

# Majors Field Amateur Radio Club

Regular Business Meeting

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NOVEMBER 16, 2017

# Agenda

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- Opening
- Officer Reports
- Calendar of Events & Announcements
- New/Old Business
- Program
- Adjournment



# Current Officers

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- **PRESIDENT**  
Larry Smith – K5XB
- **VICE-PRESIDENT**  
Michael Ketchum – K5MDK
- **SECRETARY-TREASURER**  
John C. Nelson Jr. – NØDFW
- **TRUSTEE (appointed position)**  
Jonathan Brown – WB5KSD



# Officer Reports

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- **MEETING MINUTES** – as published in the AirWaves newsletter.
- **PRESIDENT’S REPORT** – Larry Smith – K5XB
  - Meeting Room Change
- **TREASURER’S REPORT** – John Nelson Jr. – N0DFW
- **SELECT COMMITTEE REPORTS**
  - **WINTER FIELD DAY** – David Rogers
    - Winter Field Day, January 27<sup>th</sup> & 28<sup>th</sup>, 2018, Rules:  
<https://www.winterfieldday.com/rules/>
  - **Digital Repeater** – Jon Brown
  - **E-Club Funding** – Michael Ketchum



# Calendar of Events & Announcements

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- SVARA Meeting Today at 7 PM Hunt County Regional Hospital, Greenville – 2nd floor conference room
- Hopkins ARA Meeting Today at 6 PM, First Church of the Nazarene, Sulphur Springs (ARRL VEC test session after the meeting)
- Van Zandt County ARES meets Saturday, November 18<sup>th</sup> 9 AM, Canton Library
- Rains ARA Meeting will be Saturday, December 9<sup>th</sup>, Rains County EOC at 9 AM
- Next Majors Field ARC ANNUAL Business Meeting December 14<sup>th</sup> at 11:45am --- Kitty Hawk CR. REMINDER: we are moving permanently to the 2<sup>nd</sup> Thursday of each month going forward.



# Hamfest Calendar

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- Upcoming Oct/Nov/Dec/Jan:
  - MARA Annual Christmas Hamfest, Minden, LA, December 16<sup>th</sup>, 2017 <http://www.n5rd.org>
  - San Antonio Radio Fiesta 2018, Jan 13<sup>th</sup>, Schertz, TX, San Antonio Radio Club, <http://w5sc.org>
  - Cowtown Hamfest (North Texas Section Convention), Jan 19<sup>th</sup>, Forest Hill, TX, Cowtown Amateur Radio Club, <http://cowtownhamfest.com>
  - Belton Ham EXPO, Apr 6-7<sup>th</sup> Belton, TX <https://www.tarc.org/hamexpo>
  - HAM-COM, June 8-9-10<sup>th</sup> Plano, TX [www.hamcom.org](http://www.hamcom.org)



# Old Business

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- Shack Location (ongoing)
- Repeater Maintenance and Upgrade
  - UHF to Digital –
    - A Kenwood TKR-850 has been purchased
    - The repeater is running. There is some further development in work.
    - Need to acquire Raspberry Pi digital modem kit for ~\$200
    - This must be expensed this year!
  - VHF upgrade with modern hardware deferred until next year.
  - E-Club grant to cover shortfall in funds has been declined for now.
  - Donations? Larry and Michael have pledged \$200 each if needed to underwrite the project.
- MFARC Elections, end of year festivities, coming up.
  - Opening of nominations -- Michael has slate of nominations.
  - Elections will be held at December meeting.
  - Other Nominations will be accepted from the floor at December meeting
  - December meeting will feature door prizes (yes, door prizes worth having).



# New Business

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- Winter Field Day.
  - Sign up to work with David on Ops Plan.
  - Rains and Hopkins clubs have an invite to participate. Need someone to reach out to SVARA, Others





# Wrap-Up

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- Go Backs?
- Do Overs?
- Second Guesses?
- I Wish I Had Said....?
- Any others?



# Program

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- This Month
  - Scott Davis –KK7JS
    - Radio Frequency Interference
- Next Month
  - Annual Business Meeting



# Adjournment

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Don't forget your Turkey!



# Radio Frequency Interference (RFI)

A personal experience

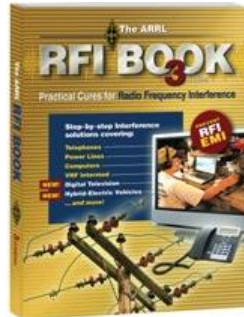
# The problem I had, but didn't yet know it

- ▶ During the summer of 2016, I noticed I had s9+20 noise (or higher) across the entire band on 80, 60, and 40m.
- ▶ 30 and 20m were not much better.
- ▶ Did not at first realize there was any issue with RFI. The Sun provided a lot of solar fireworks that could explain all the noise I had.

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Solar-Terrestrial Data
20 Feb 2017 2203 GMT
SFI:80 SN: 23
A-Index: 10
K-Index: 3
X-Ray: B1.4
304A: 113.7 @ SEM
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Calculated Conditions
Band Day Night
80m-40m: Poor Fair
30m-20m: Fair Fair
17m-15m: Poor Poor
12m-10m: Poor Poor
Signal Noise: S2-S3
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# Obvious that I had a problem somewhere...

- ▶ When fall and winter came and the solar activity declined, still had overwhelming noise on most bands.
- ▶ There were days I had solar indices A=0, K=1 and should've had decent conditions.
- ▶ Purchased the “RFI Book” from ARRL and started to do some research.



# No progress at first...

- ▶ Started with some basic steps, like going around the house with a radio tuned to AM listening for noise.
- ▶ Tried turning off appliances and then whole circuits to see if the noise was reduced.
- ▶ Nothing seemed to make any difference, so started looking into the possibility of a receive antenna to help reduce the noise a bit.

# Looking further afield...

- ▶ I decided to put up a magnetic loop antenna at my QTH to see if it would cut down the interference.
- ▶ Worked very well - could hear things well again on 40m, though 80 and 60m were still largely useless.
- ▶ I then discovered if I turned the antenna in a certain direction, the noise on all bands dropped to nearly nothing.
- ▶ I took my car around the area with the AM radio on, driving past numerous utility power poles.
- ▶ I got a VERY strong reaction from one in particular, not more than 1/10 of a mile from home.



# The solution

- ▶ I went to the GEUS customer center in downtown Greenville and asked to speak to an engineer or lineman.
- ▶ Customer rep sent a note to their engineering department with my request and one called me within 2 hours.
- ▶ I explained the situation as best I could, giving them information on the location of the utility pole.

# Current state of affairs

- ▶ I had informed GEUS of the problem just before Christmas, so was not at home for two weeks after letting them know about it.
- ▶ When I came back, there was no longer a problem with noise from that utility pole.
- ▶ 80, 60, and 40m are all usable to me again.