ORANGE COUNTY RADIO AMATEURS
An ARRL Special Services Club
Orange County, North Carolina

The OCRA Newsletter for October, 2009

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October Board Meeting Summary

The OCRA Board Meeting for October was held at Casa Ibarra on Monday, October 12th at 6:30PM as announced on the OCRA website. In attendance were Officers and Board Members:

Woody Woodward (K3VSA), President
Ken Kauffmann (KR4FM), Vice President
Dan Eddleman (KR4UB), Treasurer
Laurie Meier (N1YXU), OC ARES
Dave Snyder (W4SAR), Board Member
Karen Snyder (KD4YJZ), Board Member

Others attending the Board Meeting were:

Wayne Estabrooks (KJ4GDW)
Bruce Meier (N1LN)
Dee Ramm (KU4GC)
Dewey Thompson (WA4AHR)
Lisa Woodward (KG4PFB)

Treasurer Dan Eddleman reported a balance of $6,701.39 in the club's account. Laurie Meier provided an update on ARES training. Woody Woodward had a question about whether or not OCRA had given a monetary donation to Sunrise Church, which provided us with the use of its building for our membership meetings and VE test sessions before we moved to the Orange EOC. It was recalled that a motion to allocate funds for such a donation had been passed, but nobody remembered if a check had actually been sent. Dan

Eddleman said he would look to see if one had been written. It was agreed that we should have a more formalized system to keep track of motions.

Woody informed the attendees that OCRA Secretary, Adriano Marcuz (KV7D) was having some personal matters that would probably preclude his ability to perform his secretarial duties, and that he'd asked for some assistance. Woody said that Adriano had communicated that it would be unlikely that he would be standing for reelection next time. Woody volunteered to help with the secretarial chores.

There being no presentation scheduled in advance for the Membership Meeting, Dee Ramm (KU4GC) volunteered to show photographs he'd taken of the tower where the OCRA 442.150MHz and 53.450MHz repeaters are located, and this was approved with gratitude. The Board Meeting was subsequently adjourned.

de K3VSA

October Membership Meeting Notes

The OCRA Membership Meeting for October was held at the Orange County EOC Building in Hillsborough. Dan Eddleman (KR4UB) gave the treasurer's report and an update on the new 2 Meter repeater. Laurie Meier (N1YXU) gave an update on the progress of ARES training.

Dee Ramm (KU4GC) connected his laptop computer to the EOC's projector and showed us some breathtaking photos he'd taken from the thousand foot level of the tower where two of the OCRA repeaters are located, and the photos were accompanied with commentary by Wayne Estabrooks (KJ4GDW), the recently retired Chief Engineer who helped oversee the construction and operation of that tower. Bruce Meier (N1LN), who owns and operates several hundred foot towers himself, mentioned that he'd never want to be on a thousand foot tower. It was pointed out that he'd be just as dead falling from one of his hundred footers, but of course, he'd have longer to think about the outcome while falling from that thousand footer. Afterward, members and guests enjoyed cookies thoughtfully prepared and served by Lisa Woodward (KG4PFB).

de K3VSA

The President's QRM
(October 2009)

We begin this month's "President's QRM" with a warm welcome to Jim Hicks (KB4OT), OCRA's newest member. He's become a regular at the Saturday Bojangles breakfast event and is a good fellow whom we're lucky to have in our club. Welcome also to David Cackowski (KJ4PYR), who joined after passing his Technician exam at our last test session. And finally, it was good to see a former OCRA Charter Member, Lad Carrington

(W4ORD), at the last membership meeting. Hopefully, Lad will formally rejoin the club now that he's back in our area after many years of living elsewhere. Good to have all of you!

While we're recognizing people, how about our own Laurie Meier (N1YXU), who won herself a prize at the 2009 North Carolina State Fair. It seems Laurie somehow finds time to do crafts, and a birthday card she created was on display there with a second premium ribbon attached to it. I'm continually amazed by the variety of talents that our members demonstrate. Congratulations, Laurie!

Our nets continue to flourish. The Thursday evening Central Carolina D-STAR Net got a boost when its host repeater, Rhett Iseley's KR4RDU 442.5375MHz machine, got a sensitivity boost at its new location on a tower next to the one we're on. D-STAR Gateway connectivity for this repeater now enable the net to host check-ins from all over the state, if not all over the world. Gerald Jones (KI4MXP) is doing a fine job as D-STAR Net Control.

Our Monday evening OCRA 10 Meter Net continues with check-ins from the usual suspects and some DX operators, too, when the band opens up. With the sunspot cycle destined to improve at some point in time, participation on this net can only get better.

The new Net Control script and accompanying training sessions have now become an established fact for our Saturday morning ARES net, so even if you cannot check in, at least listen in and learn a thing or two about emergency operating and message handling.

OCRA now has a page on Facebook, so if you're a Facebook member, why not request to become a fan of ours? It'll be great to have some photos out there of our members having fun together with Amateur Radio.

Well, that's about it for now. Don't forget that JARSFest, the last hamfest of the year, is coming up on Sunday, November 15th in Benson. I've missed a few hamfests this year but don't plan on missing this one! And of course, don't forget to come out to our next Membership Meeting on November 9th at the Orange EOC. We'll probably have the date and details of the OCRA Holiday Dinner for 2009 announced there, and that's always a great time of food and fellowship that you won't want to miss!

Until next time,
vy 73 de Woody K3VSA

Orange County ARES Update

By Laurie Meier, N1YXU, Orange County ARES Emergency Coordinator

Each year, ARES organizations conduct Simulated Emergency Tests (SETs) to assess the readiness of their membership and ability to work with other agencies within neighboring communities. The OC ARES organization will conduct its 2009 SET in November.

In order to ensure that our membership is prepared for situations involving emergency communications, we have recently conducted two training sessions. Most recently, OC ARES members attended a training session and participated in a “boots on the ground” exercise on Saturday, October 10, at the Hillsborough EOC.

I would like to personally thank Steve Ahlbom (W3AHL), for his work in completing the materials, leading the training session, and ensuring the radio room at the EOC was operational for the exercise. He and the other members of the OC ARES Leadership Team made sure that the training was well prepared and well received.

I would also like to thank all OC ARES members who attended the training session. Those members include: Dave Belt (NA4VY), Patrick Brooks (KJ4EWX), Dan Eddleman (KR4UB), Wayne Estabrooks (KJ4GDW), Jim Hicks (KB4OT), Jim Jingozian (KG4NEL), Gerald Jones (KI4MXP), Wilson Lamb (W4BOH), Randy McCray (KE4UCM – Durham County ARES EC), Andy Meyer (N4GMG), Stephen Mills (KJ4NPD), Dee Ramm (KU4GC), MK Ramm (W4MKR). OC ARES Leadership Team members included: Steve Ahlbom (W3AHL), Ken Kauffmann (KR4FM), Bruce Meier (N1LN), Chris Pope (KG4CFX), Woody Woodward (K3VSA), and me.

In reality, the training session really started on Friday, October 9, when the Code Red, reverse 911, notification was activated. All OC ARES members who are registered with the Code Red process were notified via email and phone, as requested. If you are not currently registered and would like to be, please send an email to Bruce Meier (N1LN), OC ARES Administration AEC, for further information.

The Saturday training session began with an overview of the Activation Plan. This plan defines levels of response and outlines answers to the question – I’ve been notified that OC ARES has been activated… now, what? If you have not yet read through the plan, please take time to do so. The Activation Plan and all materials that were provided and reviewed at the training session are available on the OCRA Yahoo group. Go to Files/Emergency Communications/Training. You will find a zip file called “OC ARES Drill 101009”.

After we reviewed the Activation Plan, we discussed conventions that are used during net operations. The training then focused on message handling and, specifically, the IC 213 form which had been adopted as the standard message form for North Carolina ARES. A tabletop, or “live” demonstration, was given and involved RESNET (resource net) net control, TACNET (tactical net) net control, and OC ARES members working from the point of ARES activation through deployment to message passing to deactivation.

The OC ARES members then put into practice the information that had been reviewed. This was the “boots on the ground” portion of the training. After each person checked into the resource net, teams were formed by RESNET net control for deployment. Deployment locations were in the immediate area of the EOC. Each team was given a package of information that included an assigned location, a scenario to follow at the location, maps, and blank ICS 213 forms. Each team remained on the RESNET frequency until arrival and (fictitious) set-up at the assigned location. Upon direction from RESNET, each team checked into TACNET. Each team passed an ICS 213 message to TACNET, and some teams waited for message responses. After the message passing, each team was directed by TACNET to secure its site and return to the EOC for debriefing. Each team checked back into RESNET when leaving the assigned location and remained on RESNET until arriving back at the EOC. Upon arriving at the EOC, all members of each team checked out of RESNET. The procedures that were practiced by each team mirror those that OC ARES will follow in future drills, the SET, and in true emergencies.

Bruce Meier (N1LN) and Ken Kauffmann (KR4FM) acted as RESNET and TACNET net control operators, respectively. They did an exemplary job and kept us all in line!

As is evident, each team truly was able to practice the training that had been reviewed. It was a good exercise, and everyone involved learned quite a bit. We will continue to practice message passing and emergency net procedures to hone our skills. One of the next opportunities will be the SET in November. Plans are underway for the SET, and information will be shared shortly.

Please be sure to check into the Saturday morning OC ARES training net. Each week, a training topic is reviewed. You will also have the opportunity to copy messages using the ICS 213 form, ask for fills, and become more comfortable sending messages. The Saturday morning net is a great way to continue to practice emergency communication skills.

I look forward to hearing you on the OC ARES training net on Saturday, and I look forward to you participating in the OC ARES Simulated Emergency Test (SET) in November.

Our Rich Ham Radio Heritage
(Number 15 of a Series)

by Woody Woodward K3VSA

Most of us have heard about or read about the giants of radio technology, people like Edwin Armstrong, Guglielmo Marconi, and Lee de Forest, whose creativity brought about the world of wireless communication that we enjoy today. Interestingly (and perhaps sadly), most of us have never even heard of one particular individual whose passion for radio and whose organizational talents were largely responsible for the establishment and preeminence of electronics engineering in the United States in general and California in particular. That man was Fred Terman.

Born in 1900, Frederick Emmons Terman was the son of Lewis Madison Terman, a Stanford University professor who was well known in his own right for popularizing IQ testing in America. Wireless was the rage among young boys of Fred's era, and he built a crystal radio and received station KPH in San Francisco. "I was hooked," said Fred, who, by 1914 was on the air as 6AE. One of his ham radio associates of this period was none other than Herbert Hoover, Jr. (W6ZH), who eventually became a president of the ARRL.

Fred graduated from Stanford in 1922 with degrees in chemistry and electrical engineering. At that time, MIT was known for having the best graduate school for EE, so Fred went there to obtain his PhD, studying under the renown Vannevar Bush. Upon obtaining his doctorate in 1924, Fred moved back to Stanford and began teaching electrical engineering there on a part-time basis. Shortly afterward, Fred suggested that Stanford develop an introductory course on "radio." This suggestion was approved, so Fred developed the course material and began teaching what was the first "electronics" program at Stanford.

Funds for laboratory equipment were limited for many years, and often some of the more advanced students were tasked with the design and construction of the needed instruments. One such device was a resistance-capacitance audio oscillator that two very promising boys named Bill and Dave worked on. One of them was a ham radio operator himself, and the other was interested in electronics applications for medicine. I'm sure you've heard of them, as they made a name for themselves: Hewlett-Packard. The audio oscillator became HP's first product, the 200A, which Terman helped them sell to Walt Disney Studios for the making of the film, "Fantasia."

By 1937, Fred had become the head of Stanford's Department of Electrical Engineering. His seminal book, Radio Engineering, had been published and revised. This book was the most widely used book in its field and still commands a respectable price on Amazon.com even today. It is certainly worth having in any decent private library of the radio arts.

From early on, Terman believed in the benefit of having his students associate with commercial businesses in the discipline, taking them on field trips to such places as Philo Farnsworth's television laboratory in San Francisco. This kind of association would prove to be beneficial during World War II, when Terman, then doing research back east on radar, would have production engineers in the research laboratories doing what we'd now call "early manufacturing involvement." Some of Fred's war projects included electronic countermeasures equipment, including radar jamming transmitters and the famous "chaff," ribbons of aluminum foil that were dropped from aircraft to confuse enemy radar operators with spurious reflections. Partly as a result of this work, in 1948 Terman was awarded the Presidential Medal of Merit.

After the war, Terman returned to Stanford as Dean of Engineering. Contacts he'd made while east helped him win many research contracts for the school, which by the start of the 1950s had pulled even with MIT in prominence. Stanford Industrial Park was begun at about the same time, and it started attracting first-tier firms such as GE and Sylvania, who built facilities there.

In 1955, Terman was appointed Provost of Stanford, and he wrote to William Shockley at Bell Laboratories, inviting him to partake of the Stanford intellectual climate for research on the newly developed transistor. Shockley recruited, among others, Robert Noyce and Gordon Moore and founded Shockley Semiconductor in Palo Alto. Fed up with Shockley's "style of management," eight of his best people, the so-called "traitorous eight," formed their own firm, Fairchild Semiconductor, in 1957. Ultimately, over fifty high tech companies would be born out of this original seed, and the technological innovations from these firms would change the way the whole world thought about, and dealt with, information. And it all began with a boy who built a crystal set and then got his ham ticket.

Terman became "Professor Emeritus" in 1965, and Stanford's Building 500 became the Frederic Emmons Terman Laboratory. After his retirement, he continued to garner awards and acknowledgements from Presidents and nations. He died peacefully of cardiac arrest during the night of December 19, 1982. "He was an engineer's engineer," said David Packard at the memorial service held at the school.

Reminders:

The next OCRA Membership Meeting will be at 7:30PM Monday, November 9th at the Orange County EOC Building, 510 Meadowland Drive, Hillsborough NC. As usual, an open Board Meeting will begin at 6:30PM at Casa Ibarra Restaurant on South Churton Street in Hillsborough, with dinner preceding at our usual table upstairs.

Be sure to visit our club's website (http://www.ncocra.org) to learn about other upcoming events in the area.

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