

Minutes 04/2018

Club President Albert KE0LOL led us in the pledge to the flag, a nice big one, 3' x 5' attached to the whiteboard. Attending were:

Albert	KE0LOL	Ron	KRON
John	N2AO	ex	NOQET
ex	KE0QBH	Joel	K0OQL
Bill	KD0FJR	JoDee	KD0RNC
Greg	N0GR	Rob	N0SNW
Paul	WB0GXD	Derek	W0TYG
Norm	WA0JYD	Wayne	KN0WDJ
Kevin	N0MHK	Craig	KD0YTI
Craig	KE0NEU	Rich	WA0ZQG
Steve	KE0NWN	(17)	

Minutes of the previous meeting had some small errors: Craig NEU isn't retired quite yet; Wayne WDJ said he should have been included in list of attendees, and Minden IA 442.075 is FM only.

Treasurer Greg N0GR was a few minutes late, but when he showed, gave a balance of \$7,334.

Repeater Committee

Paul GXD said it (.82) "worked on the way in" and it's the "same with .225" (Fusion in Omaha).

SWI Radio Website

Albert LOL said 'Radio Reference' now has audio from our .82 repeater, and records it. You can go back a few days to listen to such things as the Saturday Noon Swap Net.

Field Day

Greg N0GR, Field Day Chairman (who lives in Minden out by the likely McClelland site) said the choice was still under discussion (but a lot of people have made comments on the radio assuming McClelland). It's a nice place, trees and retro 'facilities' – just a little out of the way regarding visitors as it is ten miles East of Council Bluffs.

Paul GXD recalled his Elmer, Ron Toyne whose call was WA0AJF which started remembrance of other Hams. Paul used to work at Collins Radio in Cedar Rapids IA, and was there recently to find the very large Log Periodic antenna that used to dominate the site is gone.

IA Severe WX and DMR

Greg N0GR was using his DMR radio recently and found out later he'd been interfering with a severe weather net in Des Moines. The problem is that DMR (Motorola version of digital FM) uses two (2) time slots, and an Internet connection. In Iowa, the repeater Greg was on and the one in Des Moines use the same time slot, and the time is limited by Internet bandwidth.

The severe weather guys figured this out, but declined to interrupt Greg's conversation in another area thinking it would sound imperious if they asked him to cease so they could have better access.

Our Pott. Co. EMA (Emerg Mgmt Agcy) is in the basement of the City/County Courthouse at 5th Avenue and 6th Street downtown. Scott Mann is the guy there. They'll be using the 800 Meg radio system, .94 in Omaha, and 442.25 repeater during storms this year. Scott's phone is 328.5777

We adjourned the meeting at 7:35PM

Minutes by Club Sec'y, WA0ZQG

Program on Time Constant

Rich ZQG put up the formula $TC = RC$ on the white board and tried to explain filter caps.

An Astron 35 uses two (2) 35,000 microfarad filter capacitors, and at full load the resistance is under one Ohm. (23 Volts prior to regulation)

Multiplying 70k times 1, the time constant is around .070 or 70 milliseconds if you do the math and remember the 10⁻⁶ 'micro' prefix. That means the filter will discharge 63% in one time constant (.070) but the full wave (120 cps) rectifier will charge it back up every 8 milliseconds. Thus the filter cap doesn't get very discharged (8/70 of 63% or about 2 volts down) between AC pulses. You should have a scope to see this. Rich brought along the \$20 DSO 138 scope you can buy on Ebay, but not an Astron.