



FARL President's Notes, May 2010

Greetings, club members! First of all, thank you for re-electing me as your president for another year. Let's work to make these next 12 months as good as or better than the last 12 months with respect to the club. Now, on to other things. As I am typing this note (April 24), I have just passed my Extra Class license examination. "About time!" I can imagine a few of you saying. This now means, among other things that I can fully participate as a VE now, being able to give all levels of exams rather than just the Technician exam. If I go to Europe, I can operate with full privileges under the CEPT agreement. And of course, the full amateur radio spectrum is available to me for operating. Thanks go to my main training materials, the Gordon West Extra Class training manual and the Amateur Radio Extra Prep software for iPhone and iPad by Patrick J. Maloney. Taking and passing seven practice tests with that software gave me the confidence to take the test for real today.

I took the exam out in South Lyon at the Witches' Hat Depot, the restored old train station in the downtown area. The test session was run by SLAARC, the South Lyon Area Amateur Radio Club. I'd been there once before, when I took and passed the Element 1 (Morse code) exam and thereby qualified for my General license. Seven other test takers were there with me. One was going for her Technician license, one was going for his General, and the rest of us were going for our Extra. And we all passed. Here's hoping that the test session we're giving at the Ford Yacht Club this month will be just as successful.

Have you seen the revamped ARRL website yet? It's been substantially overhauled and reorganized with the intent of making it more useful to members and the public. It takes some getting used to, but I think they've done a good job with it. They've made some improvements to it since the overhaul, and I'm sure they'll continue to make adjustments.

If you're a member of Facebook, take a look at our new page for the club, as developed by our Historian John, N8NWA. No, this doesn't replace the website at k8utt.org.

Our May meeting is on May 13, but I won't be in attendance. As I said at the conclusion of last month's meeting, I'll be down in Dayton attending the Hamvention and Four Days in May, the annual QRP event, with my uncle Bill, K8WA. While our meeting is taking place in Dearborn, I will be participating in the FDIM Buildathon, learning how to handle SMD components and building an iambic CW keyer based on the K12 chip from K1EL Systems. Meanwhile, you'll be getting an update on our preparations for Field Day in June with LARC, a report on the Board of Directors' review of the club constitution and bylaws, and a presentation from Al, W8AMH, on Bluetooth headsets. It's too bad I'll be missing out on the meeting.

Here's a reminder for those of us who'll be at Dayton: we typically set our HT's to the Tin Lizzy 2m output frequency (145.27 MHz) and turn on a 100 Hz tone.

73,
Roger, KD8CSE



Ford Amateur Radio League (AKA: The Tin Lizzy Club) Club Meeting Minutes - April 08, 2010

Meeting called to order at 6:35pm by club President Roger, KD8CSE

Minutes of the March, 2010 meeting were reviewed. Motion to approve made by Rusty, N8RGI, seconded by Bernie, KD8KEO. Motion approved.

Treasurer's report from Bill, WA8HEA was read by Roger, KD8CSE. Motion to approve report made by Bill, N8OZV, seconded by Bernie, KD8KEO. Motion approved.

Communications from the Board of Directors: No board meeting last month; no communications at this time.

Repeater: The 220 MHz machine is down, not transmitting, not receiving. Murray KE8UM has been asked to investigate. On the 2m repeater, there appears to be an interference signal present 10 khz down from the output frequency. Inform N8HKU about any information on where the interference may be coming from. There was also a report of a conversation in Ann Arbor on the 2m Tin Lizzy output frequency. Dave, N8HKU, will listen in to see where it may be coming from.

Repeater Net: N8HKU is working on a script developed by Richard, K8RMM. He will modify it and post it to the club website for all to use.

Education and Training: Next exam session: Sunday at 2pm at the Ford Yacht Club. Bill N8OZV has three examiners, OK for more. Contact him for travel information. Next test planned for Sunday, May 9th, 2pm to 4pm. No exam preparation schedule for the summer as of now.

Equipment to borrow: John, N8NWA, has a couple of 2m vertical antennas and one 11 element 440 MHz beam that he is willing to loan to club members in need of an antenna.

Headset: Prosoft Plus quoted the Heil headset with the HC4 element at \$140, cable for \$20, handswitch \$29, for a total of \$189. A discount will be provided down to a total of \$170.18 plus shipping. Dave to continue to shop.

Club Historian Position: John, N8NWA is interested in this position. He was nominated and affirmed by the club.

Club Elections: Dave, N8HKU, presented the quorum call: Over the last three months, a total of 36 members were present, giving an average of 12 members per month. A quorum is $\frac{1}{2}$ of this number, giving a minimum number at 6 members required. A total of 16 club members are present for the elections.

Officer Elections:

President: Roger Reini, KD8CSE has served one term, and is eligible for a 2nd term if desired. Roger accepted a nomination. No other nominations were made. KD8CSE was voted in by acclamation by all members present.

Vice President: Dave Treharne, N8HKU has served one term, and is eligible for a 2nd term. Dave accepted a nomination for a second term. No other nominations were made. N8HKU was voted in by acclamation by all members present.

Secretary: Bill Brezina, WA8HEA originally accepted a nomination, but decided to withdraw. John Turowski, N8NWA accepted a nomination for this position. No other nominations were made. N8NWA was voted in by acclamation.

Treasurer: No nominations were received for Treasurer. Bill, WA8HEA, agreed to serve another term or until a new Treasurer is elected. The club membership voted to accept by acclamation.

Activities Manager: John Stucka, N3JM has served one term, and is eligible for a 2nd term. John accepted a nomination for a second term. No other nominations were made. N3JM was voted in by acclamation by all members present.

ARRL Renewals: Club members can renew through the club, giving \$2 of their renewal fee to the club, sending the remaining \$37 to the ARRL. Bill WA8HEA has forms and can provide help in filling out the application. New ARRL members can deduct \$15 from their fee to the club as part of a new membership.

Waxman letter: Bill WA8HEA has letters to sign for members wishing to support the legislation but has not sent a letter to date. Bill will fax them to Washington.

Cadillac Swap: May 1st.

30ft Tower is available, free for asking. Contact Bill WA8HEA for information.

Michigan QSO Party: Noon to midnight Saturday, April 17th. LARC is operating from the Livonia EOC. If interested in participating, your name and callsign needs to be given to Mike Rudziki, N8MR, to be put on the list. Bill, WA8HEA, will also help send in names.

iPad from Apple: Roger, KD8CSE showed off the new Apple iPad.

NPR audio article on Amateur Radio: Mentioned by Chuck, WV8A. See NPR.org for more information.

Christmas in July at Mott Children's Hospital: Bill N8OZV was asking about club interest in participating in going to Mott in Ann Arbor for a Christmas in July Speaking with Santa. The club expressed sufficient interest for Bill to be able to move forward. Bill will target mid July, not the week of July 4th.

Software Defined Radio: Presentation of the current offerings of Software Defined radio put together and presented by Bill, WA8HEA.

May club meeting: Roger will be at Four Days in May, in Dayton, during the club May meeting. Dave, N8HKU, will lead this meeting.

Adjournment: Meeting called to adjourn at 8:35pm.

Meeting Minutes taken by Dave Treharne, N8HKU.



FCC Proposes Additions, Changes to Amateur 5 MHz Allocation

Acting on a 2006 Petition for Rulemaking filed by the ARRL, the FCC has issued a Notice of Proposed Rule Making (NPRM), ET Docket No 10-98 to modify the rules that govern amateurs' secondary use of five channels in the 5 MHz frequency range known as 60 meters. The proposed changes would substitute a new channel for one that is seldom available because of occupancy by the fixed service, which is primary in this range. Also proposed is an increase in power from 50 to 100 W effective radiated power (ERP) and the addition of CW, PSK31 and PACTOR-III modes with provisions to ensure that such operations would be compatible with the primary service. The proposed changes can be found beginning on page 8 of the NPRM.

"The ARRL is pleased that the Commission has opened this proceeding to increase the usefulness of the limited 5 MHz Amateur Service allocation," said ARRL Chief Executive Officer David Sumner, K1ZZ. "We are gratified that the Commission and the NTIA agree that the responsible manner in which amateurs have been using the five USB channels warrants some expansion of privileges so that the Amateur Service can be even better prepared for service to the public."

Background

The 60 meter band is part of the larger 5060-5450 kHz band that is allocated to the fixed service on a primary basis for Federal and non-Federal use, and to the mobile (except aeronautical mobile service) on a secondary basis for Federal and non-Federal use. Per footnote US381 to the Allocation Table, this makes five frequencies in this band -- 5332 kHz, 5348 kHz, 5368 kHz, 5373 kHz and 5405 kHz -- available to the Amateur Service on a secondary basis. In addition, footnote US340 authorizes Federal and non-Federal maritime and aeronautical mobile stations to use the 2-30 MHz band (which includes the 60 meter band) for measuring the quality of reception on radio channels on a non-interference basis; however, actual communication by these stations is limited to frequencies specifically allocated to these services.

In 2003, the FCC added the Amateur Service secondary allocation to this band after determining that such frequencies could be useful to the Amateur Radio Service for completing disaster communications links at times when existing frequencies in the 80, 75 and 40 meter bands are not available due to ionospheric conditions. The FCC concluded "that such an allocation represented the best compromise available to give the Amateur Radio Service access to new spectrum for a wide range of radio communications, while assuring that incumbent operations are protected."

At the request of the National Telecommunications and Information Administration (NTIA), the FCC restricted the use of these five channels to single sideband suppressed carrier voice using only the upper sideband transmission, and a maximum effective radiated power (ERP) of 50 W peak envelope power (PEP). The Commission adopted these operating restrictions to decrease the interference potential between amateur stations and federal stations.

On October 20, 2006, ARRL filed a Petition for Rulemaking, seeking certain modifications to the rules governing Amateur Radio use of the 60 meter band. Seven weeks later, the FCC issued a Public Notice to seek comments on the ARRL's Petition, but none were received. In its Petition, the ARRL requested that the FCC make three modifications to the existing rules governing Amateur Radio use of the 60 meter band, specifically Section 2.106,

footnote US381 of the Rule and Section 97.303 of the Rules, in order to increase the flexibility in the use of the band and to facilitate emergency communications provided by the Amateur Radio Service:

- One of the available channels, 5368 kHz, be replaced with 5358.5 kHz.
- Three additional emission designators -- 150HA1A, 60H0J2B and 2K80J2D -- be authorized in the 60 meter band, provided that the operators using these modes utilize great care to limit the length of transmissions so as to avoid interference with Federal operations.
- The maximum ERP on channels in the 60 meter band be increased from 50 to 100 W PEP, provided that amateurs utilize Voice-Operated Transmit (VOX) while in the single sideband emission mode, so as to permit the amateur operator to bear an attempt by another station, which may be a Federal user, to utilize the channel.

The ARRL Petition argued that a successful history of sharing with Federal users -- together with its amateurs' strong desire to improve Amateur Service use of the band -- merited a grant of greater flexibility in the use of these frequencies: "Because of strong admonitions provided by ARRL to Amateur Radio operators relative to their obligations vis-à-vis Federal agency primary use of and access to these few channels, the access provided for the Amateur Service with the assistance of NTIA in the past three years has been successful without qualification. Neither ARRL, nor, apparently NTIA, is aware of a single reported instance of interference to a Federal user by a radio amateur operating at 5 MHz to date." The proposals contained in the ARRL Petition were based on these discussions and a May 12, 2006 letter from the NTIA, indicating that it would "look favorably" on the above-described modifications should ARRL choose to pursue rule changes with the Commission.

On March 11, 2010, the FCC adopted a Notice of Proposed Rule Making and Order that made certain amendments to correct the Amateur Service rules and to conform the rules to prior Commission decisions. The FCC's proposals are based on the current rules, as modified by that action.

Discussion

The existing Amateur Service use of the 60 meter band represents what the FCC calls "a balancing of important interests -- the desire to provide amateur operators with frequencies that could be used to complete disaster communications links when other bands are not available, and the need to protect important primary Federal operations in the 60 meter band." The ARRL's Petition seeking to modify "the existing spectrum sharing scenario in a manner that appears to be consistent with the interests of both Federal and amateur users in the band, and we tentatively conclude that the changes to footnote US381 and Section 97.303 of our Rules that are proposed by ARRL should be adopted."

One of the available channels, 5368 kHz, be replaced with 5358.5 kHz

The ARRL, in its Petition, pointed out that its request to replace the 5368 kHz channel with 5358.5 kHz is based on reports from amateur operators of frequent interference from a digital signal on the existing authorized channel. "Based on this information, we tentatively agree that the proposed modification would eliminate interference and enhance Amateur Radio operations and that it should be implemented." The FCC noted that most non-Federal licensees in the 60 meter band are licensed across the larger band 5005-5450 kHz and that many are also licensed across other bands, as well: "Therefore, we believe that our proposal to exchange one amateur channel for another in the 60 meter band will have a de minimis impact on these licensees, while benefiting Amateur Radio users who have a limited number of channels in the band on which they may operate and reducing the potential for interference from amateur operations to the primary Federal stations operating in the 5330.6-5406.4 kHz band."

Three additional emission designators -- 150HA1A, 60H0J2B and 2K80J2D -- be authorized in the 60 meter band, provided that the operators using these modes utilize great care to limit the length of transmissions so as to avoid interference with Federal operations.

In its Petition, the ARRL explained that it had conducted a survey of Amateur Radio operators who use the 60 meter band. The League found that there is significant demand for modulation techniques that would allow telephony and data transmissions in addition to the one that is currently permitted for voice transmissions (single sideband suppressed carrier upper sideband, emission type 2K80J3E). Specifically, ARRL maintained that Morse code telephony by means of on-off keying (emission designator 150HA1A) continues to be used by amateur stations,

due to its reliability in difficult propagation conditions. The ARRL also stated that the other requested emission designators -- 60H0J2B (generally known as PSK31) and 2K80J2D (generally known as PACTOR-III) -- are popular narrowband data modes.

In its NPRM, the FCC proposed to add these three emission designators that would allow four permissible emission types to be used in the 60 meter band. It also proposed to permit "any additional modulation techniques that we adopt to be used on all assigned frequencies within the 60 meter band, including the assigned frequency 5368 kHz in the event that we do not adopt our proposal to replace the assigned frequency 5368 kHz with 5358.5 kHz."

The ARRL pointed out that FCC could require amateur operators to limit the length of transmissions in the two data emission modes "in order to better position amateur operators to avoid causing harmful interference to primary operations and suggests adopting a rule that incorporates a general requirement to limit the duration of data transmissions."

As such, the FCC is seeking comments as to whether a rule addressing transmission limits "would help ensure that in the currently infrequent instances in which Federal agencies exercise their primary use of the 60 meter band frequencies, those amateur licensees who have been operating on a secondary basis will be better positioned to avoid causing harmful interference, which is prohibited." If commenters support a specific time limit, the FCC wants to know whether a transmission length of three minutes would be sufficient; if not, what limits should the Commission adopt?

In addition, the FCC is also seeking comment on whether "amateur stations should be permitted to transmit emission types in addition to the four discussed above in the 60 meter band without increasing the likelihood of interference to primary users." To the extent that commenters identify such emission designators, the FCC would like them to discuss their "use and benefits and, in particular, how the use of those emission designators can be balanced with our continuing interest in protecting primary stations in the 60 meter band."

The maximum ERP on channels in the 60 meter band be increased from 50 to 100 W PEP, provided that amateurs utilize Voice-Operated Transmit (VOX) while in the single sideband emission mode, so as to permit the amateur operator to bear an attempt by another station, which may be a Federal user, to utilize the channel

The ARRL asserted in its Petition that the typical transmitter output power in modern Amateur Radio transceivers is 100 W PEP, and that the present 50 W PEP transmitter output power limit compromises communication reliability in the 60 meter band. At certain times of the year, and more often in the southern latitudes, there are high static levels in this frequency range. It is the ARRL's position that a slightly higher transmitter power output would bolster reliability, especially in connection with emergency communications.

The ARRL also suggested that amateur operators be required to use Voice-Operated Transmit (VOX) in the phone emission mode, saying that by adopting this requirement in conjunction with an increased transmitter output power limit would permit a Federal user to interrupt an amateur station's transmission quickly and easily without waiting for an unpredictable end of the transmission. The FCC is seeking comments on these proposals, specifically comments on "whether a VOX mode of operation might increase the potential for interference because of its susceptibility to keying a radio to transmit under high surrounding noise environments such as might be found in an emergency operations center."

In its proposed rules to implement the changes as discussed above, the FCC has, in some cases, incorporated editorial revisions intended to make the rules easier to read and to ensure that control operators have the necessary information to easily determine their proper operating requirements on the 60 meter band frequencies. Also, at the request of NTIA, the FCC is soliciting comments on whether amateur operators who provide emergency communications using the 60 meter band should be encouraged to add a sound card-generated Automatic Link Establishment (ALE) capability to their stations.

The commenting period for this NPRM will begin once it is published in the Federal Register and end 30 days later. The period for reply comments begins once the NPRM is published in the Federal Register and ends 45 days later.



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	Dee Flint	248-981-8145	N8UZE@arrl.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.



2010-2011 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	Roger Reini	KD8CSE	734-728-1509
Vice President	Dave Treharne	N8HKU	734-476-1666
Treasurer	Bill Brezina	WA8HEA	313-563-2905
Secretary	John Turowski	N8NWA	313-258-1996
Repeater Chair	Murray Scott	KE8UM	248-743-1704
K8UTT Trustee	Dave Treharne	N8HKU	734-476-1666
Activity Chair	John Stucka	N3JM	313-576-9880
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: May 13, 2010 at 6:30PM

Topic: Bluetooth Headsets for Amateur Radio, Presented by Al, W8AMH

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