
SIGNALS

**Rockwell
Collins**

Monthly Newsletter of the

Amateur Radio Club

Volume 38 Issue 02

Web Site <http://www.w5rok.us>

November 2016

**RCARC
Membership Meeting**

Tuesday 22 November 2016
1700 Social 1730 Meeting
1800 Program

Methodist Richardson Medical Center
At Bush/Renner/Shiloh Intersection
Conference Room A in Hospital Building

*Subject:
The Program is TBD*

2D

W5ROK	1012	2	7	3,414	NTX
W4HOD	840	2	3	3,276	AL
VE2RAE	675	2	40	2,340	QC
KD0MED	413	2	4	1,480	IA
N2BJ	634	1	2	1,159	IL
K4FCW	277	2	3	912	NC
KD2AJO	197	2	3	504	WNY
K3AA	116	2	2	408	MDC
W5ROS	145	2	12	390	STX
K4ELI	169	2	11	388	GA
K4TEP	89	2	2	388	AL
K7DLX	149	2	2	348	UT
NA9VY	60	2	2	170	IN
KD6LOQ	2	1	150	ORG	
WO5X	45	2	6	140	AR
N9QID	43	2	3	136	MI
KJ4MFT	7	2	5	64	KY

(Contributed by Dennis Cobb WA8ZBT)

Local Club News

Meeting Notice

This month's program had not been finalized at the time of the newsletter's publication.

Location: RCARC has RESERVED Methodist Richardson Medical Center Conference room A or B for the RCARC monthly meeting (fourth Tuesday of each month) from April, 2016 through August, 2017.

Directions: We now meet in the main hospital building. To find your way for the first time enter by the main entrance on the south side of the hospital. Stay on the first floor, turn left at the entrance and go down the hall to where it just turns to the right heading for the emergency room; do not continue. Turn left and go into Conference Room A.

W5ROK Field Day Results

The Field Day results have been published in the December 2016 issue of QST. The class 2D results are on page 85. There were 17 entries across the U. S. in class 2D, and W5ROK finished first.

AREDN at W5ROK

After the September meeting I was very much interested in the AREDN setup. I ordered one of the Ubiquiti NanoStations from New Egg. This NanoStation has an 11dBi gain antenna (built in) with power output of +28 dBm (620mW), and the noise floor on the receiver is about -95 dBm.

It arrived at my QTH and after powering it up, I discovered it had 5.6.2 firmware. According to AREDN, this firmware needs to be downgraded to 5.5.X firmware. If you do not do this step first you run a chance of making the NanoStation a "brick." So with 5.5.X firmware loaded, I then loaded the AREDN 3.1.16 firmware. The unit came up, and after a few adjustments I had it set up on an amateur channel just outside the 2.4 Ghz WiFi band. It is called Channel -2. I think it is centered around 2.397 GHz +/- 5 mHz. (Continued on page 3)

RCARC OFFICERS			
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MEMBERSHIP Joe Wolf N5UIC 214.202.2757 n5uic@arrl.net		W5ROK CLUB STATION 972.705.1349 461-290	

Richardson The Richardson Wireless Klub (RWK) VE team hold license testing on the third Thursday of each month at St. Barnabas Presbyterian Church, 1220 West Beltline Rd. Testing begins at 1900 hrs in room 12. Enter through the Northern most door on the east side of the church building. For further information contact Dave Russell W2DMR, at 972.690.9894 or E-mail warhog4@tx.rr.com.

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President and VP Messages

VE SESSIONS

Dallas tests are held on the fourth Saturday of each month at 1000 hrs. 13350 Floyd Rd. (Old Credit Union) Contact Bob West, WA8YCD 972.917.6362

Irving tests are held on the third Saturday of each month at 0900. Fifth and Main St. Contact Bill Revis, KF5BL 252-8015

McKinney VE test sessions are held at the Heard Museum the first Sunday of the month. The address is 1 Nature Place, McKinney TX. The time of the testing is 1430, ending no later than 1645. **Note: no tests given on holiday weekends.**

Garland testing is held on the fourth Thursday of each month, excluding November, and begins at 1930 sharp. Location is Freeman Heights Baptist. Church, 1120 N Garland Ave, Garland (between W Walnut and Buckingham Rd). Enter via the north driveway. A HUGE parking lot is located behind the church. Both the parking lot and the Fellowship Hall are located on the east side of the church building, with big signs by the entrance door. Contact Janet Crenshaw, WB9ZPH at 972.302.9992.

Plano testing is on the third Saturday of each month, 1300 hrs at Williams High School, 1717 17th St. East Plano. Check Repeater 147.180+ for announcements.

Greenville testing is on the Saturday after the third Thursday, 1000 hrs at site TBA, contact N5KA, 903.364.5306. Sponsor is Sabine Valley ARA. Repeater 146.780(-) with 118.8 tone.



Have a Great and Happy Thanksgiving!

See you at the meeting, 73's
Gene, K1GD

Secretary's Report

25 Oct 2016

The meeting was called to order by Vice President Gene Duprey K1GD at 1738.

The following were present at the meeting:

Jim Brown	AF5MA
Dennis Cobb	WA8ZBT
Larry Creech	KC5LOP
Gene Duprey	K1GD
Bob Kirby	K3NT
John McFadden	K5TIP
Paul Newman	KA5TYW
Mike Schmit	WA9WCC
Jim Skinner	WB0UNI
Bill Swan	K5MWC
Joe Wolf	N5UIC

Officers and Committee Reports:

There were no formal reports other than the Secretary's Report, which is contained in this newsletter.

Old Business:

Bob Kirby K3NT raised the issue of the weather station anemometer damaged in a recent storm. Dennis Cobb WA8ZBT stated that he would buy the necessary parts to install a new one.

The status of the weather display intended for installation in the RC factory hallway was discussed. The display was removed and reinstalled inside the radio shack when remodeling was done in the past. Dennis Cobb will inquire with RC management to determine whether reinstallation in the hallway is feasible and desired.

Discussions on purchase of a new transceiver for the radio shack were concluded. Bob Kirby moved to purchase an Elecraft K3S/P3 in kit form; Jim Brown AF5MA seconded the motion. The purchase was approved unanimously by all members present. Bob Kirby will make the purchase. As a side issue, Dennis Cobb agreed to investigate upgrading of the currently-owned K3.

New Business:

Bill Swan K5MWC briefed the members present on the various aspects of applying to become a club-level MARS station. The possibility will be investigated in the near future and a decision to proceed will be brought to the membership for approval when all facts are known.

Dennis Cobb provided status on establishment of an AREDN repeater station at the W5ROK radio shack. The station is now up and running, with good communications to the UTD repeater site verified. Based on success to-

date, the members present authorized \$450 to fund Phase 2 of the AREDN installation.

AREDN at W5ROK *(Continued from page 1)*

Kathy and I came over to Rockwell Collins on Sunday October 23, 2016 and I mounted the NanoStation (pointing west) on the HF tower about 45 feet above the ground. The NanoStation has a very good link to K5UTD (at the UTD Campus). Signals that day (at W5ROK) were about -65 dBm from K5UTD with our NanoStation. It is about 5 miles from W5ROK to K5UTD.

The NanoStations are very nice in that all the RF conversion is done right up on the tower where the NanoStation is located. There are no long runs of expensive coax. All that was needed was a run of Cat-5 cable up to the NanoStation. The power supply is down near the air handlers out of the weather. There is special exterior grade, shielded Cat-5 cable made for outdoor the cable runs. W5ROK is on 24 hours a day 7 days a week, and we have just added another connection to the (AREDN) Emergency Mesh Network that these amateurs are trying to get going.

What can we do with it? I also installed a service called "MeshChat," which enables you to talk to another station that has "MeshChat" keyboard to keyboard. There are other things (for example, cameras) that other amateurs have set up. There also appears to be a SDR radio on one amateur Node.

(Contributed by Dennis Cobb WA8ZBT)

AREDN Node in Parker

Thanks to Paul KA5TYW, David KG5EIU, and Doug KD5OUG, AREDN fixed-node K5RA-rk2o-parker77 is now operating in the North Texas AREDN mesh on the 2.4GHz band, Channel -2, with a UBNT Rocket-M2 (XM) radio and an L-Com HG2413DPU omnidirectional MIMO antenna. The Transmitter is configured for 5 MHz bandwidth and +28 dBm output power. AREDN 3.16.1.0 is installed on top of airOS 5.5.11 (downgraded from airOS 5.6.2).

The node is located in the city of Parker about 1.0 mile NNE of Plano East High School at about -96.6416 (W) long, 33.0532 (N) lat. The center of the radiator is about 77 feet above ground. The base of the tower is about 590 Ft elevation, according to the NAD27 topographic map. The antenna has a clear view of a 320-degree arc from about 335 degrees azimuth clockwise around to about 295 degrees. Scattering by the tower may reduce signal strength in the 295-335 degrees sector (north Plano, south Allen, Frisco). Link establishment should be possible with nodes in parts

of Richardson, Plano, Murphy, Fairview, Lucas, and other locations.



AREDN node k5ra-rk2o-parker77 is below the 2L full-size 40m beam and Force 12 C31-XR tribander antenna. The base of the node is about 75 feet up. There is also a TA-36 at about 50 feet. The tower is shunt-fed for 160m, and an 80m vertical will be re-attached soon below the AREDN node.

Links were made with W5ROK, K5UTD-N, and K5UTD-SE.

Reports of signal strength and link quality posted on this topic will be appreciated. Please include details of your station location, radio and antenna equipment, antenna height and beam azimuth (if directional), and weather conditions.

(Contributed by Dennis Cobb WA8ZBT from an email from Timothy Bratton K5RA)

Ham Radio and the Hams Who Use Them

Check out the link below. It is interesting to listen to non-hams describe and discuss amateur radio. They get most things "right" but, a few things "wrong." So, they are to be

commended for giving good exposure to the wide ranging, diverse technology and processes that comprise modern amateur radio.

<http://www.stuffyoushouldknow.com/podcasts/ham-radio.htm>.

(Contributed by Jim Skinner WB0UNI from an email from Roger Stierman WA0VYU)

RCARC Community Service Activities

Siren Testing Dennis Cobb WA8ZBT, John McFadden K5TIP and Jim Skinner WB0UNI participate in the Richardson emergency siren testing. The testing on 2 November 2016 was cancelled due to overcast weather. The siren testing is performed at 12:00 on the first Wednesday of each month. The sirens are monitored by amateur radio operators and reports made using the Richardson Wireless Klub (RWK) repeater at 147.120 MHz. Siren testing occasionally uses the University of Texas at Dallas (UTD) repeater at 145.430 MHz, which is designated as the backup repeater.

Crime Watch Patrol Jim Skinner WB0UNI participated in Richardson Duck Creek Crime Watch Patrol (CWP). CWP members, after successful completion of Richardson Police Department Training, patrol their neighborhoods and report all suspicious activities to the Police Department.

National Geographic Ham Radio Movie

Here's a newly made video about ham radio that should interest kids:

<http://channel.nationalgeographic.com/mars/videos/before-mars/>

Anthony Burokas KB3DVS commented that, "This is a real good video! I kinda waited for the ham to mention something about a license though. Or the people on the ISS."..

(Contributed by Jim Skinner WB0UNI from an email by Doug Kilgore KD5OUG)

The QSO Radio Show on Shortwave Radio

While we're on the topic of ham radio in the media...

I was tuning through the shortwave spectrum outside of the ham bands the other night, and stumbled upon the tail end of an interview about ham radio. Quite interesting, and great PR. They call it "The QSO Radio Show."

The station is WTWW out of Tennessee, which broadcasts religious content, oldies music, and other programming. Very strong signal...you can copy it well, even with a portable radio. Looking at their website (<http://qsoradioshow.com>), I find that they do the ham radio interview show three times weekly (following are local Dallas times):

Tues 8 pm on 5085 KHz AM

Sat 1 pm on 9475 KHz AM

Sun 9 pm on 5085 KHz AM

I found it interesting...see what you think.

(Contributed by John McFadden K5TIP from an email from Carl Solomon W5SU).

Presentations for Monthly RCARC Meetings

RCARC has an urgent need for presenters to present a short topic on Ham Radio at our monthly club meetings. 45-60 minute presentations may include, but are not limited to:

- Set-up, Building or Modifying Station Equipment (Antennas, Audio, Dummy Loads, Desks, Lights, ...)
- Operating a Radio Station (Listening & Transmission tips, Ham Logo decrypted, Popular Frequencies, ...)
- My Radio Broke (Possible Alternatives before using the Sledge Hammer, ...)
- Different types of Digital Operation (APRS, Packet, PSK 31-64, RTTY, ...)
- Software Defined Radios (Commercial, Kits, Remote, Internet, ...)
- Software used for Ham Radios (WSPR, PSK-31, ...)
- Emergency Radio Equipment (Go Kits, Batteries, Solar power, Easy-Up Antennas, ...)
- Ham Radio Activities (MARS, RACES, MARC, Contests, Satellites, Mobile, Portable, Remote, Field Day, SWL, ...)
- Radio Reference (On-line manuals, theory, how to books & Videos, ...)
- Social Mingle (With light snacks? Ham and cheese crackers? ...)

If you would like more information on a particular topic, and would like someone to do a presentation on it, you may suggest it as a topic. Please email Bob Kirby K3NT, Jim Skinner WB0UNI or Gene Duprey K1GD to present a topic or to suggest a topic for presentation.

Upcoming Events

NOVEMBER

19-21 November Sweepstakes—Phone Objective: For stations in the United States and Canada (including territories and possessions) to exchange QSO information with as many other US and Canadian stations as possible on 160, 80, 40, 20, 15 and 10 meter bands. Begins 2100 UTC Saturday and runs through 0259 UTC Monday. <http://www.arrl.org/sweepstakes>.

19-20 EME - 50 to 1296 MHz Objective: To work as many amateur stations as possible via the earth-moon-earth path on any authorized amateur frequency above 50 MHz. 0000 UTC on Saturday through 2359 UTC Sunday. Details at <http://www.arrl.org/eme-contest>.

DECEMBER

2-4 160 Meter Objective: For Amateurs worldwide to exchange information with W/VE amateurs on 160-meter CW. Stations located in overseas and non-contiguous U.S. Territories may be worked by DX stations. This includes Alaska KL7, Caribbean US possessions KP1-KP5, and all Pacific Ocean territories KH0-KH9, including Hawaii KH6. These stations can work both domestic stations as well as DX stations around the world. Starts 2200 UTC Friday, ends 1600 UTC Sunday. Details at <http://www.arrl.org/160-meter>.

10-11 10 Meter Objective: For Amateurs worldwide to exchange QSO information with as many stations as possible on the 10 meter band. Starts 0000 UTC Saturday; runs through 2359 UTC Sunday. Details at <http://www.arrl.org/10-meter>.

18 Rookie Roundup—CW Mission: To encourage newly-licensed operators (“Rookies”) in North America to operate on HF bands and experience competitive operating. Experienced operators are strongly encouraged to participate and help new operators. Objective: Rookies exchange information with as many other stations as possible on the 80, 40, 20, 15, and 10 meter HF bands. Operation is from 1800 UTC through 2359 UTC. Details at <http://www.arrl.org/rookie-roundup>.

REGULAR ACTIVITIES

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

Daily DFW Late Traffic Net (NTS) at 10:30pm 146.72 – PL 110.9Hz

Daily Texas CW Traffic Net at 7:00pm on 3541 KHz and at 10pm on 3541 KHz www.k6jt.com

1st Wednesday Richardson Emergency Siren Test. At noon using the Richardson Wireless Klub (RWK) repeater at 147.120 MHz.

2nd Wednesday ARES North Texas HF Net Every month—3860 KHz at 8:30 pm—9:30pm

Rockwell-Collins

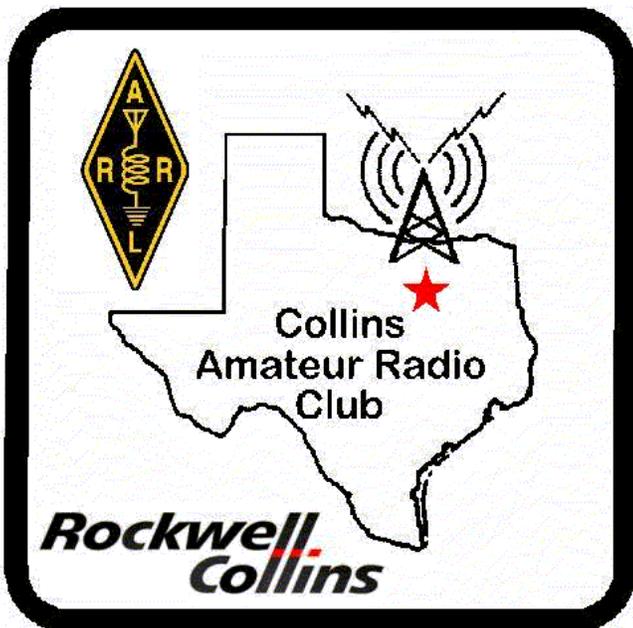
Amateur Radio Club

Mail Station 461-290

P.O. Box 833807

Richardson, TX 75083-3807

TO:



CLUB STATIONS
 (972) 705-1349

W5ROK REPEATER
 441.875 MHz +5 MHz Input
 131.8 Hz PL - RX and TX

W5ROK-1 PACKET BBS ROK Node
 145.05 MHz

W5ROK-N1, W5ROK-N2 & W5ROK-N3 HSMM-MESHNET Nodes 2.4 GHz

Tuesday 22 November 2016
 1700 Social 1730 Meeting

**Methodist Richardson Medical Ctr
 At Bush/Renner/Shiloh Intersection**

Conference Room A in Hospital Building

NEXT SIGNALS INPUTS DEADLINE:
→→→ 16 December 2016 ←←←