



President's Notes for September 2015

There is a lot to talk about this month, with a lot of things going on this fall, so let's get started!

Field Day: 2015 Field Day is now in the history books, and the theme of this year's event could be summed up as "Trying to Operate." It has always been touted as an exercise in training for a post-disaster scenario where we would be able to operate without our standard power and antenna infrastructure. We go out into the field, use portable everything, and operate for 24 hours. Now, we have had weather problems before at Field Day, mostly with thunderstorms that roll in and roll out, bringing lightning, rain, and wind. We had a lot more than the usual problems this year, along with various technical challenges.

This year, though, the wind and rain were not associated with a passing thunderstorm, they were continuous from before the start of Field Day right through Saturday afternoon. The rain softened the ground and released our ground stakes, and the wind tore up our tents. The FARL shelter took the worst of it: we were holding it down by hand, the wind was opening the zippers as fast as we could close them, and the tarp to frame connections were both bending the structure and tearing itself up. By about 4pm, the tent tore apart and was useless. All the gear was piled back into a car. The Livonia Fire Dept inflatable tent blew over onto itself, and trapped some people inside of it for a short while, with the tables and chairs also being tossed around. A car was eventually parked in it overnight to hold it down. The food tent had to be held down by cinderblocks, and it took some zipper damage. The SSB2 tent leaked water like crazy, and it needed a 2nd tarp over the top. The CW station operated from a U Haul trailer, which did not blow over, but everyone had to duck while standing in it, and the roll door made it dark when closed. Only the digital station, in an RV trailer, remained both fully functional and undamaged. To allow our SSB1 station to get back on the air, one of the LARC hams went home and brought back a tent, which we assembled and staked down with cinder blocks. A bit cramped, it did get us back under cover and back on the air! After all of the blowing and rain on Saturday, Sunday was much calmer, and we were working contacts to the last minute of the contest.

The network communications between stations was handled by a Ham Mesh network this year. The signals were strong for all of the stations, but we suffered a series of pretty serious problems. First, the network routers at each station were powered by a wall wart. When the power went down for a generator refuel, the mesh node went down as well. That, and some difficulty getting it to connect back up again when power was restored, left individual stations

unable to connect and stay hooked up. This resulted in lost contacts with the station effectively off the air. The main computer, serving as the server, also encountered a couple of serious issues. First were multiple resets. After each reset, the computer restarted the log, resulting in a loss of duplicate checking. Then, this computer stopped working with the TCP function, which took all of the logging off-line. A call to our mesh-master, who had headed home, resulted in him racing back to the site to help. He got it hooked up again, but we do have a significant amount of time when the event was not taking contacts. At the end of the event, it did appear that we had some duplicate entries in the log, but hopefully, we did not miss any.

The final number of contacts this year, and a delta from last year, is shown below. Last year was the FARL-LARC club's best ever showing. Just like last year, we had 1 CW station, 2 SSB stations, 1 digital station, and VHF/Satellite work. Every category was down from last year, with an average drop of 17%. We were also unable to complete a satellite contact this year. With some improvements to the weather conditions, our network, and favorable band conditions, we should be able to improve for next year.

Total Contacts by Band and Mode:

Band	CW	Phone	Dig	Total	%
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160	2	0	0	2	0
80	281	326	0	607	27
40	225	717	23	965	43
20	128	287	20	435	19
15	70	51	0	121	5
10	28	56	0	84	4
6	0	45	1	46	2
Sat					
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Total	734	1,482	44	2,260	100

Delta number of contacts from last year:

Differences 2015 vs 2014					
Band	CW	Phone	Dig	Total	
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160	2	0	0	2	
80	-63	209	0	146	
40	-187	-153	-1	-341	
20	62	-423	-10	-371	
15	-32	25	0	-7	
10	28	56	0	84	
6	-1	38	1	38	
SAT	-2	-3	0	-5	
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Total	-193	-251	-10	-454	
% diff	-21%	-14%	-19%	-17%	



PEAC Bike Ride

A reminder to contact Pat, WD8JDZ, to volunteer for the September 12th PEAC ride. We need more hams to support the rest stops. This is a worthy cause, and good practice for us to perform tactical communications in the field. Pat can be reached at pquinn52@wowway.com. We need your help!

Radio Situation

For Field Day this year, we used Dave's, N8HKU, Icom 9100 for the SSB radio, as the club Yaesu FT990 radio could not be repaired in time for the event. The radio, with its 3kHz roofing filter and advanced DSP, did make a difference in rejecting interference from the other stations at Field Day as well as picking out signals in the very crowded band conditions. For the future, it is a good idea for the club to own a radio to take to this, as well as other (Maker Faire) operating events. We had started this discussion at the June club meeting, and the Board worked to further discuss this at a Board meeting in August. Below are three proposed radios to discuss the purchase of, along with the needed hardware to work with our G5RV antenna, or other antennas. We will talk about this further at the club meeting, including any ways to get the cost down further. Our overall philosophy for evaluation the options for a new club radio were:

1. **Design** capable of working in a Field Day situation. This meant we wanted a 100w radio, good filters and DSP, and capable of connecting to a computer.
2. **Bands:** HF bands were a must, VHF/UHF were not highly valued.
3. **Vintage:** We removed radios from the selection, such as the Kenwood TS-2000, that were first introduced a long time ago, have not received any updates, and may go out of production any day now.
4. **Poor reviews:** Some of the possible radios on the list had rave reviews, others had more rants. Radios with more rants were not left on the list.
5. **Weight/Portability:** We have better ratings to radios that were ready for field use as opposed to desktop or mobile use. Our primary operating conditions are portable, so radios that had very small controls, or radios that weighed over 20 lbs, were discounted.
6. **Price range:** We started out in the sub-\$1,000 price range, which is generally the entry-level radios. We ended up looking at radios into the \$1,600 price range to see what additional features and functions would be available. For all of these radios, we will need to supply a 25A peak, 12V power supply and an external antenna tuner. Those radios with an internal antenna tuner are only good for a 3:1 SWR, and the G5RV exceeds that

on several bands. Our club headset will work on Yaesu and Kenwood radios with an adapter change, but Icom radios require the Heil IC microphone element, which is powered from the radio.

At the September club meeting, we will list out the Board's recommended radio choices. These are all new radios, primarily because we wanted the advanced DSP and roofing feature options, which limits the used market. We can still look to the used market if we wish to save a bit of money. After we complete our discussions in the club meetings, we will then ask for a vote via email.

On a related topic, the club has received donations of HF radios over the years, but these are not suitable for portable use. They are also old enough to not be very good to loan out to new Hams, as they are tube-based units. The Board is looking to determine the functionality of these radios for possible sale. Any money we receive from them would offset our new radio purchase.

ARISS Contact

The FARL is still working with the Dearborn School district on an upcoming Amateur Radio via the International Space Station (ARISS) contact in November. In August, a school in Indiana was able to make a contact with the Space station on Thursday, August 27th, at 11:53 am EDT. Several of us used our vehicle radios and antenna to listen into the transmission from space back to Earth. Personally, I was impressed on how well I could hear from the middle of the Ford FEL parking lot. According to the AMSAT web tracking software, I was able to hear clearly as the ISS rose to 17 degrees above the horizon, about 1,200 km (750 miles) away. The signal got weak right at 75-80 degrees in elevation, consistent with my vertical antenna. It cleared up and was good until 17 degrees again, as the astronaut was saying his good bye to the kids. The Doppler Effect was only +/-3 kHz from the nominal frequency. The wideband FM radio picked it up without really needing any tuning whatsoever. Overall, I heard over 8 minutes of the 10 minute pass easy with this sub-optimal set-up. I feel more confident in our ability to contact the station when it becomes our turn in November.

Topics for Club meetings

We are still looking for topics to present at our club meetings. We need one for our October meeting, which will be led by Bill Boyke, N8OZV. (Dave and Roger will both be unavailable on Oct 8th). If you have any kind of topic or presentation or demonstration you can give, please contact Dave, N8HKU.



Ford Amateur Radio League (AKA: The Tin Lizzy Club) Club Meeting Minutes – June 11, 2015

Meeting Minutes for FARL, June 11, 2015

In Attendance: 5 members, 0 guests

Dave Treharne, N8HKU; Bill Allen, KD8KTF;
Sam Wells, KD8YTR; Pat Quinn, WD8JDZ;
Rod Deyo, K8SGL

Meeting called to order by Dave, N8HKU, 6:35 PM

Minutes from May meeting presented. Motion to accept by Dave, N8HKU; seconded by Sam, KD8YTR. Motion passed unanimously, minutes approved.

Treasurer's Report – Review of 2014-2015 Annual Report. All potential issues were resolved with no changes to the report first presented in May. Motion to approve made by Bill, KD8KTF, 2nd by Rod, K8SGL. Motion approved.

Review of May expenses. None made. 2014 Field Day expense reimbursement to Dave, N8KHU, is still outstanding. Pat has the receipt. Motion to approve the Treasurer's Report for May was approved.

Board of Directors – Board approved emergency expense for sending the Club Yaesu FT-990 for repair, as it was discovered by Dave, N8HKU, to be non-functional. See detailed report below.

Committee Reports:

Repeater – 2m and 220 MHz repeaters functional.

Newsletter – June edition went out. If anyone has anything to contribute to the BOLT, send it either to editor Rajiv Paul, KD8LHF, Dave, N8HKU, or Roger, KD8CSE.

Historian – post is currently vacant.

Equipment Inventory – Looking for the club coax for the G5RV and the club voice repeater. Bill Boyke, N8OZV, probably has the coax.

Unfinished/Current Business:

New Business:

Club Yaesu FT-990 Radio: Radio vintage is from 1991-1999. Discussion on the unsuccessful repair efforts to date. Discussion on the costs of sending the radio out for repair, and the labor costs to potentially repair it. If certain parts are needed and are not available, the radio could

not be repaired. Midwest Technical Services did end up offering to repair the radio. Yaesu stopped servicing this radio.

Costs for shipping are estimated to be \$50 each way, or \$100. Labor is \$45/hour, probably 2 hours minimum.

Members in attendance recommended we email the membership for a vote on whether to send the radio out for repair or to investigate purchasing a new radio for the club. The FARL primarily uses the club radio for outside events such as Field Day and Maker Faire. We have not loaned out this radio to club members for other uses. Dave, N8HKU, to send out an email with the options, including a look at entry level new radios and their comparative costs.

Wayne County ARPSC: Bill, KD8KTF, reported on efforts of this group to provide D-Star services, and the issues with Canadian regulations against the use. Website: <http://mediccom.org/public/~wcarpsc/index.html>

PEAC ride: Pat, WD8JDZ, reminded the club that the PEAC ride is scheduled for Saturday, September 12th. He asks for many volunteers to support this annual event. Amateur radio in the SAG wagons and at rest areas is much more effective than cell phone communication. Dave, N8HKU, to update the club calendar with this information.

Presentations – Field Day preparations

A discussion on Field Day preparations, starting with the site plan review from last year. Bill, KD8KTF, will string the antennas up between trees on Friday, June 26th, 3pm or so, weather permitting. Dave and Bill need to meet to get Bill the antenna and coax. (Dave forgot the antenna, and Bill, N8OZV, was not present to supply the club coax.) Bill will attempt to string the CW and FARL SSB1 antennas in an end to end configuration for least interaction. We will use coax with a coil of coax at the antenna end to choke feedline shield RF to help protect against interference.

Station configuration. We will use Dave's, N8HKU, Icom IC-9100 as the SSB radio, as a substitute for the FT-990. We will use the tent from last year. Dave will bring bungee cords or other methods to allow easy roll up of the tent sides for ventilation, as needed. Dave will also supply a solar power set-up to be able to make natural power QSOs. Bill reported LARC is planning on having tables and use the Livonia inflatable tent this year.

Adjournment – meeting adjourned at 7:40 PM

Minutes by David Treharne, N8HKU, President



Club Repeater Information

The Ford Amateur Radio League operates 3 club repeaters under the club K8UTT license. All the repeaters are located in the Dearborn, MI area near the Southfield Freeway. All repeaters are open for members and guests to operate.

Repeater	Output Freq	Input Freq	Tone
2 M Repeater	145.270	-600 KHz	100 Hz PL
1 1/4 M Repeater	224.520	-1.6 MHz	100 Hz PL
70 cm Repeater	443.425	+5 MHz	107.2 PL

Club Net: 8pm on Sunday, 2 and 1-1/4 Meter Repeaters!



Classes and Exams

The following amateur radio clubs conduct license exams throughout the year. Many clubs allow walk-ins but pre-registration will insure an exam is available for you when you attend.

Club Name	Contact Person	Phone	Email
Ford Amateur Radio League	Bill Boyke	313-805-8877	wboyke@ford.com
South Lyon ARC	Christian Anderson	248-437-3088	K8VJ@arr.net
Motor City ARC	Don Novak	734-281-7030	K8THU@arrl.net
Hazel Park ARC	Jerry Begel	248-543-2284	w9npi@comcast.net
USECA ARC	Joseph Kennedy	586-977-7222	N8OZ@arrl.net
ARROW Assn	Roger Place	734-663-4625	merrogplace@aol.com

Some of the above clubs also conduct license classes. Please contact them for additional information.



2015-2016 Club Officers

Please contact any of the officers for information regarding the Ford Amateur Radio League, or go to the club website at www.k8utt.org for current events and activities.

President	Dave Treharne	N8HKU	734-476-1666
Vice President	Roger Reini	KD8CSE	734-728-1509
Treasurer	Pat Quinn	WD8JDZ	734-729-1993
Secretary			
Repeater Chair	Murray Scott	KE8UM	248-743-1704
K8UTT Trustee	Dave Treharne	N8HKU	734-476-1666
Activity Chair	Bill Boyke	N80ZV	313-805-8877
Bolt Editor	Rajiv Paul	KD8LHF	313-244-2515



Club Meetings

The Ford Amateur Radio Club meets on the second Thursday of each month, except for Christmas and the summer months July and August. The meetings are held at 6:30 PM at the Ford Engine Manufacturing & Development Offices (EMDO) building. EMDO (located at 17000 Southfield Rd, Allen Park, MI) is south of I-94 on the east side of Southfield just north of the Allen Park Municipal offices. Park in the front of the building and come into the main lobby at the side. Knock on the inside door on the right if no one is standing there to let you in.



Next Club Meeting: September 10, 2015 at 6:30PM
Topic: Club Radio Choices and Discussion!

The Ford Amateur Radio League
PO Box 2711
Dearborn, MI 48123