

March 29, 2016

Kansas City DX Club Meeting Minutes

Carmack Community Room, Central Resource Library - Overland Park, KS



The March 29, 2016 meeting of the Kansas City DX Club was called to order by President **Jeff Blaine, AC0C**, at 6:37 pm (2337 March 29, 2016 UTC). The meeting was held at the library because the Better Homes and Gardens office is being moved and that space is no longer available. Thanks to **Bill, K0VBU** and his company for allowing us to meet in that fine place the last few years.

Agenda -

- Introductions/Greeting
- DX and Contesting News
- Presentation – **Ted, KC3OL**, EME (Moonbounce)
- Short Features:
 - **Dave, W7FB**, Trees and Insulators

Introductions -

As customary, we all introduced ourselves to the group.

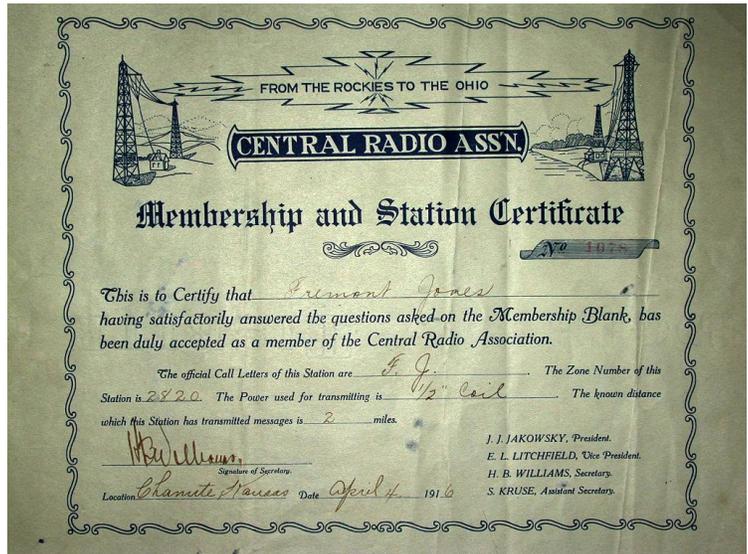
Guest, Our speaker **Ted Holdahl, KC3OL** and his wife, **Minda** and Ted's friend **Clark Hatch, W0BT** from Topeka were introduced. Welcome to you all.

News –

- April contesting – lots of QSO parties
- DXing – The big one is **VK0EK** Heard Island. Several of us had worked them as of meeting time but most reported them fairly difficult to work. **FT4JA**, Juan de Nova, is also coming up in a day or so. Several others were noted as being worthy of working. **Dave, W7FB**, demonstrated how the propagation hops for us here in the Midwest USA have to bounce several times on land, making it much more difficult to hit them than those on the East and West coast experience.

Ham History

Jeff Blaine, AC0C showed a picture from John Wilson, K0IP, QRZ.com web page which is of a certificate his grandfather had in 1916. If anyone has any information about the Central Radio Assn., please contact John. This is a great page by the way. Check it out.



Program – Introduction to EME by Ted Holdahl, KC3OL

Ted began by showing several examples of EME antennas and described his equipment which an IC706MK2G transceiver, an 8877 linear amplifier and a pair of Yagi antennas of about 12 dB gain all working on 2 meters.

He showed an example of K4MSGs QRP (200W) setup which you can see at QRZ.com.

The logistics of an EME contact were described which adds up to a fairly daunting round trip path loss of 252 dB and involves Doppler and Faraday shift. Faraday shift has to do with the polarity of the signal shifting randomly, sometimes taking about 30 minutes to reverse.

A good time to attempt a contact is moonrise or sunset with the antenna elevated about 15 degrees.

The major concerns about EME are both stations must see the moon at the same time, conditions change daily and there are only about 20 days out of the month that are suitable for communications because of noise caused by the Milky Way background or the Sun.

Some of the software programs used were described:

- Moonsked used to schedule contacts
- WSJT – Weak Signal communication by K1JT which makes “QRP” EME possible because signals about 6dB below the noise level can be detected
- JT65B is another digital mode that is used
- PstRotator rotator software
- EME spotting is done at livecq.eu (how did we ever do without the internet?) The Funcube dongle is a popular receiving preamplifier.

Ted likes the IC706 but has recently acquired a Kenwood TS2000 and likes it as well.

Putting the rx preamplifier at the antenna involves some complications of course. You need good relays sequenced to switch from rx to tx mode at the proper time.

Ted has been doing EME operation for about three years and has confirmed 48 entities, 44 states, and 738 QSOs, 286 of which are initial QSO's. All EME QSLing is done direct.

Many other details were discussed which I was unable to get to paper. Great job, Ted!

Short Feature - Tree Tips by Dave Fisher, W7FB

Dave had a dipole insulator trapped high up in a tree fork. He showed a very un-cost effective method of retrieving it by nailing several 1x2s together to make a very tall wobbly pole. He screwed an eye hook into one end and ran it up the rope line to the insulator. Then he simply pushed it off. Ten dollars worth of wood to save an insulator that cost a few cents.

Dave then showed us a photo of a tree that had been struck by lightning but with no obvious burn damage. All the damage was from acoustics caused by air and gas expansion.

Jeff, AC0C, showed us photos of **K5AND** shack and VHF/UHF antennas.

29 people signed the attendance sheet.

The meeting was adjourned at approximately 8:15pm.

The April 2016 club meeting is TBD but will likely be Tuesday, April 26 again at the Johnson County Central Library. There was some discussion of moving the meeting time up to 6pm because the library closes at 8pm. There is no final decision on that as this is written.

Charles Hett, K0THN, KCDX Club Secretary