



Orange County Radio Amateurs Newsletter for May, 2010

an ARRL-affiliated club in Orange County, North Carolina

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Board Meeting Minutes

The Orange County Radio Amateurs board meeting for May 2010 took place on Monday, May 10th at 6:30 PM at Casa Ibarra restaurant in Hillsborough as scheduled. In attendance were the following Officers and Board Members:

Ken Kauffmann (KR4FM), OCRA President
Dave Snyder (W4SAR) OCRA Vice-President
Dan Eddleman (KR4UB) OCRA Treasurer
Woody Woodward (K3VSA) OCRA Secretary
Bruce Meier (NILN) OCRA Board Member
Laurie Meier (N1YXU) OCRA Board Member
Karen Snyder (KD4YJZ) OCRA Board Member

The following were also in attendance:

Justin Heinecke (KD4CPM)
Dee (KU4GC)
M.K. (W4MKR)
Dewey Thompson (WA4AHR)
Lisa Woodward (KG4PFB)

The Officers and Board Members discussed preparations for the upcoming Field Day and progress with the antenna work at Meg's school. Meeting was subsequently adjourned.

Membership Meeting Highlights

OCRA welcomes Tim Sexauer (KJ4ELU), who attended the meeting and became the latest member of the club.

Dan (KR4UB), OCRA Treasurer, reported our bank balance at \$6,342.09, and that after our paying liability insurance premiums.

Laurie (N1YXU), Orange County ARES EC, reported that the county has allocated \$10,000 as the first step to equip the ham station at the Hillsborough EOC. This money is intended for the professional installation of antennas that will support the station. Laurie emphasized the significance of this, especially in the current times of tight economics. She said that the county's allocation of these funds was a clear indication of the confidence in us and the importance we're given, based upon our strong participation in emergency communications.

The importance of all the ARES members having completed the required ICS courses was once again emphasized. ARES at the state level is making it clear that those who do not comply will not be recognized and will not be participating on the statewide database of trained individuals.

Reports on the moonbounce attempt and the school antenna party were given (see separate articles on each in this newsletter).

Dave (W4SAR), our Field Day Captain, reported on different proposed arrangements for all the Field Day stations and provided an update on progress so far.

Bruce (N1LN) had the new Field Day logging software on hand, which was copied by all the Band Captains in attendance.

-Woody (K3VSA)

The Arecibo Moonbounce Attempt

Members of OCRA attempted to communicate with the Arecibo Observatory Radio Club (KP4AO), which had been granted access to the big dish antenna there at the observatory for several hours each on Friday through Sunday, April 16 - April 18. We had about a week's advance notice, and I sent a note on the NCO CRA Yahoo Group to see if anybody was interested in participating. In short order, a reply came back from Steve (W3AHL), who said he'd be designing a Yagi and would contribute his IC7000. He pointed out that his equipment and my Mirage 100 Watt 432MHz linear ought to make a serviceable station.

Other OCRA members volunteered to participate, and on Friday afternoon, Steve and I were joined by Dave (NA4VY), Mac (WQ8U), Wilson (W4BOH) and Wayne (KJ4GDW). Steve took the lead in setting up the equipment, and we were on the air at about the start time, trying to find the moon in the bright sky of early afternoon. Attempts to hear the Arecibo station were in vain, and we later found out that their linear amplifier was inoperative and they were only putting out about 20 Watts. In spite of the lack of contacts, we had a rather pleasant afternoon drinking beverages, feeding the fish in the pond at our gazebo, and watching Wilson practice taking naps.

On the next day, Saturday, Steve and others regrouped at his QTH and made a second attempt to work KP4AO. This time, the amplifier at the distant end was up and running, the moon was visible in the sky, and their signal was heard here in Orange County. Wilson's efforts on the straight key were as diligent as those of the Marconi operators on board the RMS Titanic, but no QSO was made.

Sunday afternoon, the final day, saw yet another attempt made, and Arecibo was sporting an even higher power amplifier. They were heard here on both CW and SSB, but, unfortunately, they never did hear us. We tried a helical antenna supplied by Steve (KZ1X), but it was cross-polarized, which resulted in less than ideal performance. Nevertheless, kudos are in order for all of our participants, especially Steve Ahlbom, who engineered and built our Yagi antenna in only a couple of days.

-Woody (K3VSA)

Adopt-A-Highway Cleanup

Fair weather greeted our work party, which gathered once again to comb our section of New Hope Church Road as part of our Amateur Radio Emergency Service's "Adopt-A-Highway" road cleanup campaign. Our participants met at 0800L (8:00AM) on April 24th and quickly worked their way down the road and back. Oddest item found this time was a door, discovered by Wilson (W4BOH). Mac (WQ8U) later quipped that it would be the "door prize" at an upcoming DFMA meeting.

-Woody (K3VSA)

OCRA Helps With Central Park School's Antenna

Saturday, May 8th saw members of OCRA on the roof of Durham's Central Park School attempting to put the school's SteppIR antenna in working order. The school boasts a complete ham station thanks to a grant given to Meg (KI4LLL), who teaches there.

Gusty winds and a bright sun added to the challenges, but the crew, which included Dewey (WA4AHR), Steve (KZ1X), Adriano (KV7D), Wayne (KJ4GDW), Woody (K3VSA), Meg (KI4LLL) and Randy. Jim (KB4OT) also tried to attend but couldn't find the school, which is not all that hard to miss!

It took a long time to get the beam antenna lowered enough to work on, but finally the tower was brought down and the antenna elements were within reach. The fiberglass radomes were removed, and it was finally determined that the "professional" crew that installed the antenna in the first place made a wiring error.

There was not sufficient time to rewire the antenna control units, and the tilt-over baseplate donated by Dewey was not ready anyway, so the antenna was put back together with new rubber boots and left on the roof. A subsequent work party (or two) will be going back in a week or so to install the tilt-over plate and rewire the antenna.

-Woody (K3VSA)

N1LN Honored in June QST

Congratulations go out to OCRA's own Bruce Meier (N1LN), who was honored in the June 2010 issue of QST as a winner in the ARRL's 2009 160 Meter contest, which took place between December 4th and 6th. According to the magazine's feature story, station N1LN was the winner in the Roanoke Division for the Multioperator category with 516,864 points. Only the Atlantic and Central divisions winners posted higher scores in this category, so in reality, Bruce and his team came in at third place nationally in their classification.

-Woody (K3VSA)

OCRA Tests A New Microwave Repeater

On Friday, May 14th, a maintenance crew installed and activated an experimental HSMM (High Speed Multi Media) repeater that operates on the 2.4GHz band using the recently

developed HSMM-MESH architecture. Tests run between Dan (KR4UB) and Ken (KR4FM) show that the vertically polarized Ubiquiti "HP" (High Power) Wi-Fi "bullet" easily communicates with equipment deployed at the Orange Grove Fire Station, eight miles away with its one Watt output.

The success of the tests so far raises the possibility that eventually a county-wide microwave backbone system can be set up to allow Internet connectivity and other digital messaging. Both Ken and Steve (W3AHL) have been actively engaged in HSMM experimentation, and Steve has extensive experience with this mode of operation from his time in Chester County, Pennsylvania. It is hoped that they will boil all the complexity down to a cookbook recipe that will permit many, if not all, of us to cheaply and easily interconnect into the HSMM system.

-Woody (K3VSA)

53.45MHz Repeater Temporarily Off The Air

Routine maintenance at the repeater site revealed that our Six Meter repeater, on 53.45MHz, was reflecting about thirteen Watts out of sixty-five Watts in! Of course, with such a high standing wave ratio there was a good likelihood that the transmitter's power amplifier would fail. Therefore, the machine was taken down for bench tests.

The diagnosis is some sort of antenna issue. It is not known at this time whether the antenna itself, which had to be installed upside-down, developed some sort of water leak over time; or whether the problem is that the shield braid has pulled away from the co-ax connector. In any event, the repeater has been taken off the air temporarily until the issue can be resolved.

-Woody (K3VSA)

The Next OCRA Meeting

The next OCRA Meeting will take place on Monday, June 14th at 1930L (7:30PM), as usual at the Orange County EOC Building in Hillsborough. In the meantime, join many of us for Saturday morning breakfasts at the Hillsborough Bojangles on South Churton Street beginning about 0930L (9:30AM). See these and other upcoming events on the calendar portion of the OCRA website:

<http://www.ncocra.org>

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