

The Chawed Rag

Volume 37, Issue 4

April 2007

APRIL 2007

Meeting-on-the-Air

Monday, April 2, 7:30 PM

RWK Repeater, 2 Meters, 147.12 (No PL Tone)

Monthly Meeting

Monday, April 9, 7:00 PM

Series, Parallel Impedance Transformations of L, C, and R Networks

by Forrest Cummings W5LQU
St. Barnabas Presbyterian Church
1220 West Beltline Road
Richardson, TX

Monthly Breakfast

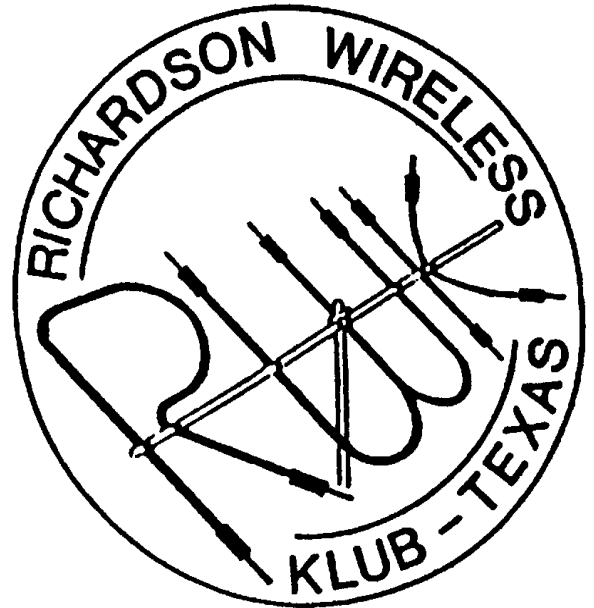
Saturday, April 14th, 8:00 AM

Luby's Restaurant, Campbell Rd, West of US 75

Richardson RACES Net

Monday, April 2nd 9:00 PM

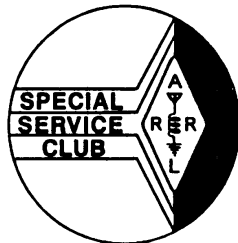
Monday, April 16th, 9:00 PM



K5RWK Repeater

147.12 / 147.72

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Membership is open to all that are interested in amateur radio and can be obtained at any meeting or by mail.

There are three regular monthly activities:

1. Meeting-on-the-Air, 1st Monday night of each month, 7:30 PM, 2 meters, RWK Repeater, K5RWK, 147.12 (no pl tone).
2. Meeting, 2nd Monday night of each month, usually at the St. Barnabas Presbyterian Church, 1220 West Beltline Road in Richardson at 7:00 PM.
3. Breakfast at Luby's Restaurant, on the Saturday following the monthly meeting, 8:00 AM. Luby's is on the north side of Campbell Road, a few blocks west of U.S. 75.

RWK Web Page and E-mail Reflector Information

RWK Web Page: <http://www.k5rwk.org/>

RWK E-mail:

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

All club members are encouraged to subscribe. The email list is intended as a forum for ideas of interest to club members.

Any club member on the list may post a message to the group at <rwk-ntx@yahogroups.com>

RWK Web Host:

John Beadles, N5OOM

Chawed Rag Online

The **Chawed Rag** is available online at:

<http://www.k5rwk.org/crcurrent.pdf>

Check for it around the first of each month.

President's Corner

Paper or PDF Part 2 - We had a pretty good discussion of newsletter issues at the March meeting. I was quite surprised that no one seemed to feel that they had to have a printed newsletter if the club decided to switch to PDF-only. So I asked the question several times, still no takers. I was having trouble believing it.

On Monday, I got an email from one member who indicated that he would prefer the printed newsletter. That made me think that there might be others. So let me try to make this as clear as possible:

1. We are NOT contemplating this action out of financial necessity. We could continue publishing a printed newsletter indefinitely. The reason we're considering this is that a significant number of our members read the PDF version when it's available on the RWK website, and then don't bother to look at the printed version when it comes in the mail. And we could probably make better use of the funds now used to print and mail the Chawed Rag.

2. If we do decide to go PDF-only, or maybe I should say PDF-mostly, we can still accommodate those members who would much prefer a printed newsletter. Just let us know if you think you can't deal with the PDF newsletter. If you don't speak up we just have to assume that everyone will be happy with PDF.

RWK Beacon Project - A group of RWK members – Dave Russell, Doug Kilgore, Mark Culross, Carl Solomon, and I – are building a 10 meter CW beacon that will fly as part of the North Texas Balloon Project balloon flight on April 28th. The balloon will take our transmitter up to 90,000 feet before it bursts due to reduced air pressure (the balloon expands as it rises, getting bigger and bigger until finally it just pops). A parachute will return everything safely to earth.

We are building a 500 mW beacon transmitter, and plan to use a ½ wave vertical dipole as an antenna. (Continued at right, bottom).

RWK Meeting Minutes

The March Meeting of RWK called to order by President Bob Kmak, K5WO at 7pm.

Bob Kmak indicated a local group was building a 10 meter cw beacon for an upcoming balloon flight. All interested were invited to participate in this.

The printed newsletter was discussed. (The last President's column in the RWK Newsletter also discussed this issue.) The printing and mailing of the newsletter takes up 75% of the current RWK budget. It was mentioned several other local clubs have gone to all electronic delivery of their club newsletters. Discussion followed for 10 minutes. Postage rates are going up again in May 2007. The Board will address this issue.

The May 19th planned Saturday breakfast may need to be rescheduled as that is the WildRide weekend and many club members will be involved in that.

The door prize of a 1 gig flashdrive was won by Glen Peasely (no call).

A program on software defined radio (SDR) was given by Duane Baade, W5PNM. Lots of experimental software is available in the public domain.

A second program on Amateur Radio and the International Space Station was given by Iain McFadyen, KI4HLV/6Y5. This showed the Vienna Wireless Club effort to successfully bring amateur radio to the Centerville High School for a talk between the students and an astronaut aboard the ISS.

Submitted by Bob Voss, N4CD, RWK Secretary

=====
Bob continued ...

The entire flight lasts just 2 or 3 hours. But if the band opens while our beacon is aloft, we could get some DX QSLs! For more information on the North Texas Balloon Project see <http://www.arbonet.net/>

73, Bob, K5WO

CHARLIE'S WHISTLE

By
Bob Beaudet, W1YRC

These are the days when the propagation experts are trying to figure out exactly when the minimum of our current sunspot cycle, #23 will occur and of course, when the next cycle will officially start its rise. Of course, none of them agree on the details. Cycle 24 is predicted by some to begin in late 2007 or early 2008, which is about six months to twelve months later than scheduled. Cycle 24 is expected by most scientists to reach its peak sometime in 2012. The precise date of cycle 23's end and 24's start will actually be determined empirically, probably six months past that date when the experts look back and see that the observed monthly numbers bottomed out and started rising once again. National Center for Atmospheric Research (NCAR) scientists predict that the next solar cycle will produce sunspots across an area slightly larger than 2.5 percent of the visible surface of the sun and its activity could be 30 percent to 50 percent stronger than the last one. Wow!

New hams who have become licensed in the last few years don't know what a wide open band ten or twelve meters can sound like but they surely will find out. This should be quite a show, better than most of us have ever seen. According to the NCAR forecasts, Cycle 24 should be nearly the greatest in intensity that the world has seen in the two centuries for which it has recorded data. The solar flux forecasts suggest that upcoming Cycle 24 will be second in intensity only to Cycle 19 which peaked in March, 1958 with a smoothed maximum number of 201. Cycle 19 stands as the greatest intensity in recorded history. So boys and girls, fasten your seat belts. We're in for quite a ride.

At most meetings, Charlie's club normally includes station reports from each member as part of its meeting routine. When attendees are especially numerous or they have a special program planned for the meeting, they skip station reports in the interest of time but it is always interesting and encourages members to be at least somewhat active during the month so that they have something to report. Newer members of Charlie's club are always amazed when Charlie pulls out his list and reads off the stations he has worked in the last month. Most members will go home and listen at the times Charlie listens but most never hear what Charlie hears and works. Charlie has explained several times that during the low side of the sunspot cycle, it's essential to listen deep for weak signals. Every morning, Charlie listens in the predawn hours to his favorite, the 40 meter CW band. Most every morning, Charlie manages to hear impressive DX when others do not. Of course, his 40 meter beam antenna is helpful but Charlie's operating skill is the biggest difference. Some operators who learned their DXing skills during the high sunspot numbers in Cycle 23 seem to not hear signals that aren't strong enough to move their S meter whereas old timers actually look for those very thin signals. That's where the good DX is usually lurking, amidst the crashes of noise.

At Charlie's last club meeting, Charlie's station report was unusually short. He talked about his and Mary's trip to Orlando in February and his experiences at HamCation but not very much concerning on air work. Still, compared to others in the club, Charlie was very active indeed. His report included a couple of dozen DX calls including some far eastern stations and long path southern hemisphere contacts on 40 meters during the dark hours between 0700 and 1000 UTC. Other members listened and smiled because they knew that Charlie's report meant that despite the fact that they never hear anything, Charlie surely does and it gives them all hope that some day, maybe soon, the bands will return for them also. They can remember the days of high sunspots when they would work Europeans on 10 meters from their 25 watt mobiles while driving to work and ZLs and VKs at dusk on their way home or to club meetings.

As is customary, the president asked Charlie after the station reports were completed to give the members his synopsis of conditions and how he sees the next cycle coming along, once it does start its climb. Charlie was pleased to oblige of course and was able to speak off the cuff without preparation. Experience in his working life as well as his DX ham career prepared him quite well to easily speak to people without pages of notes or hours of prep work.

Charlie proceeded to tell the club members, "Cycle 24 is now warming up its engines and within the next year, will begin its climb. Solar cycles tend to be sawtooth shaped with rise-times much shorter than fall-times. So, once the rise has started, good band conditions on ten and possibly six meters may start within a year. That means that by the fall of 2008, we should be working Europe regularly during daylight hours on twenty meters and occasionally on fifteen and even ten. By fall of 2009, twenty should open around the clock, fifteen should be open most evenings until midnight and ten and six meters will open to world wide DX. Now is the time to get ready for what probably will be the best DX

conditions in the next 25 years. Don't wait for the next solar peak to put up the new antennas you have been dreaming about or you'll get them installed just in time for the big decline into relatively poor conditions that may last for another 20 years."

Charlie explained to his fellow club members, "NASA solar physicist David Hathaway has predicted that the following cycle after #24 will be extraordinarily weak, with its peak high smoothed sun spot number at only about 75 to 80 which is not much different than our present readings and we're near the bottom of this cycle. Most of you think our bands are dead now." Charlie was firm in pointing this out, "All of you who enjoy the kind of wide open band conditions that you remember in the 'good old days' would be very well advised to spend some time this summer to pull your ten and six meter beams out of storage and getting them back up into the air. This may be your last opportunity to use them for thirty years. Cycle 24 may very well hit an index of 100 by 2008, 135 by 2009, 160 by 2010 and 180 or higher by the expected peak in 2012. The bad news is that after that, the downslope of Cycle #24 will be very sharp, dropping to an index that could be as low as 25 to 50 by 2015, lower than existing conditions today."

Charlie looked around the room and said, "I surely don't want to shock anyone but for those of you who don't think you can work DX during low sunspot years, you had better spend serious operating time during the next few years and enjoy Cycle 24 thoroughly because some of us won't be around when high sunspot conditions like this might come around again, possibly well after 2025."

Charlie realized that he had shaken the new hams with what he said, especially those over the age of 60. But then the old DX master smiled and said, "You know, it's not all bad news for you guys who just bought new \$12,000 transceivers. You'll have a great time chasing DX for the next several years. But, I'm very serious when I tell you this. You'd be very well advised to sharpen your operating skills because in the years after 2013, your normal mode will require you to listen deep on the so called low bands and know how to pull weak DX out of the noise. If the scientists are correct, during those years, band conditions above 20 meters will be fairly quiet. Your best bands will be 40 and lower in frequency."

Charlie figured that he had shocked his fellow club members sufficiently for one meeting so he stopped and asked if anyone had questions. A few hands went up and Charlie picked one. It was Harold, a new retiree. He asked, "Charlie, are you concerned with this news?" Charlie thought for a moment and smiled. "Not really, Harold. My favorite band is 40 meters. It should continue to produce DX for as long as I'll be around. Propagation on 40 isn't shut down as it is above 20 meters." Another hand went up. It was Emily, the 12 year old daughter of Jim, the club treasurer. She just upgraded to General under the new FCC ruling that dropped the code test. "My dad says that I don't need to worry about what you said at all. I'll be able to work anything I want to work." Charlie grinned and said, "Well, that may be true, Emily. Your dad isn't a DXer but there's still hope for you." The members laughed at that comment. Then Charlie went on, "Seriously though, if someone never cares to work anyone beyond another ham ten or twenty miles away, he or she will probably not be affected. Read up about ground wave and propagation using ionospheric reflection. Over the next sunspot cycle, you'll experience some outstanding conditions on fifteen, twelve, ten and six meters. You'll contact other young hams across the country and in other countries for several years during the next cycle. After doing that for a while, you may discover that DXing is a lot of fun. But, be sure your school work always comes first." Jim, her dad, applauded at that. Several others joined in.

Charlie looked around the room. There were no more hands, so he thanked the president and sat down. The president thanked Charlie for his terrific impromptu lesson on sunspots and added his own admonition to the members, "Folks, Charlie generally knows what he's talking about. I can see plenty of antenna work taking place this summer and fall. I know that I'll be pulling my six meter antenna out of the rafters in the barn."

Then, the president asked if the membership had any ideas after hearing Charlie's talk. One hand went up. It was Andy who had just graduated last year with a Mechanical Engineering degree. "Mr. President, I'd be willing to design a combination ten and six meter yagi and donate some stock for members to build an inexpensive and small beam for those bands." Another hand went up. It was Mike, Charlie's good friend who is a serious flea market dealer. Mike said, "I know where I can get plenty of tubing that would be perfect for a small beam like you have in mind. I'll donate some and help fabricate the pieces."

The president said, "Well this sounds like a terrific club project for the fall. Let's name Andy and Mike to head up the committee and pull in some others if you need them. By next meeting, can you publish some cost figures of what someone could expect to pay for one of these antennas?" Both Andy and Mike nodded and said they would do so.

On the way home from the meeting, Charlie heard from Mike on the club repeater, "Say Charlie, that was a great idea that Andy had, wasn't it?" Charlie replied, "It surely was. I wish I had thought of that myself. I need one of those ten and six meter beams myself and so do you. Neither of us has much of an antenna for those bands. We both could use one and building two yagis on a common boom is a great idea. It's good that we have some smart kids in the club, huh?"

Andy had been listening on the repeater and took advantage of the long pause after Charlie made his comment to Mike. Andy picked it up and jumped in saying, "While you were talking at the club Charlie, the idea hit me. Most of us in the newbie crowd don't have an old ten meter beam in storage. The club needs building projects and this would be simple and inexpensive for any member to build and it would be very useful as well. It would be fairly small and easy to put up using a TV rotator and it wouldn't have to be very high either. A full wave on 10 meters is only 32 feet." Mike picked it up, "Charlie, it's as you just said. It's a darned good thing that we have some smart kids in the club." Charlie replied, "Amen brother!"

Ben Franklin once said, "By failing to prepare you are preparing to fail." Charlie and his friends are preparing for the great conditions that we'll experience soon and in that preparation, they'll make themselves ready for the much different conditions that will follow. We all should follow their lead.

Program for April 2007

The April meeting program will be by our own Forest Cummings, W5LOQ titled Series, Parallel Impedance transformations of L, C, and R Networks. The transformation is related to a very simple but elegant relationship involving the Q of the network. There will be practical demonstrations showing why these transformations are important in the operation of a station. Forest has had years of experience in the Electrical Engineering field with many years with Collins Radio and then later with E Systems.

New Member

Welcome Bill Reed, WD0ETZ.

Dues & Newsletter

If you have not renewed your 2007 RWK dues, this will be the last Chawed Rag you receive as we will be culling the mailing list after this mailing.

Cookies

The RWK provides regular coffee and decaf coffee. Volunteers bring cookies and help setup and takedown the coffee/food. Volunteers for the remainder of 2007 include: April: Don Bowen, K5LHO; May: Forest Cummings, W5LQU; June: Bob Kmak, K5WO; July: TBD; August: TBD; September: Bing Borschow, N5XP; October: Hal Wolff, N5BT; November: TBD.

RICHARDSON WILD RIDE BIKE RALLY - PUBLIC SERVICE EVENT - SAT., MAY 19, 2007

It's that time again! The 2007 Richardson Regional Cancer Center's Wild Ride Bike Rally is scheduled for Saturday morning, May 19. The rally starts and finishes at the Verizon Business building in Richardson. The 64 mile route travels out through Wiley, across the Lake Lavon Dam, out to Josephine and then back again. Four rest stops will be in the same places as last year.

[Http://www.wildridebikerally.com](http://www.wildridebikerally.com)

Operators are needed for key person shadows, for rest stops, for rovers with APRS to man SAG wagons. Stand-alone APRS trackers are needed to place in non-ham SAG wagons. Again this year we will connect each rest stop to the internet to transmit digital pictures and messages to Net Control in real-time. Operators with laptop computers and digital cameras are needed to man the rest stops.

To volunteer, contact Doug Kilgore KD5OUG kd5oug@arrl.net Ph 972-231-8539 or Jay Pinkerton KE5FMS jaypink@swbell.net Ph 972-467-0478.

Financial Report

NET WORTH

3/24/2007

ASSETS

Cash and Bank Accounts	
Checking	1,695.65
Savings	1,210.00
Cash Account	80.00
TOTAL ASSETS	2,985.65

LIABILITIES

0.00

OVERALL TOTAL

2,985.65

INCOME/EXPENSE 1/1/2007-3/24/2007

INCOME

50-50 Raffle	32.50
Dues: 2007	528.00
Gift Received	40.50
Interest Inc	0.51
TOTAL INCOME	601.51

EXPENSES

Bank Charge	40.35
Newsletter-print & postage	186.36
Website	46.20
TOTAL EXPENSES	272.91

OVERALL TOTAL

328.60

Meet the Member - Bob Kmak - K5WO

Born: Chicago, Illinois October 31, 1952.

Grew Up: Chicago, moved to Texas in 1986.

Occupation: Software Engineer.

Guests at Dream Dinner: John le Carre, Graham Greene (the author)

What's in the Shack: HF: Kenwood TS-850 and Heathkit SB1000. VHF & up: Icom 910H, Yaesu FT-100D (IF rig for microwave transverters), Transverters for 902 and 1296 MHz, plus 10 GHz. In the air: TH7 at 70', 10 el 2 meter at 72', 2 el shorty-forty at 80'. Yagis for 432, 902 and 1296 sidemounted with rotor at 50'.

Current Ham Efforts: RWK 10 meter beacon/balloon flight project, building a 30w amp for 1296.

What Most People Do Not Know About You: I stole my first ARRL Handbook from Allied Radio in Chicago, in 1966. OK, so I didn't exactly steal it, but they sent it to me by accident with a parts order for a science fair project, and I never sent it back. I was a larcenous little brat.



**The Richardson Wireless Klub
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Richardson, Texas 75083-0232**

First Class Mail

10 Meter Beacon Construction



Future Events

May 07 - Monday - Meeting-on-the-Air, 7:30 PM
May 07 - Monday - Richardson RACES Net, 9:00 PM
May 14 - Monday - Monthly Meeting, 7:00 PM
May 19 - Saturday - RICHARDSON WILD RIDE BIKE RALLY (PUBLIC SERVICE EVENT)
May 19 - Saturday - Breakfast at Luby's, 8:00 AM (TENTATIVE, THIS MAY CHANGE!!)
May 21 - Monday - Richardson RACES Net, 6:30 PM Dinner at Southern Recipe

June 04 - Monday - Meeting-on-the-Air, 7:30 PM
June 04 - Monday - Richardson RACES Net, 9:00 PM
June 08-09 - Friday & Saturday - HAMCOM, Plano, TX
June 11 - Monday - Monthly Meeting, 7:00 PM
June 16 - Saturday - Breakfast at Luby's, 8:00 AM
June 18 - Monday - Richardson RACES Net, 9:00 PM

July 02 - Monday - Meeting-on-the-Air, 7:30 PM
July 02 - Monday - Richardson RACES Net, 9:00 PM
July 09 - Monday - Monthly Meeting, 7:00 PM
July 14 - Saturday - Breakfast at Luby's, 8:00 AM
July 16 - Monday - Richardson RACES Net, 9:00 PM
