

Volume 8 Issue 8

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Meeting Minutes

No minutes this month

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September 2020

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MFARC Bank Statement for August

Beginning balance: New balance:

\$2,302.39

\$2,302.39

Provided by Treasurer John Nelson Jr – W7JOY

Editorial Note

We, at the AirWaves, do want to apologize for the late release of this month's edition. There were a few factors involving reports, but also there was this thing where the editor took a vacation! Very unacceptable and it may happen again.

So, please accept my apologies. Thanks for the time off and keep those reports coming this way.

Written by Editor Michael Ketchum – K5MDK



Harmony in the Home

I must say, up front, that my wife, Yelica, is amazingly supportive of my interests in amateur radio. She will often ask me if I have made any new contacts or inquire as to the progress of my latest antenna experiment. If she's noticed I haven't been on the radio in a few days, she will ask about band conditions and the state of the shack. She's a big fan of the hobby, even though she isn't licensed.



research-y stuff (which, oddly, includes tons of colored pencils and scissors -it's more like an arts and crafts kind of thing that an extension of a research lab).

Thank heavens for Amazon. If it isn't available on Amazon, chances are it isn't available on this planet. Within a week, we had two "L" shaped



On a final note, she asked me to make sure to let everyone know that she had NOTHING to do with the décor of the office. That is 100% on me and several rattle cans of spray paint. The mural was done by a friend of my son's while she was in High School. When she landed a new job that requires her to bring work home, I knew I needed to be equally supportive of her. So, I offered to split the radio room in half and make a dual-purpose office. On one side, radios and tuners and rotator controls and logbooks and amplifiers. On the other side, all of the accoutrements pertaining to science-y



desks, 2 new compact office chairs, and various other supplies needed to set things up. While space is a bit tight, everything fit into our small (9ft x 10ft) newly re-designed multi-purpose office.

If you take a look at the pictures, you will see for yourself that it is possible for HAMS and civilians to co-exist.



Written by President David A Rogers – KG5KPU

Spinnin' and Grinnin'.. WBØTEV gets his rotator overhauled

You know your newsletter editor is desperate for copy when he asks you to write a story about getting your rotator fixed, but here goes.



First, a little back story. After moving to my present QTH in late 1993, I set out to put up a tower. A local ham had become a silent key and his widow was selling off his tower, rotator and beam. With the help of some friends and a borrowed gin pole I took down the beam, rotator and tower over a long stretch of weekends although not without almost getting myself killed.

After getting the beam down the next step was to take down the top section which had this huge aircraft prop pitch motor in it that had been used as a rotator. So, I climb up, attach the gin pole to section below the top one, extend it up and tie the rope from the gin pole pulley to the top section. After removing the bolts connecting it to the section below and with a couple guys on the ground pulling on the rope to lift the top section via the pulley at the top of the gin pole, I inserted a car scissor jack between the tower sections and started cranking to push the top section off of the one below it.

Unfortunately, I hadn't realized how darn heavy that prop pitch motor was and I had tied the rope BELOW the center of gravity of the top section/prop pitch motor combo. As soon as the top section popped off from the section below it where I was strapped in, it flipped violently upside down as I ducked to keep from getting smacked by it.

Meanwhile the guys on the ground were desperately clinging to the rope barely able to hang on without it crashing to the ground. I rapidly scampered down the tower, added what little additional muscle power I possessed to the rope and the three of us with great strain managed to slowly lower the whole thing safely to the ground. After that the rest of the tower disassembly went fairly quickly. One of the guys who helped me (George Beal from Commerce, now a silent key I think whose call I can't remember) bought the beam and prop pitch motor, while I took home the Rohn 25 sections which would later go into my tower.

Oh yeah, the SK from whose widow I bought the tower was Carlton Smith, W5NNI, whose call is now memorialized as the club call of the Majors Field Amateur Radio Club.

So anyway, in 1994 I bought a HyGain Tailtwister T2X rotator which I installed in the fall of 1995 after getting my tower put up using sections from Carlton's old tower and a new top section, thrust bearing etc.

Last year the rotator started getting flaky. Often I couldn't get it to budge. Bouncing the brake on and off several times and trying to drive it first one way and then the other would often get it going again but by early this year, it just wouldn't budge at all.

Bummer, there's not much worse than broken hardware 60 feet up in the air when you're 61 years old. It had been 25 years since I put it in and I wasn't even sure if I'd need a crane to take the beam antenna down in order to get the rotator out.

To get better view of stuff "upstairs" without climbing the tower myself, and to get some photos to use to brief my tower climber on what to do, I got out my Nikon digital camera and tripod and took some telephoto shots.







Fortunately, I'd installed a thrust bearing so the weight of the antenna wasn't pressing down on the rotator and once disconnected the rotator could be popped out the side of the top section. In the above photo you can see the rotator sitting on its mounting plate. A thrust bearing is installed on the top of the top section. A set of three bolts press into the

mast from the side of the thrust bearing to support the weight of the mast/antenna and also to keep it centered with the center of rotation of the rotator. Shims also go into the rotator recess to center the mast.

The white microwave antenna is for my 5 GHz wireless internet, while the grey dish below it is a defunct 2.4 GHz wireless internet fixed which my tower climber removed during one of his aerial forays.

While bemoaning my rotator woes on the Lone Star DX Association Google Hangouts chat room my friend Paul Blumhardt (K5RT) told me that he'd overhauled quite a number of rotators and would be glad to fix mine for the cost of the parts along with me gifting him with a particular part he needed for a repair of another rotator he had. Meanwhile, I hired a nimble 21-year neighbor (son of a friend of mine who lives nearby) to do the tower climbing for me.

So in early March (just before the Coronavirus mess exploded) Andrew, my tower climber, disconnected and removed the ailing rotator. With the rotator out, and the mast only supported by the thrust bearing there would be nothing to keep the wind from spinning my big 110-lb Mosley PRO-76B beam round and possibly ripping the coax apart. Fortunately, I had another old Hy-Gain rotator that had the same mounting hole pattern and I had Andrew temporarily install it and clamp the mast into it to try and keep it from spinning.

I took the rotator over to K5RT's Rowlett QTH and waited for the exploratory surgery and diagnosis. He would later send me the following photos and captions:





Cracked Ring Gear



Pin came out of indicator pot. The pot also needs replacement.



Lower bearing race is NASTY!



Middle race can be cleaned and greased.



Further testing would show that the electric drive motor itself was also shot.

Meanwhile, one weekend I noticed that despite having been clamped into the other rotator, my antenna had spun around in the wind and that its coax was wrapped around the tower. Apparently the clamping hadn't been tight enough and/or had worked a little slack loose. I feared a good wind gust could rip the antenna to coax connection loose and the weather man said a storm was due in 45 minutes! YIKES! I quickly called Andrew but he was out of town, so I grabbed my old climbing belt, some tools and hauled my aging carcass up to the top of the tower where I managed to unwind the antenna a bit and screw the bolts down tighter on the mast to rotator clamp. Not long after I got off the tower a big storm blew through and while the beam rocked and rolled it largely stayed put. WHEW!

It took a while to get some of the parts (especially the motor) from MFJ/HyGain due to the COVID-19 impacts but in late April I was informed that my rotator was repaired and good as new and the parts cost had been only a bit over \$100. Not bad since a new rotator was around \$800. I picked it up from Paul, paid for the parts along with a tip brought it home.

On April 25, Andrew climbed the tower and reinstalled it, with a ground crew consisting of myself, K5PS (Scott Davis) and fellow L3 retiree and newly minted ham Brent Johnson KI5HXM.

It was a great joy and relief to be able to aim the beam again. While the rotator was out of commission I was able to hear 9N1AA from Nepal on 20m FT8 (which would have been a new country for me on digimodes) but with my beam stuck due west at the time he never heard me.

In the days and weeks that followed I was able to work a number of new countries on 12m FT8 and some fairly rare DX including XWØLP in Laos, VU2XTO in India, AP2AM in Pakistan, 9M2TO in West Malaysia, 9V1YC in Singapore, and XV2A in Vietnam, all on 20m FT8. It helps when you can point your beam at the target!

Hopefully that rotator will now outlast me!

73, Victor WBØTEV / V31VP

Written by Victor Paul – WB0TEV

Contesting via Remote Ham Radio

In July I was invited by Steve Lott, KG5VK, to participate in the SSB North American QSO Party. Due to concerns about COVID, and an interest in seeing how difficult it would be to do, the entire effort was done remotely.

Steve has two FlexRadio systems available for use, and the FlexRadio SDR software is freely available for download. Some of the other team members had a Maestro system, a device which has the look and feel of the front panel of the radio.

I downloaded the software and documentation for FlexRadio SDR from their website. The documentation was detailed and answered all my questions. Took about an hour to set up and integrate with my existing Ham Radio Deluxe control and logging software. Logged into the FlexRadio 6600M



radio which had a 20m monobander at 133ft. Made some FT8 contacts with WSJT-x; I can hear a lot more with that antenna than my vertical!



Connected and using FT8

I ended up installing the SDR software on my second computer because of issues getting a microphone to work. I worked with Steve and other members of the team over Zoom conferencing to get N1MM+ set up and communicating over the internet with all the other remote ops. I had to create a special rule on my router to allow communications through the firewall.

I was able to use my gaming headset and mic with the FlexRadio set to VOX to do SSB QSOs. Other than a barely noticeable delay I saw no difference in operating remotely vs. locally. I thoroughly enjoyed operating a few hours in the contest from the comfort of my own home.

I did have trouble not having the feel of "the dial" to tune around the band but made adaptations and had suggestions from Steve and others on what to do. I would have liked to have had a Maestro in lieu of just software, but what I had worked much better than I expected.

I hope that I will have the chance to do this again now that I've some experience with it. It also makes me think of building my own remote station sometime in the future, if I end up living in an environment that is too small or bans antennas.

Written by Secretary Scott Davis – K5PS



Calendar

Sep 15	Rockwall ARC Meeting at 7:00pm at Soulman's BBQ in Rockwall.
Sep 17	Sabine Valley Amateur Radio Association Meeting – Caddo Mills Fire Station 7:00pm
Sep 19-20	ARRL 10 GHz & Up – Round 2
Sep 26-27	CQ WW DX RTTY <u>www.cqwwrtty.com</u>
Oct 8	Majors Field Amateur Radio Club Meeting – Lawson CR at 11:45am.
Oct 10	Rains ARA Meeting at 9:00am at 146.92 video chat.
Oct 15	Sabine Valley Amateur Radio Association Meeting
Oct 19-23	School Club Roundup
Oct 20	Rockwall ARC Meeting at 7:00pm at Soulman's BBQ in Rockwall.
Oct	Belton Hamfest – so far it is on! <u>https://www.tarc.org</u>

Sep 2020 Contest Corral – CLICK HERE

Oct 2020 Contest Corral – CLICK HERE



REGULAR ACTIVITIES

Daily DFW Early Traffic Net (NTS) at 6:30pm 146.88 – PL 110.9Hz

- Daily DFW Late Traffic Net (NTS) at 8:30pm 146.72 PL 110.9Hz
- Daily DFW CW Traffic Net (NTS) at 7:00pm and at 10pm on 3541 KHz http://www.k6jt.com
- Mon Hopkins Co NET at 7:00pm 146.680 PL 151.4Hz
- Mon Rains Co NET at 7:30pm 146.920 PL 88.5Hz
- Tues Majors Field Lunch time Net at 11:45am 147.16 + PL100Hz
- Tues Rockwall ARC Net at 7:00pm 441.525 + PL141.3Hz
- Tues K5VOM Net at 8:00pm. News Bulletin at 7:30pm, Allstar 40668 441.775 (+) PL 100Hz
- Wed W5ENT Rains Co 10-meter Net at 8:00pm on 28.425MHz SSB.
- Thurs SVARA Net Every Thursday night at 7:00pm on 146.780 MHz (+) PL 114.8Hz

Thurs QRP Fox Hunt http://www.grpfoxhunt.org/summer_rules.htm

2nd Wed of each month – ARRL NTX ARES Net 8:30pm local on 3860

