
SIGNALS

Rockwell Collins Amateur Radio Club

Volume 31 Issue 8

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

May 2010

RCARC Membership Meeting

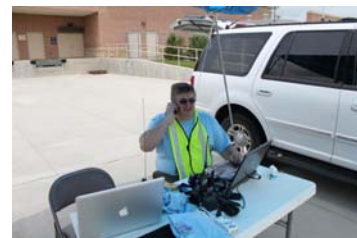
Thursday, 27 May 2010
1700 Social 1730 Meeting
Methodist Richardson Medical Center
At Bush/Renner/Shiloh Intersection
Second Floor East Conference Room

Subject: Forest Cummings, W5LQU, "Impedance Transformation. Also Field Day Planning



start/finish line. Doug Kilgore, KD5OUG, of the Richardson Wireless Klub did a great job organizing the local Amateur Radio operators for this event which he has worked on for several years. The Wild Ride event announced a 1 million dollar donation mile-

stone this year during a Wednesday night planning meeting at the Methodist Richardson Medical Center where we meet. The final amount raised during the May 2010 fund raising event has not yet been published. Area Amateur Radio operators, who numbered greater than forty (40+), were placed along the event route or provided assistance or were mobile on the route in various roles. The Rockwell Collins Amateur Radio Club members included Mike Schmidt, WA9WCC, providing radio communications in SAG wagon seven (SAG 7), Bob Kirby, K3NT, communications/network setup at rest stop four (4) and Ross Terry, K5SRT, provided communications and live digital picture uploads at rest stop four (4). A full set of pictures captured at this event can be seen at <http://www.k5rwk.org/wr>.



Local Club News

Meeting Notice. At This month's meeting, Forest Cummings, W5LQU, will talk on Impedance Transformation and will cover T networks, PI networks and some graphical impedance solutions. Forest worked at Collins from 1953 to 1984 in the transmitter department. After retiring from Collins in 1984, he worked for E-Systems until 1989, and returned to Collins to do contract work in the early 90s on HPTS.

Club Meeting Talk-In. Each month, on the night of the membership meeting we have a Talk-In on the club repeater. The Talk-In this month is 1630 to 1700 hours, prior to the meeting.



The 2010 Wild Ride Against Cancer & 5K Trail Walk was held on Saturday, May 15 to benefit the Methodist Richardson Cancer Center and those in the fight against cancer. The ride was supported by many local Amateur Radio Club members who were placed along the 64-mile

route from Richardson Texas over the Lavon dam out to Josephine, TX and back. A 5K Walk was held at the same time along with shorter bike route options and other fund raising activities at the



We Have New Amateurs! Congratulations to the following eight new Amateurs who completed the April 2010 Amateur Radio class. New Amateur Name Call Sign & License Class:

- Armando Rodriguez, KF5GUK-Technician
- Hoangminh Nguyen, KF5GUL-Technician
- Hershelle Hogan, KF5GUM-Technician
- Christopher Havenridge, KF5GUN-Technician
- Adrin Espinosa, KF5GUO-Technician
- Joshua Dornback, KF5GUP-Technician
- Gregory Armstrong, KF5GUQ-Technician
- Ira Blum, KF5GUR-General

Let's encourage each one to become a member of our growing Amateur Radio club. BTW, there will probably be a general class this summer, so lets encourage them to take advantage of the upcoming opportunity once its date is announced. Several expressed their Thanks to the club for making the Amateur Radio Level 1 Class possible.

RCARC OFFICERS

| | |
|---|--|
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VE SESSIONS

Dallas tests are held 4th Sat of each month at 10:00. 13350 Floyd Rd. (Old Credit Union) Contact Bob West, WA8YCD (972) 917-6362

Irving tests are held 3rd Sat. of each month at 09:00. 5th 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 14:30, ending no later than 16:45. **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 Bill Reynolds, K8DNE, 972-475-3854.

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 3rd Thursday, 1000 hrs at site TBA, contact N5KA, 903.364.5306. Sponsor is Sabine Valley ARA. Repeater 146.780(-) with 118.8 tone.

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President's Message

Well, the 2010 Rockwell Collins Fun Days event is now history. I believe our PSK 31 demonstration project was quite successful. It attracted attention of many, especially some new hams who just received their radio licenses.

I would like to thank some members who were critical to the success of this project. James Skinner, Michael Ketchum and Bob Kirby were a great help in getting the antenna up and working. I would also like to thank all members who worked and visited the station during the event.

I would like to acknowledge the great work of our education team Ross Terry and Dwight Ramsey. Their hard work has resulted in eight more students receiving their amateur radio licenses. This great work helps insure the future of amateur radio in our community.

Finally I would ask all members to remember our friend John Champa and his family in your prayers as he deals with some serious health issues. They will need great strength and peace in the coming weeks and months.

Shalom John!

Mike Schmit, WA9WCC
wa9wcc@arrl.net

Vice-President's Message

Member Involvement: It makes one proud when a new graduate of a recent RCARC class becomes a member and takes action to become involved and finds ways to make the club better for all members. Check out the following: *"Thank you for providing the Class 1 April 2010 class roster. I have obtained the February class roster of graduates as well and have compiled a spreadsheet of all the names of folks I need to reach. I will be attempting to visit each individual to invite them personally to the club meeting with me and use the FIELD DAY 2010 as a road to entice them to get involved. I may start out and ask them what prompted them to get their ticket and use that response to channel them to get involved somehow. There are so many facets to Ham Radio, there is something there for everyone. The Club is a golden avenue to learning and doing whatever it is you are interested in doing. The best way to find out what that is would be to jump in. Field Day 2010 and our regular RCARC meetings are an easy way to do just that.*

If you have any suggestions or if you know of some other club members who might be interested in helping me with this endeavor, please let me know. I can always split the list and share! Also, I realize that our next meeting is coming soon. I'll do my best to make these contacts on time. Michael - K5MDK"

W5ROK Station Visit. Late in the afternoon of April 21, 2009 I received a call from one of the visiting members of our sister club in Cedar Rapids (W0CXX/N0CXX). Randy Aschbrenner, KD0ION, had completed his business and was requesting a RCARC tour. I quickly clocked out and met Randy in the lobby

where we proceeded to the club station. Randy is a manager of Lean Sigma & Subcontracts Enterprise Supply Chain QA. After we discussed our roles and backgrounds the conversation quickly turned to ham radio.

Randy is very interested in learning and operating CW on the HF bands. We reviewed the clubs setup and equipment but the local RFI noise did not help with demonstrating our HF capabilities. Since this RFI has increased to the point of masking nearly all but the extremely strong signals, we turned our focus to the clubs VHF/UHF equipment. Randy had a small Yaesu dual band handheld with him and we talked about dual band receive, scanning and cross-band repeating.

Randy reported the Cedar Rapids club is very active with between twenty to twenty five members at their meetings. He does work the stations and has helped with antenna maintenance. His current interests are operating QRP (low power < 5 watts). Randy also related how he was on the Cedar Rapids repeater and was discussing his interest to try out HF but lacked equipment. One of the locals quickly offered to loan him a HF rig and a QRP rig and the rest was loads of fun.

After setting things up and listening to activity on 20 meters Randy decided to try to make a contact. Turned out there was a contest and so his QSO count went up quickly. This was to the point that he was running out of space on his 'Pizza Box top log-book'. So Randy quickly built a spreadsheet to continue his logging. He was encouraged to send in his contacts and with some more local help, he converted the spreadsheet log entries to the format required. Talk about jumping right in and having fun with ham radio?

We then discussed our family's wonderment of how we listen to more than one radio at a time. Before leaving Randy indicated that many of the Cedar Rapids members enjoy reading our SIGNALS newsletter. His final suggestion was to consider a sign-in list for the club station. W0CXX and N0CXX make use of their sign-in and station activity logs to support their stations space. Great suggestion Randy.

RCARC Radio Class Nets More New Hams. The recent RCARC technician class that started April 13, 2010 was taught by member Ross, K5SRT. It is now history. Special thanks to members who lent Ross a hand with this class and followed up with student questions on amateur radio. Please join me in welcoming these newly FCC licensed operators. Please see page 1 for a complete list of new Hams.

Thanks also to those RCARC members who helped with the introductory W5ROK station tours and also provided many with their first official licensed radio contact (QSO).

Richardson Wild Ride. Mike WA9WCC, Ross, K5SRT, and Bob, K3NT volunteered and supported the 2010 Richardson Wild Ride as RCARC representatives. HSMM wireless was used as part of the network to pass along pictures of the event to a big screen TV at the main tent.

RCARC Learning Sessions: A number of RCARC work sessions occurred since our April meeting. The club station is a little more comfortable now that we were able to move some of our seasoned equipment to a cabinet just outside the room. It is not clear if this will be a long term storage for the club. The K3 and

TS-2000 positions have been relocated to shorten coax runs and enhance operation. Other sessions involved setup, testing and packing the K3 station for remote fun days operations, installing a temporary 20 meter dipole near the W5ROK repeater tower and fixing a loose RF connector on our repeater. Those that attended these sessions learned skills and also had valuable hands on experience that they could use at their own home or mobile stations.

Consider lending a hand and giving a little bit back to your Rockwell Collins Amateur Radio Club. If you missed these opportunities, there are always things to be done around the club station for many club projects and activities. RCARC needs an Activities Chairman and a Secretary. - contact Mike wa9wcc@arrl.net

John, K5TIP, and Mike, K5MDK continue working hard to ready his place for RCARC field day radio operation in June. Can you help them with 2010 W5ROK FD operations? If so, please contact John: k5tip@arrl.net

A reminder that the RCARC Membership Roster is available in the for members only (FMO) section of our website <http://www.w5rok.us>

Till next month, 73 from Bob, K3NT
k3nt@arrl.net
<http://w5rok.us>

Secretary's Report

Mike Schmit, WA9WCC, opened the meeting at 1735 on 22 April 2010, in the Methodist Richardson Medical Center Conference Room with the Pledge of Allegiance. Present at the meeting were:

| | | | |
|--------------|--------|-----------------|--------|
| Bob Ashby | K5IHR | Charles Beis | K5UWD |
| Loney Duncan | W0GZV | Michael Ketchum | KF5FFT |
| Bob Kirby | K3NT | Michael Schmit | WA9WCC |
| Jim Skinner | WB0UNI | Joseph Wolf | N5UIC |

The meeting was dedicated entirely to the initial planning for Fun Days and Field Day. RCARC will support Fun Days by setting up a station on the west side of building 462, which will necessitate setting up an antenna on the roof of the building near the west end. Field day will be operated at John McFadden's (K5TIP) house. Work days to prepare for the events will be required for each. There were no official minutes recorded for the meeting.

Special Thanks To Volunteer Examiners. Special Thanks to William (Bill) Reynolds K8DNE his young lady (YL) Sandy Reynolds and crew of Volunteer Examiners for administering a successful formal exam on May 6, 2010 at Methodist Richardson Medical Center. The VEs crew picture (which includes Ross Terry K5SRT, Class Elmer for the April 2010 class) was taken by Dwight Ramsey, KE5SAS after the exam which lead to eight (8) new Technician Licenses and a little later one (1) General License (see Graduating Class of May 2010



on <http://w5rok.us> under Ham Radio Classes). The VEs are active at many area Amateur Radio Ham Fests or monthly supporting the Amateur Radio Testing effort. Give these VEs a Special Thank You for supporting Amateur Radio if you see them in the field or on the air waves. They work before the event preparing for the official test, administering the official exam based on <http://ARRL.org> guidelines and then officially file the paperwork used in the FCC (<http://www.fcc.gov>) licensing process. If you're interested in becoming a Volunteer Examiner contact Bill Reynolds K8DNE.

VEs for the May 2010 Rockwell Collins Amateur Radio Club (RCARC) Exam were.

- Bill Reynolds, K8DNE-Extra (Liaison)
- Sandy Reynolds
- Ron Abraham, KC5IMJ-General
- Garland G. Newman, W5IDN-Extra
- Ed J. Prasifka, W5EJP-Extra
- Wayne Williams, WT5J-Extra
- Andy Carstarphen, WY5V-Extra
- Bill Richards, KM5VZ-Extra

(By Sidney Ross Terry, K5SRT)

Fun Days at Rockwell Collins 12-13 May 2010

By Michael D. Ketchman, K5MDK

Meeting up to the standard of its name, Fun Days were just that, days of fun. On Wednesday and Thursday on the 2nd week of May, the Rockwell Collins company picnic had many activities to offer; one of which was the Rockwell Collins Amateur Radio Club with a 20 meter station operating digital mode PSK31. The Fun Days effort for our club started on Saturday, May 8th, when Mike Schmit (WA9WCC), Jim Skinner (WB0UNI) and Michael Ketchum (K5MDK) setup a 20 meter dipole antenna on the roof attached to the W5ROK repeater tower. With a little tweaking on Monday by Bob Kirby (K3NT), we had a good match of 1.5-1 SWR on 20 meter PSK-31 frequency. This low standing wave meant most of our power from our transmitter should be radiated and the RF finals had a close 50 ohm match. John McFadden (K5TIP), Bob Kirby



(K3NT) and Michael Ketchum (K5MDK) had a time of equipment testing /dry run on Tuesday evening using Mike's, WA9WCC, 12 volt backup battery to be sure everything was good to go, even though we did not have AC Power.

Here is the equipment that was used: 20 meter dipole using zip cord elements attached with nylon cord to the repeater tower and another pole near the stair well. We had 100+ feet of coax running down the West side of the 462 building behind the stair well. We used the K3 transceiver along with one of the club's computers with Ham Radio Deluxe software and two monitors, one for the operator and another for visitors to view, as they approach the table. In addition to all the equipment, we had brochures with the ARRL band plan on one side and general Amateur Radio information on the other, as well as a small fliers with RCARC upcoming news and events for folks who wonder what we do as a club and how to get involved.

Several DX (distance) contacts were made during fun days, and not all by current club members. More importantly, we had employees come by to see what was happening. One visitor, Paul Whiteman (KF5FFZ), made a couple of DX contacts. Mary Ellen Johansson (KC5FDZ) expressed interest in upgrading to General class and getting active again. Recent graduates from both the February and March classes dropped by to say hi, including Ira Blum (KF5GUR), who was able to make some DX contacts using PSK31. Ira is going to be submitting his application to RCARC soon, so please welcome him the next time you see him. We also had interest from a few about enrolling in the next Technical class, and we had plenty of information on hand to pass out to them. We also had several regular members drop by to show their support. One retiree member, John McFadden, K5TIP was present and helped out on Wednesday.



Some of the lessons we learned through this equipment setup and teardown includes properly labeled cables, as well as dedicated PC and power equipment for remote use. Some time was lost on Fun Day setup due to having to find which cable went where on the PC and so on. The

USB ports are not all equal. Some devices need to be plugged into the same USB port where the device was first configured. In such cases, specific labeling is required. Since we used equipment that is normally used in the shack on a permanent basis, it would be better to have a mobile PC system and cables that are setup the same way for remote use, either for Field Day or other outside company or community events.

Realizing that Field Day 2010 is almost here, it would be prudent for all equipment to be properly setup, tested and labeled before we haul it off for Field Day. Discussion was made to make an effort to perform this task in the near future. **If you are interested and can help, please volunteer soon.** Additionally, Field day network and logging setup is desperately needed. Thanks again to Bob Kirby (K3NT) for clocking out and spending a couple of hours putting the equipment all back together again operationally in the club's station for members to enjoy.

Overall, Fun Days at Rockwell Collins was a great success for the club. We hope folks in the company will continue to follow through with their expressed interest and get active again. It is activities like Fun Days that help expose Amateur Radio and our club to the Rockwell Collins employee population. This effort, however, was more fun for us, as we get a chance to practice communications planning, remote setup, enjoying on-the air contacts, and making new friends. Now, that's fun.

Air Handler RFI Briefing. For all of you who have been attempting to use the club station on HF and have been frustrated by the large amounts of RFI on the lower bands, we have a brief update.

The RFI issues have now affected more than just the Radio Club. A program experienced an RFI problem. This problem caused two weeks of investigation until the Air Handler was turned off and the problem went away. A program TPM called a meeting with

facilities to see what could be done. This meeting was held a little over 2 weeks ago.

I was able to attend the meeting and discuss the issue. It was established that the RFI noise appeared at the same time facilities had a Variable Frequency Motor Drive installed in Penthouse #6. It was also established that the program's RFI issues were from the same source. The short meeting ended with a request for more information and some high level agreements for some initial action items.

We discussed the option of running the Variable Frequency Drive in its bypass mode at times when program testing or club operations would be impacted. Due to the power cost and facility environmental control improvements afforded by this device, facilities was requesting that it be left in operation, however they would be willing to bypass the device at times we request. They also agreed to discuss the RFI issue with their vendor.

I was requested to provide the following information:

1. References to FCC rules that may apply
2. Spectral Plots and Signal Strength measurements

I responded two days later with the requested information, quoting parts of the FCC rules from Part 15 and showing spectral plots with the device on and off from 40 and 80 meters.

We will have at least one additional meeting in the next few weeks to discuss the procedure to put the Variable Frequency Drive unit into bypass and further determine what can be done to bring the generated RFI under control.

(By Bob Diepenbrock, KC4UAI)

Rockwell Collins selected for Boeing NewGen Tanker team. CEDAR RAPIDS, Iowa (May 12, 2010) - Boeing's NewGen Tanker will feature the same advanced Rockwell Collins flight deck technology that is being supplied to the 787 Dreamliner. In addition to the flight deck, Rockwell Collins was selected by Boeing to provide Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM), aircraft networks and situational awareness capability to support the aircraft's mission. <http://www.rockwellcollins.com/news/page12436.html>.

Events and Public Service Ops

22-23 May 2010: South Central Tour de Cure (Bike ride Benefiting American Diabetes Association). San Antonio to Austin, TX with overnight stay in San Marcos. ATX Hams contact - Jeff N5MNW N5MNW@arrl.net. Hays/Caldwell Hams contact David KD5MML kd5mml@gmail.com. SA Hams Contact Lee N5NTG info@sanantoniohams.org. (By Joe Wolf - N5UIC)

12-14 June 2010: June VHF QSO Party. The objective is to work as many amateur stations in as many different 2 degrees x 1 degree grid squares as possible using authorized frequencies above 50 MHz. Foreign stations work W/VE amateurs only. It begins at 1800 UTC Saturday and ends at 0300 UTC Monday. More info at <http://www.arrl.org/june-vhf-qso-party>.

11-12 June 2010: Ham-Com 2010 is June 11-12 at the Plano Centre. The Ham-Com Flyer is now online! The full-color Adobe (tm) Acrobat document is available for download via the "Ham-Com Flyer" link at <http://www.hamcom.org>.



The flyer includes the following important event information:

- Commercial exhibitor list
- Supporting clubs and SIGs
- Layouts for hallways, main exhibit hall and meeting rooms
- Flea market information
- Special-needs parking
- Lone Star DX dinner information
- QCWA Dallas Convention schedule
- The K4TWJ, SK "Travelling Keys" exhibit
- Boy Scout "One-day Radio Merit Badge" program
- ARRL West Gulf Division Convention
- Basic and advanced SKYWARN classes
- Door prizes
- Meeting and program block schedules
- Program listing
- Speaker biographies

Discount online admission sales close midnight May 30. General admission will be \$10 at the event (\$8 for family members). Admission **FREE** for K-12 students and Boy Scouts in uniform.

26-27 June 2010: ARRL Field Day. The objective of this event is to work as many stations as possible on any and all amateur bands (excluding the 60, 30, 17, and 12-meter bands) and to learn to operate in abnormal situations in less than optimal conditions. Field Day is open to all amateurs in the areas covered by the ARRL/RAC Field Organizations and countries within IARU Region 2. DX stations residing in other regions may be contacted for credit, but are not eligible to submit entries. More info at <http://www.arrl.org/field-day>.

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
 145.01 MHz

Thursday 27 May 2010
 1730
Methodist Richardson Medical Ctr
At Bush/Renner/Shiloh Intersection
➔ Second Floor Conference Room ←

NEXT SIGNALS DEADLINE:
➔➔➔ 13 June 2010 ←←←