form that you can completely fill out, pay thru the club, and the club keeps \$15. If you are RENEWING your membership in ARRL, you may now pay thru the club, and it keeps \$2. ARRL dues are \$39 for regular and \$36 for SENIORS per year. There are others options also.

Help support your club.

Pay your dues at the meeting or send your check to: Fred Winner KE4LXW, 8972 Lancaster Store Rd., Castalia, NC 27816.

Digital Modes

Les, W4FRA

In "CQ VHF Visits West Mountain Radio" (CQ-VHF, Winter 2007) Gordon West, WB6NOA, states "There are over 100 ham radio sound card programs that support operating on over 25 distinctly different modes,..." This is the first in what we hope will be several short monthly articles on some of those Digital Communications Modes.

In this article we will look at what it takes to get started, point out a few good web sites where one can get a lot more information, and identify some frequencies where the digital modes can be found. In coming months we will look at many of the "sound card" digital modes, one mode per month. We will not be covering proprietary modes that require a specific vendor's equipment. The only equipment required for the modes we will be covering is your SSB transceiver, a PC with a Soundblaster compatible sound card, and an interface unit. That interface unit can be as simple as a resistor voltage divider, but usually also includes some isolation and buffering.

The interface can be homebrew, built from a kit, or commercial. Information on homebrew interface circuits can be found at www.psk31.com, <http://home.teleport.com/~nb6z/>, or www.buxhamparts.com. BuxComm at the latter web address also sells an interface unit called the Rascal that is available in kit form for \$29.95 or assembled for \$49.95. If you have built electronic kits before, you should be able to assemble the kit version in less than an hour, if you have never built a kit before but can solder it is still just a one evening project. Other commercial interfaces are available from MFJ, West Mountain Radio, and others. The interface will connect the accessory plug (most SSB rigs produced in the last 20 years have one) on your radio to the sound card in your computer.

You will also need some software for your computer. Software for all of the popular modes is available both as "freeware" and "shareware". Some of the more popular programs are WinPSK SE, DigiPan, WinWarbler, HamScope, MultiPSK, and MixW. The latter two programs are "shareware" available as trial versions that must be registered for a fee after a trial period, all of the others are available free. More programs that are mode-specific will be identified in later articles, the free programs mentioned here for the most part work for PSK31 and usually RTTY. The "shareware" programs will work on most of the modes that we will be discussing in the future. There is one other free program that is not required but is highly recommended, QuickMix. The sound card settings on your computer will usually reset each time you boot up the computer and many other programs that access the sound card also change the settings. QuickMix will allow you to save the settings used for a particular application in a way that they can be easily retrieved the next time you want to use that program. All of these programs are available on the web for download and are easily found by doing a search on the program name. One other thing that needs to be done with your PC is to go to the Windows Control Panel and turn OFF all of the windows sounds. You don't want to transmit "You've Got Mail" in the data portion of the band.

Once you have your rig connected to your PC via the interface and have one of the necessary programs installed, where do you find signals to listen to? The ARRL Band Plans are a good starting point, but only a starting point. If you stick to only the frequencies listed for RTTY/Data in the ARRL Band Plans, you will miss half the fun. The web sites listed above will have more information on frequencies where PSK31 and RTTY signals can be found. Specific frequencies for some of the other modes will be mentioned in the article dealing with that mode. Also, during the summer sporadic E season when Six Meters opens up, listen on 50.290 and you will find a few PSK31 signals and an occasional RTTY signal. I have worked 22 grids in 14 states and 2 Canadian provinces on Six Meter PSK31 in the past 2 years.

Now that you have found one of those funny sounding signals, how do you know what mode it is, so you can make the proper selection in your software and begin decoding? Usually the signals can be identified by sound. The NB6Z web site mentioned above and www.wb8nut.com/digital.html both have audio files that you can listen to in order to find out what a particular mode sounds like. Another way to do it is to launch your software with your rig turned OFF.

Typing a test in the Transmit buffer and, after double checking to BE SURE THE RIG IS OFF, clicking on the transmit button, or click on the CQ Macro button and you will hear the sound of that mode in your computer's speakers.

In the coming months we will have discussions of PSK31 and it's variants (this may take 2 months), RTTY, Hellschreiber, MFSK, Olivia, MT63, THROB, RTTYM, Contestia, and a couple of modes that are used almost exclusively on VHF, FSK441 and JT6M. BY the time we finish these, there will probably be a couple of new ones to investigate. See you next month with a discussion of PSK31.

Ham Gear for Sale or Trade

If you have any ham gear or other electronic gear to sell or trade, send a copy of your ad to W4FRA@trarc.org.

This is a list of the Items from WA4TCC's estate. If you desire to bid for any of these items please send a message to me mailto:rdkeller@nashvillenc.com... do not send to list (If you do....Everyone on the list will know your bid). Please specify WA4TCC Estate in the subject line and identify the item for your in the text of your message. Please include your contact information. If you desire to bid for more than one item, submit separate bids for each.

The highest reasonable bid will be accepted. That is, if an item is worth \$100, please don't waste our time by bidding \$5.00 for it. Please examine the list carefully. If it says "condition unknown" it means we are either unable or UNWILLING to turn the device on and test it.

There is no financing involved. All sales are final. Cash, no checks or credit. All proceeds go to WA4TCC's widow.

All sales must be approved by WA4WPD, N4JEH AND WT4S.

- ADI AT-600** S/N 8350001047
VHF/UHF dualbander HT with external mic
replacement battery by W & W Manufacturing
One original battery
Manual
missing charger
- Aerotron External Speaker**
- Hallicrafters S108** S/N 284925 / 29602
receiver
unknown condition
Missing Manual
- Hallicrafters S120** S/N 120000D 44309
receiver

- manual
unknown condition
- Heathkit HD 1426** S/N 00816
Field strength meter
unknown condition
missing manual
- Icom TV-R700** S/N 03753
video from a scanner unit
- Kenwood PG-5A**
TNC data cable
new in box \$15.00
- KLM mutil 2700** S/N 93130
2meter 10 meter receive OSCAR transceiver
unknown condition
missing manual
- MFJ 280**
compact speaker
- MFJ 1278** S/N 3014854
TNC, CW, and RTTY decoder early 80's model
condition unknown
power supply
interface cable for unknown radio
Parallel cable
missing manual
- Mirage B108** S/N 5289-1181
Two meter AMP
condition unknown
missing manual
- Realistic HTX 404** S/N 0075992
440 HT
works
charger
speaker mic
missing manual
- Realistic BTX 124** S/N 70200578
commercial VHF business band radio
- Realistic BTX 124** S/N 70200579
commercial VHF business band radio
- Vibroplex Vibrokey standard**
Ham Key
- Yaesu FV-107** S/N OC 030150
external VFO
- Yaesu FP-107E** S/N OG 020594
power supply
- Yaesu FC-107** S/N OE 030700
Antenna Tuner
- Yaesu FT-107M** S/N OE 050118
160-10 HF transceiver
desk mic
Display malfunctions
missing manual
no WARC bands

Yaesu FTV 107/R **S/N 040326**

transverter 430 Mhz
new in box
was 229.95

Yaesu FTV 707 **S/N 020170**

2 meter transverter

Yaesu FTV 700 **S/N 6K140050**

6 meter transverter

FOR SALE – IC-735 HF RIG.... excellent condition..... with manual..... asking \$500.

57 ft. free-standing commercial grade tower in three sections, PLUS the top tripod to hold antenna, asking \$300.

– Fred Winner, KE4LXW, 252-459-4332

FOR SALE - Kenwood TH-215A w/manual \$50; Azden PCS-7200 220 MHz w/manual \$200; KLM Beam Antenna, KT-34A, 10, 15,20M w/manual \$100; 5 Rohn 25 tower sections, HyGain Mark IV Rotator, Mast, Thrust Bearings, package \$300; Radio Shack DC Power Supply, regulated, 3 Amp, w/manual \$25; Icom IC-03AT, 220 MHz, \$100; Radio Shack HTX-202, \$50.

- John Faulkner, KR4SV, 252-442-7946

Input Wanted

If you would like to see something in particular in YOUR newsletter, let me know. If you have an article of interest, send it to me. – Les, W4FRA.
