

Oakland County Amateur Radio Public Service Corp (ARPSC)
W8OAK Repeaters – 146.900 MHz/100pl & 444.325 MHz/107.2pl
Weekly 2 meter net 8 pm every Thursday
Hospital Radio Net – 7:30 pm last Thursday of Month
Packet 144.950 MHz/1200 baud, connects made with Oakxxx or
Callsign-# to OAKBBS (W8OAK-3) with nodes at
OAKNOD (N8NM-1 Pontiac – most coverage),
OAKEOC (W8OAK-7 at EOC) or K8DTX-7 (White Lake)
APRS – 144.390 MHz
Web Site: <http://www.arpesc.com>

Meeting Minutes for 1 June 2016

On 1 June 2016 at 7 pm, Jim Richards - AB8JR, Emergency Coordinator (EC) for the Oakland County ARPSC, called the meeting to order in the County Emergency Operations Center (EOC). The order of business included:

(I). Report from Kevin Scheid, Homeland Security Division – Oakland County, KD8ZVO:

County Homeland Security has been busy with active shooter training. Personnel using the Oakland County EOC are now being orientated on their responsibilities there. This already includes six ARPSC members.

Grant money purchases have just been submitted for the repeater and antennas. Grant money proposals for the year 2016 must be submitted by this September and followed quickly in November 2016 for the year 2017.

(II). Report from the Emergency Coordinator (EC), Jim Richards - AB8JR:

Repeater status: We have a go ahead to replace the Addison Receive Site antenna. Also, there is an area of weak reception on the east side of the county about half way up. A new receive site transmitter/antenna would be useful, and one such site does exist which might be useable. A grant money request this could be made for this.

Current receive sites use Diamond antennas which seem to have a life expectancy of about 5 years and at the most 10 years. Jim wants to look into the possibility of switching them out for J-pole antennas which are not much more than aluminum poles with few parts to wear out. However, concerns about J-poles need to be reviewed; i.e. how well they receive. Future planning needs to include equipment replacement on a periodic basis.

DMR Support Group will be held 11 June 2016 from 10 – 12 a.m. at the same Troy Fire Department Training Center.

The next siren test is Saturday, 4 June 2016. Volunteers are needed. For a list of this year's unchecked sirens, go to our website (www.arpdc.com). The USCEA repeater is still down, therefore NE Quadrant volunteers will need to use the Clarkston Repeater. If you can't connect with the Clarkston, then use the W8OAK repeater. So far this year, 52% of the sirens have been checked.

Oak Apple Run is 4 June 2016. Volunteers are needed and should contact Mike Van Buren at wd8s@comcast.com.

At the Dayton Ham Convention, Jim tested two Tytera MD-380 handhelds for spurious admissions and found both were unusually clean across the bands. At the next meeting, Ron Miotke – WD8MNX will check member's handhelds for spurious emissions. There are no spurious emission requirements for ham radios above the 225 Mhz level, except that good engineering practices must be used. The examination takes about 5-10 minutes and one gets a good idea on how an individual radio performs.

For instance, the Davisburg site was found earlier to be transmitting spurious admissions across the 70 cm band – something no one wants. This has been corrected. Jim added testing would include the radio manufacture, model number, and approximate age of the radio. There is no requirement that a transceiver "out of the box" is a true representative radio.

(III). Presentation: "OCHSD/ARPDC" by Jim Richards – AB8JR:

Oakland County Homeland Security Department and ARPDC (OCHSD/ARPDC) had a joint exercise on 5/25/2016. Background for this is the training is (1) the need by various agencies for EOC orientation, (2) followed up by partial EOC test activations, and (3) full activation exercises. Purpose is to provide training, to test operating procedures, and identify areas which need improvement. Already six ARPDC members were involved in the 5/25/2016 exercise.

Looking ahead, the County EOC wants to expand from 6 to 18 operators, not including ARPDC ham operators needed for their operations. One goal is to provide a full staff for extended events, with the ARPDC complimenting EOC county operations. Experienced ARPDC net control operators are a plus. Procedures would be revisited to streamline operations; i.e. ridding duplicity of forms, etc.

GIS (Geographic Information Systems) development: GIS is a valuable tool for situational awareness and a key to developing initial damage assessments. It uses a picture/map which provides an instant visual understanding of the magnitude of the event. Oakland County is an ESRI software subscriber for this GIS. Until recently, only county employees, local municipalities and some subcontractors could use this. Now, this has been expanded to certain ARPDC members. Six ARPDC members have been given user credentials to access the county's IT system for GIS activities – the same six

who were involved in the 25 May 2016 exercise. Application of GIS includes Skywarn events, floods, siren testing, civil unrest, chemical leaks, etc.

Still to come is embedding radio operators with CERT teams in the county, additional ICS training activities, and installation of a new DMR repeater. Discussions are being held on changing the standards for RACES cards and development of self study classes. At one time, the ARRSC was a legal corporation and believe our ARPSC should renew as 501c to keep its tax exempt nonprofit status. Many things are going on with the ARPSC.

(IV). Presentation: “What’s Happening to The Repeater System” by Ron Miotke – WD8MNX:

Our two meter, W8OAK 146.90, 100hz pl machine and its associated ancillary connections (i.e. receive sites) are in the process of being assessed for maintenance and improvements. Our plan is first to get the remote receive sites fully functional while documenting what equipment they use. Receive sites are (1) Northeast – Addison, (2) Northwest – Davisburg, (3) Southwest – Novi, (4) Southeast – Southfield, and (5) Central – Commerce and Waterford. Both the Southfield and Novi sites are not working right and need attention. Once these are corrected, attention will focus on the main site and its operation.

Both the Southfield and Commerce Sites have been around for a while and their Motorola radios will be replaced with Vertex Standard EVX 5400’s. Moving from Motorola to Vertex, some differences between radios are being found.

Each site requires two radios, one for VHF receive and one for UHF transmit which are coupled with a controller for timers, interface, audio link, Morse code CW audio ID, etc. It is important that the controller uses easily replaceable electronics should a storm damage it. Ron also wants to see how the Davisburg and Addison sites work alone. The old transceivers will be kept as backups and for special event sites. Jim Richards – AB8JR also reminds us that these changes and replacements require funding and limit the speed of updating the sites. After this, attention will focus on the main repeater site with the biggest concern being the antennas on the tower and voter/controller adjustment.

(V). “An Introduction to EZNEC Antenna Modeling Software” by Peter Gladysz – K8PGJ:

EZNEC Antenna Software by W7EL is most useful to build ham antennas. The program shows graphically radio propagation patterns based on antenna height, wire size, component size, antenna length, antenna types, etc. It comes close to actual results. Results can be real eye-openers and a great help in understanding antennas and how possibly to improve the antenna. Hams are encouraged to become familiar with such programs. For instance, larger the wire size results in greater band width. Pete

used this software to demonstrate building several antennas: an inverted V model, 10-20 meter dipole, and a G5RV. He recommended the use 12 gage insulated wire instead of thinner sizes. One needs to understand how the actual ground to antenna height greatly affects SWR and radiation patterns. He recommended the best hours to use antennas with ground hugging radiation lobes (versus more vertical radiation lobes). The actual ground below the antenna affects results with the best being verticals over large bodies of salt water. He used the sea as his ground while contesting in Bora Bora.

EZNEC comes in five forms: EZNEC v. 6.0 Demo (no cost), standard EZNEC v. 6.0, and EZNEC+, and two professional programs. EZNEC Demo allows 20 segments which limit the complexity of the antenna to be analyzed, but still is most useful for beginners and less complex antennas. Vendor information can be found at www.eznec.com.

(VI). AEC-Management Team Reports:

(1). Report from Pete Gladysz - K8PGJ, Operations:

Woodward Dream Cruise is the 3rd Saturday of August (20 August 2016). Friday night before is the City of Berkley CruiseFest. Ham radio volunteers are needed and more details will be available at the next meetings. Plans are to use both FM and DMR radio communications.

On 6 August 2016, the 2nd annual Sno*Drift Summer Rally will be held at Montmorency County, Michigan. Ham volunteers are needed and should contact Barb Steencken (head of volunteers) at www.sno-drift.org. Pete is in charge of communications.

Next week end (4-5 June 2016) is Museum Ships on the Air. Pete will be contesting at Rogers City, Michigan as W8B for the SS Carl D. Bradley near the 40 Mile Point Lighthouse.

(2). Report from Mike Vander Veer – KD8ATK, Net Operations:

W8OAK nets are held weekly on Thursday evening at 8 pm. More net control operators are needed and Mike will help you get started. If interested, please contact or email Mike Vander Veer at kd8atk@wowway.com. With the complexity of emergency situations, additional net control operators are needed at the EOC.

(VII). Miscellaneous Items:

Query? Are DMR mobile radios still being ordered for members? Answer: Jim Richards – AB8JR doesn't believe he can get a discount on these. However, he passed around a sign-up sheet for those members interested in purchasing a new DMR mobile radio or a J-Pole antenna.

Respectfully submitted,
James R. Murphy, N8SML
Secretary, Oakland County, ARPSC, 2 June 2016