

Orange County Radio Amateurs (OCRA) Newsletter May 2008

From the Editor

Toward the end of every month, I anxiously await the arrival of newsletter articles from OCRA club members. And, every month, I am not disappointed in the number of articles and the diversity of articles.

As you read through this month's newsletter, you will find out more about fellow members of YOUR club. You will learn about a significant recognition that YOUR club has in a recent radio competition. And, you will be inspired to join in the annual Field Day activities with members of YOUR club.

So, get comfortable and read through your club's newsletter. I will bet you'll be very proud to be a member of OCRA when you have finished reading. And, remember – get radio active!

Best regards,
Laurie - N1YXU
lbmeier@bellsouth.net

Summary of the April Meeting

The April OCRA meeting was held on Monday, April 14. There were quite a few topics discussed at the meeting. Summaries are shown below:

- 1 Proceeds from sales at the recent RARSfest netted the club \$544. Many thanks to all who helped at the OCRA tables and also to those who donated portions of sales to the club.
- 2 Welcome to our newest member – Adam Sowers, KJ4DEO!
- 3 Dave (W4SAR) recounted the events of the recent VE session. When the Hillsborough library facility did not honor OCRA's reservation for a room, amateur radio communications via the Saturday morning ARES net allowed the session to continue at a different location. Thanks to all who participated in the VE session, to those who helped find a new location, and (most importantly) congratulations to all who passed their exams at the session.
- 4 Field Day preparations are well under way thanks to our Field Day Coordinator, Dave (W4SAR). You will read more about the OCRA Field Day event later in this newsletter. A special thanks goes to Dave for coordinating the ordering of Field Day t-shirts and pins for OCRA members.
- 5 Ken (KR4FM) gave an overview of WinLink capabilities. Ken – Thank you for a very interesting presentation! Later in this newsletter, you will find references that Ken has provided for WinLink.
- 6 Show and Tell included a portable HF antenna that John (W4PAH) shared with the group, a self-contained PSK31 digital modem that Steve (KZ1X) showed the members, and a 4:1 balun that Adriano (KI4OTN) will use for his new dipole.
- 7 Due to time, there was no paper contest at the April meeting. There will be a paper contest at the May meeting.

The May OCRA meeting will be held on Monday, May 12, at the Sunrise Church beginning at 7:30 pm. The weekly Orange County ARES net meets on Saturdays at 9:30 am local on the W4UNC repeater [442.150MHz with a PL tone of 131.8Hz]. All licensed amateur radio operators are invited and encouraged to check in.

The President's QRM

by Woody Woodward, K3VSA

This May issue of the OCRA Newsletter that you're reading is a milestone of sorts. It's the fifteenth OCRA Newsletter of the contemporary series that is the editorial creation of Laurie Meier (N1YXU), our OCRA Secretary. Now, over my three score years of existence, I've seen a newsletter or two. I consider myself qualified to pass judgment about newsletters, so here it is: Our OCRA Newsletter is great!

OCRA is very fortunate to have such a high quality newsletter, and the reason for that is not because Laurie has such an abundance of free time to devote to it, because, really, she's a busy person. Nevertheless, she sees to it that the newsletter is more than just a collection of dry, technical blather. Laurie makes sure that there's a continuing human dimension in every issue, and the warmth that she adds really does communicate an important and positive message about Amateur Radio and our club. Of course, Laurie would say that it's the large number of high quality submitted articles from OCRA members that make our newsletter so good, and there's some truth in that. However, Laurie sets the tone and is the glue that makes it all come together. So, Laurie, hats off to you for a continuing "FB" job as OCRA Secretary. You're one in a million!

On Saturday, April 26th, a half dozen OCRA members conducted a public Amateur Radio operating event held at the parking lot of Suntrust Bank on South Churton Street in Hillsborough. Chris (N2JFP) brought a Yaesu FT-897 HF transceiver and two of his fellow "tech team" members from New Horizons Church, Tom (KG4EDY) and Rihanna. Tom brought his own FT-897, so we had three HF transceivers including the Elecraft K2/100 that Chris (KG4HNC) furnished. A Buddipole dipole setup and several whips provided antennas for the HF operation. Adriano (KI4OTN) brought his VHF/UHF Alinco mobile radio and called the OC ARES Net from the event using a discone on a portable mast. A canopy that Gerry (KD4YJV) loaned us kept the sun off during the several hours we operated.

Even with the relatively meager HF antennas used, we heard California and Cuba, among others, on 20M SSB, and several of us made contacts. Adriano (is it KI4TON?) had a hilarious time checking in to the appropriately named "knot head net."

Amateurs participating were Chris (KG4HNC), Chris (N2JFP), Tom (KG4EDY), Adriano (KI4OTN), Brian (KI4YSZ), Rick (KI4GND), Lisa (KG4HNC) and Woody (K3VSA). Dan (KR4UB) and Dee (KU4GC), with Karl (N1XPB), stopped by for moral support. No advance publicity of the event was made, because there was supposed to be another organization conducting a bake sale at the bank's parking lot that morning, but they never appeared. So, the "people traffic" we were anticipating never materialized. Nevertheless, several passers-by stopped to see what we were doing and were given a demonstration of Amateur Radio and handed ARRL PR brochures. The consensus of everybody who participated was that the event was a success. We were able to quickly get set up and operate and then break it all down before fatigue set in. Who knows, maybe we can do this once a month at different locations around Orange County.

Next time, we'll prepare our own baked goods and sell them. We have people in this club who make irresistible pies and cakes, don't you know. We'll enlarge the club's treasury while educating the cake eaters about ham radio and emergency communications, and maybe we'll convince some of them to become hams, too. (Heck, I've always felt that the ability to enjoy food that's not good for you is a prerequisite to becoming a first class operator. It certainly works for all of us at Bojangles every week.)

Presidential "attaboys" this month also go out to Adriano (KI4OTN) and Chris (N2JFP), who assisted Rick (KI4GND) in getting Rick's new multiband HF beam antenna up on his roof that same Saturday morning. Rick had managed to get all but the last element installed and needed a quick hand or two to get it all finished. He was on the air using his new skyhook when they left, and he had nothing but good words to say about OCRA and its members. Once again, people like Laurie, Adriano, Chris, and the rest who helped Saturday morning make me proud to be the president of this club.

Field Day 2008
by Dave Snyder, W4SAR
Field Day Coordinator

The plans for this year's Field Day are moving along nicely. At the last meeting, most all of the bonus points have been covered, but we still need to address some needs.

- 1 We will need to solidify plans for the educational activity.
- 2 We will need to start planning for how exactly to set up the public information table.
- 3 Form a hospitality crew, visitors should be signed in and warmly welcomed. If they are new to amateur radio, they should be given a tour and orientation as to what is going on.
- 4 We are still looking for a 20 meter CW band captain.
- 5 A satellite QSO would garner us another 100 points.
- 6 We will need to confirm that the Piedmont Electric bucket truck will be coming.

At this month's meeting, I will bring an example of the binder that will be issued to each band captain. It will have forms, the Field Day rules, and other reference information. I would like all band captains in attendance to have a look at it. I'll gladly accept any recommendations to make it useful and apply any required changes. At the June meeting, I will issue the binders to all the captains.

Finally, the order of ARRL t-shirts and pins has come in. Shipping was only charged for the t-shirts and not for the pins. So, for those of you who had placed an order, the t-shirts come out to \$14 each and pins remain at \$5 each.

The closer we get to Field Day, the more excited I get. See you there!

Follow-up to WinLink Presentation
By Ken Kauffmann, KR4FM

Thank you for your great response to the Winlink 2000 overview.

Some of you had asked for the web links that were shown at the end of the presentation at the April club meeting. I have reproduced them below.

Official Winlink 2000 site:

<http://www.winlink.org/>

Jefferson County ARES site:

<http://olyopen.com/gandj/ARES-Site/winlink_training.html>

"Winlink for Dummies" site:

<http://www.winlink.org/node/23>

PaalinkMP download site:

<http://www.winlink.org/software>

Please contact me if you have interest in trying this out. We may even consider a "configuration" session associated with our monthly meeting.

[Ken – Thank you for a very informative presentation at the April club meeting!]

My adventures in D-STAR

by Christopher Ferrer, N2JFP

I have always been an “above 50 Mhz” kinda guy. So, when I heard that there was a local D-STAR repeater operating in Raleigh, I had to find out more! Reading the some what recent issue of QST on D-STAR and then scouring the internet for information on the local digital repeater turned up very little... I did manage to find a frequency and the repeater’s call sign though (which in fact is crucial for programming these new digital radios).

D-STAR (**D**igital **S**mart **T**echnologies for **A**mateur **R**adio) is a digital voice and data protocol specification developed as the result of research by the Japan Amateur Radio League. My experience with it has been very minimal though since I have only had my new digital radio for about two weeks now. The one thing I can confirm is the manual that came with my Icom IC-92AD is horrible at going into detail about this new digital realm...After several hours of trying to figure what information went where, I was finally able to key up the repeater. WOW! I was greeted with a very clear and pleasant sounding human voice from the controller and then saw the repeater’s information scroll across the bottom of my radio (the absence of a squelch tail was a little strange at first). I was not able to contact anyone on the air that day but the next day I heard the repeater owner, Rhett (KB4HG) on the air and had my first QSO. My first digital contact was exciting and a little overwhelming at the same time but after Rhett walked me through how to communicate properly, things went rather well. Apparently you have to wait for the beep after the other station finishes transmitting before you can talk and the wait for that beep can take about five seconds. We talked for about twenty minutes and Rhett literally sounded like he was standing right next to me! The audio is definitely clear but it does have a distinctive “digital” sound to it.

Programming the radio was much easier once I got the hang of hitting my first repeater. There are a few fields you need to fill out in order to contact a station or a repeater. There is “My” call which is your callsign and then there is “UR” call which is the callsign of the station you are calling. If you are just trying to contact the local repeater to see if anyone is listening, you put “CQCQCQ” in that field. Then there are the fields for “RPT 1” and “RPT 2”, the repeater’s callsigns, which followed by a letter which designates which module you are communicating to. In my case, I entered “KB4HG B” which designates the “B” module (or the 440 Mhz module). If you are just contacting a local repeater, you just use “RPT 1”. If you want to talk from Raleigh to Germany, you enter the Raleigh repeater in “RPT 1” and the Germany repeater in “RPT 2” and you can key up that repeater in Germany just by pressing the PTT button, the radio automatically routes your call through the local repeater onto the Gateway, then on to the repeater in Germany :)

The D-STAR system has the ability to pass voice and data over the same signal. Since I do not have any experience with the data side yet, I referenced some information from Wikipedia here on voice and data rates:

“Within the D-Star Digital Voice protocol standards (DV), voice audio is encoded as a 3600 bit/s data stream using proprietary AMBE encoding, with 1200 bit/s FEC, leaving 1200 bit/s for an additional data "path" between radios utilizing DV mode. On air bit rates for DV mode are 4800 bit/s over the 2 m, 70 cm and 23 cm bands.

In addition to DV mode, a high speed Digital Data (DD) Mode can be sent at 128 kbit/s only on the 23 cm band. A higher rate proprietary data protocol, currently believed to be much like ATM, is utilized in the 10 GHz "link" radios for site-to-

site inter-linking.”

I look forward to learning more about this new system and keeping the club updated as to the progress of the new local digital repeater. It may be changing homes soon according to the owner and there is a slight chance it will be coming closer to us!

For more information on D-STAR, please visit the link below:

<http://en.wikipedia.org/wiki/D-STAR>

North Carolina QSO Party – 2008 Results

by Bruce Meier, N1LN

The logs have all been submitted and the counting is over. I am VERY pleased to announce that the W4UNC team WON THE CLUB COMPETITION. As you know, the team members were Dave (W4SAR), Gary (AI4GT), Laurie (N1YXU) and me, Bruce (N1LN). We operated from our house using one of our two stations. The other station was also on the air, but not with the same level of activity. Even with lower activity NC4KW finished in 7th place.

Here is a cut/paste from the official NC QSO Party web site: <http://www.w4nc.com/ncqpreresults.html>

CLUB COMPETITION

The instate club category had double the number of entrants this year from 6 to 12, which made for some great competition, not to mention more operators getting involved in our event. The NCQP is always a place to get new blood into our ranks. After it was all said and done, we have a new winner this year as the Orange County club W4UNC edged out the team from the Charlotte ARC W4CQ by about 100 contacts. In a close 3rd was last year's winner W4DXA also from the Charlotte area. Just 14 q's and 2 mults separated these 2 teams. Nice work everyone! We also welcome back K4EG, the Alamance ARC who were responsible for starting this great event years ago; the 3 NC4 stations who always put in a great showing-ZO from Randolph, AR from Davidson and NC from Pitt County. It was nice to see the Battleship on the air as NI4BK as always, the Kilowatt Crew NC4KW from Orange, the Blue Ridge Club at W4YK, the Mecklenburg club W4BFB, and the Nature Science Center station K4NSC from Greensboro! Hope to hear you all on the air during Field Day.

CAT	CALL	Q	8	8	4	4	2	2	15	TO	TOT	C	US	FIN
			P	C	P	C	P	C	P/	QS	MU	W	W	SCO
CLU	W4UN	O	7	8			2	5		444	90	38	51	926
CLUB	W4CQ	C	7	8	5	8	1			337	87	43	43	756
CLUB	W4DX	M	8	2	8	9	5			351	89	42	46	734
CLUB	K4EG	A	2	1		1	2	1		264	74	35	38	571
CLUB	W4BF	M	1		8	1	5	1	2	283	78	38	39	454
CLUB	NI4BK	N			1		1			307	63	14	48	388
CLUB	NC4K	O			7	1		2		217	58	18	40	335
CLUB	W4YK	H	5	1	9	3	1	1	12	187	69	41	27	282
CLUB	NC4Z	R	4		5		4			143	60	27	32	173
CLUB	NC4P	PI	4	1	1	3				113	52	28	23	146
CLUB	NC4A	D	8		7					93	50	34	16	960
CLUB	K4NS	G	1		2		1			19	19	2	17	760

Now the question – can we be repeat winners for 2009?

CPR and First Aid Training Opportunity

by Adriano Marcuz, KI4OTN

OCRA now has the ability to further prepare itself as a yet a more outstanding Amateur Radio association in the Triangle area by offering the ability to its members to be trained as First Responders in CPR and First Aid. This is the same training given to hospital nurses, police officers, and fire fighters.

The Orange County Red Cross has agreed to let me, as one of its instructors, and a member of OCRA teach this class to any amateurs. The cost is a miserly \$35 and includes all supplies (book, manikin use, face mask, and CPR/First Aid card). If you are interested in becoming trained, please let me know.

2008 OCRA Officers and Board Members

Officers:

Woody Woodward, K3VSA – President
Ken Kauffmann, KR4FM – Vice President
Dan Eddleman, KR4UB - Treasurer
Laurie Meier, N1YXU - Secretary

Board Members:

Justin Heinecke, KD4CPM, One year term remaining
Gary Pielak, AI4GT, One year term remaining
Robert Little, N4ZAK, Two year term remaining
Brian McLamb, KI4YSZ, Two year term remaining