



Remote Operating Position of N3AM

CWops “CWT”

Every Wednesday

Regular Tests: Full Speed

Start times: 13Z, 19Z, 03Z (+1)

1-hour each session

Exchange: name/number (members)
name/SPC (non-members)

CWops “neighborhood”

Look for CWops on 1.818, 3.528, 7.028,
10.118, 14.028, 18.078, 21.028, 24.908, 28.028,
50.098

CWops Officers and Directors

President: Rob Brownstein [K6RB](#)

Vice President: Peter Butler [W1UU](#)

Secretary: Jim Talens [N3JT](#)

Treasurer: Craig Thompson [K9CT](#)

Director: Bert Donn [G3XSN](#)

Director: Vidi La Grange [ZS1EL](#)

Director: Nodir Tursoon-Zade [EY8MM](#)

Webmaster: John Miller [K6MM](#)

Editor/Publisher: Rick Tavan [N6XI](#)

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President's Message

As 2014 draws to a close, and 2015 begins to



emerge, let's take stock of our successes this year. Our CW Academy program is extremely popular and we encourage more members to volunteer as advisors because, as I've said many times, we are supply limited and

not demand limited. Just to give you an example, our Sep-Oct 2015 list is now closed (150 signups) and we are more than 15 signups into our Jan-Feb 2016 list! So, if you've thought about helping out, this would be a great time to take that step.

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When Rick N6XI volunteered to take over as editor of *Solid Copy* two years ago, I was thrilled. Having known Rick for probably 20 years now, I knew him to be a conscientious and quality-driven guy. His work on *Solid Copy* has been exemplary. The newsletter has become even more diversified and interesting. Thank you, Rick.

CWT continues to grow in popularity, and the change to a weekly event has, if anything, increased its popularity. During 2014, CW Academy has made use of CWT as a training exercise, too. Our Level 2 and 3 students are given weekly assignments which accomplish two key things: it increases overall participation; and helps them learn how to copy faster and use proper contest procedures.

QTX remains a very popular program, too. We are not seeing huge increases in the numbers of members who report their QTX points, but the number of QTX points continues to grow. That is indicative of more conversational QSOing going on. And that's a good thing. CW can be more than contest and DX exchanges. It can be a way for people to get to know one another, too.

The CW Open, like other contests in 2014, saw some attrition in logs submitted and participation. Yet it remains popular enough that someone could do a full four-hour session without running out of stations to work. This is the first year we have expanded our awards beyond single winners in each session to winners in each ITU region for each session. It is still early to determine if that will draw in more players, but we will continue with that program in 2015.

Our ambassador program is going very well. For example, since its inception, we have had ambassadors represent CWops at events in the UK and US (including Hawaii). In addition, several ambassadors have reported that they have attended local ham club meetings and given presentations about CWops and CW Academy. So the ambassador program is doing exactly what it was intended to do – it is helping to spread the word about our club and its programs, and gives hams worldwide a person to contact with questions about us.

Some of our members in parts of New York were hit with a major snow storm. Snow depths of as much as seven feet (two meters) have been reported. As winter begins in earnest in the northern hemisphere, we know that severe storms can occur. We hope that our members in areas noted for severe winter weather will come through the winter season in good health and with minimal disruptions. Stay warm.

Finally, after a very successful two year stint as manager of CWT, my colleague and friend, Hank W6SX is stepping down. Hank has been an enthusiastic manager who participates in practically every CWT session. So, it was a difficult problem for me to find someone I thought would be able to fill Hank's shoes. I have appointed Rich VE3KI as the new CWT manager starting in January. Those of us who are regulars in CWT know that Rich, like Hank, has been a stalwart player. So as December progresses, please let Hank know how much you appreciated his efforts, and as January begins, please give Rich your full support by participating in CWTs in 2015.

73,

Rob K6RB

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From the Editor



Big Deals!

November has been a big month for CWops. Record numbers of hams are graduating from [CW Academy](#). This program truly distinguishes CWops, both the organization and our active members. Our efforts are not going unnoticed in the rarified air of major ham radio advocacy organizations, with an “attaboy” received recently from Dave Sumner K1ZZ, CEO of ARRL. The [2014 CW Open results](#) are out and included in this issue of *Solid Copy*. The CQ Worldwide CW contest takes place the last weekend of the month, widely regarded as “The Big One” among radiosport competitors. And finally, the U.S. Thanksgiving holiday is Nov. 27, always a Thursday and usually resulting in over-fed U.S. competitors staggering to their shacks for CQWW CW. Other feature material in *Solid Copy* this month includes a [whimsical radio blessing](#) from Jerry AC4BT and an overview of his [remote radio configuration](#) by John N3AM.

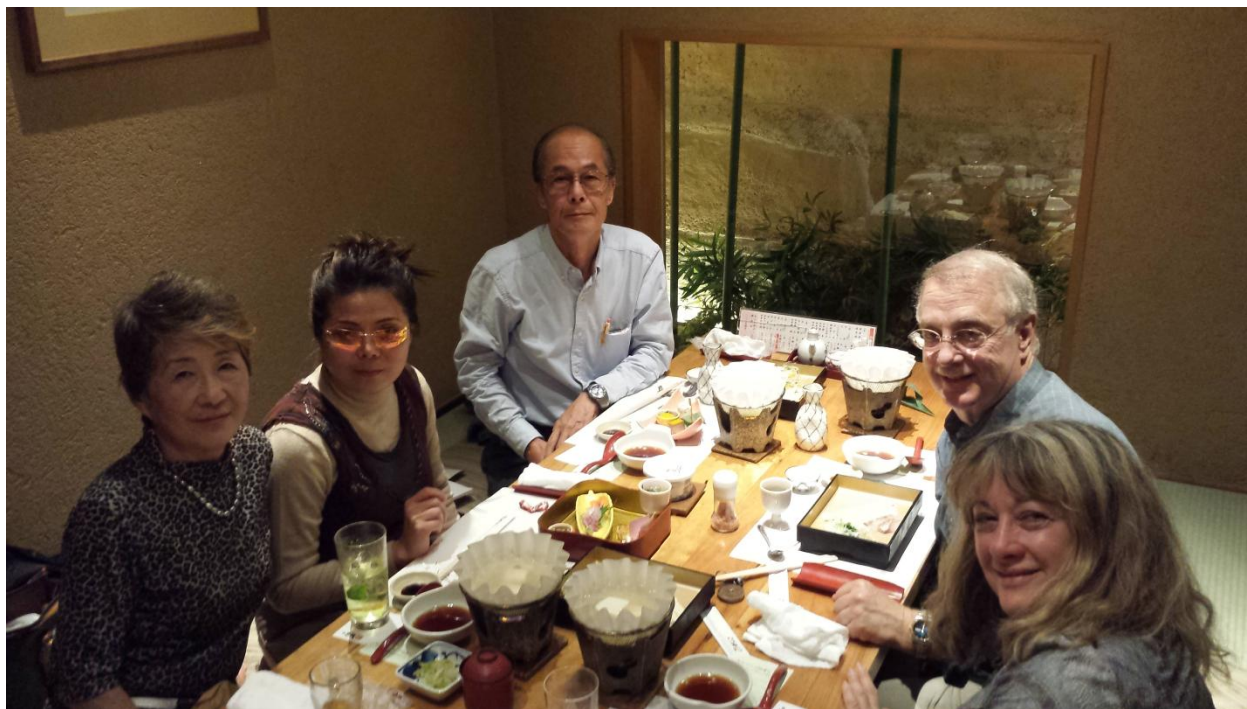
Speaking of blessings and giving thanks, please allow me to reflect on the US holiday of Thanksgiving, a secular holiday that resonates with almost everyone. It is my personal favorite holiday of the year, celebrating the giving of thanks by English pilgrims who arrived safely and survived settlement in North America 400 years ago, many of them fleeing religious persecution and all seeking better lives in the “New World.” Wisely, this national holiday corresponds to no particular religious faith. It belongs to all faiths as well as those of no faith. We should all take time to be grateful for what is good in our world and in our lives.



I will be attending an inter-faith Thanksgiving service, an annual event in my Silicon Valley community, sponsored by our local ministerial association and rotating annually among some fourteen different places of worship. That group counts among its current members clergy from Catholic, Jewish, Mormon, Muslim, Orthodox Christian and Protestant institutions and welcomes all other faiths as they establish themselves in our small city of Saratoga, CA. They have an outstanding record of interfaith cooperation, dialog, respect and mutual admiration. That kind of pluralism is nothing new to radio amateurs, as our hobby transcends national, civic, religious and ethnic differences. We are

all united in our common love of radio. But around the world, millions of people do not enjoy such freedom and inclusiveness. We hams can be proud that we do our small part to show the rest of this big world that all people are equal and that our differences should and do make us all richer. I am thankful to live in a modern, pluralistic society, and I long for the day when every man, woman and child on this beautiful planet can live together in peace.

Jim N3JT sent along another photo from his JA trip, a dinner party with JA3AVO:



73,

Rick N6XI

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News & Notes

Jerry AC4BT

This is a column where members can report their activities, happenings and achievements, both radio-related and personal. Please send brief notes to Jerry AC4BT at jveisskohl@gmail.com

Rob, K6RB: While I was in Israel in November I visited Vic 4X6GP (K2VCO), at his new digs in Rehovot. He has a very nice set up. He's on the top floor of a nine floor apartment building with a vertical on the roof and a shack up there, too. It was around 12:15 PM and the K3 was barefoot on 15M. With one CQ I worked 9A9C followed by R1AGW. I was 4X/K6RB.

When I got home, I had to reassemble my disassembled station (my house was being painted) and hoped for the best. Usually in situations like this, something doesn't work when you put it all back together. This time I lucked out. Not only was it working ... it was working better! And I reduced the number of power supplies from three to one, so both K3s and all 12 volt accessories are working off the same ASTRON 12 volt supply. I also got rid of a bunch of things that were no longer connected but were still cluttering the floor behind the desk. So now I have a newly painted shack and a newly configured station.

Below is a picture of 4X6GP (L) and K6RB (R) at Vic's QTH in Rehovot, Israel:



Jim, N3JT: Jim and Nina have relocated for the winter to Boynton Beach, Florida. Jim is using his Virginia station remotely but also has a vertical antenna in Florida.

Fabio, IK0IKI: I took part in the 2014 GQRP Club Convention in Rishworth, UK.

A warm welcome and interesting event indeed.

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How We Were – W1RM (K2UVT)

by Hank W6SX

Here is CWops Founding President, CWops #8, W1RM, aka K2UTV and W1BGD, 1957.



Please send YOUR How We Were to w6sx@arrl.net.

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Grounding , the Vatican and a Miracle

Jerry Weisskohl AC4BT

I have two radios in my station, both K3s. One is attached to a KPA500 amp that puts out about 500 watts and the other is attached to an Alpha 8410 Amp capable of 1500 watts. I have two separate power supplies, stacked one on top of the other, for the two radios. The power supplies have rubber feet so there is electrical separation between them.

I don't use the Alpha 8410 often but the last time I did I noticed that my power supplies were getting very hot to the touch. Usually they might get a little warm after many hours of use but not this hot. Apparently, RFI from the Alpha amp was getting into the power supplies. I have had no RFI problems just using the K3 that is paired with the KPA500 amp.

I examined my station and noticed that the only thing I hadn't grounded was the power supplies. I had several unused, tinned, copper braid assemblies in the shack so I went ahead with the grounding work. It was now about 1:00 in the morning local time and I turned on the K3 to listen to 80 meters while I did the work. The grounding lug on the power supplies was located on the bottom and I had to use a square piece of wood between the two power supplies to ensure that the grounding assemblies didn't touch any metal part of either power supply.

I just finished the work when I heard the Vatican City station, HV0A, begin to call CQ on 80 meters. It didn't take long before there was a huge pileup. HV0A was not very loud. Unfortunately, the noise level was and I wasn't sure that 500w was going to do it. I turned on the Alpha amp but had to wait for it to warm up (about 3 minutes). So I used the K3 with the KPA500. The other stations in the pileup had booming signals so my usual strategy of following the DX station wasn't going to work. I went up about 1.5 in frequency and starting sending my call. HV0A was working the rest of the pileup further up so I was in the clear, albeit a bit lonely. I looked at my panadapter for the activity and noticed one station after another start to disappear from the waterfall display after being worked. Pretty soon the pileup was almost gone and there were only a handful of stations left. Sure enough HV0A came back to my frequency and picked me up. I heard my call copied correctly and immediately looked up towards the sky (OK, ceiling, since I was in the basement) and said "thank you!"

By this time the Alpha amp was ready to go. HV0A QSY'ed to 40 meters, which generated a much bigger pileup than on 80 meters and I quickly switched to my other station with the Alpha amp. Now using 1500 watts I headed straight into the pileup and HV0A picked me up on my first try!

Within a few minutes I had worked Vatican City on 80 and 40 meters. I got down on one knee and "crossed" myself. (OK... technically I am not Catholic, but I've seen enough movies on how to cross yourself and after all I was sincerely grateful for my new-found good fortune.) I went over to look at my power supplies and they were barely warm so the grounding was successful and had eliminated the RFI issue.

I shut the station down, uploaded my new log entries to LoTW and went off to bed, stopping to once again get down on one knee and cross myself and say one last “thank you” prayer. When I awoke the next morning I turned on my computer, logged into LoTW and found two confirmations waiting from HV0A!

It’s a miracle!

Now I’m thinking, what could be accomplished if I had a vial of Holy Water blessed by the Pope! What a joy it would be to see my call sign atop of the DXCC Honor Roll leader board...

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My Remote Rig Setup

John Silva N3AM

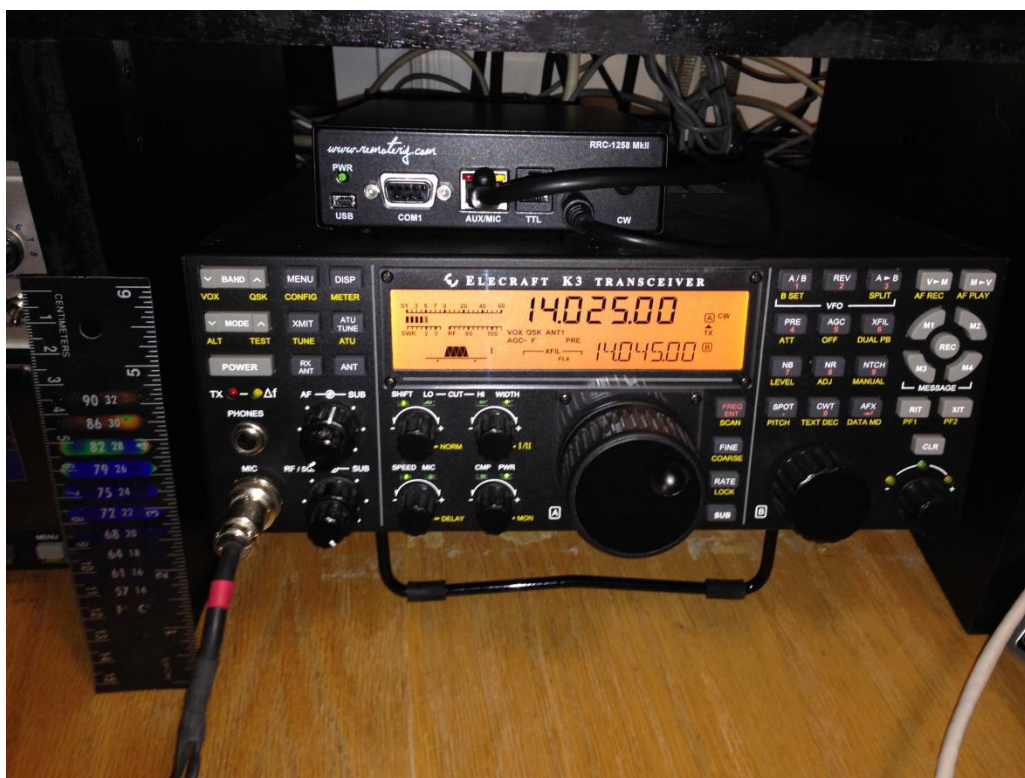
Since mid-October, I’ve been operating my Maryland station via remote control from our winter home in Boynton Beach, FL. For this season, I have full control of the K3/100 and Green Heron rotator control box. Next year I will add remote control of my Alpha 87A, using a second USConverters XS1000 server module. I was pleasantly surprised to find that there is virtually no Internet latency when operating the station from 1,000 miles away. Keying sounds quite good, based on on-air reports.

Here’s an overview of the shack in Maryland:

- On the far left is the Green Heron rotator controller interfaced via a virtual COM port on my MacBook Pro in Florida using the USConverters XS1000 server module (small box on the right), which does the translation from Ethernet to RS-232.
- The Foscam web camera can rotate for a view of the Green Heron readout or the P3 band scope, as well as thermometers to monitor indoor/outdoor temperatures.
- The K9AY control box is on top of the P3 fixed on Europe (no remote control, other than the ability to turn it on or off via the K3)
- K3 with the RRC-1258 MkII RemoteRig interface.
- Above the K3 is a Drake matching network used for 75M, but not part of the remote set-up.
- On top of the Drake MN2700 is the Top Ten band decoder which reads the band data from the K3 to switch antennas.



Detail of the RemoteRig Controller and K3:



Web Power Switch 7, from Digital Loggers, Inc. which provides individual remote control of eight outlets. A Netgear Ethernet switch is in the front of the photo.



The remote control set-up at our QTH in Boynton Beach, Florida appears on Page 1 of this issue.

- MacBook Pro running Parallels and Windows 7, with N1MM logger
- K3/0-mini with the RemoteRig RRC 1258MKII control interface
- CW keying with a Bencher paddle is provided by the RemoteRig box, and N1MM keying also works, via a virtual COM port

Screen shot of of N1MM on the MacBook. The Rotor Control window and Foscam image of the P3 band scope can be seen above the logging window.

The screenshot displays a complex radio software interface with several overlapping windows:

- Packet Window:** Shows a list of received packets with columns for 'Packet', 'Telnet', 'Type', and 'Close Port'. It includes a search bar and a 'VE7CC-1' label.
- Frequency Log:** A table listing various frequencies and their corresponding call signs or modes. For example, 'J28NC' at 28042.1 and 'J28NC' at 28042.1.
- Rotator Control:** A window titled 'N1MM Rotor Control' with a 'Turn' button and a display showing '0'.
- Call Log:** A window titled '21025.03 CW Elecraft K3 VFO A' showing a list of calls and frequencies. It includes a 'Log It' button and a 'Spot It' button.
- Aircraft List:** A window titled 'Elecraft K3 VFO A' showing a list of aircraft frequencies and their corresponding call signs. It includes a 'Wide' button and a 'SH/DX' button.

73,

John N3AM

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CW Academy

Jack W0UCE



Club Members, Level II and III Class Graduates
We need you! Join CWA's Pair of Jacks
for Level I, II & III Associate Advisor Training
Workshops coming in December!
To register - e-mail wOuce@nc.rr.com

73,

Jack

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CW Academy Report

Rob K6RB; Will, WJ9B; Jerry, AC4BT

CW Academy had a record-breaking semester that ended in October. We had, at last count, 79 graduates of Levels 1, 2 and 3. In addition, we have added several new advisors to our advisor corps: John Harden VE3VGI, Mike DeLong KD8RQE, Don Jones K6ZO, Andrew Barkley WB7DKZ, and Jose Campione, VA3PCJ.

We've made a few changes to our courses during 2014. Our basic course – Level 1 – has been improved by introducing early on the copying of short phrases in addition to individual words. Levels 2 and 3, which had been more or less customized to individual aspirations has become more structured while preserving that customization. Many MP3 files have been created that simulate typical QSO messaging, including abbreviations. These can be played at 15, 20, 25 and 30 wpm, thus meeting the needs of Levels 2 and 3.

In addition, we've begun assigning our Level 2 and 3 students to make use of our weekly CWT events. They are instructed to operate S&P and work successive running stations after having copied call sign and exchange. Each week they are given progressively higher quotas. And, as we've seen, their call sign and number copy skills improve dramatically. As another resource for learning to copy call signs and numbers, we have our Level 2 and 3 students use Morse Runner in single-call mode, and again they are asked to seek continuous improvement in number of calls copied and in accuracy. They love it.

With our Level 1 program representing at least two thirds of our signups, we are seeing an increase in demand for Level 2 as these students complete Level 1 and want to continue improving. We anticipate that this will also increase demand for Level 3 downstream. So we have a need for new advisors and experienced advisors to work with Levels 2 and 3 signups.

For those who hesitated volunteering to advise Level 1 beginners, Levels 2 and 3 offer a way to begin working with students who are already capable of copying and sending at 15 WPM or faster, and simply guiding them in their self-study to higher levels of competency. For example, I received an email from one of my recent Level 3 graduates who said, in essence, "my ease in copying at 25 WPM has now been stepped up to 35 WPM in just eight short weeks."

For those of you who are focused more on QTX than CWT, here's your chance to influence new CW operators in the finer art of conversational QSOing. Help them become proficient rag chewers, too.

Here is the list of our recent graduating class. If you work any of them, remember to give them a "congrats on CWA."

Level 1:

- 1) N0XC
- 2) WB4OWC
- 3) W2RFN
- 4) KC0WHR
- 5) KD0UKC
- 6) N5EVE (ex KE7AHG)
- 7) KV4WV

- 8) KD0VAS
- 9) KF5RDN
- 10) W5BXE
- 11) VE3NWN
- 12) K1QED
- 13) AK4IC
- 14) KD2FVG
- 15) N8FE
- 16) KD2CAP
- 17) WY0M
- 18) KC9LIF
- 19) KC0UDT
- 20) KD2DGM
- 21) NB5N
- 22) KB1ZIR
- 23) KW1L
- 24) KJ4DEM
- 25) W4FLN
- 26) K1RWR
- 27) AJ4HP
- 28) N4CR
- 29) K5CID
- 30) WR7Q
- 31) KV4JQ
- 32) KB1MEE
- 33) KB1ZEB
- 34) KC1APK
- 35) KV4TE
- 36) VE8IR
- 37) KJ6NGF
- 38) WH7TT
- 39) KF7PXT
- 40) KJ4IOR
- 41) WP3ME
- 42) KB1VX
- 43) ZS6AKU
- 44) N6TMT

Level 2:

- 1) KK6CHF
- 2) KB6VME
- 3) KD7UI
- 4) AG6FU
- 5) WB7DKZ
- 6) N3BXY
- 7) W9MIC

- 8) KJ3Q
- 9) N4KD
- 10) K3SEN
- 11) W2VM
- 12) NG1R
- 13) KC2ZBZ
- 14) KJ4CC
- 15) KE6K
- 16) NI2F
- 17) N5IKD
- 18) WW0K
- 19) KI5IO
- 20) N4JGD
- 21) VA3PJC
- 22) WU8R
- 23) OZ4WIL
- 24) G8VR
- 25) 2EODCW
- 26) G3XLG
- 27) M0NAX

Level 3:

- 1) WU7F
- 2) AB7MP
- 3) K7KY
- 4) WR5J
- 5) VE3VGI
- 6) KD8RQE
- 7) KC7ZO

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CWops Ambassadors' Report

Rob K6RB

Our CWops ambassadors have been getting the word out about CWops and CW Academy. In the US south central, ambassador Dave W0VX has been busy. Here's his report:

"In the past few weeks I have presented my 'Why and How of CW Operating' to two additional clubs with good results. I continue to be surprised by the level of interest in the topic.

"On September 23 I gave the presentation to the Rockwell Collins ARC. There were only 12 members present but it was a good audience with lots of questions. Several members were very interested in the CW Academy.

"On October 14 I gave the same presentation to the McKinney ARC. There were over 60 members present for that one. Questions and follow up discussions went on for half an hour after the presentation with lots of interest in the CW Academy. Some 20 people picked up the information handout so I'm hopeful some will get in touch with the CW Academy."

A follow-on report from Dave is encouraging, too.

"On November 4 I gave my "Why and How of CW Operating" program to the Dallas Amateur Radio Club. About 50 hams were in attendance. The response to the program was again very good. There were over a dozen questions following the talk and some follow-up email exchanges.

The DARC makes the 4th club where I have presented the CW program. The response has been universally enthusiastic. The interest by the 'shack on a belt' Technician licensees has been the most surprising to me."

Sometimes we all have a tendency to dismiss shack-on-a-belt hams as lost to HF and CW. As Dave points out, we may be selling ourselves short. When a lot of these folks joined the ham radio ranks, local clubs had become life support systems for 2-meter repeaters. There were few, if any, CW operators on hand. So, these newcomers were not exposed to the joys of HF CW. I believe that if someone with only a 2M HT completes a Level 1 course they are far more likely to get an HF rig than if his/her only exposure to HF was via phone or RTTY.

Here's another thought. There are many HF ops who have never operated anything but SSB. We are getting our fair share of these signing up for CWT. But many of them have not heard about us yet. So let's make an effort, at least once a week, to plug in a mic and work one or two SSB operators. In the course of the QSO, find out if they operate CW. If not, find out why. If the answer is "I don't know much about it or how to start," then tell them about CW Academy. These people are already on HF and most have radios with CW built in. They just need our help and encouragement to entice them explore the CW mode. I'm planning to do exactly that – get on phone once a week and work two or three Qs. That would be 150 Qs per year, and I'll bet I find at least 15 candidates for CW Academy. How about you?

Lloyd KH6LC just reported in from Hawaii that he had a presence and handouts at the Big Island Hamfest on Hawaii. Lloyd was even flying our banner at the event. *[Alas, your Editor failed in his attempts to embed the flyer into Solid Copy. If you would like a copy, email [Lloyd](#). – Ed.]*

Our success as a club has not been through advertising and marketing. It has been largely through word-of-mouth and CWT events. By our ambassadors going to events where lots of hams show up, presenting to local clubs, and chatting with hams on phone, we have a chance to continue our bottoms-up approach. This is not likely to add new members in the short term. It is likely to add new competent CW operators to the HF bands. And once that happens, the increase in membership follows. For example, KD7UI, WU7F, AB7MP and WR5J were recent graduates of CW Academy. Today, they are also members of CWops. It's a natural progression.

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CWops Tests

by Hank Garretson W6SX

CWops Tests Participation Medals

We're coming up on the end of the year. Will you earn a CWops Test 2014 Participation Medal?

You earn one point for each CWT session in which you make ten or more contacts. You don't have to be a CWops member to earn points, but you must be a member at the end of the year when the awards are presented. To earn a Gold award, you need 60 points; Silver, 40 points; and Bronze, 24 points. The medals are really nice – scroll to bottom of page at <http://www.cwops.org/cwt.html>. Our objective is to encourage CWT participation – you don't have to be competitive to earn points, just active.

The above achievement levels were established in January 2013 when we had only six CWops Tests per month. In May 2014, we began weekly CWops Tests, but we didn't change achievement levels. Our thinking was, let's make 2014 a bonus year. Achievement levels may change for 2015.

And 2014 has been a bonus year. See <http://shake.bitjanitor.net/~jhetrick/cwops/topslist.txt>. As of 20 November, fifty-nine hams have already qualified for Gold, twenty-five for Silver, and thirty-five for Bronze. Many hams are close enough to still qualify for bronze. Others are in a position to move up a medal level.

Where will you be at the end of the year? Everyone, get on for CWTs. Move up a level. Or qualify for a Bronze. Let's have CWT fun.

Please note that the 0300Z session on New Year's Eve is actually 0300Z, 1 January 2015. This session will not count for 2014 Participation Medals.

New CWops Tests Manager

Effective 1 January, Rich, VE3KI will be your new CWops Tests Manager.

It has been my great pleasure to have been CWops Tests Manager for the past two years. Participation is up. Lots of hams who tentatively tried a CWT are now competent CWops members.

We're now weekly. We've graciously adapted when W1AW Centennial operations and DXpeditions popped up on our traditional frequencies. We've had a blast. Thank you everyone for all your suggestions, encouragement, support, and participation. You made my job fun. You are the greatest.

Prez K6RB hit a homerun when he asked Rich to be your new CWops Tests Manager. Rich is topnotch. Please give Rich all the super support you gave me.

CU Wednesdays, CW friends.

The first rule of CW is to have fun and to share the fun.

CW Exuberantly,

Hank W6SX

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CWops Awards

Pete W1RM and Peter W1UU

The Annual Competition Award (ACA) is based on the number of members worked each calendar year. You get one point per member worked, once per year. It resets to zero at the beginning of each year. The Cumulative Member Award (CMA) is based on how many members you've worked since January 3, 2010 on each band and continues to grow in perpetuity. The CWops Award Manager (CAM) software, available at no cost, will help you keep track of your ACA and CMA totals.

Call	ACA	CMA		Call	DX Total		Call	WAS		Call	WAE
AA3B	694	4494		W1RM	134		N5RR	50		W1RM	43
F6HKA	622	2972		F6HKA	113		W1RM	50		OH2BN	40
W1RM	599	3363		W4VQ	113		W4VQ	50		AA3B	37
G4BUE	579	1306		OH2BN	112		F6HKA	50		N5RR	37
VE3KI	569	2855		N5RR	94		W1UU	50		EA8OM	36
N5RR	534	3232		EA8OM	93		VE3KI	50		F6HKA	36
K6RB	489	2678		AA3B	85		G4BUE	50		W4VQ	36
W0VX	459	1969		DL8PG	84		AD1C	49		KR3E	34
DL8PG	426	1556		VE3KI	83		FG8NY	49		KZ5D	34
FG8NY	425	1866		EA1WX	82		K6DGW	49		G4BUE	34
F5MNK	421	727		PA7RA	79		K6RB	48		VE3KI	34
N1EN	417	973		W0VX	79		EA8OM	48		DL8PG	33
W9ILY	395	1943		KZ5D	78		GW0ETF	48		PA7RA	33
AD1C	375	1465		G4BUE	78		K1ESE	48		FG8NY	32
EA8OM	365	1284		K1ESE	77		KZ5D	48		W9ILY	32

KZ5D	336	3239	W9ILY	76	NN6T	48	W0VX	31
K1ESE	335	1421	KR3E	73	W0VX	48	K1ESE	31
GW0ETF	307	1193	AD1C	71	W6KY	48	EA1WX	31
W1UU	307	1542	NN6T	67	W9ILY	48	NN6T	29
WB9G	299	807	N1ZX	67	AA3B	48	N1ZX	28
W0EJ	239	594	W1UU	66	F5MNK	48	W1UU	28
PA7RA	215	1108	GW0ETF	65	DL8PG	48	F5MNK	28
N1ZX	215	826	FG8NY	63	KR3E	47	GW0ETF	27
W6KY	208	1573	F5MNK	57	N1EN	47	AD1C	25
EA1WX	198	1530	W6KY	54	W0EJ	47	N1EN	22
NU7Y	180	239	N1EN	51	WB9G	47	4Z1UF	21
K0DTJ	162	417	4Z1UF	50	EA1WX	46	K6RB	21
NN6T	160	1444	K6RB	49	N1ZX	46	WB9G	18
K6DGW	130	1200	WB9G	44	K0DTJ	45	W6KY	16
W5TM	121	235	W0EJ	34	PA7RA	44	W0EJ	9
WT2P	104	149	K6DGW	29	NU7Y	43	K6DGW	8
AB7MP	88	113	K0DTJ	23	OH2BN	42	G3XLG	8
G3XLG	62	84	WT2P	14	4Z1UF	36	G0DJA	7
OH2BN	45	530	NU7Y	11	WT2P	34	W5TM	7
G0DJA	16	23	W5TM	11	AB7MP	34	K0DTJ	6
SM6CNN	0	2392	G3XLG	11	W5TM	32	WT2P	4
N2UU	0	1774	G0DJA	10	G3XLG	22		
W4VQ	0	1787	AB7MP	3	G0DJA	8		
KR3E	0	1136						
PA4N	0	955						
OK1RR	0	893						
W5ASP	0	893						
WX7SJ	0	397						
PA1FOX	0	5						

73,

Pete W1RM

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New Members

Colin Jenkins KU5B

With great pleasure we welcome the following new members to CWOps:

1361	WB2UZE	Howard
1362	WR5J*	Curt
1363	KD7UI	John
1364	W5DV*	Chas
1365	G3XLG	Ray
1366	W4QO	Jim
1367	N7DXT	Gary
1368	VE7FO	Jim
1369	W6NEV	Marty
1370	K5YQF*	Cecil
1371	WB5BKL*	Nick
1372	AC8LJ	Eric

* = Life Member

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Current Nominees

As of November 26:

Need Sponsors: VE3VGI

Invitations Extended: N6KI, K6ZO, WB5BKL, K5YQF, AC8LJ

For more details about nominees and up-to-date status, check the “Members Only” pages on the Website: www.cwops.org.

For information about joining CWops, check the Website under “Membership.”

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QTX Report

Enjoying the Art of Conversational CW

QTX is a way of counting conversational CW QSOs. One point is awarded for each QSO of 20 minutes or longer. We have two ways to recognize QTX activities - the QTX Plaque and the QTX Achievement Medal.

QTX Plaque Standings

The QTX Plaque is awarded to the operator with the most QTX points at the end of the year. These are the standings at the end of October and year to date for 2014:

<u>Call</u>	<u>Oct</u>	<u>CY2014</u>
KI4XH	93	777
N5IR	88	587
WB6BEE	74	614
K5LY	62	487
K5KV	48	496
N1ZX	36	313
K4AHO	31	254
NN6T	22	365
KE6OIO	16	126
WA3NZR	13	139
IK0IXI	7	53
K8QI	5	51
K6HTN	4	33
N4SR		90
K0DTJ		79
JE1TRV		69
WA8IWK		69
K6RB		53
K6HP		46
N5RR		34
W6JMP		27
W5JQ		21
KC9EE		19
W4VQ		7
K6RQT		6
HB9CVQ		5
KC0VKN		5
K3GHH		3
ZS1C		2
N1EN		1

Fred KI4XH is back on top this month. Bill N5IR moves from first in September to second in October. Don WB6BEE, Lee K5LY, and Benny K5KV hold the same places as in September - third, fourth, and fifth.

The only personal best for October was KE6OIO.

Total QSOs were 486, down 14 from last month. Reporting stations were only 12, down 7 from September.

QTX Achievement Medals

QTX Medals will be awarded at the end of the year for 400 QTX points (Gold), 300 QTX points (Silver), and 200 QTX points (Bronze).

We are up to nine QTX Achievement Award qualifiers:

Gold Achievement Level

KI4XH
WB6BEE
N5IR
K5KV
K5LY
K1ESE

Silver Achievement Level

NN6T
N1ZX

Bronze Achievement Level

K4AHO

Since QTX Achievement Award totals can be submitted any time up until the end of the year, there may be some members just waiting until the end to send in their totals. That's fine; the more the merrier.

Submit Your QSOs:

Submit your monthly points by the 5th of the month to compete in the QTX Plaque standings. Submit your points anytime for Achievement Awards. There is still time to win an Achievement Award Medal.

Thanks to all for your participation.

73,

John K1ESE, CWops #792

QTX Manager

QTX – All About Conversational CW

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Upcoming CW Operating Events

Joe Staples, W5ASP

This brief list of operating events is intended to provide members with options for using and improving their CW skills in less intense and more casual on-the-air activities.

At times we [U.S. hams] tend to forget that our friends north of the border [VEs] are actually living in an entirely different country. The ARRL lumps their provinces into the ARRL multiplier list right along with our states and sections. This often obscures their distinctive country status during domestic contests. However, the Canadians do have their own national amateur radio organization, the RAC, [Radio Amateurs of Canada](#). And what's more, they have their own operating events, including three annual contests: the RAC Canada Day Contest, the RAC Winter Contest, and the Ontario QSO Party. The Canada Day event is always held on July 1st, one of the few contests with a fixed date.

The RAC Winter contest will take place the weekend after Christmas and marks the end of the year's scheduled operating events for most of us. As with the other Canadian contests, the activity will be open to any and all who choose to join in. Last year over 700 logs were submitted. Several of the Canadian CW leaders logged more than 1,000 QSOs and one made more than 2,000. Obviously there's more than enough going on to justify getting involved.

What's probably most attractive to the casual CW operator is the variety of multipliers available. There are ten Canadian provinces and three territories along with 14 official stations distinguished by the suffix "RAC." Several of these are by no means easy to collect, and do present a challenge. In addition I've found it interesting to keep a running record of the CWops members I run across ... kinda like another version of CWT. The CWops membership includes 48 Canadians. By the time the RAC Winter contest rolls around, it's likely that the CQWW DX CW and ARRL 10 Meter contests have more than satisfied the thirst for rate and high Q counts. The event is a welcome change.

Though it's not strictly a December operating event, I want to call your attention to ARRL's Straight Key Night to be held on January 1st from 0000 UTC through 2359 UTC. You can get the details at <http://www.arrl.org/straight-key-night>. As pointed out by Dan N1ND, "This 24-hour event is not a contest; rather it is a day dedicated to celebrating our CW heritage. Participants are encouraged to get on-the-air and simply make enjoyable, conversational QSOs. There are no points scored and all who participate are winners."

So ... clear the champagne glasses and ticker tape off the operating table, dust off your old J-38 or bug, return to the days of yesteryear, and relive those good ol' days when you were just starting out as a CW enthusiast.

November Events

NAQCC Sprint	0130Z - 0330Z, Dec. 10 th
RAC Winter Contest	0000Z – 2359Z, Dec. 27 th
ARRL Straight Key Night	0000Z – 2359 Z, Jan. 1 st

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2014 CW Open – Results

Sponsored by CWops and ICOM America

September 6, 2014

Introduction and Summary

The CW Open consists of three separate four-hour sprints known as “sessions.” The objective is to work as many CW stations worldwide as possible within each session. Each station may be worked once per band in each session. Entry can be made to any or all of the sessions. Each session is scored separately. Entries into multiple sessions are added together to form a combined score. Additionally, there is a team competition which is unconstrained by geographical location.

The sessions occupied the following slots: 1: 0000–0359z, 2: 1200–1559z, 3: 2000–2359z.

The awards provided by ICOM America are beautiful and consist of trophies and plaques. CWops really appreciates ICOM's continuing support of our premier operating event. Please be sure to check out ICOM at <http://www.icomamerica.com/en/amateur/>.

Participation was good but down this year to 53,156 QSOs (19,281, 17,515, 16,360 in Sessions 1, 2, and 3, respectively) and 495 logs were submitted and adjudicated (158, 179, 158 in Sessions 1, 2, and 3, respectively). Interestingly, the average number of QSOs per log stayed approximately constant at 108/log in 2014 vs. 112/log in 2013. There were certainly fewer entries from ITU Region 1 in 2014 relative to 2013.

The CW Open has settled into a regular calendar slot, the first Saturday in September. The contest calendar is full and the CWO Committee is doing its best to avoid direct time conflicts. This year, the final minute of Session 3 bumped into the start of the NA Sprint. This form of near conflict will only occur every five years or so.

Regarding results, the race for the top spot in HP was a “photo finish” in Sessions 1 and 2 and required a detailed recount! Error-free logs were way up this year, even with the tough CWO exchange and less-than-optimal conditions.

The CWO had its first (unofficial) Multi-Multi operation with Rick N1DC and Pi K1RV piloting K1USN during Session 2. They had a visit from Mr. Murphy but soldiered on and put in a great performance. The CWO Committee plans to discuss different operating classes for next year.

In addition to the Top Ten boxes and full box scores, be sure to check out the Soapbox! All the files will be posted on the CWops Web site.

And the big news: The award structure was expanded significantly for 2014!

Congratulations to the 2014 award winners!

Trophy, high score, each session, each ITU Region

Region 1: Session 1: **UA5C** Session 2: **UA5C** Session 3: **DL5AXX**

Region 2: Session 1: **N4AF** Session 2: **N4AF** Session 3: **N4AF**

Region 3: Session 1, Session 2, Session 3: Not Awarded in 2014

Trophy, high combined score (all sessions), each ITU region

Region 1: **UA5C** Region 2: **N4AF** Region 3: Not Awarded in 2014

Plaque, high score, each of HP, LP and QRP, each session, each ITU region

Region 1

Session 1

HP: **UA5C**

LP, QRP: Not Awarded in 2014

Session 2

HP: **UA5C**

LP: **SF3A**

QRP: Not Awarded in 2014

Session 3:

HP: **DL5AXX**

LP, QRP: Not Awarded in 2014

Region 2

Session 1

HP: **N4AF**

LP: **K0AD**

QRP: **NW2K**

Session 2

HP: **N4AF**

LP: **N5AW**

QRP: **W7ZRC**

Session 3:

HP: **N4AF**

LP: **WJ9B**

QRP: **NW2K**

Region 3

Session 1: HP, LP, QRP, Not Awarded in 2014

Session 2: HP, LP, QRP, Not Awarded in 2014

Session 3: HP, LP, QRP, Not Awarded in 2014

Winner, Team Competition (Awarded Most Excellent Bragging Rights!)


PVRC Zutters

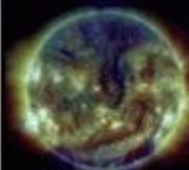
*** A minimum of 100 QSOs (after log checking) was required to win an award. If the same entrant won multiple awards, the awards were combined.


[For reasons known only to Microsoft, and maybe not even to them, this article now skips to the next page!]

Conditions and Propagation

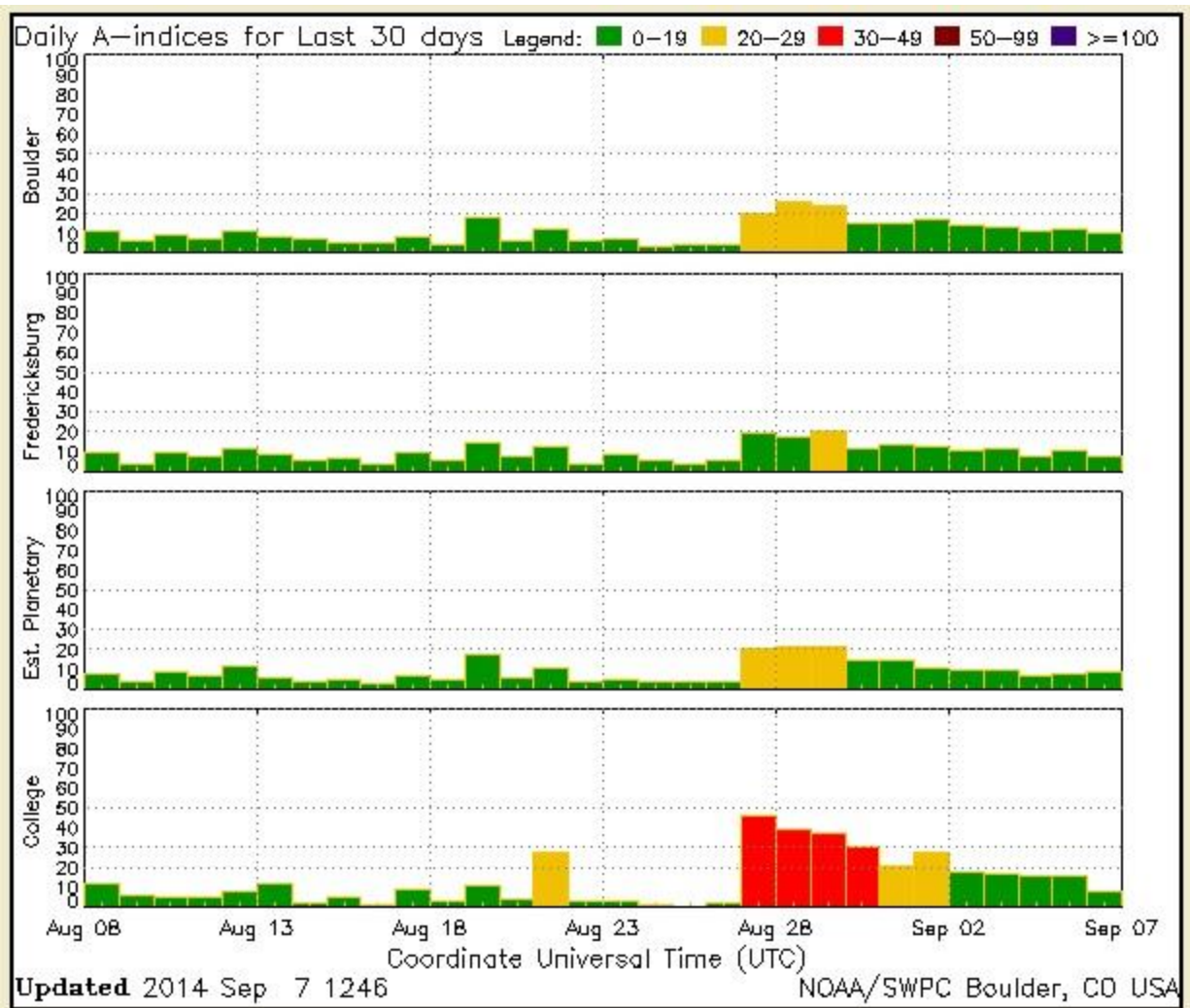
Conditions were simply OK during the CW Open this year. Here are a few informative charts regarding propagation, one hour before the start of each Session:

Solar-Terrestrial Data/Predictions at www.qrz.com									
05 Sep 2014 2300 GMT				Current Solar		Band	Day	Night	
SFI	144	SN	136			80n-40n	Fair	Good	
A	009	K	2			30n-20n	Fair	Good	
XRY	C1.3	304A	153.1			17n-15n	Good	Good	
Aur	9	Lat	54.6°			12n-10n	Fair	Poor	
Bz	-1.3	SW	339.1			Geomag Field	QUIET		
PF	6.8	EF	200.0			Sig Noise Lvl	S1-S2		
MUF Bdr	25.36 @ 2245					CME (UTC)	6 Sep 0900		
EME Deg	Fair					(C) P. Herriman N0NBH 2013			

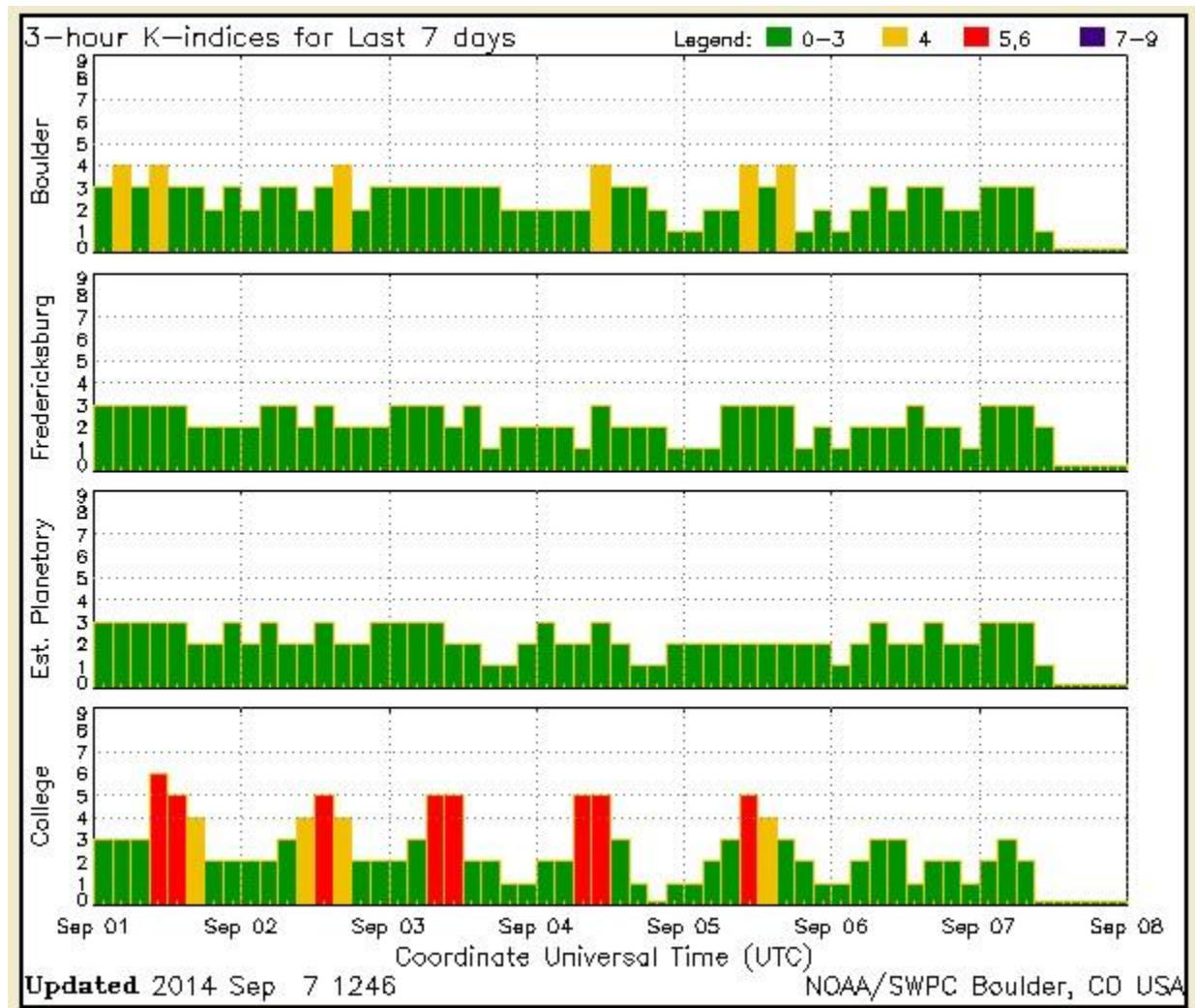
Solar-Terrestrial Data/Predictions at www.qrz.com									
06 Sep 2014 1100 GMT				Current Solar		Band	Day	Night	
SFI	144	SN	124			80n-40n	Poor	Fair	
A	008	K	3			30n-20n	Fair	Good	
XRY	C1.8	304A	155.5			17n-15n	Good	Good	
Aur	7	Lat	58.6°			12n-10n	Fair	Poor	
Bz	8.7	SW	342.5			Geomag Field	UNSETTLED		
PF	6.2	EF	21.6			Sig Noise Lvl	S2-S3		
MUF Bdr	12.10 @ 1045					CME (UTC)	6 Sep 0900		
EME Deg	Good					(C) P. Herriman N0NBH 2013			

Solar-Terrestrial Data/Predictions at www.qrz.com									
06 Sep 2014 1900 GMT				Current Solar		Band	Day	Night	
SFI	144	SN	124			80n-40n	Poor	Fair	
A	008	K	3			30n-20n	Fair	Good	
XRY	C2.0	304A	157.7			17n-15n	Good	Good	
Aur	3	Lat	65.6°			12n-10n	Fair	Poor	
Bz	1.6	SW	371.0			Geomag Field	UNSETTLED		
PF	6.8	EF	237.0			Sig Noise Lvl	S2-S3		
MUF	Bdr	26.22 @ 1845				CME (UTC)	6 Sep 0900		
EME	Deg	Good				(C) P. Herriman N0NBH 2013			

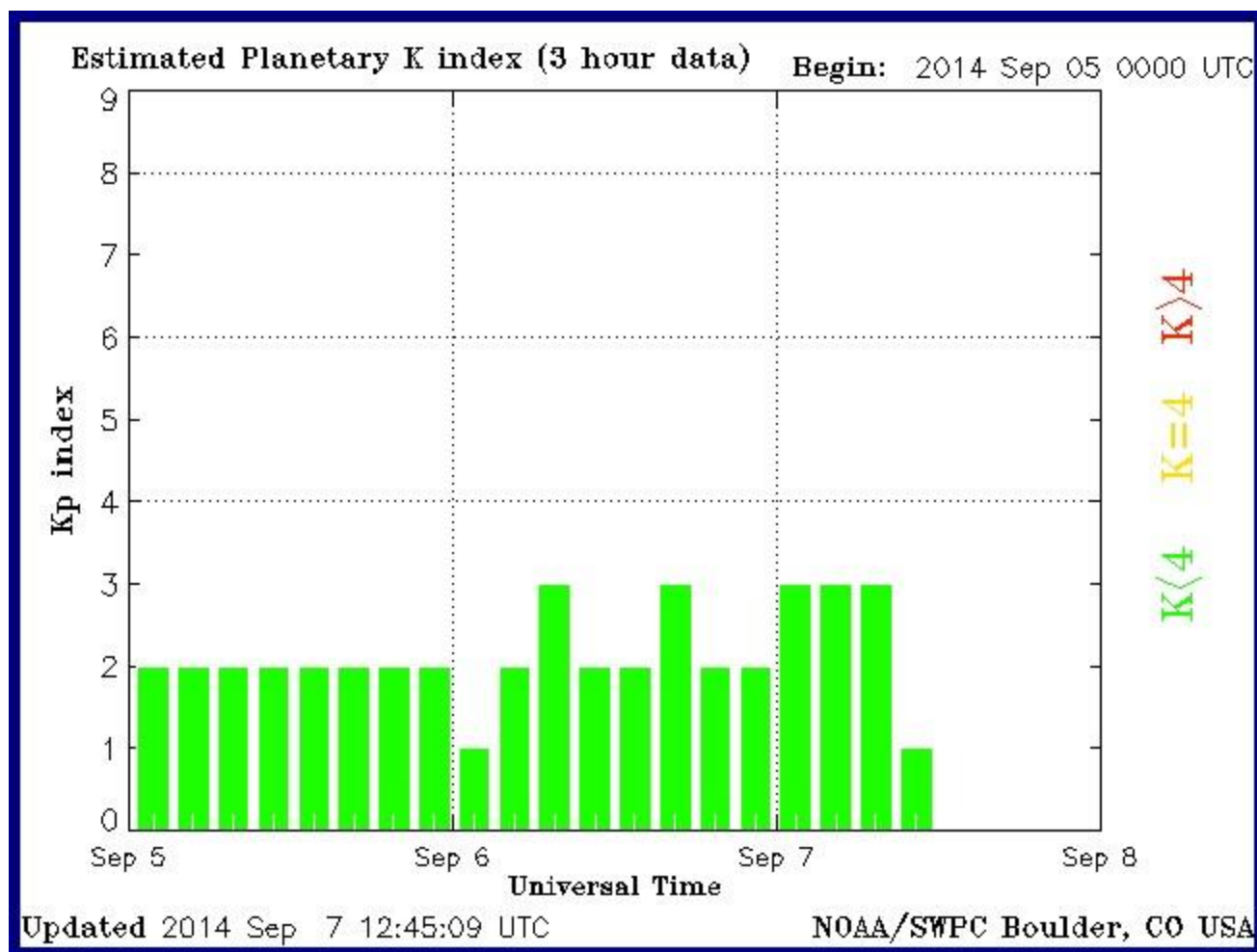
Daily A Indices for the Last 30 Days (8 AUG – 7 SEP 2014)



3-Hour K Indices for the Last 7 Days (1 SEP – 7 SEP 2014)



Estimated Planetary K Index (3 Hour Data) (5 SEP – 7 SEP 2014)



2014 Results – General Comments

The overall results are presented by session (1, 2, 3), and by power level (HIGH, LOW, QRP). These tables are located in separate PDF files on the CWops Web site. Error-free logs are denoted in gold. Top Ten lists were then created by session and power level to highlight the fine achievement of the leading Ops. These Top Tens are listed below. Additionally, tables were created to illustrate the top combined scores, which are also listed below. Finally, the team competition is discussed and summarized near the end of this report. Plaques and Trophies will be mailed in JAN-FEB 2015.

A Note on Log Checking

All submitted logs were checked for accuracy and scoring issues. Every log received was checked by computer to cross check each and every QSO. If the “other” log was available, all parts of the QSO were checked. If a QSO was uncheckable because the other log was not available, then some parts could still be checked by recognizing that others who worked the same station had similar (in most cases exact) reported exchange information.

All log checks resulted in a RPT (report) file detailing each and every deduction. If you would like to receive your RPT file, let us know with an email to CWO@cwops.org.

A Note on Accuracy

There were plenty of Golden Logs! Session 1: 9, Session 2: 14, Session 3: 19. Golden Logs are error-free and contain 50 or more QSOs. The Golden Logs are highlighted in gold in the Top Ten results. One contestant had Pure Gold – Congratulations Jim K7WA!

Jim K7WA (Session 1: 89/71, Session 2: 67/59, Session 3: 52/49)

Of special mention, with two Golden Logs each:

Jim KI7Y	(Session 1: 137/94, Session 3: 59/52)
Deko LZ1QV	(Session 1: 51/48, Session 2: 71/60)
Mike AA8IA	(Session 1: 62/50, Session 2: 108/86)
Mitch NW0M	(Session 2: 191/123, Session 3: 162/110)
Mel KJ9C	(Session 2: 84/69, Session 3: 54/47)
Mark W7TST	(Session 2: 183/120, Session 3: 183/127)
Phil HB9ARF	(Session 2: 83/70, Session 3: 84/69)

Even with the complicated CWO exchange and rough conditions, several ops had QSO error rates well below 1%. Check out the Top Ten boxes below to see how the leaders did in terms of accuracy.

While all logs are checked by computer, there is human intervention in generating the results documents. Please check your scores and send us a note if we made a mistake (CWO@cwops.org).

Thanks to CWops and ICOM!

<http://www.cwops.org/>

<http://www.icomamerica.com/en/amateur/>

Special Thanks to the fine ops around the World that participated in the 2014 CW Open. See you next year on September 5, 2015! Details here: <http://www.cwops.org/cwopen.html>.

And now, the details, which follow, once again, on a subsequent page:

Top Tens – Session 1

Session 1

Call	Operator	Station	Name	QSOs	Mults	Score	Busts	P	SO2R	Assisted
N4AF	N4AF	N4AF	HOWIE	356	211	75116	10	H	Y	Y
AA3B	AA3B	AA3B	BUD	370	202	74740	3	H	Y	Y
K0RF	K0RF	K0RF	CHUCK	368	194	71392	11	H	Y	Y
N5RZ	N5RZ	N5RZ	GATOR	336	182	61152	5	H	Y	N
N6RO	N6RO	N6RO	KEN	342	176	60192	7	H	Y	N
K6RB	K6RB	K6RB	ROB	322	177	56994	6	H	Y	N
K4RO	K4RO	K4RO	KIRK	318	176	55968	8	H	Y	Y
K4BAI	K4BAI	K4BAI	JOHN	318	175	55650	2	H	N	N
AE6Y	AE6Y	AE6Y	ANDY	312	172	53664	3	H	Y	N
N4PN	N4PN	N4PN	PAUL	290	171	49590	6	H	N	Y

Call	Operator	Station	Name	QSOs	Mults	Score	Busts	P	SO2R	Assisted
K0AD	K0AD	K0AD	AL	292	167	48764	3	L	Y	Y
K7SV	K7SV	K7SV	LAR	290	154	44660	4	L	Y	Y
WJ9B	WJ9B	WJ9B	WILL	276	160	44160	7	L	Y	N
W1NN	W1NN	W1NN	HAL	262	141	36942	1	L	N	Y
N3JT	N3JT	N3JT	JIM	241	146	35186	8	L	N	Y
W3KB	W3KB	W3KB	KEITH	244	144	35136	10	L	N	Y
KG5U	KG5U	KG5U	DALE	217	126	27342	4	L	N	N
NW0M	NW0M	NW0M	MITCH	208	131	27248	1	L	N	N
W7TST	KN7T	W7TST	MARK	194	131	25414	4	L	N	N
N4YDU	N4YDU	N4YDU	SAM	193	118	22774	8	L	N	Y

Call	Operator	Station	Name	QSOs	Mults	Score	Busts	P	SO2R	Assisted
NW2K	NW2K	NW2K	DEAN	172	110	18920	1	Q	Y	Y
W6JTI	W6JTI	W6JTI	FRANK	128	94	12032	1	Q	N	N
N5RR	N5RR	N5RR	BILL	149	78	11622	5	Q	N	Y
K2UFT	K2UFT	K2UFT	DICK	103	74	7622	2	Q	N	N
W7ZRC	W7ZRC	W7ZRC	ROD	84	74	6216	1	Q	N	N
KU7Y	KU7Y	KU7Y	RON	88	69	6072	3	Q	N	Y
RT4W	RT4W	RT4W	MIKE	55	34	1870	2	Q	N	Y
N6GA	N6GA	N6GA	CAM	29	29	841	1	Q	N	N
N8XX	N8XX	N8XX	OSCAR	26	26	676	0	Q	N	N
VA3RKM	VA3RKM	VA3RKM	BOB	23	21	483	2	Q	N	N

Gold indicates a Golden Log, 50 or more QSOs. "Busts" is the number of busted QSOs.

In HP, Howie N4AF edged out Bud AA3B by a mere 376 points (0.5%!) and Chuck K0RF was close behind in third. Gator N5RZ and Ken N6RO rounded out the top five in HP. If you want a win in HP, you'll need to add SO2R to the shack.

The LP winner, Al K0AD, snagged more mults than second place finisher Lar K7SV. By design, mults make all the difference in CWO. Will WJ9B was extremely close behind in third and was unassisted, unlike Al and Lar. Hal W1NN and Jim N3JT secured 4th and 5th respectively.

The 5W gang saw Dean NW2K lead the pack over second place finisher Frank W6JTI. Bill N5RR, Dick K2UFT and Rod W7ZRC, finished in 3rd through 5th place.

Top Tens – Session 2

Call	Operator	Station	Name	QSOs	Mults	Score	Busts	P	SO2R	Assisted
N4AF	N4AF	N4AF	HOWIE	317	198	62766	3	H	Y	Y
AA3B	AA3B	AA3B	BUD	319	195	62205	5	H	Y	Y
K4RO	K4RO	K4RO	KIRK	275	187	51425	8	H	Y	Y
K4BAI	K4BAI	K4BAI	JOHN	280	181	50680	2	H	N	N
K6RB	K6RB	K6RB	ROB	293	170	49810	2	H	Y	N
UA5C	UA5C	UA5C	ALEX	236	194	45784	17	H	N	Y
N4GG	N4GG	N4GG	HAL	264	167	44088	5	H	N	Y
RK4FU	RK4FU	RK4FU	VLAD	232	190	44080	19	H	Y	Y
N6RK	N6RK	N6RK	RICK	268	160	42880	6	H	N	N
N8AA	N8AA	N8AA	JOHN	253	167	42251	4	H	N	N

Call	Operator	Station	Name	QSOs	Mults	Score	Busts	P	SO2R	Assisted
N5AW	N5AW	N5AW	MARV	309	197	60873	2	L	Y	N
WJ9B	WJ9B	WJ9B	WILL	303	165	49995	8	L	Y	N
K0AD	K0AD	K0AD	AL	251	160	40160	4	L	Y	Y
K7SV	K7SV	K7SV	LAR	229	148	33892	2	L	Y	Y
W3KB	W3KB	W3KB	KEITH	223	136	30328	2	L	N	Y
K0FX	K0FX	K0FX	DON	203	134	27202	13	L	N	N
KG5U	KG5U	KG5U	DALE	200	127	25400	3	L	Y	N
K7WP	K7WP	K7WP	JOHN	189	125	23625	2	L	N	N
NW0M	NW0M	NW0M	MITCH	191	123	23493	0	L	N	N
W8CAR	W8CAR	W8CAR	DAN	182	123	22386	3	L	N	N

Call	Operator	Station	Name	QSOs	Mults	Score	Busts	P	SO2R	Assisted
W7ZRC	W7ZRC	W7ZRC	ROD	163	102	16626	4	Q	N	N
NW2K	NW2K	NW2K	DEAN	154	96	14784	1	Q	Y	Y
KU7Y	KU7Y	KU7Y	RON	127	88	11176	3	Q	N	Y
K2UFT	K2UFT	K2UFT	DICK	103	83	8549	4	Q	N	N
K6XT	K6XT	K6XT	ART	81	69	5589	3	Q	N	N
N8XX	N8XX	N8XX	OSCAR	69	63	4347	1	Q	N	N
WB5BKL	WB5BKL	WB5BKL	NICK	63	48	3024	5	Q	N	N
RT4W	RT4W	RT4W	MIKE	53	39	2067	1	Q	N	N
RW3AI	RW3AI	RW3AI	VAL	32	29	928	0	Q	N	N
N6GA	N6GA	N6GA	CAM	28	25	700	1	Q	N	N

Gold indicates a Golden Log, 50 or more QSOs. "Busts" is the number of busted QSOs.

Again, Howie N4AF achieved the top spot in HP in another "photo finish" with Bud AA3B, with only 561 points between them (0.9%!). Kirk K4RO, John K4BAI and Rob K6RB formed a tight points cluster in 3rd - 5th. Every Q and mult counts in the CWO!

In LP, Marv N5AW pushed hard to a decisive win by racking up the mults, with Will WJ9B holding a strong 2nd. Marv's impressive total would have placed him solidly in 3rd in HP! Al K0AD finished in 3rd with Lar K7SV and Keith W3KB in 4th and 5th respectively.

In QRP, Rod W7ZRC outscored Dean NW2K in both QSOs and mults with Ron KU7Y showing in 3rd. Dick K2UFT and Art K6XT completed the Top 5 in QRP.

Top Tens – Session 3

Session 3

Call	Operator	Station	Name	QSOs	Mults	Score	Busts	P	SO2R	Assisted
N4AF	N4AF	N4AF	HOWIE	329	215	70735	6	H	Y	Y
K5OT	K5OT	K5TR	LARRY	329	202	66458	2	H	Y	N
K4BAI	K4BAI	K4BAI	JOHN	304	211	64144	1	H	N	N
N5ZO	N5ZO	N5ZO	MARKO	295	191	56345	2	H	Y	N
K7RL	K7RL	K7RL	ED	273	185	50505	7	H	Y	Y
K1RO	K1RO	K1RO	MARK	274	184	50416	1	H	N	N
K6RB	K6RB	K6RB	ROB	271	172	46612	0	H	Y	N
K5KG	K5KG	K5KG	GEO	259	178	46102	8	H	N	Y
N4GG	N4GG	N4GG	HAL	258	173	44634	5	H	Y	Y
AA3B	AA3B	AA3B	BUD	262	165	43230	3	H	Y	Y

Call	Operator	Station	Name	QSOs	Mults	Score	Busts	P	SO2R	Assisted
WJ9B	WJ9B	WJ9B	WILL	245	144	35280	2	L	Y	N
K0VBU	K0VBU	K0VBU	BILL	191	153	29223	6	L	N	N
WD4AHZ	WD4AHZ	WD4AHZ	RON	181	150	27150	3	L	N	Y
W8CAR	W8CAR	W8CAR	DAN	184	135	24840	8	L	N	N
N3JT	N3JT	N3JT	JIM	185	128	23680	8	L	N	Y
W7TST	KN7T	W7TST	MARK	183	127	23241	0	L	N	N
K1DW	K1DW	K1DW	DALLAS	171	129	22059	7	L	N	Y
K7SV	K7SV	K7SV	LAR	173	117	20241	9	L	Y	Y
K9XZ	K9XZ	K9XZ	MIKE	154	127	19558	27	L	N	Y
NW0M	NW0M	NW0M	MITCH	162	110	17820	0	L	N	N

Call	Operator	Station	Name	QSOs	Mults	Score	Busts	P	SO2R	Assisted
NW2K	NW2K	NW2K	DEAN	192	121	23232	0	Q	Y	Y
W7ZRC	W7ZRC	W7ZRC	ROD	165	106	17490	1	Q	N	N
KU7Y	KU7Y	KU7Y	RON	148	108	15984	3	Q	N	Y
WB5BKL	WB5BKL	WB5BKL	NICK	74	59	4366	3	Q	N	N
N5RR	N5RR	N5RR	BILL	53	46	2438	4	Q	N	N
K1SX	K1SX	K1SX	DAVE	32	28	896	2	Q	N	N
N6GA	N6GA	N6GA	CAM	27	27	729	0	Q	N	N
WT2P	WT2P	WT2P	FRED	22	22	484	1	Q	N	N
AD0BI	AD0BI	AD0BI	LAR	11	11	121	3	Q	N	N
RW3AI	RW3AI	RW3AI	VAL	9	9	81	0	Q	N	N

Gold indicates a Golden Log, 50 or more QSOs. "Busts" is the number of busted QSOs.

Howie N4AF racks up another win in HP this year with Larry K5OT in 2nd. Hat Trick for Howie! John K4BAI finished 3rd ahead of Marko N5ZO. Mitch K7RL secures a Top 5 in HP.

Will WJ9B wins LP with 245/144 ahead of Bill K0VBU and Ron WD4AHZ. Dan W8CAR achieves 4th with Jim N3JT earning another Top 5.

Dean NW2K wins QRP ahead of Rod W7ZRC and Ron KU7Y. Nick WB5BKL and Bill N5RR finish 4th and 5th respectively. The QRP category continues to be an important component of the CW Open and it's increasingly competitive.

Combined Scores – Top Tens

Call	Session 1	Session 2	Session 3	Total	Power
N4AF	75116	62766	70735	208617	HIGH
AA3B	74740	62205	43230	180175	HIGH
K4BAI	55650	50680	64144	170474	HIGH
K6RB	56994	49810	46612	153416	HIGH
N4GG	47261	44088	44634	135983	HIGH
K1RO	46646	33176	50416	130238	HIGH
K3MD	46784	39273	36972	123029	HIGH
WO4O	39116	36300	40915	116331	HIGH
K4RO	55968	51425	0	107393	HIGH
N8BJQ	38448	31500	35164	105112	HIGH

Call	Session 1	Session 2	Session 3	Total	Power
WJ9B	44160	49995	35280	129435	LOW
K7SV	44660	33892	20241	98793	LOW
K0AD	48764	40160	0	88924	LOW
W3KB	35136	30328	15855	81319	LOW
N3JT	35186	19836	23680	78702	LOW
N5AW	2254	60873	10120	73247	LOW
W7TST	25414	21960	23241	70615	LOW
NW0M	27248	23493	17820	68561	LOW
KG5U	27342	25400	0	52742	LOW
W8CAR	4672	22386	24840	51898	LOW

Call	Session 1	Session 2	Session 3	Total	Power
NW2K	18920	14784	23232	56936	QRP
W7ZRC	6216	16626	17490	40332	QRP
KU7Y	6072	11176	15984	33232	QRP
K2UFT	7622	8549	0	16171	QRP
N5RR	11622	0	2438	14060	QRP
W6JTI	12032	0	0	12032	QRP
WB5BKL	0	3024	4366	7390	QRP
K6XT	0	5589	0	5589	QRP
N8XX	676	4347	0	5023	QRP
RT4W	1870	2067	0	3937	QRP

In HP, Howie N4AF wins it all with a Hat Trick and a combined 1002/624. Bud AA3B is right there in 2nd with John K4BAI finishing in 3rd. Rob K6RB and Hal N4GG round out the Top 5.

Will WJ9B cruised to an overall win in LP. Lar K7SV finished a strong 2nd with Al K0AD in 3rd. Keith W3KB and Jim N3JT complete the Top 5 in LP.

Dean NW2K edged out Rod W7ZRC for the top spot in QRP with Ron KU7Y finishing 3rd just ahead of Dick K2UF7 and Bill N5RR.

Team Competition – 2014 CW Open

PVRC ZUTTERS	816,981
N4AF	208,617
WJ9B	129,435
K7SV	98,793
N3JT	78,702
N4YDU	78,214
N3HEE	74,389
K4EU	57,794
N3QE	48,148
W0UCE	41,408
K6RM	1,481

SECC and Friends	773,190
K4BAI	170,474
N4GG	135,983
W04O	116,331
K4RO	107,393
N8BJQ	105,112
N4PN	91,422
N1CC	33,058
KU8E	8,787
WN4AFP	4,630
N4OX	0

DFWCG/CTDXCC	464,625
W5ASP	74,237
N5AW	73,247
N5RZ	70,354
K5OT	66,458
KG5U	52,742
W0VX	51,021
AC5K	50,399
N5QQ	26,167
AF5I	0
K5TU	0

FRC	438,265
AA3B	180,175
K3MD	123,029
W3KB	81,319
W9RE	50,835
K3WW	2,907
N3DXX	0

NCCC	342,640
K6RB	153,416
N6RO	60,192
AE6Y	53,664
W6SX	20,463
K6MR	19,082
W6JTI	12,032
NA6O	9,343
K6DGW	9,038
W6OAT	4,356
M6O	1,054

NCC/MRRC & Friends	258,506
N8AA	55,832
W8CAR	51,898
W2GN	46,756
W1NN	36,942
N2ZN	35,868
NA8V	27,894
N8SS	1,848
K8PP	1,468

YCCC Chowda	214,353
K1RO	130,238
N1RR	81,315
W1UJ	2,800
K2KQ	0

Black Hole	181,442
K9XZ	47,996
K3WA	47,152
KJ9C	46,518
AL9A	20,630
AB9YC	17,110
KC9EE	1,552
WT2P	484

W. Washington DXC	136,162
K7RL	50,505
W7OM	45,037
W6SZN	22,632
K7WA	12,820
NG7Z/4	5,168
N7TK	0

QRP Team Thunder	126,611
NW2K	56,936
KU7Y	33,232
K2UFT	16,171
WB5BKL	7,390
K6XT	5,589
N8XX	5,023
N6GA	2,270
WA8HSB	0
WB3AAL	0
AA4GA	0

MWA	96,306
K0AD	88,924
N0AT	7,160
K0TNT	222
W9LHG	0

K1USN Radio Club	44,441
N1DC	35,630
K1USN	8,811
K1RV	0

The Vikings	24,051
SM3CER (SF3A)	14,676
SM4DQE (SE4E)	9,142
SM5ALJ	233

DFW Contest Group	15,460
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K5NZ	15,460
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NM5M	0
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K5RT	0
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N5IR	0
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Deep Dixie CC	10,025
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WB5EIN	10,025
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AB5OR	0
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K5XU	0
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K5KU	0
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N4OGW	0
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