



## President's Notes for April 2016

**System Fusion Repeater:** We have been enjoying the use of the new System Fusion repeater for over a month, now. It does have a nice receive range on it, and the audio quality is good. We have had both regular analog nets on the repeater on Sunday night, as well as a digital net. For those who were in attendance at the March club meeting, you got a demonstration on the audio differences between analog mode and the System Fusion mode. You can tell who the operator is in System Fusion digital mode, but there is a mechanical quality to the sound. What we did not hear, though, is any hiss or noise on the signal. It was perfectly clear, where the analog signal had background noise in it. I think I get so used to hearing the background noise that I pretty much tune it out on a regular basis. When the digital signal comes in, though, I really do notice the difference. I assume that we will be hearing more and more digital communications on the repeater as more members and guests activate System Fusion capable equipment in their vehicles and homes. I look forward to trying it out as well, as I do not have any mobile System Fusion equipment as of yet. As a reminder to those of us who do not have digital equipment: The 100Hz transmit tone from the repeater is again active. Set your tone squelch on and at 100Hz decode. That way, if a digital communication is going on, your radio will remain muted. It is a pretty bad screech when you listen to digital communications in analog mode, so it is best to avoid it. Two other things we have been hearing, or not hearing: The repeater occasionally stops retransmitting for a minute or two in analog mode. We have had this happen several times during roundtables or the start of the Sunday night net. Then, it appears again. Please be patient when this occurs. I am in communication with other System Fusion repeater owners in the area to see what they experience as well. There may be software updates to the repeater that can help this. Secondly, the repeater seems to need to listen for a fraction of a second at key on to determine if the transmission is analog or digital, resulting in a slight delay in transmission. Press your mic button and give yourself a small time before talking. Just a fraction of a second will do to make sure your first word is not partially cut-off.

**FT-991 Radio:** It was fun bringing out the new FT-991 radio for a demonstration at the club meeting. I really think we are going to have a great time using it at Field Day this year. At the club meeting in April, we will ask to make some decisions on a carrying case for it and its associated gear. I have been working on a mock-up drawing on how the radio may fit in a certain sized case. See below for the sketches in this newsletter. Mac Lunn, KD8TPO, will bring a sample case to the club that is the same width, but taller, to give us some perspective. The taller case gives us more room, but it will also be harder to fit in a vehicle and heavier. We

will use our collective wisdom to pick out a case to protect our valuable gear, and make very easy to haul our stuff out and be ready to operate at any club event!

**FT-990 Radio:** At the March club meeting, we agreed to put up the FT-990 radio for sale as parts, as it was still non-functional, and the display circuit board was badly damaged and not readily repairable. Right after the meeting, though, Mac, KD8TPO, found not one, but several FT-990 display boards for sale. We also ended up finding a used plastic display panel for sale on EBay in Bulgaria, replacing the cracked and glued together panel we had. After some on-line email votes, we ended up purchasing a display board and plastic display panel to try and fix the radio. Tye Winkel, KC8JEY, volunteered to perform the delicate surgery of taking our humpty dumpty radio apart and putting it back together again. (For those who have not seen this radio: the main circuit boards in the radio are in slots in the chassis, like a computer chassis. The display panel, however, is a spider's web of various connectors and wires and screws and parts. It is very challenging to remove and to reassemble in a coherent fashion.) As of April 2<sup>nd</sup>, Tye reported that the repairs were completed, and the radio has sprung back to life! Tye worked many contacts on 20m with it, and reported it back in service. Because it is a great base station radio, but difficult for portable use with the club, I am not sure it would not find a better life in someone else's shack as a main radio. We will discuss again in April.

**Michigan QSO Party:** The Michigan QSO Party will be held this year on April 16<sup>th</sup> (<http://www.miqp.org>). The event runs from noon to midnight on Saturday, and is a great time to be able to get on the air, call CQ, and be a wanted station. I have yet to get all counties, but I have gotten over half on several occasions. Many operators in surrounding states get on the air to work us, so have some fun with them!

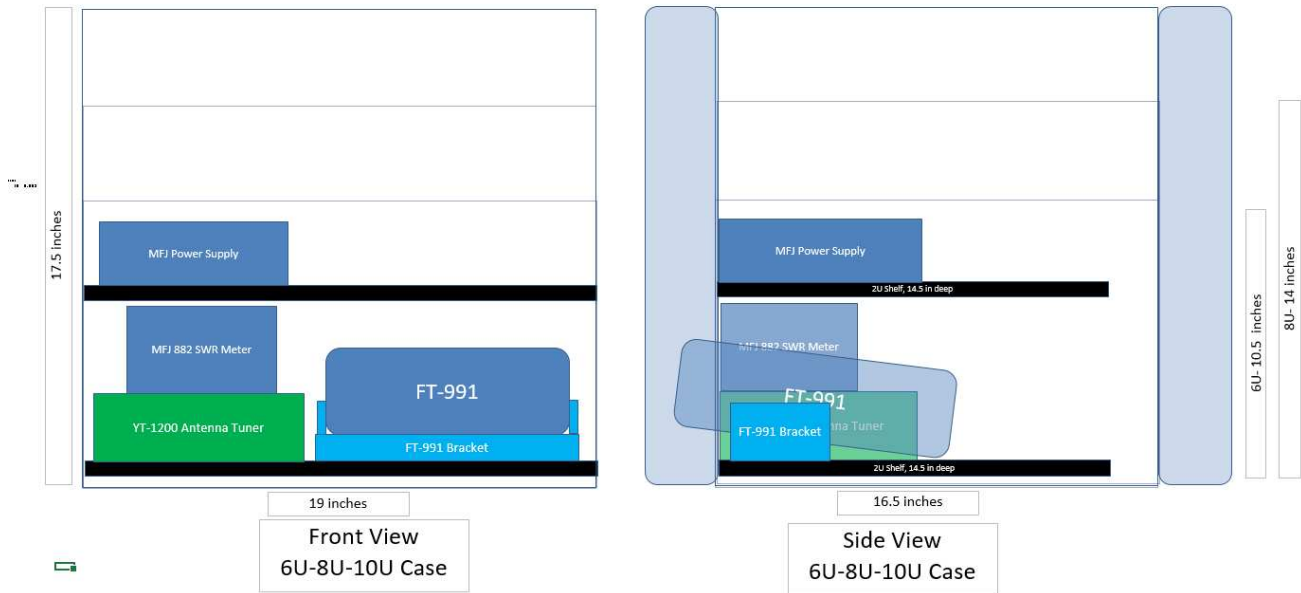
**Club Elections:** April is our annual club election month. We really welcome anyone who volunteers to get involved with our club. We have had the club secretary position open for several years now, and we ask someone step up to take the meeting notes whenever they are present. It does not matter if you can make all of the club meetings or not; anyone can help fill-in. Associates (non-Ford or Visteon employees or retirees) can be the Club secretary or Activities Manager. The President, Vice President, and Treasurer are limited to Ford affiliation because the club is part of the Ford Employee Recreation Association. Each officeholder is supposed to keep their position for a maximum of 2 years. We have been going longer than this in the President, Vice President, and Treasurer for a while now. Please consider a position in our club!

**Field Day:** Keep your eyes open for a shelter suitable for us to use as a club for Field Day. We are looking for something that is 10x10 or so, has sides that can either be in place or rolled

up/allowed for a lot of ventilation, and is easy to assemble and take down. Oh yeah, it needs to be wind and rain resistant as well. We are not asking for much, are we?

### FT-991 Enclosure Designs:

This picture shows the 6U, 8U, and 10U heights and equipment loaded in. The higher boxes would allow for more accessories to be stored inside, such as the amplified speakers. But, it also makes it heavier and more difficult to carry.



### Draft Parts list for the carrying case:

	Cost	Make	Source	Web address
Cabinet with ends	\$ 74.00	MCM Custom Audio	MCM Electronics	<a href="http://www.mcmelectronics.com/product/555-15630">http://www.mcmelectronics.com/product/555-15630</a>
2U shelf	\$ 18.69	MCM Custom Audio	MCM Electronics	<a href="http://www.mcmelectronics.com/product/555-15476">http://www.mcmelectronics.com/product/555-15476</a>
2U shelf	\$ 18.69	MCM Custom Audio	MCM Electronics	<a href="http://www.mcmelectronics.com/product/555-15476">http://www.mcmelectronics.com/product/555-15476</a>

FT-991Bracket	\$ 33.00	Yaesu MMB-90	Giga Parts	<a href="http://www.gigaparts.com/Product-Lines/Mounting-Brackets_2/Yaesu-MMB-90.html?gclid=CjwKEAjw_oK4BRDym-SDq-aczicSJAC7UVRtZB4YiLu_DEmONcduKThk4tOEaKCKElvXBqqXXK6WEhoCNCpw_wcB">http://www.gigaparts.com/Product-Lines/Mounting-Brackets_2/Yaesu-MMB-90.html?gclid=CjwKEAjw_oK4BRDym-SDq-aczicSJAC7UVRtZB4YiLu_DEmONcduKThk4tOEaKCKElvXBqqXXK6WEhoCNCpw_wcB</a>
SWR Meter	\$ 84.00	MFJ-882	Giga Parts	<a href="http://www.gigaparts.com/Product-Lines/SWR-Watt-Meters/1-8-200-Mhz-200W-X-SWR-Wattmer.html?gclid=CjwKEAjw_oK4BRDym-SDq-aczicSJAC7UVRt9nYHRHf7tF4ywTdVBJXSnWXUf3kQxH0SZoK5skzukhoCmJ7w_wcB">http://www.gigaparts.com/Product-Lines/SWR-Watt-Meters/1-8-200-Mhz-200W-X-SWR-Wattmer.html?gclid=CjwKEAjw_oK4BRDym-SDq-aczicSJAC7UVRt9nYHRHf7tF4ywTdVBJXSnWXUf3kQxH0SZoK5skzukhoCmJ7w_wcB</a>
Misc tie down straps	\$ 7.68	Simpson Strong tie	Home Depot	<a href="http://www.homedepot.com/p/Simpson-Strong-Tie-ST2115-20-Gauge-16-5-16-in-Strap-Tie-ST2115/100375249">http://www.homedepot.com/p/Simpson-Strong-Tie-ST2115-20-Gauge-16-5-16-in-Strap-Tie-ST2115/100375249</a>
Misc hardware	\$ 5.29	Rack screws and washers	MCM Electronics	<a href="http://www.mcmelectronics.com/product/50-1855?green=E9357DA9-B137-54BD-A35B-1A03D6062BEE">http://www.mcmelectronics.com/product/50-1855?green=E9357DA9-B137-54BD-A35B-1A03D6062BEE</a>
Power Strip	\$ 6.00			
Coax Jumper cable	\$ 10.00	Various	Dayton Hamvention	
Coax Jumper cable	\$ 10.00	Various	Dayton Hamvention	
<b>Total</b>	<b>\$ 267.35</b>			
<b>Without SWR meter</b>	<b>\$ 183.35</b>			
Look for a SWR meter used or on special at Dayton. Best to have a cross meter type that can be backlit.				



## **Ford Amateur Radio League** (AKA: The Tin Lizzy Club) **Club Meeting Minutes – March 10, 2016**

### **Meeting Minutes for FARL March 10, 2016**

In Attendance: 11 members, 4 guests

Roger Reini, KD8CSE: Member

Sam Wells, KD8YTR: Member

John Dynoian, KE8CTQ: Guest

Earl Morse, N8SS: Guest

Tye Winkel, KC8YEJ: Member

Chuck Homick, KA7ORS: Guest

Bill Boyke, N8OZV: Member

Pat Quinn, WD8JDZ: Member

Richard Maske, K8RMM: Member

Bernie Mitchell, KD8KEO: Member

Bob Stead, K8ETE: Member

Hank Freeman: Guest

Gerry Trimble, KG8HZ: Member (as of tonight)

Mac Lunn, KD8TPO: Member

Dave Treharne, N8HKU: Member

**Meeting called to order** at 6:32 pm by Dave Treharne, N8HKU, President

**Minutes** from February were reviewed; Roger Reini, KD8CSE, Vice-President, noted a correction that needed to be made: “X members” should be “5 members and 1 guest.” No other connections were made, and the amended minutes were approved by voice vote.

**Treasurer’s report** was given by Pat Quinn, WD8JDZ, Treasurer. He reported income of \$300 from the sale of the Kenwood TS-830 and \$125 from the sale of the MFJ voice keyer, along with two dues payments and interest of 8 cents. The report was approved by voice vote.

**Board of Directors:** the board did not meet in the previous month.

**Repeater:** the new DR-1X System Fusion repeater was installed by repeater chair Murray Scott, KE8UM, on February 22. It is working in both analog and digital modes, although some kinks remain to be worked out. The 220 MHz repeater is not relaying the digital transmissions from the 2-meter repeater, only the analog ones. There was a period when the repeater could not be shut down by phone; while this was at first thought to be a problem with poor cell phone reception at the site; that proved not to be the case (a misconnected cable from the cell phone/regular phone interface to the repeater controller was the culprit). The hotel has new ownership once again; it is now the Edward Village Michigan. There are loud squelch tails after most transmissions; this hasn't been seen by the owners of the Chelsea and I-94 repeaters. New relays to ensure that the repeater shuts down when commanded to will need to be obtained; CW ID's in digital mode need to be enabled.

**Sunday Night Net** is still going on Sundays at 8 PM. Last Sunday (March 6<sup>th</sup>), there was an extended QSO after the net that involved several digital transmissions; this will serve as a basis for a digital "after-net" to take place after the main net concludes, starting with the March 13 net. This led to some discussion about the feasibility of using System Fusion at the PEAC ride in September; the feasibility of hitting the I-94 repeater from each rest area and route would need to be assessed, and compatible transceivers would need to be obtained.

**Education/Training:** Tuesday lunchtime training sessions are continuing at Ford, with a testing session scheduled for March 22.

**Newsletter** for March has been e-mailed; thanks to Rajiv Paul, KD8LHF, for his editing and preparation.

**Website** is up to date

**FERA:** no report

**Historian:** still trying to transfer the club archives from former historian John, N8NWA, to Tye, KC8YEJ

**Club Inventory:** the FT-990 has a damaged display board that cannot easily be repaired; no suitable replacement board has been found on the market. Tye, KC8YEJ, recommended that the radio be put for sale/auction for parts on eBay for \$300. Roger, KD8CSE, moved that Tye's recommendation be done, and Tye seconded it; the motion carried by voice vote.

**Application for Membership:** Gerry Trimble, KG8HZ, submitted an application to rejoin the club; it was accepted by voice vote.

**Reimbursement:** Dave, N8HKU, requested \$23 reimbursement for the purchase of a Nifty Mini manual for the FT-991 at the LARC swap; this was approved by voice vote. The manual was also passed around the room for the attendees to review.

**Carrying Case:** Dave, N8HKU, reminded the attendees of the need for some sort of case for the FT-991 to guard against rough handling. He will put together a proposal for a rack case and present it at the April meeting.

**Presentation:** Dave, N8HKU, demonstrated the club's new FT-991, which has replaced the FT-990. Mac, KD8TPO, and Roger, KD8CSE, helped in demonstrating the System Fusion capabilities of the FT-991 (and of the new club repeater) by communicating with Dave via the repeater.

**Adjourned** at 7:48 PM

Minutes recorded by Roger Reini, KD8CSE



## 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

**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](http://www.k8utt.org) for current events and activities.

<b>President</b>	Dave Treharne	N8HKU	734-476-1666
<b>Vice President</b>	Roger Reini	KD8CSE	734-728-1509
<b>Treasurer</b>	Pat Quinn	WD8JDZ	734-729-1993
<b>Secretary</b>			
<b>Repeater Chair</b>	Murray Scott	KE8UM	248-743-1704
<b>K8UTT Trustee</b>	Dave Treharne	N8HKU	734-476-1666
<b>Activity Chair</b>	Bill Boyke	N80ZV	313-805-8877
<b>Bolt Editor</b>	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: April 14, 2016 at 6:30PM**

**Topic: Annual Club Meeting and Review, selection of a portable carrying case for the club HF/VHF/UHF station.**

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