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Meeting Minutes

Majors Field ARC Meeting Minutes 12/13/2018

- Meeting was called to order @ 1150

Officer Reports

- Meeting minutes for October meeting are in the latest edition of "Airwaves".
- Treasurer Report delivered by John Nelson. Balance is ~1300, one small deposit made.
- Christmas party hosted by M. Ketchum cancelled.

Subcommittee Reports

- Repeater update: Internet connection in place at the MSTF trailer.

Upcoming Events

- List of upcoming monthly club meetings, contests, and hamfests.

Old Business

- Social media sites needs content.
- Last test session for the year will be held on December 14th/15th at Greenville hospital.

New Business

- Need after-meeting programs.
- Preparations for Winter Field Day to be held end of January at Rains County EOC.
- With outside internet connection now available at MSTF trailer, proposal to look into getting a remote HF station operational there next year.
- Officer elections.
 - President: Larry Smith (incumbent)
 - Vice-President: David Rogers (fresh meat)
 - Secretary: Scott Davis (incumbent)
 - Treasurer: John Nelson (incumbent)

Presentations

- N/A.



Attendees

- John Nelson Jr – W7JOY
- Jonathan Brown – WB5KSD
- Scott Davis – K5PS
- Larry Smith - K5XB
- Joe Lum – KE5ZBL
- Wesley Sparks - WB5GPA
- Chris Rutz - K5RTZ
- Terrence McAllister
- Will Sanitate – KG5QCQ
- Larry Drake
- Mark Bushnell – AE5FG
- Michael Ketchum – K5MDK
- Victor Paul – WB0TEV (by Phone)
- Jae Stutzman – K5JAE (by Phone)
- David Rogers – KG5KPU

Meeting adjourned @ 1215. Year-end raffle drawing followed.

Written by Secretary Scott Davis – K5PS

President's Letter

Happy New Year!

I hope everyone had a good break from work. The first day of winter has come and gone by now. The days are getting (imperceptibly) longer every day. 160 through 40-meters has been good with 80 lengthening dramatically just after sundown. Noise has been high, but relatively QRN free, even with all the rain.

Meetings

We had a good annual meeting last month and elected a fine slate of officers. I hope all that won a door prize are getting good use out of it and enjoying it.

This month's meeting we need to do final preparation for Winter Field Day January 26-27, 2019. The folks at Rains County EOC are still expecting us for Winter FD. That is the most pressing coming event. We also need to set a date for a General Class license session because the current question pool expires July 1 this year. It would be good to give folks that have been studying current material a shot at completing before they have to start over. In addition, Summer Field Day is close enough that we need to start talking about that, too.

As always, feel free to bring your ideas for club activities to the meetings. We'd love to hear what's going on at your shack. Remember you get an extra ticket for the end of year drawing when you present a program.

Club Projects

I believe the 2m and 70cm repeater projects are in pretty good shape now. I was able to hit the 2m machine from Lone Oak with an HT although I would have been very noisy if I could have raised anyone.

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It would have been fine copy with a decent mobile unit. That is still a big improvement from being able to see the tower, and still not key the repeater.

With our internet access at the club trailer, we can start thinking about remote HF operation. We've found out that it is very simple to achieve this with a laptop computer and a rig as affordable as the IC-7300. Let's kick that idea around at the next meeting.

This year we will launch an Elmering/mentoring effort. This is a very worthy effort and I hope every active member will take part. I want to be sure we assign a member to Elmer each person that receives a license through one of our licensing study/test sessions and MAKE SURE that the new licensee gets on the air and has a QSO at least once, as quickly as possible after his or her call sign is issued. This hobby licenses perhaps thousands of new hams that never get on the air even once. That is something we can make sure doesn't happen in our area. We might not be able to hold their long-term interest, but we need to make sure they have the chance to enjoy what they have earned. Please make yourself available and sign up to help with this important project.

What else would like to see your club do? HF station? Contesting? Kit building? PCS fundraiser? Bring your ideas to the meeting and let's get something started.

ARRL

ARRL is sponsoring a huge new push for PACTOR4/ WINLINK at the FCC. If you are not familiar, this is wideband digital encrypted commercial email service proposed to be deployed in the digital (narrow bandwidth) amateur sub-bands. It has been alleged some ARRL board members have pecuniary interest in this NPRM passing. And the technology is not only incompatible with CW/FT-8/RTTY, it also is so tightly encrypted that not even the FCC will be able to read the traffic, which is completely against FCC's own Part 97 regulations. Something to discuss this meeting!

See you at the meeting Thursday. Bring a friend, and feel free to bring your lunch.

73,
Larry
K5XB
MFARC President

Written by President Larry Smith – K5XB

In Band Repeater Link

The following description is for a repeater linking system I recently installed for the MFARC in Greenville, TX. The linked repeaters included a stand-alone 440 repeater on a 350 ft. tower and a 2-meter repeater on a 100 ft. tower. The 2-meter repeater shares a dual band antenna with a 440 analog and digital multi-mode repeater. This was a direct RF link – no Internet was involved.

An in-band link was utilized with a Motorola CDM-1250 440-link radio and directional antenna located at the 2-meter site. The repeaters were all Kenwood TKR-750/850 units. The link radio used equalized (not flat) audio from the accessory connector and was connected to the accessory connector on the 2-meter TKR-750 using the equalized audio external connections. A 2N7000 inverter was required to key the CDM-1250 and the TOR line from the TKR radio was changed to active HIGH to drive the inverter. A



direct connection from the TOR line to the CDM-1250 would not key the radio. The levels were adjusted slightly in the TKR radios to provide a 1:1 audio level to each repeater.

Both the 2-meter repeater and the 440 repeater were configured with a squelch tail and a courtesy beep. In operation, the link radio is not keyed while the squelch tail is transmitted from the 2-meter radio and no pingpong effect occurs. When a 2-meter operator unkeys after a transmission he first hears the received squelch tail from the 440 repeater and courtesy tone then the squelch tail and courtesy beep from the 2-meter repeater. By utilizing different courtesy tones on the 2-meter and 440 repeaters, an operator gets the telemetry back that indeed the link is operational and is assured that his transmission was heard on both the 2-meter and 440 repeaters.

A transmission on the 440 repeater just has the locally generated squelch tail and courtesy tone, and no secondary tail and tone is heard. By utilizing a different tone squelch frequency on the 440 repeater a transmission may be made that is not heard on the 2-meter repeater, so operation is possible on the 440 repeater without being linked to the 2-meter repeater.

Since the link radio transmits on a different band than the repeater, no de-sense is experienced. The same thing is true when a transmission is originated on the 440 repeater. The retransmission of that signal on 2-meters does not de-sense the 440-link radio receiver.

Using this technique, a star network is possible linking several repeaters on one band with a central repeater on the other band. Each outlying repeater would link back to the single repeater on the opposite band and transmissions on any repeater would be heard on all the repeaters. This linking system is the simplest and most cost effective method of linking several repeaters together. A link radio with no duplexer utilizes a directional antenna pointed at the central repeater at each outlying site. The repeaters can be un-linked by simply turning off the centrally located repeater.

An example of this type network was a repeater system in New Mexico that linked a 146.62 repeater on a mountain overlooking Roswell to a 146.62 repeater in Showlow, AZ. The 440-hub was located on Mt. Taylor in northern NM. A repeater in Albuquerque was also linked to the Mt. Taylor hub, and a transmission on any of the four repeaters was heard on all the repeaters.

An in-band link for two 2-meter repeaters was implemented in Ruidoso, NM using a low power link transmitter on a directional antenna. The 250-milliwatt link transmitter did not de-sense the 2-meter repeater receiver at the link site, and the two repeaters were about 10 miles apart. The 250-milliwatt transmitter into a 4-element 2M beam was fully quiet in the other repeater. The link receiver signal was attenuated until no de-sense was noticeable at the link site but still had a fully quieted signal.

Written by Trustee Jonathan Brown – WB5KSD

NWS Skywarn Training Schedule Released

Skywarn is a fantastic way to use your Element 2A (Technician) class license for the good of your family and community. The National Weather Service (NWS) in Fort Worth has limited technology to monitor the development of severe weather. New radar technology still cannot see the physical structure of a storm. It requires eyes on the ground, and NWS forecasters cannot be everywhere at once. That is where SkyWarn spotters come in. Skywarn spotters are trained to identify certain features of weather

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and storm structure in order to provide valuable reports to NWS staff in real-time. Many decisions for alerting the public are based upon visual confirmations that Skywarn spotters make.

Training takes only a couple hours. There are two types of training levels available: BASIC and ADVANCED. You must take BASIC before you can take ADVANCED. ADVANCED is not always offered at all locations, so you may have to plan a trip to get your BASIC and ADVANCED certification. It is recommended that you take the class each year. However, every other year is acceptable.

Ham Radio Operators have a unique role in Skywarn. By being mobile and directly linked to the NWS office, Ham operators can be repositioned to provide the best possible visual report. Many times, an NWS staff meteorologist will monitor and get on the local Skywarn net to provide instructions to get better information. This makes Ham operators the “eyes and ears” of the National Weather Service.

LINK TO THE WEATHER SPOTTER’S FIELD GUIDE: [HERE](#)

LINK TO THE SKYWARN SPOTTER TRAINING SCHEDULE 2019: [HERE](#)

Hunt County: F. Warren Civic Center in Greenville on Thursday, February 28th from 7-9pm BASIC

Rockwall County: Rockwall County Library in Rockwall on Saturday, March 9th from 11-1pm BASIC

Rains County: Emory City Center in Emory on Monday, February 25th from 6:30-8:30pm BASIC

Fannin County: Finley-Oates Elementary School in Bonham on Thurs, February 21st from 7-9pm BASIC

Hopkins County: Sulphur Springs Council Chambers, Thursday, Jan 31st from 7-9pm BASIC

Collin County: Central Park Campus in McKinney, Saturday, Jan 19th from 8:30-12:00 BASIC 1-4:30 ADV.

Written by Editor Michael Ketchum – K5MDK

Calendar

- Jan 12 Rains County ARC Meeting at 9:00am at Rains EOC, 200 Industrial Blvd, Emory.
- Jan 12 San Antonio Radio Fiesta 2019 at Schertz, TX – <http://w5sc.org>
- Jan 10 MFARC Regular Meeting at 11:45am at B136-A Kitty Hawk Conference Room.
- Jan 12-13 North American QSO Party – CW <http://ncjweb.com>
- Jan 13 Rockwall ARC Meeting at 7:00pm at Soulman’s BBQ in Rockwall.
- Jan 17 SVARA Meeting at 7:00pm at Hunt Regional Hospital.
- Jan 19 Van Zandt Co ARES Meeting at 9:00am at Canton Library.
- Jan 19 North Texas Section Convention (Cow Town Hamfest) at Fort Worth, TX <http://cowtownhamfest.com>
- Jan 19-20 North American QSO Party – SSB <http://ncjweb.com>
- Jan 19-21 ARRL January VHF Contest <http://www.arrl.org/january-vhf>
- Jan 26-27 Winter Field Day ****CLUB EVENT**** <https://www.winterfieldday.com/>
- Feb 3 North American Sprint – CW <http://ncjweb.com/Sprint-Rules.pdf>

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- Feb 11-15 ARRL School Club Roundup <http://www.arrl.org/school-club-roundup>
Feb 16-17 ARRL International DX – CW <http://www.arrl.org/arrl-dx>
Feb 23-24 North American QSO Party – RTTY <http://njcweb.com>
Mar 2 Irving Amateur Radio Hamfest <https://irvingarc.org/>

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>
Mons. Rains/Hopkins Co combined NET at 7:30pm 146.92 – PL 88.5Hz
Tues. Rockwall ARC Net at 7:00pm 441.525 + PL141.3
Thurs SVARA Net Every Thursday night at 7:00pm on 146.780 MHz (+) PL 114.8Hz

Officers

- President:** Larry Smith – K5XB
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- Vice President:** David Rodgers – KG5KPU
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- VE/Class Team Leader:** Scott Joseph – AG5QQ
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- Club Trustee:** Jonathan Brown – WB5KSD
trustee@w5nni.net
- Contest/Activities:** David Rogers – KG5KPU
contest@w5nni.net

Club Repeaters

- Club Station:** TBD
- VHF Repeater:** W5NNI/R
147.160 MHz (+) PL 100.0 Hz
- UHF Repeater:** W5NNI/R DMR
444.625 MHz (+) Rx-SQ PL 151.4 Hz

AirWaves is a production of the Majors Field Amateur Radio Club

We're on the Web! Find us at: <http://w5nni.net>

Your article submissions are welcomed. Please submit to editor@w5nni.net.