



MAY 2007

*The Official Publication of*

## **The Western Carolina Amateur Radio Society, Inc**

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

### **President's Microphone...Scott W4IYS**

Recent weather events demonstrate once again how fragile public utility service can become. The prepared amateur operator can be of invaluable service when these occurrences disrupt usual modes of communication. See you at the meeting ...73  
Scott - W4IYS

### **WCARS May Meeting**

The next WCARS meeting will be May 3, 2007, 7:30 p.m. in the Simpson Auditorium, Simpson Bldg, at ABTech. Program: To be announced.

### **April minutes...Karen - KG4OUP**

Meeting was called to order at 7:30 p.m.  
Scott - W4IYS started introductions. There were 44+ in attendance.  
Scott - W4IYS announced NVIS training on April 7<sup>th</sup> (practice) at 6:00 p.m. April 14<sup>th</sup> is official check in.  
No treasurer's report was given due to absence of Karl - K4PCY.  
Dean - K2JB gave no report for Hamfest. Everything going according to schedule.  
Henry - KF4ODC announced Advance Skywarn classes on April (7<sup>th</sup>).  
Chet - KE4VXC announced Field Day is in the works and cooking along. Special thanks to Bill - N4OOC.  
Bill - N4OOC gave a report on the repeater. It is coming along. PL Tone has been put on.  
Carl - NVAA gave the program on DX Contesting. Door prize was won by Marc - KG4OPM.  
Meeting was adjourned at 9:03 p.m.

### **SkyWarn Training**

On April 7th, Vince Di Carlo - KF4ZOQ, Warning Coordination Meteorologist (WCM), NWS, Greer, SC, conducted advanced SkyWarn training at the Buncombe County Emergency Operations Center, with 10 students in attendance. The course concluded with an introduction to Doppler radar interpretation. The course is informative and useful for anyone interested in becoming a spotter for the National Weather Service (NWS).

**Who's calling our net? (Not me!) ...A partial reprint of original message from Dick - K8SKX (as suggested by Dean - K2JB):** Where's the net control? (I'm here, why isn't the NCS?) Ever hear this? Why didn't the net take place? "You" were interested enough to make an effort to try and check in, but "you" weren't interested enough make it work by stepping in as net control. So the net was skipped and a number of individuals lost out because of "not me".  
Nets can be: formal (directed) or informal (open); have a specific purpose (traffic, emergency practice, swap, rag chew, information etc.); relaxed or very structured. The WCARS Information net, while being a directed (formal) net is a relaxed net whose purpose is to provide information about WCARS activities and rag chew comments by the participants. "Directed" means there is a net control station that keeps the net moving, somewhat orderly, and sees that each station gets to talk. Why if so many people want the net does it always depend on one person to see that it operates? It's probably because too many hams are afraid to try NCS because they might make a mistake... All "net

control stations” make mistakes. So... The next time it’s net-time and the regular NCS doesn’t show up, step up and say “I’ll do it”. The WCARS Info net preamble is printed elsewhere in this issue. If you don’t have the preamble... say what you can remember, make one up, and call the net. It’s fun, it’s rewarding, and no one is going to care if it’s not “perfect”. Besides, what is perfect anyway other than successful? And if we at least try, we all can achieve that.

## Hamfest Calendar

**May 5, 2007** - Upstate Hamfest and Computer Show, Spartanburg, SC, 575 Fairgrounds Road, Piedmont Interstate Fair Grounds, South Carolina Section Convention, Sponsor: Blue Ridge Amateur Radio Society - <http://www.upstatehamfest.org>  
Talk-In: 146.610 MHz  
Contact: Rusty Kirkpatrick - AJ4RK  
351 Old Georgia Road, Moore, SC 29369  
Phone: 864-576-9643 - Fax: 864-598-6154  
Email: [aj4rk@bellsouth.net](mailto:aj4rk@bellsouth.net)

**May 12, 2007** - RCARC Hamfest & Computer Show, Reidsville, NC, Liberty Baptist Church, 141 Broadleaf Road, Sponsor: Rockingham County ARC, <http://www.rcarc.com>  
Talk-In: 146.850 MHz  
Contact: Dal Williams - W4YQY  
307 Oleander Drive, Suite D, Eden, NC 27288  
Phone: 336-627-7076 Email: [w4yqy@rcarc.com](mailto:w4yqy@rcarc.com)

## THE BIG ONE!

**May 18, 19 and 20, 2007** – 2007 Dayton Hamvention®, Dayton, OH, Hara Arena Complex, 1001 Shiloh Springs Rd (Trotwood), Sponsor: Dayton ARA, <http://www.hamvention.org>  
Talk-In: 146.94, 146.91, 223.94, 442.1  
Contact: Jim Nies - WX8F, c/o Dayton Hamvention, Box 964, Dayton, OH, 45401  
Phone: 937-276-6931 Fax: 937-276-6934  
Email: [exhibits@hamvention.org](mailto:exhibits@hamvention.org),  
[fleamarket@hamvention.org](mailto:fleamarket@hamvention.org),  
[tickets@hamvention.org](mailto:tickets@hamvention.org)

**May 19, 2007** –Mountain City Hamfest, 1923 South Shady Street, Mountain City, TN, Sponsor: Johnson County Amateur Radio Club  
Talk-In: 146.610 PL 103.5  
Phone: 423-727-0333

**May 26, 2007** - Durham Hamfest, Bahama, NC,

Little River Community Complex, 8305 N. Roxboro Rd., Sponsor: Durham FM Association  
<http://www.dfma.org>  
Talk-In: 147.225, no tone  
Contact: Linda Jackson - KF4LJZ  
122 Infinity Rd., Durham, NC 27712  
Phone: 919-477-8368 Email: [kf4ljz@aol.com](mailto:kf4ljz@aol.com)

## Special Events

### May 18, 2007

(Madison County) Tourism Day will include 2 meter and HF operations from 1000 through 1400, at the I-26 (East) Welcome Center north of Mars Hill, NC. Sponsor: Madison County ARCT – Contact: B. Allen Stines - KF4ZDS  
EC for Madison County ARCT  
1300 Barnard Road, Marshall, NC 28753  
Radio: 224.360, 224.600, 224.660  
Phone: 828-712-6554  
Email: [bpvfd1102@intergate.com](mailto:bpvfd1102@intergate.com)

### July 13, 2007

(Madison County) Hott Doggett 100 bicycle race (2 separate runs). Supported by Madison County ARCT – Need VOLUNTEERS to work this event (encompasses most of Madison County). ARCT will utilize the 220 band, and hopes to have a 2 meter link in place by race time.  
<http://www.mhc.edu/hotdoggett/>  
Contact: B. Allen Stines - KF4ZDS  
EC for Madison County ARCT  
1300 Barnard Road, Marshall, NC 28753  
Radio: 224.360, 224.600, 224.660  
Phone: 828-712-6554  
Email: [bpvfd1102@intergate.com](mailto:bpvfd1102@intergate.com)

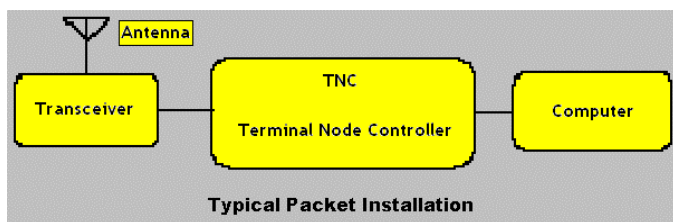
**Packet Radio** - First, a bit of history, which I found in “Your Gateway to Packet Radio” by Stan Horzepa - WA1LOU (ARRL, 1989). In 1964 the RAND Corp made a study of store-and-forward switching techniques. The term “packet” was coined in 1965. The first actual amateur packets were transmitted and received in May 1978 at a meeting of the Montreal Amateur Radio Club. A year and a half later new FCC rules took effect that allowed US amateurs to use ASCII for radio teleprinter communications, remote-control operations and the operation of data networks and other uses consistent with the Amateur Radio Service. The first US packet demonstration was presented at the 1980 ARRL National Convention.

KA6M put the first simplex digipeater on the air on 2 meters on December 10, 1980. Amateur packet radio was off and running in the US.

Typical of most ham development, much of the early operations were based on combining surplus gear with homebrew equipment. Software was written for those 'new' personal computers on micro-processors. Terminal node controllers (TNC) were developed to control the radios and surplus telephone modems were used to modulate the radios. Many organizations were involved in packet development. These groups adopted common protocols (ex AX.25), developed hardware and established networks. Today's systems are still based on this work.

So just what is packet? It is a system where the transmitting station breaks 'information' into small units (packets) which along with identification and error checking data are sent to a receiving station. If the packet is received and interpreted correctly, the receiving station acknowledges the receipt and a new 'packet' is sent. If the packet is not correctly received then the sender retransmits the packet until it is correctly received. This continues until all the information is sent and correctly received. If you've ever talked to a FAX machine on the telephone, you've heard something similar to a packet transmission.

Packet equipment has changed over the years. Early on a packet station consisted of a 'dumb terminal' or PC connected to a TNC which was connected to the mike, PTT and speaker of a radio. MFJ, KAM, AEA and PacComm were common makers of TNCs. Today, much of packet as well as other digital modes use the soundcards of PCs, an interface to control the radio and the radio itself.



Why use packet? Like other operating modes, it has its advantages and disadvantages. As I see it, the **main advantage of packet is that it creates error-free messaging.** Lists of information can be accurately sent between stations with the

**opportunity to make a 'hard copy' at the receiving end. Messages and files can be automatically transmitted.** They can be stored on Packet Bullying Board systems (pbbs) for later retrieval. The existing system of pbbs's allowing packet messages to be sent worldwide to one or more recipients. Another real advantage of packet is its ability to 'digi-peat' or link several stations in series to reach the desired location. Digi-peating is where a station receives a transmission, temporarily stores it, then retransmits it on the next station in the linking. Hence you don't need a lot of power to reach a distant destination. Finally, only minimal equipment is needed: a radio, TNC or soundcard interface and PC or terminal. I have successfully used an old laptop computer, TNC and 2m HT for packet a number of times.

Packet's main disadvantage is that it's slow, only 300 baud on HF and usually 1200 baud on VHF although 9600 baud is used at times. The speed is cut in half each time you 'digi-peat', so don't expect fast action on packet. It's not internet, but it is all amateur radio.

Currently there is some packet activity in the area. The Hendersonville pbbs (HVLBBS) operates on 145.630 MHz as do 'digi's' on Bearwallow Mountain (BRARC), and Rich Mountain (TRARC) which links to the pbbs. Also on Bearwallow is a digi on 145.010 which links to many other stations and is used primarily for forwarding between pbbs's. The Hendersonville DX cluster operates on 144.990 MHz and 147.570 MHz.

Current plans are for WCARS to re-enter the packet system in the near future. Digi-peaters or nodes (fancy digi-peater with cross frequency capabilities) are being planned. Also Buncombe County ARES is planning to use packet to support emergency operations of the Red Cross as well as other agencies.

73 Dick - K8SKX

**THE SMOKE TEST**  
**The Official Publication of the**  
**Western Carolina Amateur Radio Society, Inc.**  
**PO Box 1488, Asheville, NC 28802**  
**www.wcars.org**  
**W4MOE/146.910 - /PL 91.5 Spivey Mountain/Asheville**

**2007 OFFICERS**

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Public Info	Bob Dockery	WD4CNZ	254-0513	<a href="mailto:wd4cnz@arrl.net">wd4cnz@arrl.net</a>
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Hamfest Chair 2007	Dean Blair	K2JB	665-1830	<a href="mailto:k2jb@arrl.net">k2jb@arrl.net</a>
Smoketest Ed.	Steve Emory	KF4TVD	658-0261	<a href="mailto:kf4tvd@arrl.net">kf4tvd@arrl.net</a>

American Radio Relay League Affiliate No. 0602

WCARS meets at 7:30 PM the first Thursday of each month at the Simpson Building at AB Technical Community College. Everyone is welcome to attend.

Membership dues are \$20/yr payable in January.

**Weekly Nets of local interest**

Net	Freq(MHz) offset / PL	Day	12 Hr Time	24 Hr Time	NOTES
WCARS Information Net	146.910 - / 91.5	Monday	9:00 pm	2100	Informal, Everyone Welcome
Oasis Shrine Radio Corp. Net.	145.190 -	Sunday	9:00 pm	2100	
BRARC Net	146.640 - / 91.5	Sunday	8:00pm	2000	
Good Morning Net	146.760 -	M-W-F	9:00 am	0900	Informal, Everyone Welcome
Madison Co. Am.Rad.Com.Tm	224.660 - / 100	Tuesday	9:00 pm	2100	Madison Co. Emerg. Comm Net
Buncombe Co. Emerg Mgt Net	146.910 - / 91.5	Wednesday	9:00 pm	2100	Directed Net, ARES / RACES
Volunteer Net	147.180 + / 136.5	Friday	9:00 pm	2100	Info, News and Swap Net
6600 Net	145.190 -	Saturday	9:00 pm	2100	Many Check-Ins - Wide Coverage
Blue Ridge Traffic Net	146.610 -	Nightly	9:00 pm	2100	May be ARES / SKYWARN in bad WX
Mount Pisgah 220 Net	224.260 -	Sunday	9:00 pm	2100	Informal, Everyone Welcome
Mount Mitchell 220 Net	224.540 -	Monday	8:00 pm	2000	Informal, Everyone Welcome
SATERN Net	14.265	Daily	10:00 am	1000	Salvation Army Team Emerg. Radio net
K4UUQ Morning Net	7.225	Daily	7:00 am	0700	Rag chew
NC Morning Net	3.927	Daily	7:45 am	0745	SSB Traffic Net
NC Evening Net	3.923	Daily	6:30 pm	1830	SSB Traffic Net
Carolinas Net (early)	3.573	Daily	7:00 pm	1900	CW (20-22 wpm) Traffic Net
Tarheel Emergency Net	3.923	Nightly	7:30 pm	1930	Directed Net, NC Emerg. Mgt / traffic
Carolinas Slow Net	3.571	Nightly	8:00 pm	2000	Slow CW (8-10 wpm) Traffic Net
Carolinas Net (late)	3.573	Nightly	10:00 pm	2200	CW (15-18 wpm) Traffic Net

## WCARS Information Net – Suggested Format

GOOD EVENING. WELCOME TO THE WESTERN CAROLINA AMATEUR RADIO SOCIETY CLUB INFORMATION NET.

THE NET CONTROL OPERATOR IS \_\_\_(your callsign)\_\_\_ and my name is \_\_\_(your name)\_\_. I am located at \_\_\_(your location)\_\_\_ and the club repeater, 146.910, W4MOE, is located on the top of Spivey Mountain about 3 miles NW of Asheville, North Carolina.

This net meets each Monday night at 9:00pm and it is your net, set up primarily for club members to check in with club information, news, functions, and announcements.

We also encourage other hams, plus our new hams in the area to become regular checkins. You do not have to be a member in order to check in. If you are not a member, I personally extend a special invitation to become a part of WCARS.

The club meets on the first Thursday of each month at 7:30 PM in the Simpson Building on the campus of Asheville-Buncombe Tech Community College. All interested persons are invited to attend and visitors are always welcomed.

At this time, do we have any emergency traffic? [pause...listen...react if needed]

If none, say HEARING NONE, I WILL ASK ALL CHECKINS TO PLEASE GIVE MY CALLSIGN\_ (your call)\_, unkey to make sure you are not doubling, then re-key, giving your call, name, location, if you are mobile, have any announcements, and if you will be in or out.

At this time, let's take a moment of silence for any lost family members, friends, or silent keys during the past week. [pause...] Thank you for the respect of the silence.

Now standing by for checkins on the WCARS information net, please call \_\_\_(your callsign)\_\_\_.

NOTE: make a list as received, recognize each one after a group has been gathered, and ask for further checkins, repeating this step until there are no further checkins. Once a group has been recognized and there are no further check-ins just now, go back to the list and have those check-ins with announcements make them.

NOTE: if anyone has given an announcement containing dates/times/places/contact persons, etc. ask if anyone needs a repeat or fill in case someone missed something when the announcement was made.

Once these are complete, begin go back at the top of the list asking for comments from those who have stayed in for the net. Once all comments have been heard and you have asked for additional check-ins and found none...proceed to close the net:

I APPRECIATE ALL CHECKINS AND HOPE YOU WILL BE FAITHFUL TO CHECK IN EACH WEEK. I HAD A TOTAL OF \_\_\_ (NUMBER) \_\_\_ CHECKINS INCLUDING MYSELF.

AT THIS TIME I WILL RETURN THE 146.910 REPEATER BACK TO NORMAL AMATEUR USE. 73's AND GOOD NIGHT.

THIS IS \_\_\_\_\_ your callsign \_\_\_\_\_ NOW CLEAR.

