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# SIGNALS Rockvell Monthly Newsletter of the Collins Amateur Radio Club

Volume 32 Issue 7

Web Site http://www.w5rok.us

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**April 2011** 

# **RCARC Membership Meeting**

Thursday, 28 April 2011 1730 Meeting 1700 Social Program 1800

**Methodist Richardson Medical Center** At Bush/Renner/Shiloh Intersection Second Floor Conference Room 200

> Subject: **Networking and Ham Radio** by Wayne Hughes, WA0TGH

### **Local Club News**

**Meeting Notice** Please plan to attend the RCARC membership meeting this month, as we have been having a good turn out at the meetings this year. We are pleased to announce our program for this month's meeting: Networking and Ham Radio. The program will be presented by Wayne Hughes, WA0TGH, at about 6:00pm. The presentation will touch on how networking applies to HAM radio. The presentation will also be given to the Rockwell Collins Networking Community of Practice next month. Please invite a friend to hear this interesting presentation.

Club Workday Planned We are planning a work day at the club station on Saturday, May 14th at 9:00 am in order to work on "IT", the MFJ Antenna. The wind has certainly done some light damage on the antenna, so the agenda for our work day is as follows:

- 1. We need to evaluate if IT can be resurrected or not.
- 2. We need to repair IT.
- 3. We need to reinstall IT and make it secure, possibly with guy lines (nylon cord)
- 4. We need to tune IT.

More news will be made available as we get closer to the Work Day. Hope to see you there. If you are available to help with a pre-work day evaluation of what hardware is needed for this work day, please contact Mike Schmit - WA9WCC at maschmi2@RockwellCollins.com.

Medical Reserve Corps Exercise McKinney, TX -April 2, 2011 You might be familiar with RACES and ARES organizations for public services during a disaster. However, did you know that the US Department of Homeland Security has an organization that most counties are participating with? After September 11, 2001, when the Homeland Security agency was established, additional citizens groups were also organized to help in disasters under the direction of this agency. One such group is the Citizen's Corps and the Medical Reserve Corps. The Medical Reserve Corps, also known as MRC, is a sub-organization under the umbrella of the Citizen's Corps that utilizes trained Ham radio operators in a big way. The MRC is made up of regular volunteers, ham radio operators and also medical doctors and nurses. MRC is designed to meet medical needs in times of pandemics, disasters, and viral outbreaks. The MRC coordinates with FEMA and the Center for Disease Control (CDC) as well as ARES, RACES groups to provide services and training for such an event.



That's using my tailgate!

In cooperation with the Collin County ARES, the MRC conducted an exercise on Saturday, April 2, 2011. It was an exercise that was to test the ability for volunteers to distribute POD ( \textit{Point of} Distribution) units as well as PCU (Portable Communications Units) in a simulation exercise. It would be the first time these PCU would be used in a deployment. (Continued on page 5)

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#### **VE SESSIONS**

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

**Irving** tests are held 3<sup>rd</sup> Sat. of each month at 09:00. 5<sup>th</sup> 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 17<sup>th</sup> St. East Plano. Check Repeater 147.180+ for announcements.

**Greenville** testing is on the Saturday after 3<sup>rd</sup> 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**



Spring Is Here – If you've not been to the W5ROK station recently you're missing out. I've included a picture this month of Lauren Terry and Bradley Beck who assisted me recently at the W5ROK (http://w5rok.us) station. We tried out the newly installed K2 mounted monitors while making QSOs on the Elecraft K3 station. Gone are the

bulky PC bases and now you have two monitors located just above the K3 + P3 combo (<a href="http://www.elecraft.com/">http://www.elecraft.com/</a>) making this station a spring breeze to operate. We've heard the comments and yes we plan to add the K2 (<a href="http://www.k2mounts.com/">http://www.k2mounts.com/</a>) under cabinet mounts to both the Kenwood and Yaesu positions as well. Spring into action and make some comfortable QSOs with the club's Great radio equipment!

April Station Improvements - The W5ROK station is looking better each week. Three HF positions are operational after the winter relocation. The latest version of Ham Radio Deluxe ( http://www.ham-radio-deluxe.com/ ) has been installed and integrated to the K3 station. The new general log of HRD is very user friendly and even supports QRZ, e-QSL and LOTW. The Ultimeweather station from Peet (http://www.peetbros.com/) has proved very useful both to the facility and our accurate reports to the NWS during weather events. Our new solar shield with temperature / humidity sensor has just arrived (thanks facilities) and is ready for a work party installation. Most of the excess equipment has been removed from the station and placed in storage for disposition. The W5ROK station is once again a very clean and comfortable place to operate. Thanks to all who have and continue to work the station tasks. We've installed a new Windows XP Professional machine by the Kenwood and it's currently interfaced to the weather station using Weather Text software.

**Work Projects** – Please support the Work project scheduled for May 14<sup>th</sup> from 9AM to 12 PM. Michael K5MDK, Dennis WA8ZBT and Bob K3NT performed a quick assessment of the damage to the club's MFJ HF/VHF vertical and concluded that it must be removed, dismantled and surveyed for repair. Paul Veenstra KC0TEG could still use your help in the inventory of some the surplus cabinets. I worked late one evening and completed cabinet 14, which I'd call the field day cabinet (it has band pass filters, heavy duty power cords, and its share of mystery items).

**April's 28<sup>th</sup> Program –** This month's presentation "Networking and Ham Radio" is a club special edition by our very own Wayne Hughes, WA0TGH, the clubs WebMaster. He was asked to present to the Rockwell Collins Network Community of Practice (CoP) on networking using ham radio. Please thank those club members who take the time and effort to improve our program and please consider sharing your knowledge by presenting a meeting presentation or writing an article for SIGNALS. If you miss this month's event, plan to attend the upcoming Network CoP presentation to be given by Wayne WA0TGH.

**Monthly Siren Test and Social Event –** Our radio club has a rather large representation at the monthly Richardson siren tests.

After the test, normally on the first Wednesday of each month, many of us have been gathering for eyeball QSO's, lunch and great stories at a local restaurant. We would like to see you, more retired members, and their spouses at this social event each month. You can listen in on the siren test and learn last minute details announced on the Richardson Wireless Klub repeater right before the test or switch to our club's <a href="http://www.w5rok.us">http://www.w5rok.us</a> repeater 441.875(+) PL 131.8 (after siren signal reports to ask questions or find out who's going). Get involved – it's great fun to support the community with a friend, watch reactions of those near the sirens when they go off, and then meet other HAMs for lunch (you can find out more about Siren Testing on the Richardson Wireless Klub web site at <a href="http://www.k5rwk.org/">http://www.k5rwk.org/</a>). Even if you don't help with the test, show up at one or more of the social events which normally follow.

HSMM - Chuck K7NWM, Bob K3NT and I (K5SRT) attended a local HSMM meeting this month. We offered the group a site for a HSMM repeater if all the 802.11 equipment and antennas are delivered as a tested package and ready for our club to install. The group's goal is to have this package to W5ROK in time to support the upcoming Richardson Wild Ride event. In addition, the group donated a 19 DB gain 2.4 GHz antenna for us to use in our remote HF location project. Bob KC4UAI, Mike W5QH, Kenney KD5EVW and Bob K3NT are currently in the process of performing a link loss budget analysis along with a test of these antennas. I've even now flashed my personal Linksys Router as described at http://hsmm-mesh.org/ and joined the network. You may see my K5SRT node at an upcoming ham event. Kip AE5IB, president of the Plano Club (http://www.k5prk.net), was very helpful in answering my HSMM Mesh questions and has said he would be glad to see more of us put up nodes to support special events.

Hand Held Satellite Antenna – I attended a presentation by Bill Krueger, AE5BK, at the McKinney club (http://www.mckinneyarc.org/) and now have the desire to make a satellite contact (Bill has me hooked). I am in the process of gathering the parts for my small CJU (Cannary Jail Umbrella) "Magic antenna". If you have an interest in this area and would like to join me please send me a short e-mail at k5srt @ arrl.net. If you need a Satellite Antenna, search on "CJU antenna". It looks like a good one, and I hope to be listening to satellite passes shortly.

**W5ROK QSL Cards** – A reminder that when you make QSO's from W5ROK, please remember to: log the contact, fill out and send the station a QSL card. A supply of W5ROK QSL cards, rubber stamp and envelopes are located in a clear plastic bin above the K3 station. Additionally, when a card is received from a station that you have worked, please update the log and place a small check with your call on the back upper corner of the received card so it is clear that it has been processed. A current club project to enroll W5ROK in the ARRL LOTW is progressing.

I'd like to thank all of the active members that made the March to April progress such a success. Its been so busy that it would not be possible without your continued effort. Steve K6JT, thanks for your great presentation in March. If you want to be involved, consider yourself invited. If you have an area of interest, the club is a great resource.

Till next month, 73 from Ross, K5SRT k5srt@arrl.net

# Secretary's Report March 24, 2011

A regular monthly membership meeting was held tonight at the Richardson Methodist Medical Center Bush Renner campus on the 2<sup>nd</sup> floor conference room. Those in attendance were as follows:

- 1 Bob Ashby K5JHR
- 2 Charles Beis K5UWD
- 3 Ira Blum K5IRA
- 4 Robert Diepenbrock KC4UAI
- 5 Nathan Diepenbrock
- 6 Glenn Dubay KD5HCL
- 7 Hernando Garcia KC5FDW
- 8 George Huling K5GH
- 9 Michael Ketchum K5MDK
- 10 Bob Kirby K3NT
- 11 John McFadden K5TIP
- 12 Steve Phillips SR
- 13 Steve Phillips K6JT
- 14 Dwight Ramsey KE5SAS
- 15 Andrew Robinson KE5SAK
- 16 Chuck Samuel K5NWM
- 17 Mike Schmit WA9WCC
- 18 Ross Terry K5SRT Club President
- 19 Paul Veenstra KC0TEG
- 20 Bob Winn K5KNE
- 21 Joe Wolf N5UIC Marketing

This represents 13 Regular, 2 Life, 2 Associate and 4 non-members.

#### 1. Opening

Ross Terry – K5SRT, the club President, opened the meeting at 17:40 with a flag pledge. A round of introductions by all of those in attendance was completed.

#### 2. Calendar of Events and Announcements

Ross also mentioned the Japan catastrophe and showed the ocean wave propagation. Ross reported that there were minimal impacts to the Marshall Islands, including Kwajalein. Ross also announced the retirement of Bill Swan – K5MWC. Ross presented a list of current officers and those in leading positions within the club.

Several of the calendar events were announced. These events can also be found in the March 2011 edition of the **Signals** newsletter.

#### 3. Officer Reports

There was no Vice President's report

The minutes were read from the last membership meeting by the club secretary, Michael Ketchum – K5MDK. Hernando Garcia - KC5FDW made a motion to accept the minutes as read. Dwight Ramsey – KE5SAS seconded this motion. The hand vote was unanimous.

#### 4. Old Business

There were several items discussed in OLD BUSINESS:

 With the absence of Bob Diepenbrock – KC4UAI, Ira Blum – K5IRA, presented information regarding Field Day Planning work. Ira presented the TRI-PLEXER proposal. Ira also presented the need for the MFJ "IT" antenna to be repaired and tuned for

Field Day, as well as the need for two long wires. K3NT might be able to make his Cushcraft R5 vertical available to the club for Field Day, if the club cannot get "IT" operational. Ira also reminded us that Fun Day is in May.

- Ross, the club President, reported that he talked to Mark Harris – KC5FDX, the club Activity Manager, regarding future club presentations. Mark reported to Ross that he is not ready to make any presentations in the near future.
- 3. Jim Skinner WB0UNI is out-of-town tonight.
- Club consolidation and station construction were reported tonight by several key individuals who are taking the lead on various tasks.
  - a. Paul Veenstra KC0TEG reported on the consolidation efforts. Paul was able to get locks installed on the cabinets. Paul reported that he organized an inventory of the club stuff over a lunch hour. He requested 5-8 members to help, however only one email recipient responded that they could not come. Paul intends to reschedule the inventory in the near future.
  - b. Ira Blum K5IRA reported that a work party was able to get the cabinets arranged in the PACE lab. The cabinets are arranged into a box configuration that allows a single entrance to the storage area for the club. The center area of the cabinet box has some racks of stuff. The entrance currently has a large orange cone to block the entrance. Ira also mentioned that there was considerable effort made in order to get the club station operational again. This included the installation of dual monitor mounts at the Elecraft K3 station.
  - c. Ross Terry, the club President, reported on Phase 2 of the club weather station and the agreement from Michael Kertis of the Facilities Team, that they will be purchasing the Solar Shield and Humidity Temperature sensor. Additionally, the club can get a combination Rain Gauge/Temperature sensor, if we ship back our existing rain gauge.
  - d. Ross Terry, the club President, reported on the MFJ "IT" antenna and the recent damage caused by the wind. Ross showed two pictures, before and after, the wind damage. "IT" really needs work and then we need to tune it for Field Day. Dennis Cobb recorded a 46 mph gust just 1 hour after the work group finished on Wednesday. Temporary stabilization was accomplished by the group of volunteers.

#### 5. Events

The following events were announced:

- March 26, 2011 ARC of Parker County Hamfest
- April 30 ~ May 1, 2011 Sam's Club 150.

#### 6. New Business

Bob Kirby – K3NT brought new business before the club membership. Dennis Cobb created a well written report,

which was published in the *Signals* newsletter for a triplexer for Field Day. The problem we face for Field Day or any special events is working 10,15 and 20 meters with the TH7 beam. Only one transceiver can operate this antenna at one time. However, we would like to build a Triplexer that would allow three transceivers to operate the beam at the same time. Another solution would be to purchase and erect another beam or put up additional wire antennas. Both of these other solutions would take great manpower and money. However, Dennis proposes that a triplexer would provide us greater functionality with less manpower and within a reasonable cost, (\$320 + \$580 for additional parts). Discussion:

- a. Hernando Garcia KC5FDW asked how many watts of power can this triplexer handle? Bob replied that the triplexer can handle 100watts. However the filters are spec for 600 watts.
- b. How much can our Collins amplifier put out? Bob answered 1000 watts.
- c. What kind of reception loss and receiver filter properties on each radio? Hernando was able to speak to the receiver losses. Hernando felt this is a good way to go.
- d. John McFadden K5TIP asked if it could be purchased all together and if it will it be ready in time for Field Day? Hernando felt that the triplexer could be purchased completely assembled. However, he warned that it would be cheaper to build it and building it should not take too much time.

HERNANDO proposed that we budget \$600 towards this, whether fully assembled or pre-built. Let the officers make the final decision. If we go over by \$50, Hernando says that he will pay it.

Bob Kirby - K3NT amended to the motion that Hernando work with Dennis Cobb, since Dennis did the research on this project thus far.

Mike Schmit – WA9WCC seconded this motion. Dwight Ramsey – KE5SAS Make a third to the motion.

A vote was taken by voice vote. The motion was carried unanimously.

#### 7. Presentation

Ross introduced Steve Phillips - K6JT as club Station Trustee and repeater manager. Steve has helped to prevent problems with VOIP telephone conversion for our repeater station. We are grateful to Steve for handling this situation with the new VoIP phones at Rockwell Collins. Steve has graciously offered to present to us a talk on Remote Radio Control operation using a Ten-Ten Omni VII. The presentation began at 6:15pm.

**Security and Club Station Access** It is true that Rockwell Collins Amateur Radio Club encourages the use of its club station, W5ROK, by its members. The equipment is up-to-date and rivals some very nice stations around the country. My home station could not come close to W5ROK, from antenna capability to radio features and quality. W5ROK has the best radio equipment around, and it is available for use by the membership. However, having great equipment comes with some caveats, when you consider where the club station is located. The W5ROK club station is located within the facilities of Rockwell Collins Building 461 in Richardson, Texas. And being inside of a

secured building brings new challenges for club members who are not active employees. This article is designed to inform and remind our membership about some of the security regulations that must be followed when visiting the W5ROK club station. Whether your visit is for Field Day, a club presentation in a company conference room, or just on your own time to make some QSOs, we must act responsibly with regards to our access to the facilities.

Our club's policy regarding station use during work hours should be reiterated here. Section 2, paragraph 1 states, "Station operation by employees on company time is not allowed except by direction of the company." That means that if you are on company time, you should not be using the station, unless it is in the course of your business as an employee. I've used the club station to find a quiet place to make phone calls from, when I'm in the vicinity. However, I did not operate the station radio equipment.

When any active employee or contractor who is a member of the club enters the building, they must continue to follow corporate policies at all times. Only employees of Rockwell Collins, who are current and actively employed or who hold contractor access to the building may enter the building, provided they are identified with their badge and wear it at all times within the building. We remind our actively employed members to wear their ID badges whenever they are in the building, whether it is to use the club station for a minute or for the long enduring Field Day operations.

We have many retired members of the club as well. There are policies in place to grant them access to the W5ROK club station as well. First, retired members who have access must be found on the RCARC Retired Radio Club Members for Gate Access list. The retiree must obtain a Temporary Unescorted Visitors badge at the security gate before entering the building. Retired members must also obey all company security policies at all times. The retiree must not enter restricted areas of the building, and limit their activities to the rest rooms, cafeteria and the W5ROK club station only. With all of these requirements met, the member who is retired from Rockwell Collins can enjoy access to the W5ROK club station.

There are also members of the Rockwell Collins Amateur Radio Club who have never been employed by Rockwell Collins. Such members are still highly valued within our club and should be treated with respect and courtesy. However, access to the W5ROK club station is a little more complicated. First, this visitor must be escorted by an active employee of Rockwell Collins who has their badge with them. The visitor and employee must be inseparable, as the visitor is not allowed to go unescorted within the building at any time. All visitors will be recorded on the badge log and wear a visitors badge while in the building and will be required to show a government issued photo ID, such as a driver's license. The visitor should be briefed on security measures by the escort before entering the building. Our Associate members should feel free to make arrangements with any one of the Active employee members in order to plan a visit to the W5ROK club station.

Security is an important topic that we all should keep in mind. It insures our success as a company. For if Rockwell Collins were to lose its government security status, it would shut down many of the profitable programs that make up half of our business as a company. We cannot afford to allow security adherence to slip. As a result, we encourage everyone to stay compliant and enjoy

the station facilities, here at Rockwell Collins. (Article by Michael Ketchum K5MDK)

# Rockwell Collins sets new high mark for data transfer with Wideband HF technology Rio de

**Janeiro (April 13, 2011)** – Rockwell Collins announced the latest record-breaking results of over-the-air trials of Wideband High Frequency (WBHF) technology – a development bringing high-speed data transfer rates over HF channels to a new level.

During the Trident Warrior multi-national exercise in March 2011, Rockwell Collins engineers demonstrated, for the first time, a remarkable data transfer rate of 90 kilobits per second, in an 18 kHz HF bandwidth, over a 1,000-mile HF link between Cedar Rapids, Iowa, and Las Cruces, New Mexico. This rate is more than ten times the typical maximum rate using current technology.

"What our engineers have achieved is nothing less than extraordinary. They've applied their vast communications expertise to break the common perception that the HF band is not capable of supporting data at these transfer rates," said Bruce King, vice president and general manager of Communication Products for Rockwell Collins.

The advent of WBHF ushers in a new era for HF users, enabling them to utilize significant capabilities, previously unavailable via HF, such as streaming video and large file transfers, making HF a "viable augmentation to narrowband satellite communications," explained King. (Article submitted by Bob Kirby K3NT)

**Medical Reserve Corps Exercise** (Cont from page 1) Six High Schools were established with both PODs and PCUs. Many more High Schools, in Collin County, were setup with PCUs, by themselves, as there were ham radio volunteers to deploy and test them.

The exercise started with the ARES alerting/paging system, which sends an email, page, or cell phone call to all the volunteers to alert them to standby for instructions. Quite a while later, another call was received with the instructions for myself, personally, to go to a certain location and pick up a PCU and set it up at a certain High School location. My assignment was a stand-alone PCU at Centennial High School in Frisco, TX. I, however, did not wait for my final assignment instructions. I waited about 30 minutes for the instructions call, but figured it might not have been working, so I started off to my pickup point, since I had been given assigned instructions prior to the event. I did receive the call, however, after I had arrived and started loading the PCU into my truck. I'll be more patient next time. Because I am still recovering from surgery, I wanted to limit what I picked up, in order to not over exert myself. Fortunately, someone helped me get my PCU into my truck. Once there, I could set it up without having to haul it out of the truck. (At least that was my plan.) My pickup point was the loading dock on the North side of the University Drive Courts facility building along US-380 and Graves Street in McKinney. The equipment was stacked along the hallway in the basement, which required each operator to haul it all up in an elevator onto the dock, and then pack it into their car or truck. I was thankful for the help I received getting my PCU set into my truck.

Next was to take the PCU to Centennial HS in Frisco. The trip started to take a little while, but the 121 tollway made short work of it. Once at the High School, I double checked my packet to see where I was to setup my PCU. There were two areas identi-

fied, one on the North West corner of the gymnasium and the other was on the South West corner of the gymnasium. I choose the South West corner because of its location to a grass area, and also because it would have better clearance from buildings that might block radio signals going east towards the repeater tower.



Antenna not far away.

Assuming the power outlet was good, I started to erect the antenna on the South West side. This took about 30 minutes and was quite easy. The antenna was packaged in a PVC tube with an optional tripod, which was attached to the tube with a bungee cord. There were four – five foot poles that interlocked. There was a base plate and stake that ran thru the plate that was used as a center support for the pole system. Three stakes and premeasured guy rope with hooks and loops were attached to a special pole with eyelets at the top. The guy ropes were attached to the center support tube and drawn outward in a 120 degree pattern, which was printed on the center support plate. Knots were made into the guy rope in order to show where to drive the stakes in. Next, was the assembly of the mast, antenna bracket, antenna and coax cable. Velcro straps were already positioned on the coax to attach it to the mast. The antenna bracket attached a five foot Diamond VHF/UHF ground plane antenna to the top of the mast. Once everything was assembled, being careful with the short ground plane elements, the three guy ropes were attached to the evelets at the top of the mast and two of them were looped to the stakes on the same side as the whole mast assembly would be raised up from. It was easy to walk the mast up, place it over the center support plate and attach the last remaining guy rope to its stake. It was amazing that all the ropes were taunt, thanks to the premeasured knots to indicate where the stakes needed to be placed.

The 50' coax had a twin brother in the PCU, but it was not used. Coax cable was connected to the radio first, before power was applied. That's when I realized the power outlet was not in service. Without power, it would be hard to transmit! So, I identified a second 110 power outlet around the corner. The supplied 100' power cord made it easy to connect power. Within minutes, I had voice communications with Net Control.

The PCU contains a high-end ICOM VHF/UHF radio, power supply, Kantronics KC3+ TNC and also a speaker. A connector panel had mic, headphone, PTT connections, along with a switch

to allow the speaker to be connected to the LEFT or RIGHT side VCOs of the ICOM transceiver. The left side was used for voice and the right side for packet data.

Connecting the TNC to the PC was easy, using a simple USB cable. The supplied thumb drive contained all the files and programs needed to run RMS\_Express. The software was preconfigured to store logs on the thumb drive, as well as documentation that could help in a pinch. Once I had my laptop PC connected to the TNC and the thumb drive installed, I was running, with exception of the station callsign, ID, and information about which serial com port the TNC was connected to. A list of all the callsign, CCPOD IDs and frequencies were provided in a PDF file on the thumb drive. In about 20 minutes, I was sending my first Winlink Email message to the ECO (Emergency Communications Officer).

One big concern was listening to the voice traffic on the K5PRK repeater and hearing data packets. Many of the folks setting up their PCUs were allowing their TNC to transmit packets without switching to the DATA (Right) side of the ICOM transceiver. As a result, it was frustrating to listen to packets over the voice channels. It was noisy indeed! I made sure that whenever I was using the RMS\_Express software, that the RIGHT side was operating as MAIN, which meant it would transmit on the DATA channels.



Looking North-West.

Listening is very important in any public service event or exercise. As I was setting up my equipment, I overheard one station having problems with one of the Winlink packet nodes. It turns out that the frequency listed in the PDF files on the thumb drive were incorrect. I was able to copy the correct frequency for that node. which turns out to be my PRIMARY node. There were two Winlink nodes assigned to each PCU, depending upon their location. For my site in Frisco, I was assigned one node at the Collin County Community College campus in Frisco, which was my primary and very close, as well as the K5PRK-10 node in Allen, as my secondary. Once I got the frequency set, the Winlink message was sent without issue. A reply was quick, as I checked for new messages a few minutes later, and received the inbound message. I was very impressed with how quick the emails flowed in and out of my system. Winlink with RMS Express was fairly easy to use, although there is a level of complexity due to the TNC configuration. RMS Express also will operate over the internet and through other means.

After the first message was sent, I reported the event to Net Control, who was marking time stamps on events as they happen. This allows a team to see how long different processes took at all phases of deployment. It was at this time that I was told to check for a reply, which I did and received that reply message.

After performing voice check, Winlink primary node check, and Winlink secondary node checks, I was given permission to secure my station and return it to the court facility where I picked it up from. We started the exercise around 7:30am. I picked up my PCU and was on the road around 8:30am. I returned the equipment around 12:30pm. Overall, it was a lot of fun, good training, and an opportunity to support our community with fine communication skills. I personally learned a lot about Winlink and how to operate the PCU for the MRC.

The Collin County employees who coordinate such exercises and prepare for disasters are all in the process of getting their Ham Radio licenses. I think this is a tribute to how our hobby can be used for public service. When you consider the earthquake and tsunami disaster in Japan, and how their emergency plans were put into action, it makes me glad we are preparing for similar events here. To be a part of that effort is an honor and very rewarding. Let's just hope we never have to use our skills with this equipment in a real disaster.

If you are interested in participating with this or any other type of public service, please let me know. I would be glad to share the few experiences I've had. There are many ways you can use your skills and equipment for a great cause. It is a way to give back to ham radio just some of the rewards it has given you. You can also view pictures and see the emails I sent and received for this exercise at <a href="https://www.ketchums.info">www.ketchums.info</a>. Just click on the MRC thumbnail picture link.

(Article by Michael Ketchum K5MDK)

#### '75 Years of Innovation' -- book wins Gold

**Medal** The book, "Rockwell Collins, 75 Years of Innovation," has been awarded an Axiom Business Book Award for excellence in business book writing and publishing. The award will be presented during a celebration in New York City on Monday, May 23.

The Axiom Business Book Awards present gold, silver and bronze medals in 20 business categories. Our book received the Gold Medal in the Corporate History and Milestone category.

This 264-page pictorial history book incorporates "The first 50 years: A history of Collins Radio Company and the Collins Divisions of Rockwell International," and highlights the last 25 years of our company's accomplishments.

The book is available in soft-paper cover for \$15.99, or hard-cover for \$21.99, excluding sales tax and shipping and handling. Visit the Rockwell Collins Company Store, 105-161, to purchase a copy. For more details, call the Company Store at VPN 295.5995 or email collinscompanystore@rockwellcollins.com. (Article submitted by Bob Kirby K3NT)

(Editor's Note: This book is apparently available only to Rockwell Collins employees, although it has been found and bought on E-bay. Also, a fellow Ham in Cedar Rapids, WB0FZV, is reportedly selling them.)

#### Industry raises concerns about GPS jamming

Plans for telecommunications company LightSquared to build a ground-based broadband wireless network have resulted in growing concern the network will compromise Global Positioning System (GPS) receivers worldwide.

A recent <u>Aviation Week article</u> reported the Federal Communications Commission (FCC) conditionally approved LightSquared to build the network using spectrum normally reserved for mobile satellite communications, such as GPS. As a condition of the approval, a GPS working group is investigating the extent to which the network could jam GPS. The deadline for the group's final report is Wednesday, June 15.

According to Bobby Sturgell, senior vice president of Washington Operations at Rockwell Collins and former acting administrator of the Federal Aviation Administration, there are potential problems presented by the FCC's conditional approval.

"There will be interference – it's straight physics – the question is to what extent," said Sturgell in the article, citing the public benefit from and government investment in GPS. He also added it's a "huge task and should not be rushed."

(Article submitted by Michael Ketchum K5MDK)

## **Events and Public Service Ops**

**30 April — 1 May 2011: Sam's Club MS 150 Frisco to Fort Worth Bike Tour.** Mark the date. More info to come. Contact KB5ZDG, James Marple for more info at j.marple@verizon.net. For Amateur Radio Operators wanting to operate as SAG communicators contact Brett, N5ANM at n5anm@yahoo.com. Amateur Radio Volunteers need to sign up at Ham Radio Sign Up at <a href="http://www.nationalmssociety.org/chapters/sams-club/volunteer-information/amateur-radio-ham-operator/index.aspx">http://www.nationalmssociety.org/chapters/sams-club/index.aspx</a>. This gets your information in the system and inputs your T-Shirt order. More information can be found at <a href="http://www.nationalmssociety.org/chapters/sams-club/index.aspx">http://www.nationalmssociety.org/chapters/sams-club/index.aspx</a>.

**10-11 June 2011: HAMCOM.** There will be more information on this event next month. Meanwhile, developments can be tracked at <a href="http://hamcom.org/">http://hamcom.org/</a>.

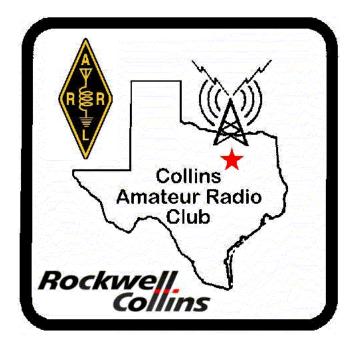
**11-13 June 2011: June VHF QSO Party.** The objective of this event is to work as many amateur stations in as many different 2 degrees by 1 degree grid squares as possible using authorized frequencies above 50 MHz. Foreign stations work W/VE amateurs only. **Date and Contest Period**: The second full weekend in June. Begins 1800 UTC Saturday, ends 0300 UTC Monday (**June 11-13, 2011**). More info at <a href="http://www.arrl.org/june-vhf-qso-party">http://www.arrl.org/june-vhf-qso-party</a>.

**25-26 June 2011: 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. Field Day is always the fourth full weekend of June, beginning at 1800 UTC Saturday and running through 2059 UTC Sunday. Field Day 2011 will be held June 25-26, 2011. Detailed info is available 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, 28 April 2011

1700 Social

1730 Meeting

Methodist Richardson Medical Ctr At Bush/Renner/Shiloh Intersection

Second Floor Conference Room 200

## **NEXT SIGNALS DEADLINE:**

→→→ 15 May 2011 ←←←