

Volume 6 Issue 8 August 2018

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Meeting Minutes

Majors Field ARC Meeting Minutes 7/12/2018

Meeting was called to order at 11:44

Officer Reports

- Meeting minutes for June meeting are in the latest edition of "Airwaves".
- Treasurer Report by Michael Ketchum indicated we had about \$1500 in the bank.
- President had nothing new to report.

Subcommittee Reports

• Repeater – Jonathan Brown – WB5KSD reported he needs a new 19" rack for the new repeater system. Some discussion on how to get one entailed. Next month, Jon hopes to have the W5NNI 147.16 machine linked with N5SN 443.9 machine. W5ZIT is returning to Texas in October. We also will need to consider our networking plans, once the IP address situation gets resolved. On that, Gabe Cook – W5TTX indicated that the configuration should be done some time next week that will provide us our own IP to that Internet Connection at the trailer.

Upcoming Events

- Various club meetings in the area.
- Various ham fests and contests

Old Business

N/A.

New Business

- David Rogers KG5KPU proposed the club thank the Audie Murphy American Cotton museum for supporting the club again this year with a monetary gift. A motion was made then a spontaneous collection was accomplished. We raised \$50.00, which David will deliver to the museum with a thank you letter.
- Hot Wash FIELD DAY 2018.
 - The generator needs attention. PM is badly needed. It also needs a new Recoil starter.
 Discussion about L3 Auto Shop doing the work. It was generally agreed to use Glens



Small engine shop. Motion made to get generator looked at by Glens. Motion passed by voice vote.

- We elected to keep the generator stored at Victor Paul WB0TEV's house when not in use. We did this because he did say that he would volunteer to keep it until we figure out what to do with it. Since we cannot get anyone to take this project on, we will hold Victor to his word (hi hi).
- We discussed scoping out new Field Day sites. We also included discussion of moving our operations South towards I-30 on the Museum property instead of setting up closer to the homes. The generator may be noisy for the residence there.
- David Rogers KG5KPU presented Jae Stutzman K5JAE with a coin from the TX State Guard in recognition for his work as VE Team Lead during the class and VE session in May. We had 102 sign up for the class, 98 showed up, 72 participated in the class and 50 got their license that weekend.

Presentations

- RTL-SDR.com
 - This month's presentation was a simple link, when opened, presented us the wonderful project of SDR linking for the purpose of geolocation of radio signals. To find out more, go to http://RTL-SDR.com

Attendees

Name	Call Sign	Club Member	ARRL Member
Mark Bushnell	AE5FG	Υ	Υ
Jon Brown	WB5KSD	Υ	Υ
Gabe Cook	W5TTX	Υ	N
Alex Johnston	none	N	N
Scott Joseph	K5BGL/AE	Υ	Υ
Stephan Kelley	none	N	N
Michael Ketchum	K5MDK	Υ	Υ
David Rogers	KG5KPU	Υ	Υ
Hommy Figueroa Salas	KG5SKP	N	Υ
Will Sanitate	KG5QCQ	Υ	N
Jose Santiago	KG5SKR	Υ	Υ
Larry Smith	K5XB	Υ	Υ
Jae Stutzman	K5JAE	Υ	Υ

Written by Vice-President Michael Ketchum – K5MDK

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President's Letter

Summer begins to ebb!

Time to plan those antenna projects to complete before winter makes that part of hobby difficult.

Meetings

Call it a "call for papers". We haven't produced many quality programs this year and that has largely been OK, as we have had several operating events we were involved with so far this year. We've been using the post-meeting program time to talk up and plan these events. But we really don't have anything to plan until next Winter Field Day (January 26-27, 2019), so how about some volunteers the next couple of months to do a presentation on some aspect of the hobby that you enjoy, or would like to try out. Remember you get an extra ticket for the end of year drawings if you present a program. As always, this month's quality program will be something interesting I found on YouTube... unless one of you come up with something better. I certainly hope you do.

Club Projects

Repeaters are coming along. Full internet connection for the 70 cm digital repeater is close at hand. A workday is coming soon to complete the last details allowing full remote control. Tech refresh of the 2 m repeater is coming along. The Rockwall Hot Rocks bicycle ride is next weekend, and the Cotton Patch Challenge bike race is next month. We always support those events with operators and radios. Hear more details at the meeting. As we are now well into the second half of the year, we need to know what you would like to see your club do. HF station? Contest participation? Kit building? PCS fundraiser? Bring your ideas to the meeting and let's get something started.

ARRL

Reminder: As an ARRL Affiliated club, the club gets to keep a whopping \$15 of your initial membership fee to ARRL or \$2 of your ARRL annual membership renewal. See a club officer for a form to join or renew with ARRL.

License Classes

Laurel VEC is asking us to begin holding test sessions once per month. Laurel also wants us to consolidate with SVARA into one testing team. We need the member's input on how we could accomplish expanded testing and either avoid, or embrace, consolidation. We need to hold a General Class license preparation class and test session. We have many new hams and we need to encourage license upgrades.

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



Changing a Light Bulb

YL: "So, what did you do today?"

Husband: "I changed a lightbulb."

YL: "That's all? I did the laundry, vacuumed the house, cooked three meals, and more... and you changed a lightbulb?"

Husband: "Yeah, but I filmed it."

Click the link below to see how the husband changed a light bulb.

https://www.youtube.com/embed/f1BgzIZRfT8?feature=player_embedded

Contributed by James Skinner – WBOUNI

The First Field Day – 1933

In its June 1933 issue, QST magazine announced the start of the first International Field Day activity. The author, F.E. Handy, W1BDI wrote, "The real object of this contest is to test 'portables' wherever they may be available. If successful, we want to make it an annual affair."

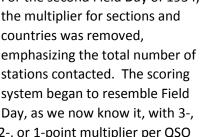
The winner of this contest was a non-club group signing W4PAW. Club members made 62 QSOs.





Quick Set-Up, Eh!

For the second Field Day of 1934, the multiplier for sections and countries was removed, stations contacted. The scoring system began to resemble Field Day, as we now know it, with 3-, 2-, or 1-point multiplier per QSO





1942 Four-Handy Talkie

depending on power output. The breakpoints were set at 20 Watts and 60 Watts!

In 1937 the "Field Day message" was born. This bonus gave 10 points (before multiplier) and was awarded for a single properly formed and serviced message to ARRL HQ stating the number of ops, location, "conditions", and power. For the first time, the winning QSO total reached 204, with a breathtaking average rate of 7.5 QSOs per hour.

(Reprinted courtesy of The Arclite – monthly newsletter of the Garland Amateur Radio Club)

Written by Don Murray - W9VE



VHF Contesting WSJT-X 2.0

It looks [like] we will only have one more major VHF contest with all the confusion on FT8 with regard to contest mode and rover procedures. Here is what K1JT posted to the WSJT Yahoo group yesterday. I suppose there will be some issues with people with out-of-date software, but the backward-incompatibility will soon get them to download the new version.

73,

Steve VE3SMA

Hi to all,

Of course we are well aware of the issues many have experienced when using WSJT modes in North American VHF contests. To summarize, there are two main problem areas:

- Decoding of messages with two callsigns followed by "R" and a 4-character grid, and the related auto-sequencing, depend of proper and coordinated setting of a checkbox at both stations.
- There is a crying need for transparent support of "/R" (Rover) callsigns in all standard messages, during contests.

Here's some background information aimed at relative newcomers and casual users of WSJT, followed by a brief preview of program features we plan to make available in Version 2.0 of WSJT-X.

Contest Mode

Standard JT-style messages (those used in all of the structured WSJT modes) have 71 information bits: two 28-bit callsigns and a 15-bit grid locator. The 15-bit field can alternatively convey a signal report (with optional "R"), or "RRR", "RR73", or "73". One additional bit re-purposes the 71 bits to carry a 13-character free test message. In a 72-bit packet there are NO free bits available to insert "R" before a grid locator, or "/R" after a callsign.

The "NA VHF Contest" checkbox presently in WSJT-X is a stop-gap feature added in 2016 to the MSK144 mode, and later to FT8. These modes conventionally use 15-second T/R intervals and offer semi-automated message sequencing. NA VHF contests require the exchange of 4-character grid locators. Signal reports are OK, but not required. Contesters wanted a way to send messages like "K1ABC W9XYZ R EN37", thereby increasing their QSO rates by eliminating some transmissions from the standard minimal-QSO sequence.

Rovers

Rovers move from grid to grid and must append "/R" to their callsign during the contest. These hardworking folks definitely need some help if they are to use WSJT modes effectively.

All structured modes currently supported in WSJT-X permit messages like these:

CQ K1ABC/R FN41 DE K1ABC/R 73

... but you can't use a second callsign in place of the "CQ" or "DE". Once again, there is no room for such information in a 72-bit packet.



Some time ago we created workarounds that enable QSOs using a "/R" callsign or an "R+grid" message fragment. But these capabilities are limited and necessarily somewhat clumsy. Users must understand what's possible and what's not, and they must be careful about some necessary program settings. Decoding "R+grid" messages requires ticking a checkbox, and if someone else sends you standard signal reports you need to uncheck the box or manually edit your messages. Also, for reasons explained in the WSJT-X User Guide, this feature cannot work well when world-wide propagation is possible -- as it has been recently on 6 meters.

All in all, it's not a happy situation -- especially when considering the typical presence of many casual operators who happen upon a contest and just want to make a few QSOs.

Recently K9AN, G4WJS, and I have been developing enhanced versions of the MSK144 and FT8 protocols that extend the message payload to 77 bits. For a taste of what's to come, here's a brief list of things made possible by the extra bits:

- 1. NA VHF Contest operation with full support of grid exchanges and "/R" (Rover) callsigns
- 2. EU VHF Contest operation with the exchange of 6-digit grids, QSO serial numbers, and "/P" (portable) callsigns
- 3. ARRL Field Day operation with standard Field Day exchanges
- 4. ARRL RTTY Roundup operation with standard contest exchanges
- 5. Better and more user-friendly support for compound and nonstandard callsigns
- 6. A special "telemetry" message format for exchange of arbitrary information up to 71 bits
- 7. The existing FT8 DXpedition mode will be supported, and a more powerful DXpedition mode may be offered as well.

All of these features work seamlessly and automatically. No "contest mode" checkboxes are needed. In most situations decoding sensitivity will be slightly better than at present for FT8; for MSK144 it will sometimes be about 0.5 dB worse. Occupied bandwidths will be the same as they are now, and false-decode rates will be significantly lower.

Much of the necessary programming is finished. Many of the new features have been tested on the air, and we find them to work well.

Don't rush to download something -- these capabilities are not yet publicly available. There is more testing and code optimization to do. With summer vacation plans, etc., our current plans call for a betatesting period probably starting in mid to late September. A full release should then be possible a couple of months later.

In particular: we are planning to make WSJT-X Version 2.0 available in time for you to read its new documentation and practice using it before (for example) the ARRL RTTY Roundup, January 5-6, 2019, and the ARRL VHF Sweepstakes, January 19-21, 2019.

THIS IS IMPORTANT: The new protocols cannot be backward compatible with the existing ones. We will probably provide some temporary "bi-lingual" capability for FT8, but not for MSK144. It will be essential



for users to upgrade to Version 2.0 in order to use the new features and communicate with others who have made the upgrade.

We will provide plenty of advance notice about a transition interval and an essential "must upgrade by" date.

-- 73, Joe, K1JT

Submitted by Jonathan Brown - WB5KSD

Don Divinia - W5LNL (SK)

Don Divinia – ex-W5LNL, 78, of Greenville, passed away July 17, 2018. A graveside service was held Monday, July 23, 2018 at Weaver Cemetery (TX) with Brother Danny Moore officiating. Dustin Divinia, Darin Divinia – WG5J, Gene Pilgrim, Paul McCormick, John Yeager and Will Beene will serve as pallbearers. Visitation was Sunday, July 22 at Peters Funeral Home in Greenville, Texas.

Don was born in Hutchison, Kansas on October 11, 1939 to Lowell and Alma (Diamond) Divinia. He received his Bachelor's Degree from MIT and was a Senior Engineer Specialist for Raytheon. He is survived by his wife Margaret Goswick (Stapleton) of Greenville, Texas whom he married October 22, 2004. Don was a former Club Trustee for the Majors Field Radio Club.

Those left to cherish his memory are sister Nancy (Dan) Newland; sons, Dustin Divinia, Darin Divinia (Dawn); step-daughters, Carol Robinson, Mildred Goswick; and step-son Eddi Goswick; grandsons, Dylan Divinia, Derek Divinia; step-grandchildren Kristy Robinson, Heather Ussery, Nicole Ficher, Matt Goswick, Emily Goswick, and Rachel Goswick, and 9 step-great-grandchildren. He was preceded in death by his parents and step-grandson David Robinson.



Submitted by Mark Rice – KK5MR and Victor Paul – WB0TEV

Victor Paul – WB0TEV in Belize Aug 15th

Word has it that Victor Paul – WB0TEV is heading back to Belize on August 15. That is just in time for the World Wide RTTY Contest (www.sartg.com) / Rookie RTTY Roundup and the North America QSO Party SSB. My sources say that Victor also plans another trip in late September with Scott Davis - K5PS.

Written by Michael Ketchum – K5MDK

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FCC Cites Amcrest for Illegal Marketing of Baofeng UV-5R series Radios

Devices marketed and sold in the United States must meet RF standards before they can be sold in order to prevent interference with federal and privately licensed systems. The Equipment Authorization Program was created to perform these tests. Each manufacturer must insure their product meets RF standards and adhere to FCC Identification requirements. Amcrest Industries, LLC DBA Baofengradio.us, formerly Foscam Digital Technologies, marketed unauthorized RF devices, namely a handheld two-way radio, that was in violation of Section 302(b) for the Communication Act and Section 2.803 of the Commission's Rules.

On March 14, 2013, the Baofeng UV-5R was alleged to transmit on land mobile frequencies using external controls and to operate at power levels above those specified for its Equipment Authorization. The model UV-5R V2+ was also included in this citation. On October 30, 2017, the FCC Spectrum Enforcement Division (SED) issued letters of inquiry to Amcrest. More were sent on January 12, 2018 and February 2, 2918. Amcrest provided timely responses to each of the letters. In those responses, Amcrest stated it stopped marketing the UV-5R, UV-5RA and the UV-5RE. However, it was discovered that the company failed to remove these models from their website until February 1, 2018. The UV-5R V2+ is now the only currently marketed radio, which is an updated version of the UV-5R. In addition, Amcrest acknowledged that the UV-5R 2+ does operate on frequencies not authorized for Part 90. Amcrest added a warning to "all user manuals, marketing materials and sales materials" implying that the UV-5R 2+ can operate on unauthorized and restricted frequencies, including "136 – 137 MHz (Aviation Services, Part 87); 137 MHz – 138 MHz (Satellite Communications, Part 25); 138 MHz – 144 MHz (not available to any FCC licensee – Federal use only); 156.7625 MHz – 157.0375 MHz (Maritime Services, Part 80 and Aviation Services, Part 87)" Amcrest then instructed the manufacturer to rectify the issues of power/frequency levels.

After reviewing Amcrest's responses, the FCC found Amcrest marketed the UV-5R V2+ outside the scope of its Equipment Authorization. Additionally, Amcrest violated Section 302(b) of the Act and Section 2.803 of the Commission's rules. 47 U.S.C. § 302a(b); 47 CFR § 2.803(b). Amcrest will be able to respond to this citation, but must immediately cease and desist from marketing any Baofeng Radio model UV-5R V2+ that is capable of transmitting on unauthorized frequencies. Additionally, Amcrest must provide a sworn statement documenting in writing that they have ceased marketing the UV-5R V2+, including removing all references to the model from marketing materials and Company website until they have brought the device into full compliance.

To read the entire Citation, goto https://docs.fcc.gov/public/attachments/DA-18-801A1.pdf

Submitted by Mark Bushnell - AE5FG

Calendar

August 4-5	North American QSO Party, CW http://ncjweb.com
August 4-5	222 MHz and Up Distance Contest

http://www.arrl.org/222-mhz-and-up-distance-contest

August 9 MFARC Meeting at 11:45am at B136-A Kitty Hawk Conference Room.

August 16 SVARA Meeting at 7:00pm at Hunt Regional Hospital.

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August 18-19 North American QSO Party Phone http://ncjweb.com

August 18-19 10 GHz & Up http://www.arrl.org/10-ghz-up

August 19 ARRL Rookie Roundup RTTY http://www.arrl.org/rookie-roundup

September 13 MFARC Meeting at 11:45am at B136-A Kitty Hawk Conference Room.

September 20 SVARA Meeting at 7:00pm at Hunt Regional Hospital.

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

Thurs SVARA Net Every Thursday night at 7:00pm on the K5GVL/R 146.780 MHz (+) PL 114.8Hz

Meets every Thursday night except on SVARA meetings 3rd Thursday of each month.

Officers

President: Larry Smith – K5XB

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Vice President: Michael Ketchum –

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VE/Class Team Leader: Jae Stutzman – K5JAE

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Club Trustee: Jonathan Brown – WB5KSD

trustee@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.