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# SIGNALS

Rockwell  
Collins **Amateur Radio Club**

Monthly Newsletter of the

Volume 29 Issue 04

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

January 2008

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## RCARC Membership Meeting

**\*Thursday\***  
**\*24 January 2008\***  
**1730 in**  
**Rockwell Collins**  
**Cafeteria**

*Subject:* HSMM Radio, by Doug  
Kilgore, KD8OUG

## Local Club News

**Meeting Notice** The program for this months meeting will be on HSMM radio. HSMM radio is not a specific mode. In Amateur Radio it means any VHF / UHF / SHF / EMF digital mode with a raw data rate above 56 kilobits per second (k/bps). Accordingly, D-Star is one form of HSMM radio. With existing technology that data rate provides enough signal capacity to operate more than one mode at the same time. Usually it uses an IP-based transport infrastructure such as 802.11b that makes it completely compatible with personal computer (PC) technology.

Doug Kilgore, KD8OUG ([kilgore1317@sbcglobal.net](mailto:kilgore1317@sbcglobal.net)) is our guest speaker for this meeting. Doug will present the story of his exciting adventure up the Alaska-Canadian Highway to Alaska taking along his HSMM radio station. Be prepared for some fantastic photography of this Eco-DXpedition into the wilderness with hi-tech radio gear.

Doug Kilgore KD5OUG joined a RV caravan to Alaska this past summer driving 12,500 miles in 100 days. An avid photographer, he sent back many photos to friends by email as he traveled.

Making the internet connection in crowded RV parks in remote areas was a challenge. Using High Speed MultiMedia (HSMM) skills and equipment accumulated in his operations on the Wild Ride Bike Rally in Richardson and the Plano Balloon Festival, he was able to accomplish the task. He will share pictures at the meeting.

Doug was licensed in 1993. He is a member of Richardson RACES. His first exposure to 802.11b in EMCOMM was at Nacogdoches while helping with the space shuttle recovery. An improvised WiFi connection of about 1/2 mile brought the internet to the ham radio control van. That connection was very helpful in managing the scheduling and support of 300+ hams over 14 days.

Since that time, he has been instrumental in organizing hams interested in 802.11b networking. In the Winter, 2007 issue of CQ-VHF magazine, an article written by Doug was published telling about the use of internet at the Wild Ride Bike Rally.

**Club Meeting Talk-In** Each month, we have a Talk-In on the club repeater before the membership meeting on the night of the meeting. The Talk-In is from 1700 to 1730 hours, just prior to the meeting.

**Welcome (Back/New) Member**  
The following Amateur has recently re-joined the RCARC:

George Huling K5GH  
Larry Kerns K5TGP

Dwight Ramsey KE5SAS

## The Change Factor

By John Champa, K8OCL

A few months back the club put forward a proposal to form a new, free Amateur Radio Training Class. The purpose of the class is to help employees, retired or active, and their families achieve the knowledge to pass the Technician Class license examination. A small faculty was recruited to accomplish this goal:

John Champa, K8OCL, Lead Instructor  
Dennis Cobb, WA8ZBT, Mentor (Station Orientation)  
Mike Hollingsworth, W5QH, Registrar  
Wayne Hughes, WA0TGH, Instructor

The class text is the *ARRL Technician Class License Manual*, First Edition (\$20).

All classes are taught on Tuesdays and / or Thursdays during the lunch period 11:30 AM to 1:00 PM.

When the first FLASH! went out (e-mails to all Richardson employees) the results were beyond our wildest expectations! We had enough new students to fill the first class (15 maximum) and then some.

Using an outside VE Team lead by Bill Reynolds, K8DNE, the first class has now graduated. They took their examination and the results are in. They did extremely well! Of the nine students taking the examinations 8 of them passed and 4 went on to achieve their General Class Ticket. Please give a warm welcome the following new Radio Amateurs who are also all Rockwell Collins active (*Cont. on Page 3*)

VE SESSIONS**R-CARC OFFICERS****PRESIDENT**

**Bob Kirby** **K3NT**  
**319.360.0500**  
 k3nt@arrl.net

**VICE PRESIDENT****Vacant****SECRETARY**

**Jim Gaston** **KD5GYD**  
**X3369**  
 jrgaston@rockwellcollins.com

**TREASURER**

**Jim Skinner** **WB0UNI**  
**214.535.5264**  
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**ACTIVITIES CHAIRMAN**

**John Champa** **K8OCL**  
**X1531**  
 K8ocl@arrl.net

**WEBSITE MANAGER**

**Wayne Hughes** **WA0TGH**  
**461-258** **1406**  
 wa0tgh@arrl.net

**STATION TRUSTEE**

**Steve Phillips** **K6JT**  
**972.517.3332**  
 k6jt@arrl.net

**CLUB STATION**

**972.705.1349** **W5ROK**  
**461-290**

**NEWSLETTER EDITOR**

**Jim Skinner** **WB0UNI**  
**972.690.9612**  
 wb0uni@arrl.net

**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**

A very happy 2008 and greetings to all reading this message.

The RCARC vice president position will be put to a vote at this month meeting. Eligible members can indicate their interest by contacting Bill Swan at 972-705-3441 or [k5mwc@arrl.net](mailto:k5mwc@arrl.net) so that you are added to the ballot.

As you will read in this issue, the radio classes have been very successful. Congratulations to all that participated as students, teachers, and volunteer examiners. We welcome the following earning Federal Amateur Radio licenses: Joseph V. Bednar-KE5SAO, George A. Deprez-KE5SAQ, Joe F. Henchal-KF5G (refresher course), Sean Lee-KE5SAN, Serge P. Lussier-KE5SAM, James A. Pellegrino-KE5SAR, Dwight Ramsey-KE5SAS, Romeo Riojas-KE5SAL, and Andrew Robinson-KE5SAK. Well done. Instructors are needed for the continuing ham radio classes, so please consider helping out.

Our club participated in 2<sup>nd</sup> annual Straight Key Morning on December 29<sup>th</sup> 2007. The North Texas Microwave Society sponsored this event. Six contacts were made on 1296 MHz and eight contacts were made on 432 MHz. A 432 MHz contact with K5LLL in EM10 (east of Austin) is significant as no enhanced conditions were noted during the event.

I would like to request that each of you please send e-mail to [k3nt@arrl.net](mailto:k3nt@arrl.net) indicating your interests and other hobbies. The club is working a project to add this information in the 'member only' area of <http://w5rok.us>. So far, we have been able to get RCARC members together to share their knowledge of radio-controlled aircraft, QRP (low power operation) and DX (working long distance contacts).

Your club has a member suggestion for an 11:30 AM get together once a month at a local restaurant. The Monday before the meeting has been suggested as a good time. The idea is that it would work for our retired and associated members and their family members. So please send me your thoughts on this suggestion. If there is enough interest, a meeting place will be located.

A second suggestion was for families get together. A DART trip to Fort Worth, TX that would included a ride on the double-decker train. Sure sounds like fun to me. Again, please let us know your interest on this or other suggestions for club activities.

Best Regards (73),  
Bob Kirby – K3NT

## Secretary's Report

There are no minutes to report this month since there was no meeting in December 2007.

**The Change Factor** (Cont. from page 1) employees:

Joseph V. Bednar, KE5SAO  
George A. Deprez, KE5SAQ  
Joe F. Henchal, KF5G (refresher course)  
Sean Lee, KE5SAN  
Serge P. Lussier, KE5SAM  
James A. Pellegrino, KE5SAR  
Dwight Ramsey, KE5SAS  
Romeo Riojas, KE5SAL  
Andrew Robinson, KE5SAK

Our President, Bob Kirby, K3NT, presented the graduates with the RCARC Training Certificate. The certificate was co-signed by Dawn Reyes, Richardson Human Resources Manager. The company considers our class a very worthwhile service to employees and their families.

When the second FLASH! went out announcing the formation of the second class, we received enough new registrations to not only fill the second class, but now a third class is also being planned.

**NEXT TEST:** All Rockwell Collins Richardson employees, active and retired, and their families are invited to the next test session! The next VE Testing session will be held on February 12, 2008, in Building 460, Green Room at 11:30 AM until.... The examination fee is \$14 and you must bring a photo ID and a black ink pen. Please let Mike Hollingsworth, W5QH, ([mahollin@rockwellcollins.com](mailto:mahollin@rockwellcollins.com)) know if you plan to take a test so a seat can be reserved for you. Refreshments will be served to all examiners and test subjects.

**INSTRUCTORS NEEDED!** We need some additional instructors. It's a fun

thing to do and we have all the materials you will need. Contact John Champa, K8OCL, ([jjchampa@rockwellcollins.com](mailto:jjchampa@rockwellcollins.com)) when you are ready to teach a class...or two.

## Upcoming Events and Public Service Ops

**19-20 January 2008: ARRL January VHF Sweepstakes** The object of this event is to work as many amateur stations in as many different 2 degrees x 1 degree grid squares as possible using authorized frequencies above 50 MHz. Foreign stations work W/VE amateurs only. The event starts at 1900 UTC Saturday, ends 0400 UTC Monday (**January 19-21, 2008**). More info at <http://www.arrl.org/contests/rules/2008/jan-vhf-ss.html>

### 16-17 February 2008: ARRL International DX Contest (CW)

The object of this event is for W/VE amateurs to work as many amateur stations in as many DXCC countries of the world as possible on 160, 80, 40, 20, 15, and 10 meter bands. Foreign amateurs (also including KH6, KL7, CY9, and CY0) work as many W/VE stations in as many of the 48 contiguous states and provinces as possible. The event duration is 48 hours, and starts at 0000 UTC Saturday and ends at 2400 UTC Sunday. More info at <http://www.arrl.org/contests/rules/2008/intldx.html>

### Hinternet—A Short Intro to

**HSMM** Hinternet is a name for the implementation of wireless data networks over amateur radio frequencies using commercial off-the-shelf (COTS) hardware such as 802.11 access points and D-Star equipment. Licensed amateur radio operators may use amplifiers and specialized antennas to increase the power and coverage of the 802.11 signal. This is also known as **HSMM** (High Speed Multi Media).

The name "hinternet" comes from a combination of the words "ham" and "internet" and can be used to refer to any high speed data network over amateur radio, not just 802.11 networks.

The idea behind this implementation is to use the 900MHz (33cm), 2.4 GHz (13cm),

3.4 GHz (9cm), and 5.8 GHz (5cm) amateur radio bands under the FCC Part 97 Rules (Amateur Radio Service) instead of the Part 15 Rules (Unlicensed). This will enable amateur operators to legally use higher output power for wireless devices and allow for long range communications. Such communications can be used to assist in emergency communications, disaster relief operations and everyday amateur radio communications.

The "hinternet" can support most of the features that the internet currently does including video-chat, VOIP chat, instant messaging, webpages (HTTP), file transfer / sharing (FTP), and bulletin boards (BBS) / forums. The only differences being that on the hinternet such services are community instead of commercially implemented and the "hinternet" is *mostly* wireless. The hinternet can even be connected to the regular internet and used for "web-surfing" although because of the FCC regulations on permitted content this is rarely done. Using high gain antennas and amplifiers reliable long distance wireless links over many miles are possible and only limited by the radio horizon.

Extensive information on HMSS is available at <http://www.qsl.net/wa2wim/hsmm/hsmm.htm>

## Ham Radio Operators Helped Ease Worries

By Regis Behe

PITTSBURGH TRIBUNE-REVIEW, Sunday, December 9, 2007

When Lisa Spahr found a cache of letters in a trunk in a relatives' home in York, she had no idea what she was looking at. They were baffling to her and her family.

They were all very similar, much like the following:

Dear Miss Spahr;

This is to inform you that I heard the following message from Robert M. Spahr broadcast at 9 p.m., EWT May 8, 1943 via short wave from Germany. "Arrived safely in Germany as a prisoner."

The letter, one of 70, was dated May 8, 1943. Robert M. Spahr was Lisa's grandfather. The "Miss Spahr" in the letters was her great-grandmother.

"When I started to look at them, I realized I didn't recognize any of the people, any of the cities," says Spahr, who lives in Regent Square. "And further, I recognized they were all saying something in common. They were saying they had heard over the radio that my grandfather was captured and I thought, 'What is this?'"

Spahr's book "World War II Radio Heroes: Letters of Compassion" (Intrigue Publishing, \$15.95) solves the puzzle of the letters she found two years ago. Spahr uncovered a network of ham radio enthusiasts who tracked German propaganda broadcasts, then informed the families of POWs that their loved ones were alive.

The above letter was written by Flavius Jankauskas, then a teenager from Philadelphia. Lisa Spahr tracked down Jankauskas, who is still a ham radio enthusiast. He told her he sent the message out of a sense of duty to the country.

But the radio operators also were going against a directive issued by President Franklin D. Roosevelt, that all shortwave communications were to cease because they were playing into the hands of German propagandist.

The radio operators, torn between duty to country and a passion to inform the families, came up with a compromise.

"They just went silent and went into a listening mode," Spahr says. "So rather than sharing information, they complied with the directive in a listening mode."

Thus, the letters that came from ham radio operators around the country. One woman in Ohio was so passionate about the project that she organized a listening schedule, so no broadcasts would be missed.

Spahr never met her great-grandmother, and her grandfather died when she was 12. Spahr, 33, never had the chance to ask him about the impact of the letters. "I have no idea what they meant to them," she says. "I know they kept them."

But she did track down a few families who received letters, along with Jankauskas and Mort Bardfield from Massachusetts, who was also a teenager during World War II. Both men enlisted in the military when they came of age.

"Mort says he was just trying to get out of doing his homework," Spahr says. "He says he didn't know he was doing anything amazing. He delivered newspapers in his spare time to pay for the postcards. ... I think it's interesting that even though these young men were hearing about prisoners and people being captured and not knowing their fate, they both chose service after this."

Regis Behe can be reached at [rbehe@tribweb.com](mailto:rbehe@tribweb.com) or 412-320-7990.

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*Editors note: I emailed this story to a lady whose husband was a bomber pilot in WW2, was shot down over Germany and became a POW. She answered: "...I received one of those cards that said Harry was a prisoner."*

**Using the RCARC W5ROK Repeater** RCARC Repeater is on 441.875 MHz with a + offset and a 131.8Hz tone. If you need help programming your radio, just let us know. On any frequency, it is good amateur practice to listen first for any activity. If there is a QSO in session and you wish to join in, just insert your call sign when there is a break in the conversation after you hear a courtesy tone. The tone is sent after a short time when a station releases their PTT (push-to-talk) button, to give others a chance to join in or report emergency traffic. It is considered bad practice to just say "break" with out identifying. Never use "brake-brake" unless you have a real emergency as all communication is to cease and you are expected to immediately declare the nature of your emergency and the help you require.

When you access the club repeater when it has not been in use for 10 minutes, it will identify in voice (W5ROK). Wait for the courtesy tone and then give your call slowly so that anyone listening can pick it up. Some of us identify with our call, name, and location after this initial repeater ID if the machine has been idle for some time. Such as: "This is K3NT, Kilo Three November Tango, Bob, in Plano". This will give those with scanners time to lock on to your transmission and reply if they can. Some of us monitor the repeater, but may not be close to immediately pick

up the mike and return your call. Therefore, it is important to wait a little to give us time to get to our radio. Remember to identify at least every 10 minutes and at the end of the QSO with your call sign. This is a FCC requirement.

Please do not just bring up any repeater and not identify. This is known as "kerchunking" and besides being bad manners, it is illegal.

If you would like to learn more about our repeater or its operation, please contact member Steve Phillips, Repeater Trustee – K6JT ([k6jt@arrl.net](mailto:k6jt@arrl.net))

**ARRL Membership Benefits** There are "fringe" benefits for RCARC when our members join or renew through the following process.

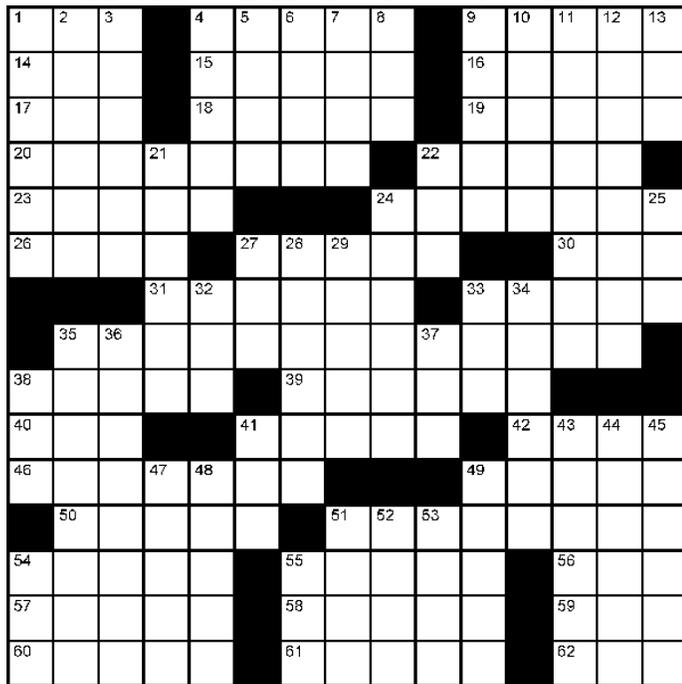
**Renewing By Check**—After filling out the form, return it to RCARC with your check. Note the definition of New or Renewing Member at the top of the form. If you have previously been a member of ARRL but have let that membership lapse for 2 or more years then you are considered a new member and the club would get a \$15 commission. If you are renewing a current membership or one lapsed for less than 2 years, you are considered a renewing membership and would get a \$2 commission. Do not deduct the \$15 or \$2 commission—make the check out to RCARC for the full renewal amount.

**Renewing By Credit Card**—If you wish to CHARGE the renewal to a credit card note the special instructions (Box on right side of form) which indicate that you would then pay the \$15 or \$2 directly to RCARC. Your credit card would be charged for the full amount minus the appropriate commission. In this instance the check should be made out to the RCARC for the appropriate commission amount.

In both cases, return the application to RCARC regardless of payment method in order for RCARC to get credit. **The application is now available on the RCARC website!** Mail to the following address:

RC Amateur Radio Club  
Attn: Treasurer  
MS 461-290  
PO Box 833807  
Richardson TX 75083-3807

**The Amateur Radio Crossword Puzzler**



**Across**

- 1. Old freq. units
- 4. HH-land
- 9. Fourteen \_\_\_\_ (weight)
- 14. Enable, as a weapon
- 15. Over
- 16. Signs
- 17. Expected
- 18. John Glenn's ride
- 19. "that \_\_\_\_ for the course"
- 20. With 22, 55, 56, and 61 across - What you collect for 35 across
- 22. See 20-across
- 23. The 18 and 21 MHz bands?
- 24. "Is that really necessary?"
- 26. New fangled rigs (abbr.)
- 27. Work on GUIs and others
- 30. This began, the July after 24-down
- 31. An ARRL section official, in 1-land (abbr.)
- 33. All but KH6 and KL7
- 35. You need more than 999 for this award
- 38. Power units
- 39. One of the things Elmers do
- 40. School org.
- 41. One place where the DX might be listening?
- 42. Heading 180 from NC
- 46. 9H operator, probably
- 49. Early radio parts manufacturer

**Down**

- 1. "... no space \_\_\_\_."
- 2. Trimmed, as a dipole (if not a bush)
- 3. It moves with a signal
- 4. What an amp also does in the shack
- 5. Prefix with VOX
- 6. What an un-keyed transmitter is
- 7. Some are green, some black, some orange
- 8. Gives a callsign
- 9. Nickels and dimes
- 10. Org. in charge of 43-down
- 11. What a DXpedition station spends most of the time doing
- 12. Non-digital, in G-land
- 13. DOS background job (remember?)
- 21. Non-ham pesky visitor on FD
- 22. C in F-land
- 24. A peak year in cycle 19
- 25. Some Ukraine prefixes
- 27. It's between the DSP and the speaker
- 28. How some DF antennas look
- 29. Listings for selling small VHF xcvr's
- 32. MHz predecessor
- 33. Those in Chile
- 34. House current, familiarly, if imprecise
- 35. Like 38-down, but for (other) digital modes
- 36. Keeps your rig's rock steady
- 37. A good signal report, in ancient Rome
- 38. Speed on CW

- 50. 1960's TV host, with Martin
- 51. Open wire (line)
- 54. Equipment reviewer, sometimes
- 55. See 20-across
- 56. See 20-across
- 57. What many towers are made of
- 58. The word that explains a UK prefix assignment
- 59. Digital ckt. family
- 60. Hamshacks, on Field Day
- 61. See 20-across
- 62. Beam heading to work PY from W2

- 41. Biggest non-amateur user of radio in the early days
- 43. Awards for performances by hams in space?
- 44. Warm tubes and solder resin, among others
- 45. Pamper
- 47. What a birdie in your RX sounds like?
- 48. G-land noblemen
- 49. Tower-top antenna supports
- 51. Repeated, it's part of FO0-land
- 52. 70 city
- 53. The part of a part you solder
- 54. Use 3-Down to give out one of these
- 55. Cute 1960's mobile hamshack

**Solution to this month's Puzzler**



# Rockwell-Collins

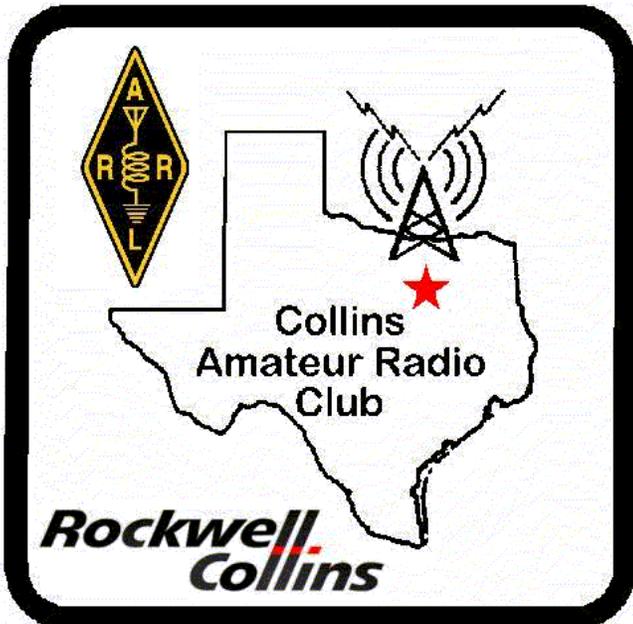
Amateur Radio Club

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

### MEETING

Thursday 24 January 2008

**17:30**

Rockwell Collins Cafeteria

**NEXT SIGNALS DEADLINE:  
18 February 2008**