

Orange County Radio Amateurs (OCRA) Newsletter
July 2008

From the Editor

I hope those of you who were able to attend Field Day enjoyed spending time operating; visiting with fellow OCRA members and guests who came to the site; eating a meal cooked to order; and suffering through the oppressive heat and humidity. You will read quite a lot more about the OCRA Field Day 2008 throughout this newsletter. Tremendous credit for OCRA's Field Day success goes to Dave Snyder (W4SAR), our Field Day Captain.

Yes, Field Day is over; however, don't put away your t-shirts just yet. Keep "Riding the Waves"! I have received quite a few complements about my Field Day t-shirt from non-hams. The logo and colors are very catchy and are a great conversation starter when someone says "What is ARRL Field Day?". And, don't store the large plastic container with your Field Day gear. Keep "Riding the Waves"! Set-up your radios at home, and keep operating throughout the year. Honing our communications skills about amateur radio and honing our communications skills operating via amateur radio will help preserve our hobby.

Yes, Field Day is over; however, I am choosing to continue to include the Field Day logo in this month's newsletter. Why? Because the message doesn't apply only to Field Day. I encourage each of you to continue to "Ride the Waves".

As usual, I will end my newsletter introduction by asking you to get comfortable and to take time to read through your club's newsletter. Until next month....

Best regards,
Laurie - N1YXU
lbmeier@bellsouth.net

Summary of the June Meeting

The June OCRA meeting was held on Monday, June 9. There were quite a few topics discussed at the meeting. Summaries are shown below:

- 1 Thank you to all who helped support OCRA at the Durhamfest. Due to the donations received from OCRA members on the sale of items at the Durhamfest, the OCRA treasury gained \$202.00!!!
- 2 Our Treasurer, Dan (KR4UB), reported that the treasury balance is now over \$5,000.00. Thank you to all who have contributed by renewing your annual memberships, donating proceeds from sales at recent hamfests, and supporting other activities.
- 3 The OCRA Cup was awarded to Steve (KZ1X) by Meg (KI4LLM) since Steve taught Meg Morse code. Congratulations, Steve!
- 4 Adam (KJ4DEO) won the paper contest. Congratulations, Adam!
- 5 Steve (KZ1X) shared his 40 meter PSK kit during the Show and Tell portion of the program.
- 6 The majority of the meeting was dedicated to final Field Day preparations and discussion. You will read quite a bit more about the OCRA Field Day 2008 event throughout the newsletter. Sincere thanks to our Field Day Captain, Dave (W4SAR) for all the work in planning Field Day!
- 7 Field Day captains – If you have not yet given Dave (W4SAR) a copy of your station's log and final score, please make sure to bring the final score and log to the July meeting.

The July OCRA meeting will be held on Monday, July 14, 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

As I write these words, Field Day 2008 has ended as of yesterday, so there's still plenty of sorting out to be done before we can say with certainty what happened. For example, we're a ways away from knowing our final points tally, although it looks as if, in general, the CW stations performed better than FD2007. The phone stations appeared not to do as well. I operated 75M SSB on the night shift, and contacts were often hard to come by. QRN was bedlam.

As far as the over all organization of our Field Day effort is concerned, it's hard to imagine how it could have been managed better, and of course, that is a result of the excellent job that Dave, W4SAR, our Field Day Captain, did in preparing us for it all. And Dee, KU4GC, along with MK, W4MKR, did a great job of keeping everybody hydrated and well fed.

From a Public Relations standpoint, the timing of Field Day, at least how it worked out this year, will work in our favor in getting something favorable in the Orange County paper on Wednesday, since no compelling state or local crisis was happening. Their freelance photographer, David Hunt, was on site Saturday and got treated to an in-depth briefing on how PSK31 works. I suggested that the "waterfall display" might be an interesting photo, and he took several, so we'll see what transpires from that.

The weather was murder this Field Day. Folklore has it that rain is the Field Day norm, but this year, I think most of us would have welcomed a good, strong rain--even a thunderstorm--just to provide some respite from the heat.

Particularly disappointing was the GOTA station, which for reasons yet to be determined found it difficult to make any contacts at all. This is especially troublesome when you consider that we're encouraging people to sit down in the GOTA chair and enjoy the fun and fellowship of Amateur Radio, and all they experience is the frustration of calling and getting no reply. GOTA Captain Meg, KI4LLL, said they were allowed to run more than QRP power last year, but this year had to limit their transmitter to the same 5 Watts the rest of us were using. I think that's a bad idea on the part of the Field Day rule makers. If the purpose of the "Get On The Air" station is to show people the fun of being a ham, QRP is probably not the very first thing they should try. We should discuss this at the July meeting, and if the membership concurs, I will recommend to my boss, Bill Morine (N2COP), that GOTA be allowed more operating flexibility in the future. Perhaps some way could be found to encourage the use of FM in the GOTA operation, even if it means permitting repeater enabled contacts.

If the rules are not changed, then perhaps we should run a separate Field Day station co-located with our W4EZ operation, using a different callsign and enough power to better insure contacts without interfering with W4EZ. This second station would keep a regular Field Day log that would be submitted, but its primary purpose would be to get newcomers to make contacts in a more leisurely manner rather than to rack up points. What do you think?

Particularly encouraging were the number of visitors who showed up at our site this year. I suspect we had more of them this time than in the past three or four years combined, and there were several reasons why they sought us out. Some of them said they found out about us from the OCRA website, which indicates that the effort we've put into bringing it up to date is beginning to pay off. At least one visitor got our location from the new ARRL "Field Day Locator" feature on their website, which is a terrific idea that HQ has done, in my opinion. Somebody up in Newington deserves a big-time pat on the back for thinking that one up.

Several were drawn in by our new road signs, which were almost entirely the work of Adriano, KI4OTN, who, along with his wife had a lot to do with the new "Got Ham?" bumper stickers Lisa and I have on our vehicles.

These new signs were deliberately made to specifically not mention Amateur Radio, but rather to question cell phone

reliability and suggest that passers-by stop in to see what they could do about that. And they seemed to have worked. Now, I'm not an advertising genius, but it seems to me that you'll first have to do something to disrupt your prospect's complacency before they will hear your remedy. Adro has been working on his sign project for about a month now, and he came up with the verbiage and produced the signs entirely on his own nickel. I thought they were great, and I was not the only one. There have been several people at the state and national level of Amateur Radio who are positively disposed toward our slant on this.

Were these signs the culmination of what we are trying to do? Certainly not. Could they be improved? Most surely. Was something wrong with our old signs, the ones that say "Amateur Radio - Worldwide Communications?" They're great signs. Good, large size with not too many words, so they can be comprehended on a drive-by. The problem is, most people already think they know what Amateur Radio is. It's that thing that people "used to do back in the 1960s and 1970s that was fun then, but now we have the Internet, so only Old People do ham radio now". So we were trying to come up with a different approach that would help us get some positive "mind share". This is a work in progress, and we'll be fine tuning it over time. Adro welcomes your constructive criticism, so let him know what improvements you come up with, but remember that we'll only keep getting the same results if we keep doing the same things you've always done.

Also particularly encouraging was seeing some of our new hams braving the blistering sun to help erect antennas, operate stations, and trying new things, like OSCAR satellites. It would have been a kinder, fairer world if Brian, KI4YSZ, had been able to complete a satellite contact instead of only hearing the bird pass over. And it sure would have been something to remark about for years to come if Patrick, KJ4EWX, had been able to work that Labrador station as his very first QSO, and on six meters to boot. Nevertheless, the enthusiasm that our newest OCRA members showed to Field Day was encouragement enough to have us do it all over again on Field Day 2009. It'll be bigger, better and (hopefully) cooler. Just wait, you'll see!

Field Day 2008 is History

by Dave Snyder, W4SAR
Field Day Coordinator

I had an awesome time at Field Day. I hope everyone else did. Yes, it was as hot and humid as it gets this time of year in the Piedmont. Fortunately, despite the dire forecasts of afternoon and evening thunderstorms, we only had a passing shower early Friday evening. In a magnificent bit of timing, the front came through with torrential downpours and high winds 15 minutes after I had finished unloading my car at home on Sunday afternoon.

I think the site plan worked out well. Everyone had no problem finding their place and had adequate room to set up their antennas. Everyone's cooperation was what made it work so well! I heard only a few comments about inter-station interference but not enough apparently to seriously impair anyone's operations.

The propagation was challenging once again. As I don't have all the logs yet at press time, I can't give you a rough score. Speaking for myself, I did twice as well as I did last year on digital communications and half as well on 80 meter phone. I will have the detailed final scores posted in next month's newsletter.

Finally, I want to complement the awesome group of operators, helpers, and visitors we had this year. As mentioned before, everyone worked well in adhering to the site plan, and plenty of help was given in setting up and operating stations. What really warmed my heart is that on 2:00pm Sunday, as the contest shut down, a few members arrived on site after the fun was over to help with teardown. Now THAT is dedication. I am proud to work with such a dedicated and positive group. I'm already looking forward to next year....

The next few pages of the newsletter contain some pictures from OCRA Field Day 2008. There

are more pictures posted on the OCRA website: <http://www.ncocra.org/FD2008.html>

Thank you to the multiple contributors who provided these pictures for the newsletter.

Our Rich Ham Radio Heritage

(Number 7 of a Series)

by Woody Woodward, K3VSA

Watching OCRA member Brian McLamb (KI4YSZ) attempt a satellite contact at Field Day 2008 made me think about how much progress we've made in space research since I was a lad. I can still remember the awe of seeing the live video of Neil Armstrong stepping down onto the lunar surface in 1969 and the crisp, brilliant photos of Jupiter and its moons sent back by American spacecraft during the 1970s. Now, we routinely (well, almost routinely) use satellite-enhanced Amateur Radio communication. Where did it begin? Was 1969 the first time we actually reached out and touched another celestial body?

Actually, many people would contend that the first such event took place early in 1946, and it was called Project Diana. When the Japanese surrender ended World War II, there were suddenly many in uniform who could relax a bit and, for a while, consider other possibilities beside combat. One of these people was Lt Col John Hibbett DeWitt Jr. "Jack", as he was called, was born in Nashville Tennessee in 1906, the son of a judge, and showed an early interest in radio-electronics, getting his ticket in 1921. He held the callsigns W4FU, W4ERI, and N4CBC. Only three years after becoming licensed, he helped with the design and installation of a 100 Watt transmitter at Nashville's First Baptist Church, probably the beginning of broadcasting in Nashville.

After obtaining his engineering degree at Vanderbilt, he moved to Washington DC for a time, but then returned to Nashville as the Chief Engineer of the famous radio station WSM, 650kHz, then as now the "air castle of the South". While at WSM, he supervised the installation of their new 878 foot Blaw-Knox transmitting tower, now one of only three still in existence and for many years the tallest in the nation. (The other two surviving Blaw-Knox towers are KDKA in Pittsburgh, PA; and WBT in Charlotte, NC. The top half of the WBT tower went down in a hurricane a few years ago; I presume it's been fixed since then.)

When the war broke out, he joined the Army and was assigned to Army Signal Corps facility Evans Signal Laboratory to do RADAR research. By late 1943, DeWitt had been appointed the director of the laboratory. I should point out that this selfsame facility had already made radio history under its former name of Belmar, when as an American Marconi wireless facility, the redoubtable Edwin Howard Armstrong had demonstrated the efficacy of his revolutionary regenerative receiver to the Marconi employee, mostly unknown at the time, who was responsible for evaluating new technology. That man's name was David Sarnoff.

Even though prewar attempts at piercing the ionosphere with radio waves had failed, DeWitt thought it was possible, and on an almost casual level, DeWitt and some of the Camp Evans staff, many just waiting for their discharges, began experimenting. They named it "Project Diana" after the mythological Moon Goddess. They had at their disposal an SCR-271 radar antenna of the type that had been installed some years earlier in Hawaii and whose received signals were ignored by Army staffers one fine morning in December of 1941. The antenna, which resembled a set of bedsprings mounted upon a tower, could only be steered in azimuth, and so lunar transmit/receive windows were specific and brief. Tests were made with the highest transmit power they had but were unsuccessful. Edwin Howard Armstrong himself provided the Army with some critical pieces of FM RADAR that he was working on, and they made more tests. And finally, on January 10, 1946, at 1158L, running 3KW in 250ms pulses at 111.5MHz, they heard the echoes from the moon about 2.5 seconds after transmitting.

The web page on Project Diana maintained by the Ocean Monmouth Amateur Radio Club, the organization tasked with the site's historical preservation, claims with justification that the project marked the beginning of the Space Age, just as Hiroshima (actually, Trinity) marked the beginning of the Atomic Age. Diana proved that space communication and, by extension, space exploration, was possible. Future space explorations, such as Project Mercury, Gemini, and Apollo, continued the trend began with Diana of naming them after Greek and Roman deities, so in effect, Diana really was the first space exploration project.

Colonel DeWitt was far from being the only ham involved in Project Diana. Herbert Kauffman, W2OQU, was involved, and he wrote an article on the project that was published in the May 1946 issue of QST. Other hams known to have participated in the project were E. K. Stodola, W3IYF, and F. Elacker, W2DMD.

As a postscript, DeWitt returned to Nashville after the war and became the president of WSM. He became heavily involved in the astronomy program at Vanderbilt, befriending and assisting Dr Carl Seyfert, after whom the unusual Seyfert Galaxies are named. In 1970, Jack donated to Vanderbilt his own 12 inch telescope that he'd loaned to Seyfert.

John H DeWitt Jr, N4CBC, Life Fellow of the IEEE, became a silent key on January 25, 1999, almost exactly 53 years to the day of the historic Project Diana success. As far as we know, he kept his eye on the heavens to the very end.

2008 OCRA Officers and Board Members

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Woody Woodward, K3VSA – President
Ken Kauffmann, KR4FM – Vice President
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Robert Little, N4ZAK, Two year term remaining
Brian McLamb, KI4YSZ, Two year term remaining