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# SIGNALS

Rockwell Collins Amateur Radio Club

Monthly Newsletter of the

Volume 32 Issue 2

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

November 2010

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## RCARC Membership Meeting

Thursday, 18 November 2010  
1700 Social 1730 Meeting

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

*Subject: To be Announced*

thing was needed, we didn't have to walk all the way back to the club station for supplies. After the antenna parts were brought to the roof, the three were joined by Andrew Robinson, KE5SAK, Mike Schmit, WA9WCC, and Armando Rodriguez, KM5ROD on the roof.



## Local Club News

**Meeting Notice.** The program for this month's meeting was not finalized at publication time—it will be announced by email.

**John Champa K8OCL, SK.** November 12, 2010. John J. Champa K8OCL passed away at his home in Richardson, Texas, after a valiant effort to overcome a malignant tumor. John's wife, Karen, indicated that cremation will take place privately and that she will announce further plans in a few days.

**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.

**New Addition to the Rockwell Collins Skyline**  
**Saturday, November 6, 2010 - Rockwell Collins Richardson Facilities** – The new MFJ-1798 antenna, affectionately called "IT", has been installed and is awaiting some final assembly and tuning before it can be used. The odd looking antenna actually may produce some great performance on multiple HF bands, which is something much needed for Field Day.

It was a gorgeous sunrise when Bob Kirby, K3NT, Ross Terry, K5SRT, and Michael Ketchum, K5MDK, met at the Waffle House for breakfast. After a good hearty meal, the three started over to the club station, where they assembled the pieces for moving and also put together a cart for tools and other supplies that might be needed. The cart was kept on the second floor, so that if some-

The weather was nice and not too windy for the work. While Bob and Ross ran coax between penthouse #6 and #4 using some Dacron line, the rest assembled the various antenna sections together as well as assembling the counterpoise system cables. Some of the grounding lugs had to be replaced as the supplied ones had no chance of fitting around a 1/4" bolt. Also, we had to solder the cable used for the counterpoise.

As our time expired, we hoisted the antenna up into position and secured it using a separate mast. A signal performance on the extreme length of coax was performed on some of the lower frequency bands. A brief test of receive capability with the Yaesu FT-2000 yielded excellent reception on 17 meters, which was much superior to the TH-7. There is still some additional work that needs to be done. Some of this includes the installation of the loading coil assembly, finish tuning IT for all frequency bands and rework the mast attachments. (Cont. on page 4)

## RCARC OFFICERS

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### W5ROK

461-290

## 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

November is a time for Thanksgiving, Thank you for being a part of the Rockwell Collins Amateur Radio Club. We would not exist without you and your support.

As I write this article and reflect on all that has been accomplished by the club, I think WOW, we really do need to be Thankful for all we have, and what has been done by those before us.

We have a great number of assets, from the ground hardware and infrastructure to skyward-facing antenna farms, made available to club members and the community in which we live. This would not be possible without membership time, talent, and support. This becomes even more apparent while working with such a great group of people yet again on the latest addition to the expanding antenna farm this month (more about IT later).

It has been a busy start for the year so far, hope you found a place to plug in and help. I know several helped with the IEEE presentation given by Mike Hollingsworth W5QH. We supported the Rockwell Collins Recreation Facilities Team (RRFT) by staffing *Popcorn Wednesday*. Several members participated in working on the new antenna and much needed maintenance was completed on the repeater equipment. Several participated in Texoma Ham Fest. We held a few planning sessions which I hope to expand on in the weeks and months ahead. Collin County ARES simulated emergency participation and there was Weather Net participation. Joe N5UIC has updated the membership database and continues to report mail coming in from QSO activities. Dennis WA8ABT reported our club has a great showing in QST for VHF contesting and he also reported on the weather station equipment selection. QST this month lists W5ROK Field Day results top in North Texas 3E. Michael K5MDK is doing a great job kept us informed (send him a notes if you have something for membership or just to give us updates on your radio related activities). Jim Skinner WB0UNI continues producing one of the best newsletters in the region (send him articles or start a new monthly section). And special thanks to Armando KM5ROD for carrying the big stick, encouraging us all to get the Antenna IT mounted.

Please make a point of giving THANKS this season for all we have, for those who made this opportunity available to us, for the talents we've been given and for those who continue to try and keep the opportunities alive for others. You'll realize if you reflect on the past even just a few years, months, days, or minutes we have a whole lot to be Thankful for.

I look forward to supporting you and for your support and would like to take this time to say THANKS!

Thanks for putting on a class to allow me to become licensed.  
Thanks for allowing me to grow in knowledge.  
Thanks for telling once again how to tune it correctly.  
Thanks for giving us lights, heat and cooling, and a place to work.  
Thanks for speaking to us.  
Thanks for working on the equipment.  
Thanks for spell checking my notes.  
Thanks for helping to serve others, and for allowing me to serve.  
Thanks for opportunities.  
Thanks for allow me use of all the equipment as a member.

Ross Terry, K5SRT  
[k5srt@arrl.net](mailto:k5srt@arrl.net)

## Secretary's Report

**October 28 2010.** Ross Terry, K5SRT, opened the meeting at 1720 on the 28<sup>th</sup> of October 2010, in the Dallas Conference Room in the Rockwell Collins Richardson Facility. The Pledge of Allegiance was performed and Ross continued by welcoming the visitors and introduction to the meeting and presentation. Attending were 2 life members, 3 retired members, 10 active members and 5 visitors present at the meeting as follows:

Charles R "Charlie" Beis	K5UWD
Ira K Blum	K5IRA
Dennis D Cobb	WA8ZBT
Robert L "Bob" Diepenbrock	KC4UAI
Dirk A Fruhling	Sr. Mechanical Engineer (C3I Solutions Mech Design)
Mark A. Harris	KC5FDX (audio setup)
Michael A "Mike" Hollingsworth	W5QH
Michael D Ketchum	K5MDK
Robert J "Bob" Kirby	K3NT
Mark S Matthews	Sr Component App Engineer (CR CAE M45 Opsbus)
John E McFadden	K5TIP
Kevin B Nguyen –	Software Engineer (C3I Applications Eng)
Olurotimi D "David" Opatola	Electrical Engineer (C3I Solutions Mission Equip Int)
Roberto G Parga Jr.	Systems Engineer (C3I Applications Eng)
Steve R Phillips	K6JT
Ken Piletic	W9ZMR (via telecom)
Dwight W Ramsey	KE5SAS
Michael A "Mike" Schmit	WA9WCC
James O "Jim" Skinner	WB0UNI
Sidney R "Ross" Terry	K5SRT
Paul E Veenstra	KC0TEG
Joseph P "Joe" Wolf	N5UIC

We also had a number of interested employees drop in/out during the presentation.

### 1. Officer Reports

**a. Secretary's Report:** Michael Ketchum, K5MDK, indicated that the last meeting notes were available in the Signals Newsletter.

Also, there were a few announcements of upcoming events:

- NCTech Hamfest in Azle, TX – November 13, 2010 – [www.wc5c.org](http://www.wc5c.org).
- Turkey Trot Public Service Event – Dallas, TX – November 27, 2010 – [www.w5fc.org](http://www.w5fc.org)
- White Rock Marathon Public Service Event – Dallas, TX – December 13, 2010 – [www.w5fc.org](http://www.w5fc.org)
- Lunch at Schiano's Pizza – Richardson, TX – November 3, 2010 following the siren test.

### 2. Featured Presentation

**a. Top 10 EMC Problems and EMC Troubleshooting and Mythbusters.** Mike Hollingsworth, W5QH, provided a wonderful

presentation on Electromagnetic Compatibility and how to trouble shoot many issues. This included some home-made probes and simple solutions with equipment a Ham Radio operator might have in order to locate and squash EMI. Mike also demonstrated several myths using his EMI test set to help the listeners get a better handle on EMI problem solving.

### 3. Old Business

**a. Work Party** – Ross Terry, K5SRT, announced a work party for Saturday, November 6<sup>th</sup> at 09:00, which will address the erection of "IT", the MFJ HF Antenna.

**b. Repeater** – The extended coverage of the W5ROK repeater was noted (all the way to Ft. Worth) since the phase 1 repeater PM.

**c. Next months Program** – Ross announced the November RCARC program will be by Mark Harris on Audio - "What does it take to pick out those signals in the noise?" - Part 1, the basics. November 18, 2010.

**d. Christmas Party** – A date of December 13, 2010 was suggested for the 2010 RCARC Christmas party. Location suggestions are welcomed.

**e. Special Presentation** – Charlie, K5UWD was presented with an early check-in registration prize of a New Yaesu 2 meter mobile radio. Ross suggested it might be good for more folks to check in and operate on the W5ROK repeater.

**f. Closing** – The meeting was dismissed and a number of members retired to Dickey's Barbecue for a late dinner and to discuss the inside details of RF-Tank circuits and "resonance."

### Planning Meeting

**October 23 2010** A meeting was hosted by Ross Terry, K5SRT, the club President, in order to get ideas of events and activities as well as advice from past leadership of RCARC. The meeting was held at Ross' residence near Lake Texoma on Saturday Night, October 23, 2010. Attending this planning meeting were Ross Terry – K5SRT, Bob Kirby – K3NT and Michael Ketchum – K5MDK. This was an informal meeting and was started around 20:00. Items Discussed:

- IT - MFJ antenna project.
- Repeater Maintenance
- TH-7 Beam Preventative Maintenance Vs. Replacement
- BBS Antenna Needs
- Scope Command Tour
- MOU
- Funding in May
- Internet Repeater Link Project Goal
- Membership Participation Ideas
- ARRL HT donation to RCARC
- Club Elections for FY2012
- Life Membership Considerations
- Ideas for Marketing the Club
- Club Assets and Inventory
- Training Ideas
- Possible Activity Ideas
- Signals Newsletter Consideration

### Planning Meeting

**November 3 2010** Due to the fact the City of Richardson Siren Test was cancelled due to the weather, an informal meeting was held during lunch at Schiano's Pizza on November 3<sup>rd</sup>, 2010 at 12:15. Ross Terry, K5SRT, the club President, directed the meeting discussion. Those in attendance were as follows: Ira Blum –

K5IRA, John McFadden – K5TIP, Michael Ketchum – K5MDK and Ross Terry, the Club President – K5SRT.

The meeting discussed possible date changes for the November and December RCARC club meetings. It was agreed by consensus that the third Thursday, November 18<sup>th</sup>, would be a better date, since the fourth Thursday fell on Thanksgiving Day in the month of November. There was also discussion regarding the December meeting. It was discussed that this meeting would be a Christmas Party. A possible venue for this party was discussed as a simple pot-luck at the normal meeting place at the Richardson Methodist Medical Center. Another suggestion was made by John – K5TIP to have a pot-luck party at his home. Ross Terry would consider these ideas and try to work with various members to come to a decision very soon.

**New Addition to the Rockwell Collins Skyline**

*(Cont. from page 1)* I believe we also need to complete analysis of the coaxial cable using the analyzer on some of the higher bands, such as 10 meters and 2 meters. I can't wait to get the tuning work done on "IT" and see what "It" can do. How about you? Stay tuned for additional announcements on the next Work Day to complete the IT project. *Submitted by Michael Ketchum – K5MDK Photos courtesy of Andrew Robinson - KE5SAK*



**IEEE EMC Society Meeting at Rockwell Collins Richardson Facility Tuesday, October 19 2010**

One mark of a good club is their ability to be involved in hosting and organizing public service events. The Rockwell Collins Amateur Radio Club stepped up to perform such a service for the EMC Society of the Dallas IEEE as they held their monthly meeting at the Rockwell Collins facilities this month. Hosting a meeting in a government contractor facility has unique complexities for the visitors from outside of the company. There are security issues that need to be addressed, including employee escort throughout the building at all times. Fortunately, the RCARC offered to assist in this area by providing trained radio operators who are also employees of the facility to escort the meeting attendees to and from the conference room and anywhere else that they need to go. This allowed Mike Hollingsworth, W5QH and Ken Hess, members of the society, to host this meeting here at the Richardson facility.

The reason the IEEE meeting was hosted by Rockwell Collins was due to the special presentation that Mike Hollingsworth made to the society on the topic of EMC (Electromagnetic Compatibility) troubleshooting and various myths. This is the same presentation that Mike gave at the October 28<sup>th</sup> RCARC meeting. Since this presentation takes many pieces of equipment, it is easier to setup here in a Rockwell Collins conference room than off-site. So, the Dallas Conference room was chosen for this meeting.

Practice presentations were held to help the presenter work out equipment issues, organize the presentation and get feedback. RCARC members were invited to these dry run sessions and attendees provided that feedback. One such advisor, Ross Terry, K5SRT, suggested that Cat-5 Ethernet cable with a signal be considered as a possible source for the presentation. After consideration, Mike Hollingsworth, W5QH, worked this into the program. This provided a basis for a very common source of EMI.

Mark Harris, KC5FDX, also provided much valuable assistance to the presentation by setting up a sound system within the conference room. The wireless microphone and PA system was so finely adjusted to the room that Mike could be easily heard from all parts of the conference room at the same sound level. This balanced approach to sound requires an artist's touch and much sound experience. A big Thank You to Mark for his contribution.

This public service and safety event was organized by Michael Ketchum, K5MDK and James Skinner, WB0UNI, and was planned to utilize a directed net. Operators who volunteered and were also active employees, used HT radios to help keep track of escort progress and accountability of visitors while in the building. At any moment, Net Control knew where each visitor was and all visitors were accompanied by escorts at all times. Net Control consisted of James Skinner, WB0UNI, and Joseph Henchal, KF5G at the North Guard shack. A desk was set up to operate Net Control while greeting visitors and check-in with security.

Operators included Kenneth Keese, KD5EVW, Michael Ketchum, K5MDK, Robert Kirby, K3NT, Mike Schmit, WA9WCC, and Ross Terry, K5SRT. The operators did a great job of answering their assignments, escorting IEEE visitors, as well as making a great impression with the IEEE society during the meeting. Several visitors commented on how well they were treated during the event. They were also impressed by the operation and the use of trained radio operators to escort members to the meeting. So, a "great job" goes to all who helped out at this event.

So, once again, RCARC answered the call to provide public service and safety, and it was an assignment that was close to home, providing great exposure for our club and the reputation of Rockwell Collins. *Submitted by Michael Ketchum – K5MDK*

## My First HF Rig

**Saturday, October 23, 2010 – Ardmore, Oklahoma** – Everyone remembers their first rig. I'm real fortunate to have good Elmers to help me get on the air. For the past several months, I've been using a Radio Shack HTX-100 10 meter mobile that one of my Elmers, John McFadden – K5TIP, let me borrow. Another Elmer, Bob Kirby – K3NT, provided me a 10 meter vertical antenna (Astron A-99) for use with that 10 meter rig. I've had a ton of fun making all sorts of contacts with this radio set.

This weekend in Ardmore, Oklahoma, I was able to attend the Ham-A-Rama ham fest. Bob Kirby, K3NT, agreed to help me shop for an HF rig. What a relief! Now I've got someone that will ask the right questions and help me with the decision process. Buying that first rig can be quite a task, without an Elmer at your side. Bob and I looked at several radios, but my budget was quite limited. With less than \$200.00, this was a challenge for Bob.

Well, it was getting late and most of the good buys had been bought. But Bob made a valiant effort and made one more pass through the convention floor. Alas, Bob inquired about a Yaesu FT-101ZD rig. The seller had it setup and running with a small antenna for a "receive only" demonstration. Both Bob and I talked with seller about it and struck a good deal. We talked with him for quite a while as he presented us the information about the previous owner, a recent silent key, Homer Moore - KD5EDD, who had used this rig for 10 meters. He was helping the family by selling the radio for them. Although the rig showed some use, we felt confident we could make the purchase, which I did.



Back at Ross's place later that night, Bob helped me work out some of the Plate and Loading settings so that when I was ready to transmit on 10 meters, I would already have the settings in a close estimation. When attached to an 80 meter dipole, the receiver was astounding, with clear reception on all bands. It was so clear; it seemed to outperform the solid state rig sitting next to it, using the same antenna. I had mentioned to Bob about how I found out that these FT-101 rigs were pretty popular. I had even considered buying one on a couple of occasions. How providential for me that one of my favored vintage rigs would be the one I find at a ham fest for my first HF radio.

The next day after getting the rig home, I couldn't wait to try it out. I read through the user manual and made some initial low power tests with the SWR/power meter. With a 1:1 SWR on my antenna, I should not have too much trouble tuning it up. Immediately, South America was booming through, so I answered a CQ and got a response. My first contact was with Renner Pedroza - PY7RP of Madalena, Brazil with an RST of 59 on 28.390MHz. I'm thinking this was not too bad for my very first HF rig.

I'm thankful to good Elmers for getting me on the air and helping me with the purchasing decision for my first HF rig. I highly recommend to our new members to consider asking for help when you are ready to make a purchase. It certainly made things very easy and safe for me. As a follow-up, I've already identified several other RCARC club members who also own a Yaesu FT-101ZD. Now I have plenty more resources to go to if I run into any questions about the operation or repair of my station. *Submitted by Michael Ketchum – K5MDK*

**APRS via the Internet.** Even though I do not have a Radio with TNC, Radio without TNC hardware or TNC software, I am able to use the Internet for APRS reporting. Microsoft MapPoint and APRS Point is working!

I can get and send APRS information on my Tablet PC anywhere I can get an Internet connection. I am now working on the TNC, either software or hardware. This is where I must decide which way to go. I do not need to connect my GPS at the Radio or even at the TNC. APRS Point prefers to have the GPS connected to the computer to obtain more information. So my next look is at TNC software and or TNC Radio. This will include a look at weight, current draw, size, remote location of radio, control features, required transmission power and should it be a dedicated radio for APRS/Packet use alone? Which may mean that I may have two (2) radios in my vehicle anyway.?

I look at using the APRS not so much when going back and forth from work as when I travel to Amateur Radio Events, Emergency Events and going 'of course' to Ham Conventions.

So what do you think?. Come by sometime and I will bring it up and show you what I have. *Submitted by Joe Wolf, N5UIC*

## Events and Public Service Ops

**3-5 December 2010—ARRL 160 Meter Contest.** The object of this event is for Amateurs worldwide to exchange information with W/VE amateurs on the 160-meter band CW only. DX-to-DX QSOs do not count for contest credit. Stations located in overseas and non-contiguous U.S. Territories may be worked by DX stations. This includes Alaska KL7, the Caribbean US possessions KP1-KP5, and all of the Pacific Ocean territories KH0-KH9, including Hawaii KH6. These stations can work BOTH domestic stations (US and VE) as well as DX stations around the world. Contest Period: Begins 2200 UTC Friday, ends 1600 UTC Sunday (December 3 - December 5, 2010). This is a forty-two hour period with no time limitation. See the detailed rules for more information at <http://www.arrl.org/160-meter>.

**5 December 2010—White Rock Marathon.** The White Rock Marathon On Sunday December 5 is in need of operators. The contact is Bob Jones [w5bj@arrl.net](mailto:w5bj@arrl.net).

# Rockwell-Collins

Amateur Radio Club

Mail Station 461-290

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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 18 November 2010

1730

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

### NEXT SIGNALS DEADLINE:

→→→ 12 December 2010 ←←←