RCARC
Membership Meeting

Thursday, 23 June 2011
1700 Social   1730 Meeting
Program 1800

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

Subject:
How To Score BIG On Field Day
by Dave Jaksa W0VX

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. The program this month will be presented by out special guest speaker, Dave Jaksa, W0VX, who will be speaking on the topic, "How To Score BIG On Field Day."

ARRL Field Day 2011
Rockwell Collins
Amateur Radio Club
WWW.W5ROK.US

Field Day 2011. I hope you are looking forward to field day this year, I know I am. This year our goals are to have fun; learn something new; and try to increase our score in the 3E category over last year. We are planning to do most of what you expect from previous years, and add a few new things to our station.

This year we plan to operate 3E using three modes: Voice, CW and PSK-31 (New this year). We are currently setting up the shack equipment and working out the details to run three stations. We will have to move one of the radios out of the shack to make things comfortable, but there should be plenty of room for operators.

We have a dinner planned for 5:00 PM on June 25, 2011 in the cafeteria. Every club member and their families are welcome to attend. I do need to know if you are coming to the dinner and how many you are bringing so we can plan to have enough food.   RSVP by sending an E-mail to KC4UAI@GMAIL.COM with your name and the number of people you are bringing.

Our security office has offered to allow our retired club members to get "T" or Temporary badges for this event. However, we will need to provide them a list of names by June 16, 2011. Folks with "T" Badges are allowed unescorted access to the building and will be able to enter and exit the doors without an escort as well. Everybody else who needs a badge will get a "V" or visitor badge which require escort. If you are a retired employee and want to get on the list, Please let me know by sending an E-mail to KC4UAI@GMAIL.COM with your name.

As you know we have a "secret weapon" this year being built and tested by Dennis Cobb. We are building a Triplexer that will let us use all three bands on our beam at the same time. If you promise not to tell anybody I'll discuss the details… In a super secret meeting location Dennis discussed the status of the Triplexer with me. It is nearing final assembly. He has been testing the unit and it seems to be working great. Hopefully he will be able to finish assembly and acceptance testing in the shack on June 11/12. The competition won't know what hit them with the combination of the Triplexer and our killer beam way up in the air.

The current schedule of events is as follows:

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.

President's Message

Hope you Fathers out there had a Happy Father's Day. I trust many of you enjoyed HamCom (www.**hamcom**.org*)* this year which had two full days open to the public starting Friday 6/10/2011 and run through Saturday 6/11/2011. I got an early Father's day surprise when Lauren my daughter took and passed her Technician class license on Saturday afternoon. Her call sign KF5LJZ showed up a week later and I got to make the first contact with her on Simplex after lots of questions as she programed here first radio a Wauxun KG-UVD1P Dual Band HT during a trip to Oklahoma.

I know many of you were present at HamCom and look forward to hearing the various lessons learned in the sessions, stories and treasure's captured during the week-end event and be sure to share your pictures taken this year at Hamcom that included the ARRL (http://arrl.org) Convention. I worked security this year at the main door way and saw Joe Wolf – N5UIC taking video so we'll want to here how that worked.

Field Day is here and I hope to see many of your during the last weekend of this month. While many you have been very busy getting ready I know you will be exicited to hear that Dennis Cobb WA8ZBT has the Triplexer built and it been in test the past couple of weeks. I heard on the radio on Sunday from Bob K3NT that they had testing the unit up to 100 watt's with three radios testing for isolation which should meet our simulated emergency operations modes planned for this year's ARRL Field Day Event.

On that subject this year's Field Day coordinator is Bob Diepenbrock KC4UAI. Please let him know of any concerns or changes as we approach Field Day (Thank him for his efforts) and offer your support in helping to fill any needs it's quite a task (Field Day is always the last full weekend in June normally with setup in the morning before noon and operations running 24 hours from 1 PM Saturday till 1 PM Sunday, but this year with all the equipment relocations has been a new challenge). I know many of you have been very busy for months given our new shack configuration but please come out and enjoy RADIO Operations during field day. Your help even if for just a few hours to setup, operate and take down will lighten everyone's load and support keeping W5ROK on the air during the event.

If you've not seen the new setup please come out and take a look at the new shack configuration and lend a hand to make Field Day - ARRL's National Emergency Preparedness exercise a great and successful event for the club and others around the country that participate in this event by making W5ROK on the air and operational.
As I've reported in the past a successful club takes lots of help and communications, If you have some special com-

munications of current or upcoming events please let the Michael Ketchum - K5MDK (club secretary) know and while you're at it please let him know what a Great Job he has been doing this year! THANKS EVERYONE FOR MAKING THE CLUB SUCCESSFUL!

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

Secretary's Report
May 26, 2011
A regular monthly membership meeting was held tonight at the Richardson Methodist Medical Center Bush Renner campus on the 2nd floor conference room. Those in attendance were as follows:

1. Charles Beis K5UWD
2. Ira Blum K5IRA
3. John Briggs KC6TVF
4. Larry Creech KC5LOP
5. Bob Diepenbrock KC4UAI – Club Treasurer
6. Rusty Haddock AE5AE
7. Joe Henchal KF5G
8. Wayne Hughes WA0TGH – Club Webmaster
9. Don Jackson W5QN
10. Kenny Keese KD5EVW
11. Michael Ketchum K5MDK – Club Secretary
12. Bob Kirby K3NT
13. John McFadden K5TIP
14. Brady Pamplin KE5GUL
15. Dwight Ramsey KE5SAS – Club Vice President
16. Andrew Robinson KE5SAK
17. Mike Schmit WA9WCC
18. James Skinner WB0UNI – Newsletter Editor
19. Joe Wolf N5UIC – Club Database

This represents 12 Regular, 2 Life, and 5 non-members.

1. Opening
Dwight Ramsey – KE5SAS, the club Vice President, opened the meeting at 17:45 with a flag pledge. A round of introductions by all of those in attendance was completed.

2. Officer Reports
a. Secretary's Report – Michael Ketchum, club Secretary, presented the minutes from the April meeting. After reading of the minutes Ira Blum – K5IRA moved to accept the minutes as read. Bob Diepenbrock – KC4UAI, seconded this motion. A hand vote was made and the minutes were accepted through a unanimous vote.

b. Treasurer's Report – Bob Diepenbrock, the Club Treasurer, presented the Treasurer's report. It was an estimate of our current balances on hand. Bob also announced the signup for Field Day operations. Bob also re-

ported that his order for replacement Band Pass filters has arrived for the Triplexer.

c. Website Coordinator's Report – Wayne Hughes - WA0TGH reported that he needs content for the web site much sooner that what he had been getting in the past.

d. Newsletter Editor's Report – James Skinner – WB0UNI, reported that he was able to get a much less expensive PDF editor than Adobe, which was approved at the prior meeting. This new version only costs $50.00.   James also added that he would like newsletter contributors to bring their submissions much sooner, before the deadline posted on each newsletter.

3. Old Business
a. IT Antenna – Bob Kirby – K3NT, reported that the work party brought down IT. Some wind damage was noticed and it was deemed unsafe to leave up on the roof.   Andrew Robinson – KE5SAK, Michael Ketchum – K5MDK, Ira Blum – K5IRA and Armando Rodriquez – KM5ROD, also helped in this effort.   IT currently resides in the K5MDK antenna hospital in Plano in order to see if IT is salvageable.

b. White Vertical – Bob Kirby – K3NT, reported that the work party performed tests on the White Vertical, an abandoned antenna from an old program.   We obtained permission to use it and performed a sweep on it, which yielded mighty fine results on 80m~10m. However, an antenna coupler or auto tuner would be needed for this antenna.   The club currently owns an LDG1000 tuner, but you need to push a button to get it to work. There is more work to be done. Field Day can probably get some use from this antenna, given a little more work. The Triplexer is close to being finished. We will have antennas for 80m and 40m as well. John McFadden - K5TIP offered to loan the club his Hustler 6BTV antenna, if someone picks it up. Bob Diepenbrock – KC4UAI, responded that he needs volunteers to put it up.

c. Weather Station – Bob Diepenbrock – KC4UAI reported weather data is being served on a web page from W5ROK-N1. He hopes to hook up a web cam that is on the roof to one of the HSMM-MESH nodes up there on the roof. Field Day, however, is the priority for now.
Joe Henchal - KF5G reported that there might be a group doing interferometer testing and the webcam might be there for that purpose.

d. Triplexer – Bob Diepenbrock – KC4UAI reported that Dennis is almost done with the Triplexer.   One small technical problem with a wire on the inductors needs to be solved. We also have the Band Pass filters for it. Dennis is thinking of securing the wire in some fash-

ion. In any case, it sounded like it is going to work very well for us on Field Day. This Triplexer will allow us to operate three separate stations on a single antenna on separate bands up to 100 watts of power. Three people on the BEAM all at the same time.

e. **Fun Days –** Michael Ketchum – K5MDK was asked to report on Fun Days. Michael reported that it was FUN and there were quite a few club members in attendance to operate the long wire antenna attached to the Kenwood TS-50 HF rig. Several contacts were made, of which Michael refers everyone to Bob Kirby – K3NT for the logs.

f. **Wild Ride!** – Dwight Ramsey – KE5SAK made a report for Ross Terry – K5SRT, our club President, on the Richardson Wild Ride bike event. Ross thanked Chuck Samuel – K7NWM, Bob Kirby – K3NT, and Mike Schmit – WA9WCC for their help.

Brady Pamplin - KE5GUL reported that EMTs made use of Ham Operators at the event, as they were able to utilize their communications in an emergency situation. There was another report about how a SAG operator was involved in another situation. Overall, it was iterated by several that it is good to be involved in helping people, especially those in a crisis situation.

4. **Events**

Several events were announced, as follows:

- 6/01 at 11:45 AM   The City of Richardson Siren Test
- 6/10 -6/11   HAMCOM (Plano Centre)
- 6/23 at 5:00 PM   RCARC Meeting
- 6/25   Field Day
- 7/15   Bring Your Kid To Work

There was also some discussion on the recent SKYWARN nets.

5. **Program**

Dwight Ramsey – KE5SAS, our club Vice President, proceeded to introduced Rusty Haddock - AE5AE as our speaker tonight. Rusty presented an introduction to HSMM-MESH.

Field Day 2011. *(Cont. from page 1)*

10:00   Setup starts
13:00   First Operating Shift Starts (We start logging Contacts)
17:00   Dinner in the Cafeteria for Club Members, Operators and Family Members
21:00   Second Operating Shift starts (The late night shift)
05:00   Third Operating Shift Starts (The first thing in the morning shift)
13:00   Cleanup

WE NEED VOLUNTEERS for ALL shifts as well as setup and cleanup! As of this writing I only had 6 folks signed up, which is not enough! Remember that the first shift usually fills up fast (it's nearly full now) so sign up fast as you can. Also, even if you don't want to run the radio, we can use "loggers" who run the computer logging program so we can always use more help. Let me know if you can commit to operate the station by either running the radio or the software, or even help with the setup and cleanup work. Again, let me know though an E-mail at KC4UAI@GMAIL.COM if you can help us! I really need operators for the late night, early morning and to help cleanup.

Let's have some FUN this year while we learn something new and hopefully improve our score from last year!

See you at Field Day 2011! *(Submitted by Bob Diepenbrock KC4UAI)*

RCARC Built HF Yagi Triplexer. Shown below is Dennis Cobb WA8ZBT showing off the RCARC clubs recently built HF Yagi Triplexer.

This unit is based on a QST magazine (http://www.arrl.org/qst) June 2010 article by Gary Gordon K6KV titled "HF Yagi Triplexer Especially for ARRL Field Day".

Dennis has been building and testing the unit over the past month and it is ready for this year's Field Day event June 25th and 26th, based on test results to date.

Since HAMCOM the unit has been tested up to 100 Watts using three radios with isolation as designed and should allow the club to operate 10M, 15M and 20M on the same antenna using three radios in simultaneous operation.
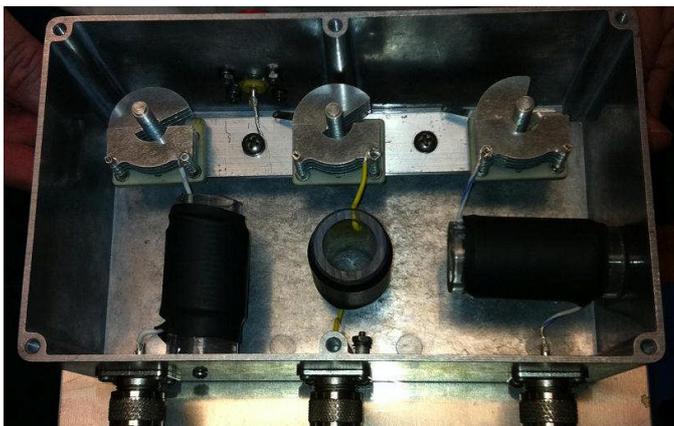
The unit makes use of the band pass filters we've used in past field day exercises and handmade coils and modified variable capacitors. Make sure you thank Dennis and those that have assisted him in the build and test of this special club sponsored Triplexer which may be the secret weapon to this year's ARRL Field Day success. *(Submitted by Ross Terry K5SRT)*

HSMM-MESH—Potential Uses.

HSMM-MESH nets are a hot topic of late. I have been skeptical of their purpose and potential use. Being a skeptic that looks for good in everything, I have taken on the task of trying to find useful purposes for HSMM-MESH and develop it into an article that may help answer this question of others; maybe even going as far as convincing others to participate.

As a reminder, an HSMM-MESH network node is not just an Access Point, it is ad-hoc when it comes to wireless topology. When a router, such as the WRT54G, is put into MESH mode as a HSMM-MESH node, it no longer functions as an Access Point. Access Points allow a wireless consumer to connect into an existing network, but MESH nodes are designed to provide a seamless wireless backbone. There are two solutions to allow computers or consumer nodes onto the MESH network: (a) plug the PC directly to the LAN ports of the HSMM-MESH router with an Ethernet cable to your PC, or (b) attach a real wireless Access Point router to the LAN ports on the HSMM-MESH node, again via a short Ethernet cable, that connects an 802.11 connection to the PC's wireless interface. There is a third option, but it is limited as to what you can do. This third option is to statically assign a WiFi address to the PC and wireless connect into the MESH node, itself. However, its ability to get topology connections to other end points is limited. The best approach is to attach an Access Point to the Mesh node, to provide that topology support, such as DHCP and Gateway Assignment. There are other network topology issues pertaining to HSMM-MESH routers, but the good news is that these should all be addressed by some sort of work-around.

As I was scratching my head, trying to justify the time to learn and explore this technology, I was initially confronted with the question, "What does this buy me?" My initial thought was to the effect that we were playing around with consumer off the shelf (COTS) router products and trying to do something that anyone can do at home. Well, as long as the antenna, power, electronics, and the functionality of the router remains under the approval of the FCC for Part 15 use, it is true that anyone can do this at home. However, the Ham operator has the ability to extend the range of these little routers immensely. Antenna gain is unlimited. Power is limited to 10 watts. Since these routers have special firmware designed for Ham's, the control operator's call sign is beaconed at a legal rate.

There are some additional issues to work out, such as password encryption, data encryption, and other functionality that may go against the Part 97 rules. However, this technology can still be used legally and be mighty beneficial to all Ham operators.

Now, as promised, the following list provides some ideas of what an HSMM-MESH network can be used for along with other benefit to Ham Radio.

(1) A Private Network For Communications. HSMM-MESH provides a private backbone to the Ham Community. You may have seen the MOTO-MESH nodes installed on street lights all around Plano. That Mesh net is for critical service responders to gain access to various types of *communications* and data that is secure and private. Hmmm, I said "*communications*". The concept of communications is the beneficial point that Ham Operators are known for. So, a Mesh net can be a natural progression for the next generation of Ham Operators, given this technology can be used for communications purposes.

(2) A Portable Network. HSMM-MESH can provide a fast and portable network in a moment's notice through deployment of individual mesh nodes, spaced appropriately to provide a good network over some topography. Node placement can be quickly realized and online in a matter of minutes, using several nodes, high gain omnidirectional antennas, and emergency power, such as solar and/or batteries. When one MESH node in a MESH network is attached and configured to a Internet Gateway, then the entire network can share access to the internet in this fashion.

(3) Voice Telephony. With a personal computer and VoIP phones, voice telephony can be realized. With free software called Kismet or using ASTERISK, you can turn your PC into a VoIP PBX that can handle phone calls across the network using SIP. Now that's *DIGITAL* communications.

(4) Video Teleconference. Once, Video Teleconferencing was only realized by large corporations with expensive gear. Today, with a laptop computer, Video Conferencing can be easy to establish. With the advent of NetMeeting, a PC can directly connect to another PC to perform a video-teleconferencing session. Voice alone may not be able to convey information well enough for the recipient. But with a picture also, you can see the expression. Additionally, data can be displayed and discussed immediately, using the whiteboard features of NetMeeting.

(5) Email. Email has reached into the Ham Radio hobby through tools such as Winlink 2000. However, it is possible to establish a mobile email server that many different users can connect to for passing text email messages. This is accomplished through a digipeater radio attached to the network. Additionally, if internet access is gatewayed to the MESH network, everyone can use RMSExpress to directly connect to the Winlink server. So, the Ham Radio operator can expand his ability to communicate even further. One additional thought by Bob Diepenbrock, KC4UAI:use the SendMail feature in Unix—a central SMTP/POP server is not needed. Email can be sent point-to-point using Unix services.

(6) Pictures And Other Data Files. Pictures and other data files can become critical components in a public service event or in an emergency. A picture really is worth a thousand words. Since the Ham operator is involved with improving efficiency in communications, picture data, as well as all other kinds of data files, such as Excel Spreadsheets, Word Documents, and MP3 files, can all be transferred between PCs on the HSMM-MESH network.

(7) Disaster Uses. Can an HSMM-MESH be useful for Emergency communications? You bet it can. We have a net control operator trying to keep track of a situation. There is usually a logger who is tracking resources and operators on the net. There may be other operators who are involved in situational awareness activities. All of these roles can easily be tied together and work as one via a private data network that an HSMM-MESH network can provide.

(8) Public Service Events. We have already seen an HSMM-MESH network at work within the grounds of Rockwell Collins during the Richardson Wild Ride! event. Pictures were transferred from a rest stop in the field to a central server. HSMM-MESH can provide all sorts of data services to public service events for an endless number of uses. It is all up to your imagination.

(9) Field Day. Linking remote logging PCs together can be accomplished via an HSMM-MESH network on site. The Garland ARC used a single hop mesh node to connect their logging stations to the internet to upload log files after the Field Day operations is ceased. However, this same connection can provide Call sign lookup, to help loggers accurately log QSOs and verify vital information.

(10) Mobile HSMM-MESH. Some Ham operators are now taking their HSMM-MESH node with them in their vehicles on the road. Why? Because more and more Ham operators are putting up an HSMM-MESH node in their homes in order to share their internet service by providing a hot-spot to their fellow Ham operators. If you drive by my house, I'll share my internet access with you too.

(11) Localized APRS (No Internet Required). Recently, I connected my laptop to the LAN connection of an HSMM-MESH node, connected my radio scanner audio output to the audio input of my laptop, and then started UI-View software, along with AWGPE, which combined to provide APRS maps with real-time position information based upon the APRS packets from 144.390MHz received by the scanner. No internet required to provide this service. The UI-View software has a built in HTTP web server, which serves the map data with icons and call signs of various reporting parties. This kind of information could be valuable for a public service event or in an emergency. The HSMM-MESH can then allow other PCs to also connect to the UI-View server, which shares this received radio communications with other operators on the network.

(12) Node GPS via APRS. Each node could have a GPS receiver attached to it, allowing for APRS location packets to be sent over the network and eventually to the various internet APRS server points. This would allow anyone with access to APRS, such as www.aprs.fi, to quickly find HSMM-MESH nodes in their area, in order to connect to them, if they are mobile. This would also help in disaster relief when configuring and establishing HSMM-MESH nodes in an area that needs digital communications.

(13) ECHOLINK. Many of you are already aware of Echolink. This is a VoIP network service that links computers, repeaters and radios together for voice communications. When I was in the hospital, they would not allow me to bring my ham radio into my room. Instead, I opened up my laptop to the hospital's WiFi and connected to Echolink to chat with friends on the PARK repeater. With HSMM-MESH connected to the internet, users can connect their Echolink clients to talk to anyone around the world via the World Wide Web.

There are unlimited uses for HSMM-MESH networks, and it is only limited by one's imagination. If every Ham in North Dallas area were to put up their own HSMM-MESH, we can provide a FREE wireless internet access network to all of our fellow Hams. But the key is to get on the air and learn about the technology, which is easy for anyone to understand. And, this technology is inexpensive. I spent $25 on a Linksys WRT54GL v1.1 router, flashed it with the free firmware from HSMM-MESH.org and had it configured and on the air in a matter of minutes. You can do it too.

I used to be a skeptic about all of this HSMM-MESH network stuff. With an unlimited number of uses, and with the evolution of technology towards digital communications, it seems like a natural progression for me to get on board with this cheap and easy **communications** technology. *(Submitted by Michael Ketchum – K5MDK)*

JCREW 3: Next-Generation Land Mine Jammers Use Power of Network.
The US military is working on the next-generation of jammers to defeat improvised explosive devices (IEDs) that pose such a grave threat to US forces deployed overseas. The jammers are called Joint Counter Radio-Controlled Improvised Explosive Device (RCIED) Electronic Warfare (JCREW) devices. They are high-power, modular, programmable, multiband radio frequency jammers designed to deny enemy use of selected portions of the radio frequency spectrum. They come in 3 varieties – fixed, mounted, and dismounted.

The first generations of JCREW devices were developed and deployed quickly to meet an urgent need in the field. The next generation of JCREW devices, known as 3.x, are being developed to increase capabilities and tap into the power of the network to enhance their effectiveness. The JCREW 3.1 version is a dismounted device, the 3.2 version is a mounted device, and the 3.3 version is being developed to work in mounted, dismounted, and fixed-installation roles, using a common open architecture of electronics. Source: Defense Industry Daily May 19, 2011 *(Submitted by Bob Kirby K3NT)*

Events and Public Service Ops
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.

Special operations helicopters make history during raid.
In a recent Avionics Intelligence video, reporter John McHale discusses the use of U.S. Army helicopters in the U.S. Navy Seals recent assault on Osama bin Laden.

While it's unclear which Chinook model was used in the raid on bin Laden's compound, both the CH-47F and MH-47G special operations variants are equipped with Common Avionics Architecture System (CAAS) cockpits, recently upgraded by Rockwell Collins.

The "state of the art" CAAS cockpit consists of five multi-function displays, two control display units, two general purpose processing units and embedded software applications that provide full avionics and mission systems integration.

The report described the upgrades as giving "brand new life" to the aircraft, and mentioned the enthusiasm of pilots flying with the CAAS cockpits.

For the video see: http://www.militaryaerospace.com/_index/display/avi-article-display/1273760542/articles/avionics-intelligence/news/2011/5/helicopter-program.html?cmpid=EnlAvionicsMay192011

Source: Tuesday, May 24, 2011 — Today at Rockwell Collins *(Submitted by Bob Kirby, K3NT)*

Rockwell Collins awards 2011 National Merit Scholarships.
Our company will award scholarships to 15 U.S. high school seniors as part of the 2011 National Merit® Scholarship Program. These students were selected by the National Merit Scholarship Corporation as merit finalists and will receive a one-time $2,500 scholarship to the accredited college of their choice.

According to Cindy Dietz, manager of Community Relations, Rockwell Collins is one of 270 companies that participate in the corporate-sponsored National Merit Scholarship Program. "Being named a merit finalist is a high accomplishment," said Dietz. "We're pleased that our company is able to recognize these 15 students – all of whom are children of our employees."

Each year, more than 1.5 million high school students enter the National Merit Scholarship Program by taking the Preliminary SAT/National Merit Scholarship Qualifying Test. This year, that number was ultimately narrowed to 8,400 finalists.

More information about the National Merit Scholarship Program is available on http://www.nationalmerit.org/.
Source: Tuesday, May 24, 2011 — Today at Rockwell Collins *(Submitted by Bob Kirby, K3NT)*

Rockwell-Collins
Amateur Radio Club

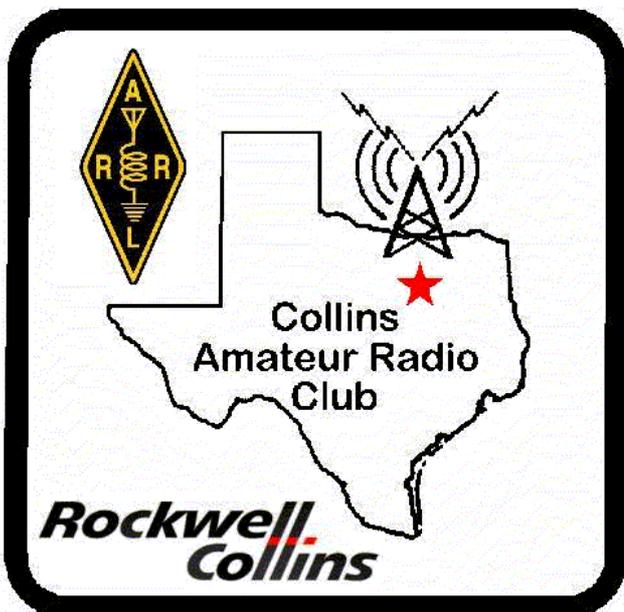**Mail Station 461-290**

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

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

Thursday, 23 June 2011

1700 Social   1730 Meeting

Methodist Richardson Medical Ctr At Bush/Renner/Shiloh Intersection

Second Floor Conference Room 200

NEXT SIGNALS INPUTS DEADLINE:
➔➔➔ 17 July 2011 ⬅⬅⬅