



K5RWK UPCOMING EVENTS

Meeting-on-the-Air
Monday, April 6, 7:30 P.M.
RWK Repeater, 2 Meters
147.120 (no PL Tone)

###

Monthly Meeting
Monday, April 13, 6:30 P.M.
St. Barnabas Presbyterian Church
1220 W. Beltline Rd, Richardson

ABC's of Hex Beams

with
Herb Welch W5YKU

###

Monthly Breakfast
Saturday, April 18, 8:00 A.M.
Southern Recipe
1381 W. Campbell Rd.
Richardson

###

RACES Nets & Siren Test
Monday, April 6, 9:00 P.M. (Net)
Wednesday, April 1 Noon (SirenTest)
Monday, April 20, 9:00 P.M. (Net)

Dallas NBEMS Learning Net
First & Third Wednesday - 7:30 P.M.
147.120 (no PL Tone)



Affiliated Club Since 1952

Ham radio license exams
3rd Thursday of each month @ 7:00 P.M.
St. Barnabas Presbyterian Church

The Chawed Rag

Volume 45, Issue 4, April 2015

ABC's of Hex Beams



Herb works the world with his hex beam on a 30' mast.

Herb Welch and his associates have plenty of physical and electrical know-how related to hex beams in various configurations.

The TexTenna now being sold locally, is one of Herb's designs. Hex beams are being used around the world with excellent results, even when fairly close to the ground. One of Herb's modified hex versions will soon be installed in a Far North Dallas attic!

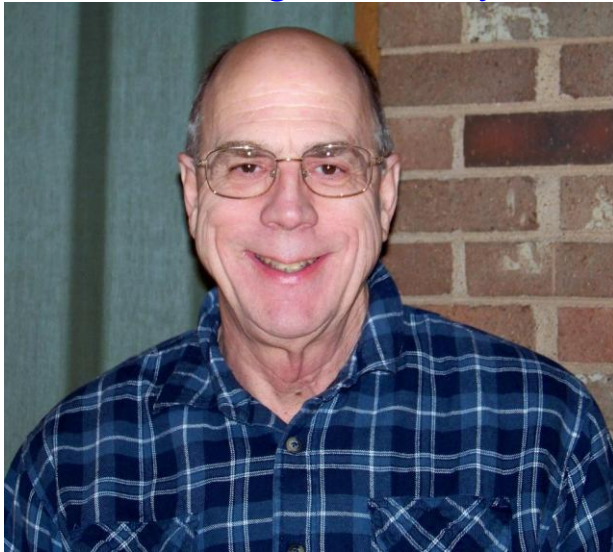
Herb Welch has a doctorate in physics and holds numerous U.S. Patents related to physical and electronic innovations. Herb worked with Collins Radio and five other firms before retirement. He currently serves as RWK's 2015 president.

In this issue:

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K5RWK Repeater 147.120/147.720
No tone needed - start talking!

Prior meeting summary



Mike Cowart WA5CMI talked homebrew amplifiers.



Mike's complete all-band HF linear amplifier.

Homebrew HF Amplifier

Mike Cowart WA5CMI presented his 3-1000Z amplifier, built to provide legal limit power on 80 through 20 meters. Mike's amplifier produces 1,200 watts on other bands.

Mike still enjoys operating AM phone and uses his amp to reach out on all HF bands.

Restoring old boat anchor rigs is another facet of the amateur radio hobby that appeals to Mike.

When it comes to DX, Mike is up-to-date with his Flex Radio 3000 software defined rig and the PowerSDR software package.

A retired electrical engineer, Mike worked for TI, Mostek, E-Systems, and Hewlett Packard, and he taught EE at Eastfield College.

Later in the program, Dave Russell talked about future plans to offer members special license upgrade mentoring.

Carl Solomon discussed offering shack visits and formal Elmer help to new Technician licensees. Individual Technicians would be required to visit several member's shacks to gain hands-on experience in the HF bands. Technicians would complete a list of specific tasks that would help them develop actual operating skills, along with skills related to kit-building, etc.

38 members & guests attended



RWK members and guests gained first-hand knowledge about homebrew HF amplifiers.

2014 Officers & Board Members

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Klub membership is open to all persons interested in amateur radio. Join at any meeting, by mail or on-line. Annual dues are \$15 individual, \$20 family, or \$5 student rate.

Archives of The Chawed Rag are available online at:

<http://k5rwk.org/rwk01/index.php/rwk-documents/rwk-newsletters>.

RWK Web Page & E-mail Reflector Information

RWK Website: <http://www.k5rwk.org>



RWK E-mail forum:

The Klub has a Yahoo group mailing list. Go to:
<http://groups.yahoo.com/group/rwk-ntx/>

All Klub members are encouraged to subscribe. The E-mail list is a forum for announcements, comments and ideas of interest to members.

Any approved *list* member may post a message to the group at rwk-ntx@yahogroups.com.

RWK Siren Testing Services

The City of Richardson will test all emergency sirens on first Wednesdays, at noon (weather permitting). We do not conduct the test if the weather looks threatening, to avoid confusing residents. Hams assist each month by going to a designated siren, checking into the net on 147.12 MHz, watching and listening to the performance of the siren, then reporting on the net. Most sirens have an assigned ham, but there often are unassigned sirens. New hams are welcome to participate and learn!
Please contact Don Bowen K5LHO, 972.235.3063, if you can help with siren tests near your QTH.

Why “The Chawed Rag?”

Ham radio operators love to talk! In addition to the many emergency communications services provided to their communities, hams enjoy chatting with fellow hams on the air. Hams exchange information about their locations, radio equipment they use, antennas, tuners, etc.

Additionally, hams often discuss the weather and exchange personal and family information. They develop on-the-air friendships. Such discussions are often characterized as “chewing the rag” with a friend or several friends over a network. That is the origin of this newsletter’s strange name.

Frankly, rag chewing with fellow hams is something that you must experience to appreciate. ***Ham radio is fun!*** If you want to explore amateur radio, contact one of our board members and join us at our monthly meetings. You are always welcome.

Future RWK Events:

Apr 01– Wednesday – City of Richardson Siren Test, 12:00 noon <http://www.cor.net/EM>

Apr 01– Wednesday – NBEMS Learning Net, 7:30 P.M. 147.120 MHz

Apr 06 – Monday – Meeting on the Air, 7:30 P.M.

Apr 06 – Monday – Richardson RACES Net, 9:00 P.M.

Apr 13 - Monday – Monthly Meeting, 6:30 P.M. – ABC's of Hex Beams (Mentoring @ 5:30 P.M.)

Apr 15– Wednesday – NBEMS Learning Net, 7:30 P.M. 147.120 MHz

Apr 16 – VE ham radio license exams, 7:00 P.M., St. Barnabas Presbyterian Church. Call 972.380.2859

Apr 18 – Saturday – Breakfast at Southern Recipe, 1381 W. Campbell Rd, Richardson – 8:00 A.M.

Apr 18 – Saturday - Raspberry Pi Group, 10:00 A.M., UTD Campus ECSS 2.410

Apr 20 – Monday – Richardson RACES Net, 9:00 P.M.

May 04 – Monday – Meeting on the Air, 7:30 P.M.

May 04 – Monday – Richardson RACES Net, 9:00 P.M.

May 06– Wednesday – City of Richardson Siren Test, 12:00 noon <http://www.cor.net/EM>

May 06– Wednesday – NBEMS Learning Net, 7:30 P.M. 147.120 MHz

May 11 – Monday – Monthly Meeting, 6:30 P.M. – TBA (Mentoring @ 5:30 P.M.)

May 18 – Monday – Richardson RACES Net, 9:00 P.M.

May 20– Wednesday – NBEMS Learning Net, 7:30 P.M. 147.120 MHz

May 21 – VE ham radio license exams, 7:00 P.M., St. Barnabas Presbyterian Church. Call 972.380.2859

May 23 – Saturday – Breakfast at Southern Recipe, 1381 W. Campbell Rd, Richardson – 8:00 A.M.

May 23 – Saturday - Raspberry Pi Group, 10:00 A.M., UTD Campus ECSS 2.410

Jun 01 – Monday – Meeting on the Air, 7:30 P.M.

Jun 01 – Monday – Richardson RACES Net, 9:00 P.M.

Jun 03– Wednesday – City of Richardson Siren Test, 12:00 noon <http://www.cor.net/EM>

Jun 03- NBEMS Learning Net, 7:30 P.M. 147.120MHz

Jun 08 - Monday – Monthly Meeting, 6:30 P.M. – Pre Ham-Com Suggestions (Mentoring @ 5:30 P.M.)

Jun 12-13 - Friday & Saturday - HAM-COM, Irving, TX - www.hamcom.org

Jun 15 – Monday – Richardson RACES Net, 9:00 P.M.

Jun 17 - Wednesday – NBEMS Learning Net, 7:30 P.M. 147.120 MHz

Jun 18 – VE ham radio license exams, 7:00 P.M., St. Barnabas Presbyterian Church. Call 972.380.2859

Jun 20 – Saturday – Breakfast at Southern Recipe, 1381 W. Campbell Rd, Richardson – 8:00 A.M.

Jun 20 – Saturday - Raspberry Pi Group, 10:00 A.M., UTD Campus ECSS 2.410

Jun 27-28 - ARRL Field Day - RWK at Cottonwood Park Pavilion - Public Welcome!

Need help getting a ham license? Getting on the air? Trying a new facet?

The Richardson Wireless Klub (RWK) donated to the Richardson Public Library a set of books to study for the Technician License. In addition, there are handbooks on various facets of ham radio operations. Look on the third floor in reference category 621.384.

RWK now has several "loaner" HF and VHF transceivers available for short-term use by newly licensed RWK members. For more information, contact Dick Morgan (k6rah@arrl.net or 972.931.7993).

RWK offers "Elmer" Mentoring Roundtables prior to the Klub's regular monthly meetings. Arrive at 5:30 P.M. to get answers to your ham questions and issues. RWK members act as local "Elmers" to new hams or members exploring new modes or interests.

"Elmer" is the term used to identify a mentor for amateur radio. If you could use some help, just let us know. We will put you together with one of our 'old hands' to help get you going. Meanwhile, here is a good online site with lots of references, self-study guides and video. <http://www.hamelmer.com/>.

You will find interactive practice license exams online at the following websites: <http://qrz.com/ht/>, <http://www.eham.net/exams/> or check out <http://www.qrz.com/ht/>. When you can consistently get a 90% or better on practice exams, you are ready to take the real exam from a local club's Volunteer Examiner team. You can check for exam locations, dates, and times at http://www.arrl.org/exam_sessions/search.

[CLICK HERE](#): to go directly to ARRL's "Practical Radio Applications for New Technician Licensees."

P.S. RWK offers exam sessions on the third Thursday of each month at 7:00 P.M. For more info, call Bill Owens at 972.380.2859. Alert! Alert! 40% of RWK's membership could upgrade their license class!

"QUA" (I HAVE NEWS OF.....)

K5RWK VE Ham Exam sessions – Monthly Progress Report

The Richardson Wireless Klub holds license exam sessions on the third Thursday evening each month, starting at 7:00 P.M. We examined five candidates in March. The exams produced three Technicians, one General, and one new Extra Class licensee. Thanks from Bill Owens to the other VEs who assisted with testing. We had a good group of VEs in March. We welcomed three new VEs in March: *Walter Anderson AF5WH, Jason Carr AF5US, and Chet Rolland AD5DM.*

If you know someone who would like to become a ham, please tell him/her about the RWK VE program. If you would like to join our team of VE's, please contact Bill Owens, AD5EW by email at wtowens3@sbcglobal.net or phone 972-380-2859. Our successful VE testing project also has produced several new RWK members!

Interested in becoming a VE? An open book orientation exam for Volunteer Examiners is all it takes to receive ARRL accreditation. If you are a General, Advanced, or Extra Class, why not get *your* accreditation? Attend an exam session and see for yourself *how satisfying it can be* to help conduct license exams. For more information, contact Bill Owens at 972.380.2859 or email wtowens3@sbcglobal.net.

RWK Repeater 'Voice of the Month'

Congratulations to ***Walter Anderson AF5WH*** for being the K5RWK Voice of the Month on the RWK repeater.

This announcement is re-recorded each month. The winner of the 50-50 drawing at the monthly meeting gains the privilege of selecting the "Voice of the Month." The winner may record his/her own voice or select someone else to be the new voice. The selected person does not have to be a ham. This allows a family member or friend - male or female - to be recorded and hear themselves 'on the air.' Be listening for each month's new voice announcement.

This is FUN! Doug Kilgore KD5OUG, RWK Repeater Chairman

U.S. ham radio license holders set a all time high record in 2014

At the end of 2014, there were 726,275 amateur radio operators in the U.S. There were 51,022 hams in Texas, only topped by California with 102,806. Several of the 'rarer' states showed 2,000 or fewer hams per state.

Just for fun, since you've read this far...

Some chuckles...

- > Indecision is the real key to flexibility.
 - > There is no substitute for a genuine lack of preparation!
 - > Nostalgia just isn't what it used to be.
 - > To some, the facts, although interesting, are irrelevant!
 - > Anything worth fighting for is worth fighting dirty for.
 - > Friends may come and go, but enemies accumulate!
 - > I have seen the truth and it makes no sense.
 - > If you think there is good in everyone, you haven't met everyone!
 - > If you never go off on a tangent, you are doomed to going in circles.
 - > If you smile when things go wrong, you have someone in mind to blame.
 - > There is always one more SOB than you counted on!
 - > Some wise-guys will skip right to the jokes and ignore the rest of the newsletter!
-

HAM TRIVIA QUIZ

What caused the ARRL to cease publication of its QST magazine in 1917?

1. The great depression
2. Paper shortages
3. WW I
4. All amateurs were drafted

From the Extra Class question pool

What impedance does a 1/4-wavelength transmission line present to a generator when the line is shorted at the far end?

- A. Same as the characteristic impedance of the line
 - B. Very high impedance
 - C. Same as the generator output impedance
 - D. Very low impedance
-

Android apps fans to meet in April

During the 5:30 - 6:30 mentoring session at the **April 13** meeting, all persons with an Android cell phone and an interest in using the new app AndFlmsg to send digital messages over the radio will meet in a separate classroom. We will help you install and configure AndFlmsg and practice sending messages.

Want to contribute an article to the Chawed Rag?

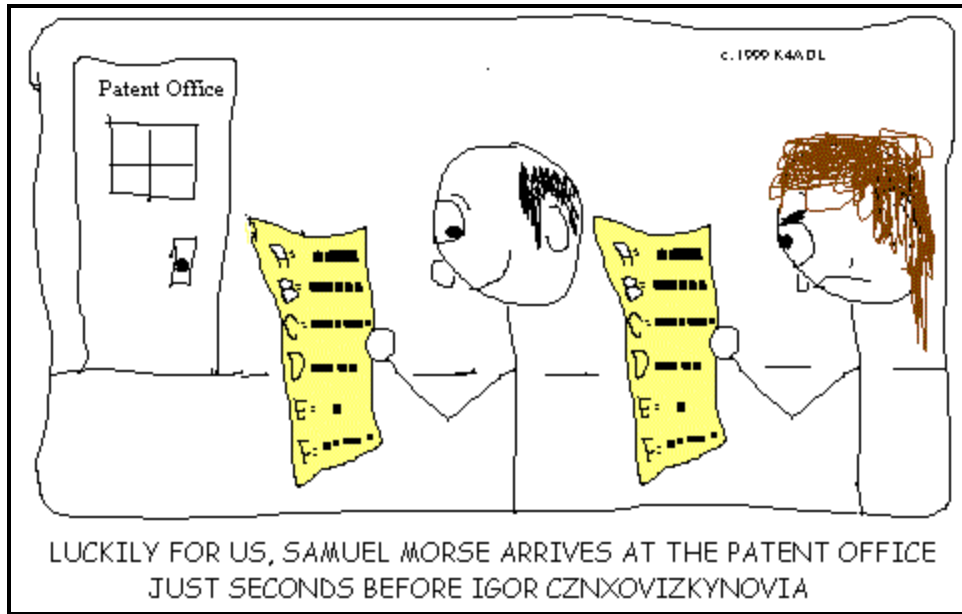
Every ham has an intriguing story to relate or knowledge to impart. Just e-mail the editor, k6rah@arrl.net, and attach a copy of your article or a description of your idea. Naturally, articles must concern amateur radio. **You do not have to be a member of RWK to submit an article!** Your article can be as short as a couple of paragraphs, or a full page with diagrams. The article may be technical in nature, concern ham history, your most memorable experience, 'how to' tips, etc. The editor reserves the right to edit or reject articles submitted. The author retains the copyright to the original submission, giving RWK the right to edit and publish it in the Chawed Rag. The Richardson Wireless Klub participates in an exchange of local club newsletters. We occasionally reprint articles from other clubs, and allow others to reprint our articles, both with proper attribution. For additional information, contact Dick Morgan K6RAH at **972.931.7993**.

Ham: a poor operator; a 'plug' (G. M. Dodge; *The Telegraph Instructor*)

The first wireless operators were landline telegraphers who left their offices to go to sea or to man the coastal stations. They brought with them their language and much of the tradition of their older profession. In those early days, every station occupied the whole spectrum with its broad spark signal. Government stations, ships, coastal stations and the increasingly numerous amateur operators all competed for time and signal supremacy in each other's receivers.

Many of the amateur stations were very powerful. Two amateurs, working each other across town, could effectively jam all the other operations in the area. Frustrated commercial operators would refer to the ham radio interference by calling them "hams." Amateurs, possibly unfamiliar with the real meaning of the term, picked it up and applied it to themselves. As the years advanced, the original meaning has completely disappeared and being a "ham" is now respectable.

Source: ARRL website



RWK installs a 440 MHz control unit antenna for the 2 meter repeater

Our 2 meter repeater finally got its 440 MHz control system antenna on March 22, 2015. Work continues to test the control unit under various operating conditions. Those participating in the installation were Kevin Sims, Sr., Clayton Seale, Carl Solomon, Bill Reed, Paul Newman, and Doug Kilgore.



Doug Kilgore, Paul Newman, and Carl Solomon teamed up.



Clayton Seale and Kevin Sims mounting the new 440 antenna.

From a recent ARRL survey: How do you prefer to send DX QSLs?

Direct to the DX station = 49%

Via QSL Outgoing Bureau = 34%

I don't send paper QSLs = 17%



K1N Navassa Island DXpedition 2015

How many K1N contacts did you make during the recent DXpedition?

Milton Withers AD5XD	5 bands SSB, 2 bands RTTY	Total of 7 QSOs
Jim Heye K5WLQ	3 bands SSB, 4 bands CW	Total of 7 QSOs
Herb Welch W5YKU	3 bands SSB	Total of 3 QSOs
Dick Morgan K6RAH	3 bands SSB	Total of 3 QSOs

The [K1N Navassa Island](#) DXpedition is now a part of ham radio history. The 15-member team wrapped up operations on schedule early on February 15. While some seekers went away empty-handed -- even after hours of trying to break the massive pileups (and some intentional interference) -- thousands were more fortunate.

The US Fish and Wildlife Service ([USFWS](#)) oversees access to the small island, and it has indicated that it would not allow any more DXpeditions to Navassa for another decade.

Three years ago...Raspberry Pi was born

A credit-card sized computer was released by the Raspberry Pi Foundation. While we remember it well, it seems like ages ago that the original arrived, and changed single board computing forever.

For a mere \$35 and a few common peripherals, kids, adults, teachers, and tinkerers could have a fully functioning Linux computer with which to do whatever they liked; play games, learn to code, or interact with sensors, screens, and switches. From there, an entire ecosystem evolved around the board. Prominent GPIO pins allowed for a multitude of add-on boards to fit virtually any need, and uses for the Pi were expanding at a rapid pace.

Home theater media centers, time-lapse camera rigs, weather balloons, and bitcoin mining clusters became common projects built with the Pi. More than 5 million units have been sold and the experimentation continues to grow.

RWK members interested in Raspberry Pi applications and experimentation are welcome to attend group meetings normally held on the third Saturday of each month on the UTD campus. For current information, e-mail Jonathan Brandenburg, at jonathan@jonathanbrandenburg.com.

THE WOUFFHONG, June 1919 QST

"Honest, fellows, we thought we had shell shock when we opened a package recently received from "The Old Man." It was a well preserved and absolutely authentic specimen of a WOUFFHONG. We confess a distinct and uncanny chill in our midst when we regarded the thing. It was shown to the Board of Direction at their meeting on May 3, in New York City, and each face noticeably blanched when the WOUFFHONG was pulled forth and laid upon the table. It is framed and hangs in the Headquarters Office of the American Radio Relay League at Hartford, Connecticut, as a horrible example of what awaits amateurs who persist in causing unnecessary QRM."



The dreaded Wouffhong!

Sources of DX information, by Bob Winn W5KNE

DX can be a fun part of amateur radio, but it can be even *more* fun if you know what is or will be happening in the world of long distance communication (DX).

There are two well-known subscription DX newsletters: QRZ DX, edited by N4AA (www.dxpub.net/QRZ-DX.html) and Daily DX, edited by W3UR (www.dailydx.com/). Both will provide samples.

If you are not prepared to pay money for your DX information, then consider one or more free sources of DX information. There are numerous free sources of information, online and by email. Here are some free resources to consider:

Amateur Radio DX (online) - www.amateurradiodx.com/. This web site provides information about upcoming DX events (in calendar format), current DX News (detailed information) and contests. The web site provides numerous color photographs of operators, maps, etc.

The OPDX Bulletin (online and email) - www.papays.com/opdx.htm. This is a good source for timely DX information. I prefer the weekly email edition.

Announced DX Operations by NG3K - www.ng3k.com/Misc/adxo.html. NG3K provides useful information, such as dates, operators, bands and the modes they will operate.

425 DX News - www.425dxn.org/425/indbulle.html. This Italian weekly bulletin for serious DXers has been around since 1995. This link will take you to a list of bulletins. The top entry in the list is the most recent. There is also a monthly magazine (www.425dxn.org/monthly/index.html) that is loaded with good info and color photos. And, they have a DX calendar at www.425dxn.org/425/calendar.html.

DX World - www.dx-world.net/. This is another good online source of DX information. Check out the News Categories section in the left side column.

WA7BNM Contest Calendar - www.hornucopia.com/contestcal/. This is the mother lode of contest information. You may not be a contester yet, but contests are a great way to find new or rare countries, states, etc. But, to operate in a contest you must know how to properly send an exchange when you contact a station. Your report could be "59 TX," "59 01," "599 TX," etc. Check out the contest rules on the WA7BNM site before chasing a station during a contest. You find it under "Exchange." "RS + serial no." means you will send 59 plus a serial number for each of your successive contest contacts, 59 001, 59 002, 59 003, etc. By the way, if you are operating CW you can abbreviate your exchange by replacing the "9" with an "N" and zeroes with a "T," for example: "5NN TT6" in place of "599 006."

DX Heat DX Cluster (online) - <https://dxheat.com/dxc>, A DX cluster is a collection of reports--called "spots"--made by operators from all over the world. The reports are called "spots," because someone "spotted" a DX station operating. Each spot provides information about the spotting station's call sign (DX de column), frequency, spotted station's call sign (DX column), UTC Time and date. This spotting information is reported as soon as the spot is reported. This web site is mentioned only to show you that there is good, timely information available for your use. The best source of spotting information is provided by local spotting networks. There are several ways to access local DX clusters, but if you are just starting in your quest to work DX, I suggest you start with VE7CC's software (see below).

VE7CC DX Cluster for Windows - www.bcdxc.org/ve7cc/.

This web site presents lots of information, examples, etc. all at once. Don't let it run you off. The VE7CC software is installed on your PC. The installation information is located near the bottom of the page. Once you have installed the software you will be allowed to select a local cluster. There are clusters all over the world, but it is probably best to use a local cluster like K5DX or AE5E, or you can use VE7CC-1 in the beginning. The cluster will present you with almost instant spots of when and where DX stations are operating. During a contest the spots roll off your screen very quickly!

I am sure there are many other sources of DX information that I have not mentioned, but these are the ones I use or have found during the writing of this article. Also, some of the sources I have mentioned may provide services that I have not mentioned. Sorry, my fingers are tired.

I will be happy to answer any questions. I am sure other DX-addicted members of RWK will be happy to answer your questions as well. Bob Winn W5KNE (w5kne@arrl.net), member of K5RWK.