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# SIGNALS

Rockwell Collins Amateur Radio Club

Monthly Newsletter of the

Volume 30 Issue 9

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

June 2009

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**RCARC**  
**Membership Meeting**  
 Thursday, 25 June 2009  
 1700 Social      1730 Meeting  
 Rockwell Collins Building 462  
 Temple Conference Room

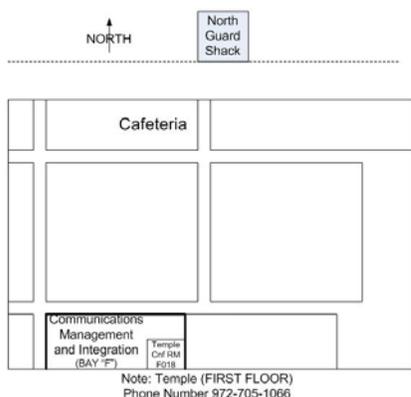
**Subject: Field Day Planning and Mobile Installations**

**On The Air at Rockwell Collins Fun Days.** The Radio Club W5ROK attended this year's Rockwell Collins Fun Days in May both locally and remotely (Pictures are pending). Thanks to those who answered our calls and let several people talk on a Radio for the very first time. We shared a table with Mary C McLennan the company Nurse who was making nutritious smoothies (remember to share with her in the future). We handed out flyers with some fun facts (see attachments on pages 5-6 below), handed out some QSL cards, invited people to the May meeting "What happened to Amelia Earhart?", and had a couple of radios going on the Repeater during the whole event. We talked to Denise T Holden the head Human Resources in Richardson TX office who stopped by and picked up a flyer about including information about the W5ROK club in the Welcome Packets for new employees (she asked that we email her an electronic copy). Lesson learned about Rockwell Collins Fun Days in the future—make sure your table is in the shade and is also parallel to the food line to benefit from those waiting in line. During the event we became aware of other Ham Radio operators at our location and a few prior Ham Radio class non-members asked if we plan or have information on up coming General or Extra classes.

## Local Club News

**Meeting Notice** This month's meeting will be dedicated to the final planning and preparation for Field Day, including a demonstration of the club's logging software. We also need to discuss the need to sell or otherwise dispose of excess and junk assets. And, if time permits, we may have a presentation or show-n-tell of the member's mobile installations.

**Meeting Location** Just a reminder that we are now meeting in the Temple conference room. It is located in the CM&I engineering bay at the end of the main aisle leading south from the north gate entrance. The bay entrance is just to the right of where the aisle forms a "T" with the east-west aisle. See the map below.



**Rod Blocksome Thank You!** I had the pleasure of introducing Roderick (Rod) K Blocksome K0DAS from Robins, IA on May 21st at one of the largest meetings we've had yet when he gave a speech on "What happened to Amelia Earhart?". This was a well attended joint meeting hosted by the Rockwell Collins Amateur Radio Club W5ROK and the Rockwell Collins Leadership Association (RCLA in Richardson, TX) which drew on many aspects of applying Engineering, Amateur Radio, and real life experiences on a great ongoing adventure. Once the word got out about the meeting we set up our first Radio Club Live Meeting on short notice so others could watch the video clips and slide show. The meeting was attended remotely from off site Radio Club members including those from W4CRC (Melbourne, FL), and W0CXX (Cedar Rapids, IA). Rod sent us a Thank You note for our help and left a voice mail about the positive comments he had gotten from some of the remote attendees that got to watch as well. Rod Blocksome's speech about the Amelia Earhart search was very interesting, if you missed it and didn't get a chance to attend. Also be on the watch for an Amelia Earhart Movie coming out later this year. I ended up talking about this speech after the meeting and knew I had reached my youngest daughter when she later sent a text message from her high school science class asking for the names for an ongoing conversation in class (Science is Great in Action). *Ross Terry K5SRT*

**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.

## RCARC OFFICERS

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972.705.1349

### 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.

**SIGNALS** is the monthly newsletter of the Rockwell Collins Amateur Radio Club, published by and for its members. The entire contents of this newsletter are copyright © 2009 by the Rockwell Collins Amateur Radio Club. Permission is hereby granted to any not for profit Amateur Radio Publication to reprint any portion of this newsletter provided both the author and Rockwell Collins Amateur Radio Club are credited.

## President's Message

REMEMBER: Just because the data appears *precise*, doesn't mean it's *correct*. In design, test and validation, we must constantly ask ourselves:

- What is the source of the numbers?
- How realistic are they?
- Is the data accurate?
- How confident are we in the data?

Otherwise, we risk thinking something is OK when it is not, chasing problems that aren't there, or chasing the wrong problems. *Mark A. Harris, KC5FDX*

Please join me in a welcome back to RCARC for our newest member, Mr. Mark Harris, KC5FDX. Some of you will remember Mark as a past president of our radio club. His interest includes Elmering, Contesting, V/UHF/HF, Packet, ATV and Microwave. Soon, Mark expects to be operating from a DX island spot that he will announce shortly. His goal is to work all of our company club's stations from this remote island location.

HamCom 2009, at the Plano center will be happening shortly. Look for fellow club members on 441.875 Mhz Simplex on Friday and Saturday June 12/13, 2009. Here is a response from RCARC member Chuck Samuel, K7NWM. "I'll be working at the parking lot flea market with the McKinney Club on Sat of Ham-Com. I'd sure like to go to the presentation on the K3, maybe if its not too busy, I'll be able to get away. I don't know what it would cost for hardware but Jim Pelegriano, KE5SAR, and I would like to suggest an IRLP or Echolink hook up between our repeater and the one in Cedar Rapids (and the other RC Clubs as well). Chuck, K7NWM". This is a great suggestion as it would increase traffic on our club repeater and bring in some of our friends in Cedar Rapids. Any RCARC members up for joining in to plan this link-up?

John McFadden, K5TIP, responded to let RCARC know he will be there and monitoring. In addition, he sent his notification that he will again win a HamCom prize. A number of us were present last year at the Dave Jaks, W0VX, DX session when K5TIP won the very large digital clock. John had people calling him for months asking, "John, just what time is it now?" That reminds me, last year, Dave, W0VX, made and kept a deal that he would operate W5ROK field day if some RCARC members would attend his DX talk. Hey W0VX, how about the same deals this year?

RCARC 2009 Field Day: June 27/28, 2009. Generator, Radios, CW Keys, Microphones, and Computer logs will be ready. Come on out and operate, visit or both. Place: RCARC radio room, W5ROK.

I can report that a little W5ROK Repeater maintenance took place in May. Your RCARC still needs volunteers. Our packet BBS issue is priority. The new packet antenna needs to be installed. Lend a hand if you can.

Thanks to all RCARC members who participated in the May 2009 Rockwell Collins Richardson Company Fun Days. W5ROK had a table set-up with operating radios, RCARC and ARRL brochures.

We had respectable traffic and interest on both days of the event.

**Selected RCARC May 2009 Activities:**

- RC Fun Days – George Deprez, KE5SAQ; Bob Diepenbrock, KC4UAI; Randall Dunning, KC5QHH; Wayne Hughes, WA0TGH; Bob Kirby, K3NT; John McFadden, K5TIP; Steve Phillips, K6JT; Mike Schmitt, WA9WCC; Jim Skinner, WB0UNI; Sidney Ross Terry, K5SRT; Joe Wolf, N5UIC
- Vice President Report – Sidney Ross Terry, K5SRT
- W5ROK contest operation.- Dennis Cobb, WA8ZBT
- Meeting Refreshments Setup Volunteer – Jim Skinner, WB0UNI (finally got a break this month)
- RCARC Roster/Database/Applications/Marketing – Joe Wolf, N5UIC
- New RCARC Intro Flyer - Sidney Ross Terry, K5SRT
- Station Tour - Bob Kirby, K3NT, Dennis Cobb, WA8ZBT
- RCARC Digital project - Robert Diepenbrock, KC4UAI; Bob Kirby, K3NT
- Yet Another Great SIGNALS Newsletter – Jim Skinner, WB0UNI
- Treasurers Report – Robert Diepenbrock, KC4UAI
- Club Librarian - Stephanie Keese, AC5NF
- Website Updates - Wayne Hughes, WA0TGH
- May Program – CARC member Rod Blocksome, RCARC Attending Members
- Secretary Report –Dwight Ramsey, KE5SAS
- Station Trustee – Steve Phillips, K6JT

Hope to see or hear you at HamCom, the meeting, or RCARC 2009 Field Day. Enjoy your Radio Hobby & Best Regards (73),

Bob Kirby, K3NT  
[K3nt@arrl.net](mailto:K3nt@arrl.net)  
<http://w5rok.us>

## Secretary's Report

Since the meeting was a combined meeting with the Rockwell Collins Leadership Association (RCLA), no business was conducted. See **Rod Blocksome Thank You!** on page 1.:

## Events and Public Service Ops

**12-13 June 2009 HAM-COM:** See the full page announcement on the next page for information on this year's HAMCOM. Meanwhile check out the website at <http://www.hamcom.org/>.

### 13-14 June 2009 ARRL June VHF QSO Party

The object 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. The event starts at 1800 UTC Saturday, ends 0300 UTC Monday (**June 14-16, 2008**). More info at <http://www.arrl.org/contests/calendar.html>.

**20 June 2009: Kids Day.** Kids Day is an on-air event to encourage young people (licensed or not) to have fun with Amateur Radio. It is designed to give on-the-air experience to youngsters and hopefully foster interest in getting a license of their own. It is also intended to give older hams a chance to share their station and love for Amateur Radio with their children. Saturday, June 20, 2009, 1800 UTC–2400 UTC. Operate as much or as little as you like. **Suggested exchange:** Name, age, location and favorite color. Be sure to work the same station again if an operator has changed. To draw attention, call "CQ Kids Day." More info at <http://www.arrl.org/FandES/ead/kd-rules.html>.

**27-28 June 2009 ARRL Field Day:** The object 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 in doing so to learn to operate in abnormal situations in less than optimal conditions. A premium is placed on developing skills to meet the challenges of emergency preparedness as well as to acquaint the general public with the capabilities of Amateur Radio. Field Day is **always the fourth full weekend of June**, beginning at 1800 UTC Saturday and ending at 2100 UTC Sunday. Field Day 2008 will be held June 28-29, 2008. More detailed info at <http://www.arrl.org/cotests/rules/2009/fd.html>.

**An Open Letter from the NTX ARRL Assistant Section Manager.** *(I would encourage all NTX RCARC members to consider taking advantage of David's kind offer of help in increasing your local club's activity and to make it a point to stop by and say hello to David should you be attending HamCom 2009 in Plano, Texas. Bob Kirby, K3NT).*

I want to introduce myself as an ARRL Assistant Section Manager for North Texas. I want to apologize for the time it has taken folks in the ARRL North Texas Section to reach out to you. The number one thing is that we care and are here to help but we need some input from you.

1. What can the North Texas Section do for you right now to help with your club?
2. What programs and events that you are having in your community do you need support from the ARRL?
3. What youth programs and membership growth programs are working for your club?
4. Do you need assistance to be an ARRL special service club?
5. What can we help with to spark growth in your club?
6. Do you have a yearly (or more often) ham fest that we need to help promote and support?
7. Who can I or Jay contact directly to get club activity information so it can make it to the North Texas Section website?

With two years success as President of the Ham Association of Mesquite, I helped my club achieve the following: membership growth of 30% year over year, increase in General and Extra class operators, process of taking our club through a 501(c)3 conversion and supporting over 17 events per month including our Ham Radio in the Park event. I turned a club with no growth potential into a club that has harmony and excitement. I am not a miracle worker but my ideas worked and they can work in your club.

Please feel free to call me or email me if you need any assistance with your club activities, programs and how to spark new life into your club. I will be heading up a roundtable discussion for clubs at HamCom in Plano, Texas again this year. The presentation/roundtable is at 1pm on Saturday June 13th, 2009. I will be at HamCom both Friday and Saturday. Hunt me down and let's talk about your club activities.

David Kaun  
 N5DBK  
 Assistant Section Manager – North Texas



## CQ-CQ-CQ

**Register online and SAVE \$2.00 thru May 30.** All online admission registrations will be entered in a drawing to win\* an ICOM ID-880H Digital/Analog VHF/UHF mobile transceiver! The winner will be notified by email prior to the event.

### Latest QST for Ham-Com 2009 -

- The DX dinner is completely sold out! This will be the largest DX dinner in five years with 200 tickets sold. The Lone Star DX Association will host a series of programs for DX enthusiasts on Saturday, June 13 at the Plano Centre.
- 46 commercial vendors including Begali Keys of Cellatica, Italy will exhibit their products at the event!
- The indoor flea market is completely sold out! There is still space in the outdoor flea market and there will be plenty of space in the tailgate area. The tailgate market in the west parking lot will be hosted by the Plano and McKinney clubs.
- There will be over 80 hours of speakers, workshops and special interest group meetings at the event. The tentative block schedule for Friday, June 12 and Saturday, June 13 is available at <http://www.hamcom.org/> via the "Programs" link. The complete schedule with program descriptions and speaker information will be available on May 30 in the Ham-Com Flyer.
- Ham-Com will give away one (1) Yaesu FT-857D each day at 5:00 p.m. All general admission ticket holders are eligible to win.\*
- An Alinco DJ-175T 5 Watt HT will be given away every hour. All general admission ticket holders are eligible to win.\*
- VE testing will be offered both days and the National Weather Service will provide basic and advanced SKYWARN training on Saturday, June 13.
- Ham-Com will once again host the Boy Scout "One-day Radio Merit Badge" program for up to 175 scouts. Please click on the "Scout Events" link at <http://www.hamcom.org/> for complete information.
- The ARRL West Gulf Division meeting will be held on Saturday, June 13 at 11:00 a.m.

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We believe that Ham-Com is "Amateur Radio at its best—Commercial exhibitors, flea markets, speakers, workshops, special interest groups, door prizes and much, much more..."

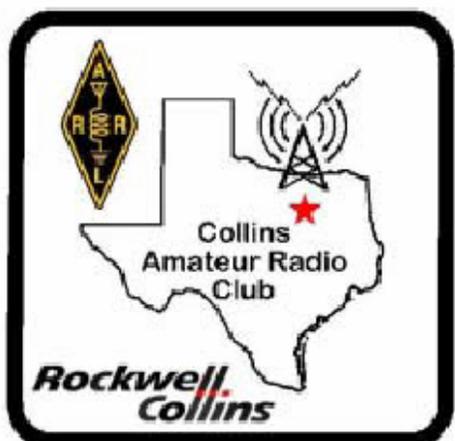
It is with great pleasure that we welcome special guests David Sumner, K1ZZ, the CEO of the ARRL, Gordon West, WB6NOA, noted author and educator and Bob Allphin, K4UEE, co-leader of the K5D Desecheo Island DXpedition.

Ham-Com appreciates the contribution of nearly 100 supporting clubs throughout Texas and the surrounding states. Bob Gormley, WA5YWC, a member of the North Texas Microwave Society (NTMS), served as this year's theme chairman.

We hope that you will attend Ham-Com 2009!

73

The Ham-Com, Inc. Board of Directors  
 Bill Nelson, AB5QZ  
 Fred Varian, WD5ERD  
 Barry Goldblatt, WA5KXX



**Would you like to learn more about Radios and Antennas or even Rockwell Collins?**

**Possibly you could benefit with practical hands on use of equipment or work with its architecture and setup?**

**Maybe you've never even talk on a radio or more importantly one that has a long term history with our company?**

You should consider like others have into plugging into the **Rockwell Collins Amateur Radio Club – W5ROK** which meets monthly.

If you would like to learn more let us know and we can make you aware of upcoming classes or monthly events. **Sometimes the first step has to be one made by you? If you keep doing the same thing you'll keep get similar results.**

Let us know of your interest by emailing us at [W5ROK@ARRL.NET](mailto:W5ROK@ARRL.NET) or visit on the web at <http://www.w5rok.us> . Also Please, visit one of our meetings.

#### FUN FACTS:

- Rockwell Collins has more than Six Active clubs world wide.
- We make global contacts on radios operated from building 461 using antenna on buildings 461 and 462 some of our own design.
- We can operate in almost any format or frequency including CW, VHF, UHF, HF, PSK31, SSB, Simplex, and Duplex.
- We've help the company celebrate our long radio history by operating historical equipment during our 50<sup>th</sup> and 75<sup>th</sup> anniversary events.
- Our membership supports Collins County Sky Watch and many other community events in the area including emergency communications.
- You can learn more about radios, antennas, and even operate them right here at work.

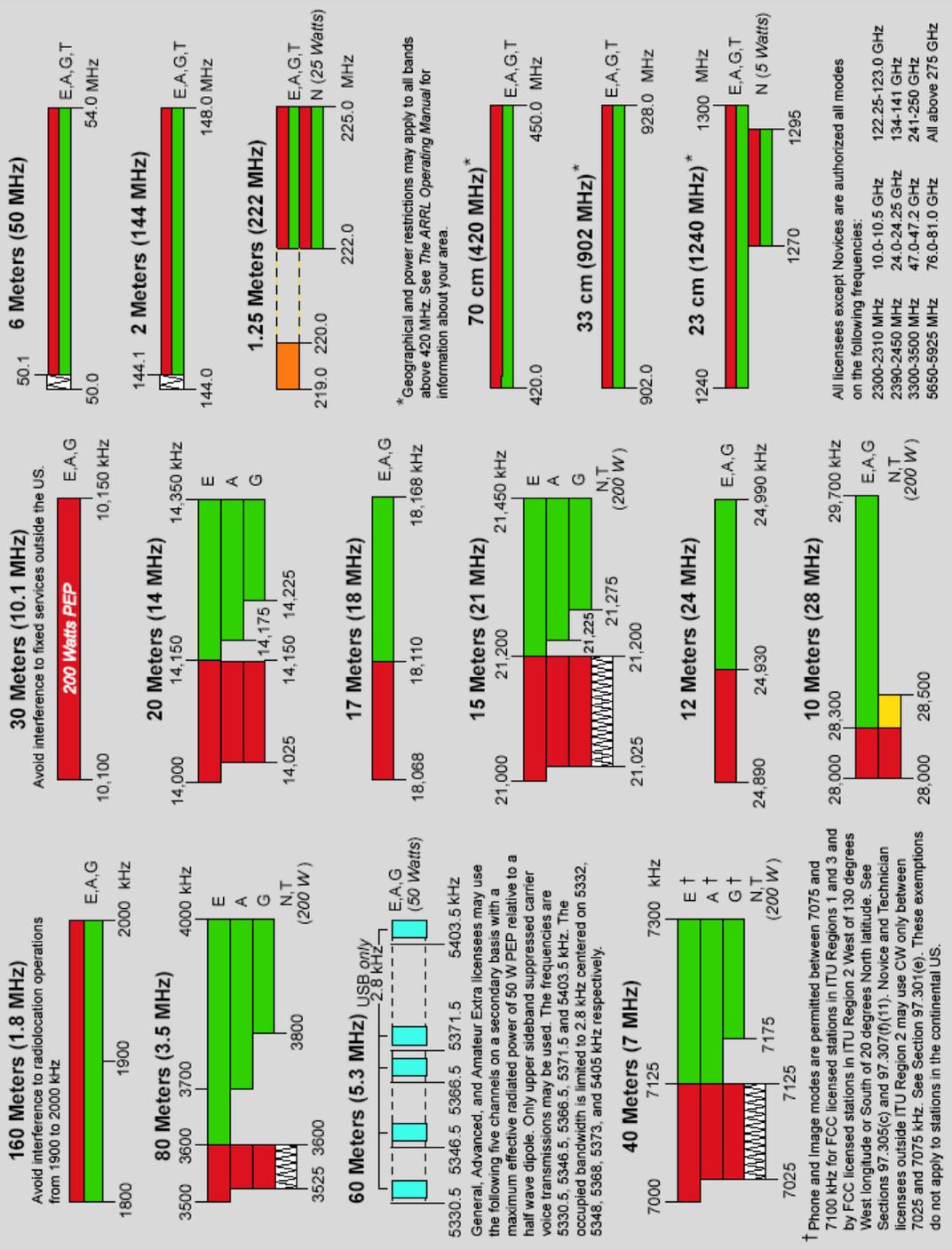
# US Amateur Radio Bands

## US AMATEUR POWER LIMITS

At all times, transmitter power should be kept down to that necessary to carry out the desired communications. Power is rated in watts PEP output. Except where noted, the maximum power output is 1500 Watts.

Effective Date  
**February 23, 2007**

Published by:  
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**AMATEUR RADIO**  
www.arrl.org  
225 Main Street, Newington, CT USA 06111-1494



**KEY**

- Note: CW operation is permitted throughout all amateur bands except 60 meters.
- MCW is authorized above 60.1 MHz, except for 219-220 MHz.
- Test transmissions are authorized above 51 MHz, except for 219-220 MHz.

- [Red Box] = RTTY and data
- [Green Box] = phone and image
- [Hatched Box] = CW only
- [Yellow Box] = SSB phone
- [Cyan Box] = USB phone only
- [Orange Box] = Fixed digital message forwarding systems only

E = Amateur Extra  
A = Advanced  
G = General  
T = Technician  
N = Novice

See [ARRLWeb](http://ARRLWeb) at [www.arrl.org](http://www.arrl.org) for more detailed band plans.

**ARRL**  
*We're At Your Service*

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email: [newham@arrl.org](mailto:newham@arrl.org)

**The NTX Personal Computer User Group** is the oldest & largest in North Texas providing educational and volunteer services which include supporting the Texas Center for the Physically-impaired. TCPI provides computers for the blind that are built, programmed, packed and shipped by the volunteers. NTPCUG has a large monthly meeting that includes a number of Special Interest Groups, These SIGS are all lead by members and often include professional presenters on all platforms: MAC, PC, LINUX etc. SIGS are divided into subject areas which include: Digital Photography, Wireless communications, Mobile computing, IT professional, Family history, .net applications etc. For more information see: <http://www.ntpcug.org/>.

***Computer Users, IT Professionals,  
& Small Business Owners....***



***Discussion Groups and***

***Workshops held locally***

***every 2<sup>nd</sup> & 3<sup>rd</sup> Saturday***

*“Share what you know, learn what you don’t”*

**A North Texas Community Resource Serving PC Users**

Visit The North Texas PC Users Group’s Website Today

[www.ntpcug.org](http://www.ntpcug.org)

## Monthly Meeting Schedule – June 2009

research and further planning for each challenge participant's website(s).

### Microsoft Excel – 8:00 am

Since we have now reviewed the new menus these past months let's look at some of the data and editing features.

### Windows Tips & Tricks – 8:00 am

Open Q&A on all things Windows & PCs. Possible 'Live, no net' troubleshooting session.

### IT Professional – 9:00 am

Special two hour session with Mobile Computing session (9-11) with Clinton Fitch.

### Making Money on the Internet – 9:00 am

In June, we'll continue our development and implementation of each challenge participant's money making websites

### Microsoft Word – 9 am (continues at 10 am)

Preparing a document in Word 2003 and 2007, slide-by-slide.

### Linux Main Presentation – 9:00 – 12:00

### Linux Installation Project – 9:00 – 12:00

Bring your computer and we'll help you set up and perfect your Linux installation.

### Digital Photography – 10:00 am

Every month we strive to maintain the bridge between legacy (old) equipment and wonderfully new innovations. Come on in and share with us.

### Microsoft Expression Web – 10:00 am

In June we will start the series on JavaScript, the essential web site building technology that animates a site.

### Internet – 10:00 am

We'll look at what goes into a HTPC, and how you can set it up as a DVR, download programs from the internet, and connect everything to your TV set or monitor.

### Mobile Computing – 10:00 am

Clinton Fitch, Microsoft MVP – Mobile Devices, will bring us up to date on what's happening in Mobile Communications – new phones, new services, etc.

**PowerShell – 10:00 am** NEW  
This month we will talk about profiles and why you will want to create one to customize your Powershell environment.

### Digital Photo Editing – 11:00 am

Cameras are doing fantastic editing in-the-camera itself. We have reasons for supplementing this with higher-powered image editing tools.

### Microsoft Access – 11:00 am

"Demo Database Review: Address Book and Info Keeper"

### Wireless Communications – 11:00 am

### WordPerfect – 11:00 am

What's New in X4?

### Family History – 12:30 pm

This month we will review a visit with Daisy's relatives that occurred in May.

### Windows Inside/Out – 12:30 pm

Vista SP2 has some new features as well as lots of bug fixes. Come to this session to see if you need to install it and what lies ahead for Vista.

### Investors – 1:30 pm

NEW

### .NET Certification Study Group – 1:30

Two Web Psychology 101 motivators ("You owe me one" and "Only a few items left"), plus continued hands-on exploration of the .NET Membership Provider.

**For further information, see our web site: [www.ntpcug.org](http://www.ntpcug.org)**

**North Texas PC  
Users Group, Inc.**  
P.O. Box 700055, Dallas, TX 75370-0055



## North Texas PC Users Group

Dedicated to providing computer information and assistance to computer users, IT professionals and small business owners. We offer many Special Interest Groups (SIGs) that provide tips, tricks and answers to those elusive questions. Non-members are always welcome to visit and participate in SIG meetings. User groups provide an opportunity to network with other computer users and IT professionals.

### 2nd Saturday – June 13th

Second Saturday SIGs are held at Microsoft Las Colinas, 7000 Hwy 161 in Irving.

### .NET Developers – 9:00 am

### Design Patterns – 10:00 am

### SharePoint – 11:30 am

### .NET Certification Study Group – 2 pm

at Nerdbooks, 1681 Firman Dr, in Richardson. Two Web Psychology 101 motivators ("You owe me one" and "Only a few items left"), plus continued hands-on exploration of the .NET Membership Provider.

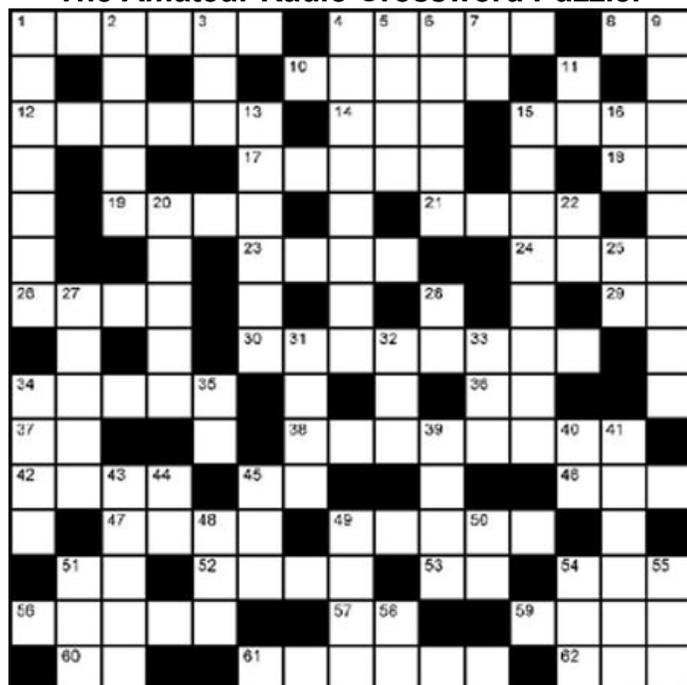
### 3rd Saturday – June 20th

Third Saturday SIGs are held at King of Glory Lutheran Church, 6411 LBJ Fwy in Dallas (between Preston & Hillcrest, north side of LBJ).

### Building Websites – 8:00 am

We'll continue our work begun in May as we examine the results of your continuing keyword

The Amateur Radio Crossword Puzzler



Across

- 1. Highly ionized gas
- 4. Splits light into colors
- 8. Sporadic VHF propagation mode (abbr.)
- 10. Practical joke (like the sun plays on us)
- 12. Lights in the sky
- 14. Assist
- 15. Where the asteroids hang out
- 17. Lasts for eleven years on the sun
- 18. Magnetic metal (Chemical symbol)
- 19. Active region on the sun's surface
- 21. Almost a gamma ray
- 23. To start (abbr.)
- 24. Wind (v.)
- 26. Propelled by solar light
- 29. Smallest of the contiguous 48 states
- 30. Coronal Mass .....
- 34. Major and minor
- 36. Most common conductive metal (Chemical symbol)
- 37. Complement to AND
- 38. Complementary to electric
- 42. Lets mass escape from the sun
- 45. Series of orbiting Russian translators
- 46. Is too! Is ...!
- 47. As well
- 49. Large and sudden release of energy
- 51. Prefix for WRTC-2006 host
- 52. The graven image of a sun god
- 53. What you get when you're fired
- 54. Not either
- 56. Forces in space

(abbr.)

- 13. When the field's not quiet
- 15. Loss of propagation
- 16. Below MF
- 20. DX path easiest to disturb
- 22. Beam optimizer program
- 25. Heat light
- 27. Physics of space
- 28. Just less than a liter (abbr.)
- 31. Prevents reception
- 32. Calling (abbr.)
- 33. Frozen liquid
- 34. Solar observatory in space (acronym)
- 35. Propagation off of ionized trails (acronym)
- 39. Agency who watches Earth
- 40. Not out
- 41. Sun's outer atmosphere
- 43. Region of the ionosphere
- 44. Complementary axis to az
- 45. Retinal cell that detects light
- 48. Abrupt radio shutdown (acronym)
- 49. Solar energy reported by WWV
- 50. Receive (abbr.)
- 51. Maximum meter deflection
- 54. Cut off or pinch
- 55. Ready (abbr.)
- 58. Half dozen Romans

- 57. Just beyond violet
- 59. Blows from the sun
- 60. Number (abbr.)
- 61. Peaks (plural)
- 62. Exchange money for goods

Down

- 1. They go around the sun
- 2. Light surrounding an object or star
- 3. Russian space station
- 4. Makes perfect
- 5. Metal guide
- 6. A and K are this type of number
- 7. End of contact (prosign)
- 9. Orbits the earth
- 11. Propagation across the equator

This month's Puzzler Solution



(Puzzler by H. Ward Silver, NOAX, reprint courtesy of ARRL.org)

Hernando, KC5FDW Looking for 2007, 2008, 2009 QEX CDs or Magazines

There are two interesting projects one is a dual DDS and a Vector Analyzer

I hope you can assist me in tracking down somebody that may have them

\$\$\$\$ AMATEUR RADIO WANTED \$\$\$\$\$

Reply to: [sale-5rv9x-1142957875@craigslist.org](mailto:sale-5rv9x-1142957875@craigslist.org)

Cash for your stuff ANY condition. Want all types, can repair, need whole ham shack.

ESPECIALLY looking for a Yaesu FT-920 but also need other radios too.

Email me, Dave, with what you have, best price and condition.

- Location: DFW
- It's NOT OK to contact this poster with services or other commercial interests

# Rockwell-Collins

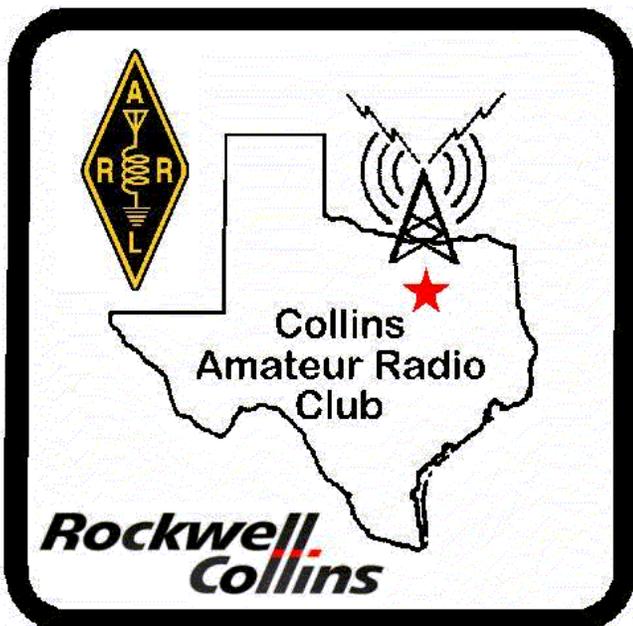
Amateur Radio Club

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 25 June 2009

1700 Fellowship

1730 Meeting

Rockwell Collins Building 462

Temple Conference Room

**NEXT SIGNALS DEADLINE:**

**→→→ 17 July 2009 ←←←**