The International CWops Newsletter



Hit 'n Bounce Net Award Held by VE3GNA

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 <u>K6RB</u> Vice President: Peter Butler <u>W1UU</u>

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 <u>K6MM</u> Editor/Publisher: Rick Tavan <u>N6XI</u>

Table of Contents

President's Message

From the Editor

News & Notes

How We Were – VO1HP

A Trip to Russia (1995)

CW Academy Associate Advisor Program

Ambassadors Program

CW Open

CW Academy

New CW Player / Introduction

CWops Tests

CWops Awards

New Members

Nominees

QTX Report

Operating Events

President's Message

Another month of summer (in the Northern



Hemisphere) but our star has gone very quiet. Sunspots have been more like a sunspot null than a second sunspot peak. Oh well, there's no sense worrying about something we have

no control over, I guess.

The W1AW Centennial and WRTC 2014 are now history. I hope those of us who were able to get to MA and CT had a great experience.

As of Friday, July 25, I am no longer working full time. Moreover, I am no longer making

that 80 mile daily commute anymore.

Beginning August 4, I will be working only

Monday, Tuesday and Wednesday; and doing it from home. That will finally allow me to do all three CWTs, each Wednesday, on a continuous basis. Who knows, I may even qualify for a gold medallion this time around ©.

The CW Academy is scrambling to get ready for our September-October semester. We have a record number of advisors, and an equally awesome record number of signups.

Coming up in early September, we will have our fourth CW Open (September 6). It would be great if many CWops take part in it. This year, for the first time, we will be giving awards based on ITU regions. That will help to make it a more level playing field.

I was in Washington D.C. last week attending a conference of the National Association of Patent Practitioners. While there I had the pleasure of having dinner with Jim, N3JT, and his better half, Nina. It is always a lot of fun getting together with other members. During the first weekend of August I will be up in Redmond Washington and spending time with our US NW ambassador (among others), Alan, AC2K.

The ambassador program is really taking off. In Japan, Ambassador Atsu, JE1TRV, submitted an article to a Japanese ham publication and it was published. He is also getting ready for CWops' activities during the upcoming Tokyo Ham Fair. Mac, NN4K, has plans to attend some ham events in his neck of the woods, and will be manning a booth with our official banner flying and several CWops' handouts. All the ambassadors have received a very distinctive name badge with club logo and their ambassadorial titles.

You should have all received an email notifying you about a bylaws vote. Please take the time to vote. Thanks. More to come in September.

73,

Rob K6RB

Back to Contents

(Keep reading beyond the blanks space!)

From the Editor



WRTC 2014!

July 2014 marked the seventh running of the World Radiosport Team Championship, held this year in New England. 59 teams from around the world operated in identical tents, driving identical antennas in field locations culled from dozens of better and worse locations. The organizers, largely members of

the Yankee Clipper Contest Club, first analyzed candidate locations using HFTA, discarding the best and the worst. Then they operated from many of the remaining locations during the "off-year" IARU HF Championship contests in 2012 and 2013, discarding a few more that suffered unusual noise problems or unexpected signal strength variations. The remaining 59 locations (plus a few spares) were as close to a level playing field as can be found in a swath of territory some 80 miles long, from southern New Hampshire in the north nearly to the Cape Code Peninsula in the south. Resulting comments from around the world, both subjective observations by contesters and quantitative analysis of skimmer and reverse beacon networks, confirmed nearly identical signals from all competing stations to almost everywhere almost all the time. Exceeding even the high bar set by the Russian sponsors in 2010, the New Englanders showed once again that it is possible, with tons of sweat and money, to eliminate the "dark shame of radio contesting as a sport," the inequality of different stations in different locations around the world. The competitors were among the best in the world, as ensured by the Herculean qualification process. The winners were truly "the best of the best." We don't all operate contests, but I hope we all appreciate the challenge, the accomplishments and the victories achieved by these hard working organizers and competitors. By the way, CWops members were everywhere: K1DG was the overall Chairman of the event. K1ZZ was the Chief Judge. Other members who served on the event Board of Directors or Judging Committee included K1RX, KM3T, K1BG, and EY8MM and dozens of our members were competitors, referees and recipients of awards for working all 59 and sending in their logs within six hours of the conclusion of the contest so the judges could do their job. About 60% of all contacts by the 59 competing teams were successfully adjudicated through submitted logs! Congratulations, all! (For more on WRTC 2014, see http://www.wrtc2014.org.)

Speaking of WRTC, don't miss this month's article by Vic Seeberger W7VSE on his 1995 experience at the Friendship Games in Russia. This was a predecessor to WRTC, one of the first international amateur radio competitions. Vic, by the way, remains active on the air at 93 years young. He is a regular net control station on RN7 (7th call area regional net in the National Traffic System) and plays country music at retirement homes three times a week!

An interesting thread on the CWops reflector recently explored the concept of "the worst CW rig ever." Although that smacks of negative politicking, most of the comments were nostalgic reminiscences showing just how far radio design has come since many of us started down the radio road. If you missed it, take a peek!

Pete W1RM was among many other CWops members at the ARRL Centennial Convention in Hartford, CT last month. He sent along these photos:



EY8MM, K1BV, W1RM

W1RM, VE7CC

Congratulations to CWops member Glenn VE3GNA who received the W4SUS Larry Frazer Memorial award from the Hit and Bounce Nets. Net manager Mark W2EAG noted that Glenn not only brings in tons of traffic, and is Net Control Station on both HBN and HBSN, but he was also Net Manager of HBSN for a time. His efforts clearly have not gone un-noticed. Glenn is now in possession of the rotating trophy, a gold-plated Bencher paddle, despite his aversion to keyers. Way to go, Glenn! Member Jack W0UCE is a prior recipient of the award, as are, I suspect, other CWops members.

Corrections: Wes AC5K called me to task for crediting Guglielmo Marconi with the invention of radio. I knew when I wrote that that it might be controversial since many people credit Nikola Tesla with that accomplishment. I chose to go with the majority, especially in the context of his daughter Princess Elettra Marconi's ceremonial QSO with K1DG as part of the runup to WRTC. But Wes is correct that there is a good argument that, even though G. Marconi won the patent race and historical credit, in fact N. Tesla may well have been there first. I could have avoided the controversy with less definitive language but I did not and I apologize to Wes and others who want credit to be applied where due. I certainly don't want to belittle the substantial contributions made by Tesla, now the unknowing and unrelated namesake of my favorite automobile company. (Nikola would have been proud!) Compounding my error, I expressed my belief that Princess Marconi is not a licensed ham. But brand new CWops member Fabio IK0IXI corrected me there as well. It turns out that the princess received the special call sign IY0EM in December 2013. Fabio has known her for many years and even hosted her on a visit to his Morse keys collection in 2009. So I stand corrected on all counts!

73,

Rick N6XI

Back to Contents

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 jveisskohk@gmail.com.

<u>Shin, JA1NUT</u>: I acquired a Chevron paddle some years ago. Initially, It worked great but now it has developed a contact problem between the bolt-nuts and the columns for the contacts. The contacts themselves are OK. But the old contacts sometimes get rusty. I have put conductive grease there, which is always effective. This worked fine for a while but soon it began to get worse again. Does anyone know how to cure it? This paddle could be perfect without this problem.

<u>Jim, N3JT</u>: Jim and Nina are planning a visit to Japan in late October, hoping to meet up with new and old ham friends along the way. Meanwhile, in September, Jim heads back to Philadelphia for his 50th high school reunion. "Tell me it isn't so!!!"

Rick, N6XI: I enjoyed almost two weeks of ham radio travel in July. First was as an observer at WRTC in New England. The Yankee Clipper Contest Club did most of the organization for this seminal, level-playing-field competition, physically held in New England but operating inside the IARU HF Championship world-wide contest. Congrats to winners N6MJ and KL9A operating as K1A. There were ample opportunities for sightseeing and socialization outside the contest proper, and I was able to take some time out for local family visits, a ball game and an air show. Many of the same folks, plus many more, then headed down to Hartford, CT for the ARRL 100th Anniversary National Convention. The nearly new Connecticut Convention Center is an outstanding venue and the organizers put on an extensive series of varied and mainly good programs. Despite living in the East for almost 30 years, I had never visited ARRL HQ and W1AW, so I took care of that life omission, too.

Alex, PA1FOX: In June we had the Veron Radio Camp in the Netherlands with lots of activities. When tuning over the bands, I found a lot of noise and interference signals. After investigating the issue, I found that the source of the noise was... in fact the 12 volt power supply in my own Caravan. Switching it off gave me a very happy time and far better reception. From July 25th to mid August we will go on holiday again and a few weeks ago I replaced the power supply with a conventional 'heavy transformer' one. I am already looking forward to the nice low noise levels on the camping site compared to the situation at home.

I will be active in CW from 80 to 10 with Sideswipers and Paddles.

So, in case of strange noises and interference signals, check out your own equipment before taking an angry walk to the neighbours!

<u>Bob, K4BG</u>: Ten-Tec certainly stirred up a flurry of interest in announcing their one time huge price reduction package sale. It matters not which brand you favor, such an event certainly contributes to our hobby and in this case especially to us CW ops. Although my Omni VI's are only 22 years old, I couldn't resist an Omni VII. I started studying the manual today. It's a bit different read from my old 304TL's or TZ-40's. CW forever! Speed now limited by arthritic ability.

<u>John, K3GHH</u>: I bet a good many of our members date from my era --- the late 1950s. I recently found a little photo album with shots I took back then, and some may enjoy seeing them. This html album isn't

fancy; I suggest just clicking on the first photo, choosing "full screen" (F11 in Firefox), and using the next-previous pane at the top to move along. The captions appear when the cursor is hovered on a photo.

http://www.johnegger.com/Ham/index.html

WRTC2014: Here's the software and rig breakdown from WRTC2014 (World Radiosport Team Championship 2014). It is interesting to note that the K3 was used by 64% of the competitors. The next most popular radio used was the Yaesu FTdx5000 at about 7%. Also, the most popular logging software used was WIN-TEST at 68% with N1MM coming in at 26%. The top three teams used ICOMs and the K3. The link to the data is below. The site contains many interesting items.

http://www.wrtc2014.org/radios-and-software-used/

Glenn, VE3GNA: I may have mentioned in the past that I have been a member of the Hit and Bounce CW Nets, both slow speed and high speed for several years. I have been a regular NCS on both nets for a few years and was once the manager of the slow net HBSN. Shortly after announcing that I would be taking a much needed hiatus from all things radio for the months of July and August to recharge the batteries and complete some little items on the honey-do list, I received word that I had been awarded the W4SUS paddle for the next six-month period. More information on this award may be found here http://hitandbounce.net/hbn-rooa.html.

This announcement caught me completely by surprise as I did not feel that I had contributed in any way to be given such high praise by the members. Nevertheless, a couple of weeks later I received the above-mentioned award in the mail, replete with the solid wooden box crafted by Jack KA8WNO (SK). A picture of the paddle follows this News & Notes item.

Once I finish my hiatus, I hope to return to the air and continue my NTS presence but in a different perspective. My wife and I are contemplating a relocation to the east coast where I spent my formative years. The sea is calling to me, and I am going to answer. I wish to spend whatever time the creator grants me gazing out over the wide Atlantic, wondering what might have been had I chosen a different path in life.

Back to Contents

(Keep reading beyond the blanks space!)

How We Were - VO1HP

by Hank W6SX



Back to Contents

(Keep reading beyond the blanks space!)

A Trip to Russia

Vic Seeberger W7VSE

During the two week period of August 4 to August 18, 1995, I was privileged to be a member of the



USA Amateur radio team and competed in "Friendship Radio Games '95," (FRG-95), in Khabarovsk, (pronounced Ha-bar'o-visk), Russia. Portland, Oregon and Khabarovsk are Sister Cities. The USA and Russian Amateur Radio Clubs decided to have the Friendship Radio Games (FRG) and compete with each other in Morse code receiving and transmitting, fox hunting, a DX Contest, and a DX pileup contest. I accepted a spot on the USA team in 1995 to go to Russia. We had four countries competing, Russia, Canada, Japan, and the USA.

I traveled with competitor Bud Larson W7LNG. We only had to pay for our Airline tickets to Seattle. A Russian AEROFLOT aircraft picked us up there and flew to Anchorage, AK. And then down to Khabarovsk, which is way over in Eastern Russia, south of Siberia, and north of Vladivostok. Then, two weeks later, they flew us back to Seattle.

The Russians were wonderful hosts. The put us up in the downtown Intourist Hotel and paid for our meals the first week. The second week we were guests of one of the Russian amateur radio families. They arranged a variety of tours and entertainment for our spare time. They kept us busy, and showed us a fine time.

The CW (code) receiving contest consisted of five-letter code groups sent from a machine, starting at 16 WPM and increasing to 40 WPM. There were no numbers or punctuation in the 5-letter code groups, just letters in English. The tapes were well prepared and the audio was excellent in good

headphones. A 32-position code room, with individual headphones for each contestant, was provided. They even furnished me a typewriter and isolated me and one Russian amateur in a different room, so the chattering of our typewriters would not bother the other contestants who were copying with pencils. I had not copied five-letter code groups since WW2, 50 years ago, but the old knack of keeping up with the sender came back. We must have done well, because our team won a Silver Medal in this category.

The CW transmitting contest was at a different location. We were on the stage of a small theater, complete with seats for an audience to observe and hear our performance. There were tables and chairs for us on the stage with an oscillator and amplifier loud enough to be heard throughout the building. They had hand keys, and bugs for us. I wished that I had brought my own bug that I had used for many years, but I had to adjust and use the one they furnished. The text we had to transmit was in plain English, with no numbers or punctuation. We took the stage and transmitted one at a time. I was the second operator to transmit and, after I finished, I was a USA judge for the rest of the program. There was one judge selected from each country that participated. We were judged, not only on our sending speed, but also our spacing and skill at sending good, readable code. I don't think I did an outstanding job, but with the help of the other members, again, we were winners of the Silver Medal.

The DX contest was back at the same place that the CW receiving contest was held. Again we used the 32-position wired code tables and all contestants were hearing the same, computer-generated pile-up of signals from approximately 70 stations with different calls. Each calling station had a different tone, different signal strength, and varied from very faint signals to normal signals to booming signals, all calling at the same time. Your job was to write down as many of the call signs as you could. It was almost exactly like an actual DX pile-up, and all those 70 stations were trying to contact you, as though you were a rare country. It was very frustrating. Our team won another Silver Medal.

The DX HF (High Frequency) contest was on another hot August day, and it was a long day. We began at 10AM and finished t 8:30PM. There were six teams participating. The USA and Canada had two teams each, and Russia and Japan each had one team. There were six Russian amateur stations used for this contest. Some of them had high-powered transmitters. Some stations had bigger, better antennae than the others. To make things fair for all the teams, each team spent one hour at each location. There was a lot of time used in traveling from one location to another. The Russians had obtained special call signs for this event that had never been used before. UE0CA and UE0CF were given to each of the six teams for use in the contest. These call signs had never been heard on the Amateur bands before, and should have offered a rare contact for all the world to hear.

We could only use 15 and 20 meters and I think this skipped over a lot of nearby stations. The band conditions were lousy that day. All the stations were operating at the same time, so you had to be careful and not get too close to another contester's frequency. We contacted mostly Russian and Japanese stations, as that was about all we could hear. Our team had 134 contacts the last hour, but it was not enough to win a medal in this category.

The Fox Hunt was a contest to locate hidden transmitters. It was held about 20 miles out in the country. They transported us in an air conditioned bus to a tourist hotel. (I didn't want to get off that cool comfortable bus.) The Russians had hidden six little code-identified transmitters in a park near the resort. They said it was a park, but it looked more like a jungle to me. The teams were all issued portable, three-element, YAGI-type, pistol grip, hand-carried antennae that were very directional, and they had meters that indicated signal strength. The hidden transmitters would transmit a CW signal for one minute and then be off the air for a while and return for another minute. As you moved toward the transmitter, you kept taking readings. After writing down the location, you would try to locate another transmitter. The contest was to see who could find the most hidden transmitters in the shortest amount of time.

Finding these five transmitters would have been much easier out in the clear. But they were hidden in the jungle of that park that only had a myriad of wandering, narrow paths. Although you could easily get a bearing on a transmitter, getting to it was a nightmare. The Russians had selected the most difficult place in the world to find a hidden transmitter. The Direction Finder would give you good solid readings, but they indicated that you should go right into the impossible bramble bush, and the path ahead went at right angles to where you wanted to go. This required you to go down the path and search for a path that would go in the direction of the transmitter. Sometimes this required going a quarter of a mile, and even circling the transmitter before you could find a path that would take you to it.

The hidden 2-meter transmitters call signs, in code, were: MO-E, MO-I, MO-S, MO-H, and MO-5. A sixth transmitter was simply MO, and was at the starting place. It was needed too, because most of us were lost when the time to quit arrived. So you could "Home" in on MO, after your time was up, and hopefully find your way back out of the jungle. This was very important, as the time limit for this event was two hours, and those who could not get back to home base in time were disqualified. All of our team's times were added together and averaged for a final score. Each of us was also equipped with a map of the area and a compass, and with a little help, we all made it back safely.

I suspect the Russians had an advantage over the rest of us, as they lived nearby and may have been more acquainted with the park (Jungle) than we were. This was the first time I had ever been on a fox hunt and I didn't do very well. I think I could have found all five if they had let me spend the whole afternoon there. The rest of our team didn't do very well either, and we did not win a medal in this category.

That evening we had a dinner and party at the resort hotel where we were staying. There was plenty of vodka and champagne at all of our tables. After we had finished dinner, someone asked me to get up and tell a story. I was feeling no pain, so I got up and told a funny story, called "The Sharp Suit." I had been telling this particular story each year for several years at the Seaside convention. It is a story you have to visually observe to really understand and appreciate. It was a long joke, and as I was telling it, I would say the verbal part of the joke, do the physical part, and pause. Then an interpreter would repeat that part of the joke in Russian, and another interpreter would then tell it in

Japanese, and they both tried to mimic my physical movements. The Russian and Japanese interpretations of my story must have been funnier than my English version, because all the Russians and Japanese were laughing loudly and applauding. Then someone told me that the interpreters were having trouble finding an appropriate word for "Sharp" (as in "Sharp Suit") in the Russian and Japanese languages. It must have taken 20 minutes or more to tell and demonstrate that joke, but finally, after it was all over, and all the roaring laughter and applause subsided, I sat down and had another drink.

A little later, a Russian named Boris brought out his guitar and sang a beautiful song in Russian. He was good, and everyone enjoyed it. He then asked if anyone else would like to play his guitar or sing a song. I was still feeling no pain, so I volunteered and played his guitar and sang one of Kenny Rodger's country music songs that I had learned, "The Gambler." Everyone seemed to like it.

It was a fun night, and one to be remembered. They transported us back to town that evening, (and I'm glad I was not driving the bus.)

The awards and farewell dinner occurred the night before we were scheduled to go home. It was another fine dinner with plenty of refreshments. It was held at a nice Japanese Café. There were about 40 of us there and we had the whole place to ourselves. The award speeches all seemed too long, as they had to be translated from English to Russian and Japanese. This made them three times as long. We all managed to live through that, however, and it was very rewarding and a humbling experience to have three Silver Medals hung around my neck. Seeing the others receive their medals was great too. The Russian cameras covered all the events, including the awards ceremonies. After the awards we had dinner, and after that they had some "special" awards. I received a box of fine Russian chocolates and a beautiful little hand-made vase, and was awarded "Mr. Entertainment" or "Mr. Congeniality," I'm not sure which, but here again, I felt rewarded and humbled. This was a total surprise.

The Russian team won most of the gold medals and more medals than any other country. But that comes with the "home field advantage" I suppose. They were really good in all the contests, and deserved the medals they won.

Next day we had to say goodbye to a lot of special Russian friends. The families that had taken us in for a week and the Russian amateurs now all seemed like close friends. They all came to the airport to see us off. This was a touching experience, and a few tears were shed here and there. This lasted about an hour, I think, but finally we said our goodbyes. With a lump in my throat I boarded the IL-62 AEROFLOT jet aircraft for the many hour journey back to Seattle, and then home.

The next Friendship Radio Games were scheduled in Japan as "FRG-97." The Japanese would have to work very hard to beat the outstanding treatment we received while in Russia at "FRG-95."

Vic W7VSE

CWops Ambassador Program

Rob K6RB

The club's ambassador program has hit the ground running. [Earlier this month we had 14 active ambassadors out of an anticipated 23 maximum, world-wide. – Ed.] Ambassador Atsu JE1TRV has submitted an article about CWops and it was just published in the JA CQ ham radio magazine.



Ambassador Alan AC2K is exploring several opportunities to present information about CWops, and Ambassador Mac NN4K will be manning a CWops booth at some ham events in his US SE region. All ambassadors have received their distinctive name badges which will help identify them when they attend club meetings and ham events.

You don't have to be an ambassador to represent CWops, by the way. There are presentation and handout materials in the "members only" section which you can use to create your own presentation for a club you belong to or to offer as handouts at a ham event.

Don't forget to let people know about the upcoming CW Open (September 6). This latest running will have a new award structure. We will be giving out three times as many awards based on participants' standings in their ITU sections. That will help to level the playing field.

2014 CW Open – Get Ready for 6 SEP!

by Dean Faklis, NW2K

The CW Open is *your* premier operating event. It's a unique international celebration of CW and CWops and a ton of radio fun. There are three 4-hour sessions on September 6 (0000-0400z, 1200-1600z, and 2000-2400z) to give each ITU Region its share of sunshine. The exchange is simple, name and serial number, and the key to bigger scores is the "one mult per callsign" rule. As usual, the action is centered on the CWops frequencies: 28-38 kHz from the band edge, plus or minus, on 160, 80, 40, 20, 15, 10. And ... everyone is welcome, members and non-members alike. Please mark your calendar.

An important aspect of the CW Open is its unique design for teams. There is no geographical limitation on teammates and winning teams can be multi-continental to optimize scores. Last year, we had 19 nearly full teams (maximum 10 single ops per team). Competition for teammates heats up in early August so now is the time to form teams. The CW Open rules are located at: http://www.cwops.org/cwopen.html.

We've developed a brief presentation for you to use with your local radio club to help promote the CW Open and teamwork. It's located at: http://www.cwops.org/pdf/CWOpen-2014Presentation.pdf and please share it with your club. Please reach out to your club and take a lead role beefing up participation in the CW Open. Of course, I'll help in any way ... I'd love to see 25 full teams this year with a strong international focus.

Our members are extremely courteous and are always extending a helping hand by matching speeds and giving encouragement. The CW Open is fun for all skill levels and degrees of competitiveness. Thanks to ICOM America, the awards are simply beautiful and there are a lot of them. Last year we had 19 teams, 1,000 logs and 100,000 QSOs. The top scorers averaged more than 100 QSOs per hour, in every hour, in every session. Let's try to make new records for participation this year.

If you're willing to post a CW Open invitation to your club's reflector, let me know (NW2K@arrl.net) and I will email you a brand new invite. And questions and comments are encouraged at any time! See you (often) on September 6!

Back to Contents

Tokyo Ham Fair in August

Atsu JE1TRV, CWops #141

Once again we are going to have a CWops booth at the Tokyo Ham Fair this year. This year, it will be held on Aug. 23(Sat) and 24(Sun) at Tokyo Big Sight Exhibition Center. The Web site is under construction right now at https://www.jarl.org/English/4 Library/A-4-6 ham-fair/ham-fair.htm>.

It's still a fresh memory that Rob K6RB was the main player in the last year's Ham Fair. Although he could not come to Japan this year, we JA members will manage and do our best for the CWops booth with Japanese service spirits "OMOTENASHI."

So, every CWops member from around the world is most welcome to Japan and our booth!

If you need more information about access, accommodations, attractions, etc. please do not hesitate to contact me <je1trv@a1club.net>.

Back to Contents



CW Academy

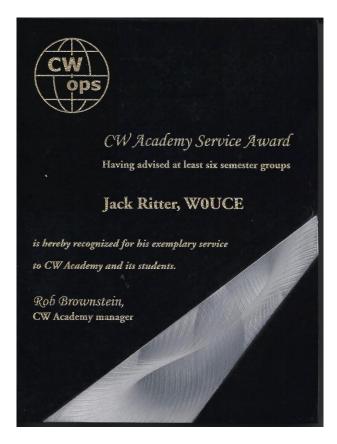
Rob K6RB, Will WJ9B and Jerry AC4BT

CW Academy is gearing up for its upcoming September-October 2014 semester. We have lots of signups, and a growing corps of advisors. The beginners (Level 1) list, as always, is the largest. It is great that so many hams who are new to the hobby are motivated to learn Morse and become active CW operators.

CW Academy is relatively new. Our first real semester was Apr-May 2011. When an advisor has taught 6 semester groups, that is the equivalent of two full years of service. To reward that service and dedication, CW Academy confers a service award to any advisor who has advised six groups. There is a second even more prestigious award for those who have done 12 sessions.

CW Academy is pleased to announce the first two service awards have been conferred. Jack, W0UCE, is our first recipient; and Rob, K6RB, is the second. Jack is also poised to receive the second award for 12 sessions. That is the equivalent of a full four years of service. Our hats are off

to Jack. Several other advisors are nearing the six session ranking and will be receiving their CW Academy service awards after this next semester.



CW Academy, by far, is CWops' most differentiating and identifiable program. To date, our backlog is nearly 12 months out. We simply don't have enough advisors to keep things reasonably current. So, once again, we appeal to our members and to non-members as well to consider joining the advisor corps so that motivated students don't have to wait a year to get started. We are nearly full on the April-May 2015 list and will soon be starting the September-October 2015 list. Ask any of the veteran or new advisors about the program. Everyone agrees that there is a great sense of satisfaction helping these fellow hams learn and improve their Morse skills. Think about being a part of that effort, and when you're ready, tab over to CW Academy and signup to join the advisor corps.

73,

Rob, Will and Jerry

...and a note from Jack follows on the next page after an unwanted underline that refuses to be deleted:

CW Academy Associate Advisor Training Program

Last Call for Student Enrollment Notice

Jack W0UCE

In preparation for CW Academy Classes starting in September, the deadline for student enrollment in Associate Advisor training for Level I, II and III classes is Friday, August 8. Classes will be conducted using OOVOO interactive video conferencing and a reliable high speed Internet connection and free OOVOO account are required. Classes will be approximately two hours in duration.

To enroll in Level I or Level II / Level III classes contact Jack – WØUCE by e-mail to: mailto:w0uce@nc.rr.com

Back to Contents

A useful tool for improving Morse code proficiency Jack WØUCE

While I am proud of every student I have had the privilege of teaching and Elmering in Morse code over the past forty years, two have truly excelled. Mack NM4K and Paul K4JAZ were in my Level III class during the January-February 2014 semester. Not only did they excel as students, they also became CWops Club members before the end of their Level III class, went on to become Associate Advisors helping me with classes during the April – May semester and will be CWA Advisors teaching their own classes starting in September.

During their eight weeks as Level III students Mack and Paul worked on homework assignments together, held one-on-one practice sessions and started using a new free training tool named CW Player created by F6DQM for which they created practice files following the teaching method, drills and letters and word grouping and sequence described in my white paper "Learning Morse code as a Language."

Their efforts and creativity paid off and they now enjoy using Morse at speeds above 35 words per minute. I asked Mack and Paul if they would write an overview of CW Player and their opinion which is presented below. Text files they created will be made available on the Morse Code Page on my website – www.wouce.net before the start of CW Academy Classes in September.

Back to Contents

CW Player by F6DQM



An introduction to CW PLAYER

Mack - NN4K (CWOPs 1227) and Paul - K4JAZ (CWOps 1260)

Introduction

Having just completed a very successful Level III CW Academy course led by Jack WØUCE, we felt it might be useful to share a tool we used in addition to those suggested by Jack to help us gain speed and accuracy.

"CW Player," written by F6DQM, is a freeware program that reads plain text files (.txt files). CW Player can be downloaded from the following website: http://f6dqm.fr/software.htm.

The following paragraphs expand on some of the features and configuration options we used to customize the program for our specific needs as we progressed in our CW Academy class. In addition, Appendix I contains some of the files we collected or generated that we used with CW Player to help us in the learning process.

Features

Text Entry

In the top left corner of the screen is a box labeled "Enter Text." Type with the curser in this box and you hear code sent at the speed set in the "Speed wpm" rate.

Messages

There are six messages that can be programmed and replayed. Right click on one of the message boxes and enter the message you want played when that message button is clicked. This is a good place to create the letters or numbers you are having trouble with so you can play them repeatedly to hear the differences. For example, the letters S and H, or numbers can be practiced until you master them.

Choice

Under the choice area of the display are seven choices. We will describe three of them that we found most useful during our CW Academy course.

Random

Clicking the "Random" option allows you to choose how many random characters are in a session as well as the lesson number to be run. One of the pre-programmed lessons or one you have either added or modified can be chosen from the 60 that are available. Noise, QSB and QRH (drift) can be added to the CW practice as desired.

Clicking the "File" option opens a window in the CW Player folder which allows you to select one of the .txt files available for transmission. We opened a sub folder named Practice Files and stored all the files we generated for practice here. The files are played at the "Speed wpm" rate as modified by the character and word spacing options described above.

Monitor

The monitor function listens to an external code practice oscillator and after adjusting the oscillator volume and "Decoder Threshold" printing out of the code heard is seen in the Monitor window. We found this feature quite helpful in getting word and character spacing timing down. (I'm not there yet!) We think this feature helps develop a good keying fist, especially while monitoring "The Quick Brown Fox" as you send it. It has extended capabilities to interface with your computer and transceiver to monitor real time CW transmissions if you want to adapt that later.

Configuration

This section acts as instructions to customize the features of CW Player discussed in the next section.

Under Tools

Local Lessons

Choosing the local Lessons option under Tools opens a window that allows you to customize any of the 22 already programmed lessons or add new ones up to a total of 60 lessons. Each lesson can consist of up to 55 characters. All of these can be customized by selecting the 'Local Lessons option under the Tools tab. In the pop up window a lesson number can then be chosen and the contents of that lesson can be modified as desired. Enter and Exit close the modification window. Then

with "Random" selected under Choice the lesson number can be changed to play the newly modified lesson.

Under Options

Spacing between characters

Spacing between characters can be set from 1 (full rate CW) to as much as 17 spaces. When spacing between characters is increased and the speed is increased characters are heard at the WPM rate but time between characters provides a much lower real speed.

Spacing between words

Spacing between words can be set between 1 (full rate CW) and 4.

QRI (pitch)

Pitch can be changed with this option from 100 to 1500 Hz and there is a check box to add harmonics to the sine wave output if desired.

Noise

Noise can be added to the output if desired by right clicking the "squiggly line" box just right of "Hide" and selecting both level and bandwidth in the pop up window. The selected noise level can then be turned on or off by clicking the "squiggly line" box

QSB

Fading can also be added by right clicking the QSB box and selecting the depth of fade desired. Noise can be added to the output if desired by right clicking the "squiggly line" box just right of "Hide" and selecting both level and bandwidth in the pop up window. The selected fading level can then be turned on or off by clicking the QSB box.

Conclusion

We found that in addition to the other excellent tools suggested to aid us in advancing our CW proficiency, CW Player was a valuable asset to include files from WØUCE's excellent white paper "Learning Morse code as a Language."

We programmed files such as:

- Two Letter groups
- Three letter Groups
- Three letter words

In addition, we found files containing the most used 100 words at the following web site:

http://www.duboislc.net/EducationWatch/First100Words.html

This site also has the second and third hundred up to the tenth hundred most used words. Other files can be copied from numerous sources into Windows Notepad then edited to remove stuff like quotes and hyphens. One neat source is the ARRL practice files. These are found here.

http://www.arrl.org/code-practice-files

Saving these files in a CW Player subfolder Practice file can provide you a bottomless source of practice text.

We hope you find CW Player as valuable as the other tools suggested for use in CW Academy courses.

Back to Contents

CWops Tests Participation Awards

by Hank Garretson W6SX

To encourage CWops Tests participation, we have Participation Awards. 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. Our objective is to encourage CWT participation – you don't have to be competitive to earn points, just active.

Award levels for 2013 were based on six CWTs per month. Beginning in March 2014 we transitioned to weekly CWTs. At the end of the year, we will have had 146 CWT sessions. As a special bonus for 2014, we are keeping Participation Award levels at the 60, 40, and 24 levels. This is your chance to earn a medal for the first time or to upgrade to a higher level.

Here are Participation points through the 10 July.

N5RR 68	NN6T 54	N4DW 45	UR5MM 39
NW2K 68	N5ZO 53	OH2BN 45	N8BJQ 38
F6HKA 67	NW0M 53	W1UU 44	K1ESE 38
VE3KI 64	K7SV 52	N4AF 44	N5AW 37
W9CC 63	KU7Y 52	N0TA 44	F5IN 35
N4FP 63	AA2ZW 51	K1SM 44	SM6CUK 35
K1DW 63	K6RB 50	WN4AFP 44	SM5ALJ 34
KG5U 63	W4VQ 50	SM3CER 43	K0DTJ 33
W6SX 62	KW7Q 48	W0EJ 43	K4JAZ 32
WJ9B 59	DJ1OJ 48	N3JT 43	KA7T 32
W2GN 57	W4TTM 48	SM4DQE 42	NS9I 32
NN4K 57	KJ9C 48	WOUCE 42	W0VX 32
VE2FK 54	KC4D 47	K4RUM 41	W1RM 32

K1GU 32	K5FP 14	NM5M 7	K5GO 3
WX7SJ 32	K6NV 13	NU7Y 6	KL7SB 3
SM0OY 32	DL8PG 13	K9DX 6	N2JJ 3
K3MD 31	N1LN 13	KK1MM 6	W3BBO 3
WA8HSB 31	AD1C 13	AA9A 6	G4BUE 3
W5ASP 31	K1SX 12	KR8V 6	K2ZR 3
N0AC 30	K3GHH 12	CR7AJL 6	NI8N 3
FG8NY 29	KC9EE 12	W9SZ 6	VK6HG 3
N1EN 29	KK4XX 12	N4HAI 6	PA1FOX 3
JF2IWL 28	N8AA 12	N4ZZ 6	NA3M 3
K0RF 28	KU7T 12	W7GB 6	K7RF 3
SM5BKK 27	G0IBN 11	N1DC 6	K5WA 3
WQ3E 27	AA4FU 11	JA7QVI 6	NIOR 3
W9ILY 26	W6JMP 11	K6DGW 6	W0JX 3
SM6FKF 24	W2CS 11	AE6Y 6	KB7V 3
W8CAR 24	W4BQF 11	W2LK 5	NOUR 3
K4BAI 24	PA4N 11		W1WMU 3
W3KB 23		GW4J 5 VE2BZO 5	
GW0ETF 23	N5QQ 11 W4UX 10	ND9M 5	SA6AQP 3 K9MM 2
WA4TT 23	N3HEE 10	K4IU 5	VE5UF 2
PA3DBS 22	K4RO 10		STEVE 2
VE3MGY 22	WB9G 10	K4HQK 5 KC7PM 5	
			W2VJN 2 K2PS 2
NA8V 21	W1NN 10	WP3C 5	
K1SE 20	N3AD 9	N2ZN 5	K4YYL 2
W2RU 19	W6KY 9	AD4EB 5	NU6T 2
F5MNK 19	HB9ARF 9	KI0I 5	N3DXX 2
K4ORD 19	K9JM 9	CO8CY 5	AA4GA 2
N3QE 19	N3ND 9	NQ6E 5	N6XI 2
W7ZRC 19	K2UFT 9	ND3F 5	RIEN 2
N3MNT 19	K4GMH 9	ON5UK 4	S56A 2
W7WHY 18	JA1GZV 9	KB0JSH 4	N6GA 2
W5ZR 18	W1FJ 8	K6XT 4	AB2E 2
N6RO 18	K4FT 8	N2SO 4	K6HTN 2
K6HP 18	K2SX 8	AA7V 4	W6CT 2
NS0R 18	N4NM 8	N8XX 4	K9JWV 2
N5IR 18	NA4K 8	K7KY 4	W9TC 2
W4NZ 17	NO5W 8	NF7D 4	AD6E 2
AC4CA 17	K1RO 8	WT5RZ 4	K0PC 2
N1ZX 16	K2CYE 8	NG7M 4	WOUA 2
N0EF 16	WB5BKL 8	K2LE 4	K4VU 2
WA6URY 16	N3ZZ 7	G3YJQ 4	K7VM 2
KI7Y 16	SP1AEN 7	K5OT 4	N8EA 2
WD0T 16	K0VBU 7	K2NV 4	W3SFG 2
N4YDU 15	W1UJ 7	PA7RA 4	JOE 2
K1BG 14	N6NC 7	KC4LE 4	W4ZYT 2
W6KC 14	RX6CB 7	K8QI 3	N5NHJ 2
KC7ZO 14	K5AX 7	W6EU 3	N7NM 2
USOMF 14	W5WMU 7	K2CDX 3	N3BB 2

VE2AXO 2	WB5EIN 1	N6PF 1	TF3DC 1
KZ5D 2	KD8RQE 1	K6RC 1	W4IX 1
PA0MIR 2	W7OM 1	N7TR 1	VK2DX 1
NM2L 2	N4DU 1	NW9I 1	AA0AI 1
K2QMF 2	W2C 1	JE1TRV 1	DL2TM 1
K9GS 2	KC0VKN 1	LZ1GL 1	N5TM 1
N8FF 2	KS0MO 1	W0ODS 1	KY7M 1
N5JR 2	PA5KT 1	WB4LZT 1	LB3RE 1
RV3ZN 2	SE4E 1	AB9YC 1	NZ8J 1
G0DJA 2	K8IA 1	SM7ATL 1	K0VXU 1
KO7X 2	WO1X 1	K2DB 1	KC8R 1
K4DJ 2	K7CU 1	NJ4X 1	N0HYD 1
W7CT 2	AE7TG 1	SM6EWB 1	AA8R 1
KH6DV 2	KJ9C/7 1	N4UP 1	W4CC 1
AC5GG 2	EA1WX 1	YO3GNF 1	N4KW 1
K7ULS 2	NP3A 1	NW3H 1	KR7C 1
KW7XX 1	AF9W 1	VE9BWK 1	W6OAT 1
N2MM 1	UF8T 1	DAVE 1	NA6M 1
NG2H 1	W1R 1	WB2VYK 1	KU8E 1
K7JBQ 1	OZ1JB 1	YO5OHO 1	WC3W 1
WA5BDU 1	KA0IQT 1	N5NU 1	AF5DM 1
WA1S 1	W3ATT 1	VE3DTI 1	G4CPA 1
W1EBI 1	N4RLD 1	AE1T 1	JA9CWJ 1
N5BA 1	SM5CCE 1	KB8UEY 1	K6EU 1
WARREN 1	7Z1HL 1	R6AF 1	W0BH 1
KH0ZZ 1	KG4BBK 1	KA8HDE 1	DAN 1
NF1R 1	N3RS 1	N6KI 1	SM6CNN 1
K6CSL 1	K4BAI N5AW 1	WM9Q 1	K6RQT 1
DM5ALJ 1	K0LUZ 1	ART 1	K0RU 1
NA9I 1	KT5V 1	W4AU 1	WB4DNL 1

Don't worry if your total seems off a bit. Joe KCOVCN will soon have current, updated weekly Participation Points standings up on the CWops website. Please wait until the website is active and then let me know if you think we have your total wrong. In the meantime, please note that to be counted you have to report your score for each session to http://www.3830scores.com/index.php.

Please take care when reporting. Make sure your call is correct. We have some names in place of calls – no credit given. Also, if you use more than one call, please make sure that your "count-it" call is in the Operator Call block. And remember, you need at least 10 QSOs to earn a participation point for a session.

Sixty-nine ops have already qualified for a medal. Nine hams have earned Gold so far. Many can still move up to Gold. Many are positioned to move up a level. Many can easily earn a first medal. To whet your enthusiasm, here's what the medals look like.



Take advantage of our low award thresholds this year. Award levels may go up for 2015.

The more hams who get on for CWTs, the more fun they have and the more fun we all have. Everyone, let's have CWops-Tests fun.

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

CW Exuberantly,

Hank WGSX

Back to Contents

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 CW ops Award Manager (CAM) software, available at no cost, will help you keep track of your ACA and CMA totals.

Here are the current totals for CWops awards:

Call	ACA	СМА	Call	DX Total	Call	WAS	Call	WAE
F6HKA	540	2811	W1RM	129	N5RR	50	W1RM	43
W1RM	459	3131	OH2BN	112	W1RM	50	OH2BN	40
VE3KI	432	2636	F6HKA	109	F6HKA	49	EA8OM	36
N5RR	417	3038	W4VQ	107	VE3KI	49	F6HKA	36
W0VX	380	1806	EA8OM	90	W1UU	49	N5RR	36
K6RB	336	2441	N5RR	90	AD1C	48	W4VQ	36
KZ5D	336	3239	EA1WX	80	EA8OM	48	KR3E	34

FG8NY	333	1687	KZ5D	78	FG8NY	48	KZ5D	34
N1EN	328	777	VE3KI	78	GW0ETF	48	FG8NY	32
K1ESE	312	1393	K1ESE	76	K6DGW	48	VE3KI	32
DL8PG	310	1414	W0VX	76	K6RB	48	W0VX	31
EA8OM	296	2126	KR3E	73	KZ5D	48	W9ILY	31
AD1C	284	1326	W9ILY	70	NN6T	48	EA1WX	30
GW0ETF	267	1122	NN6T	67	W0VX	48	K1ESE	30
W1UU	247	1446	AD1C	65	W4VQ	48	NN6T	29
G4BUE	246	386	FG8NY	63	W6KY	48	N1ZX	28
W9ILY	205	1796	W1UU	63	W9ILY	48	W1UU	28
PA7RA	171	1068	GW0ETF	62	K1ESE	47	GW0ETF	27
NN6T	140	1404	N1ZX	62	KR3E	47	G4BUE	26
W6KY	126	1537	W6KY	54	EA1WX	46	AD1C	24
K6DGW	110	1178	G4BUE	51	N1ZX	45	4Z1UF	21
OH2BN	45	530	4Z1UF	50	N1EN	42	K6RB	21
N1ZX	26	688	K6RB	49	OH2BN	42	N1EN	21
G0DJA	16	23	N1EN	47	G4BUE	41	W6KY	16
AA3B	0	3874	K6DGW	29	4Z1UF	36	K6DGW	8
EA1WX	0	1426	G0DJA	10	G0DJA	8	G0DJA	7
KR3E	0	1136						
N2UU	0	1774						
OK1RR	0	893						
PA1FOX	0	5						
PA4N	0	955						
SM6CNN	0	2392						
W4VQ	0	1599						
W5ASP	0	893						
WX7SJ	0	397						

73,

Pete, W1RM

Back to Contents

New Members

Colin Jenkins KU5B

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

1308	WA3MIX	Lou
1309	N9TK	Jim
1310	WO1X*	Tom
1311	WO4O	Ric
1312	K4ITV	Chas
1313	KG6IIP	Randel
1314	IK0IXI	Fabio

^{* =} Life Member

Back to Contents

Current Nominees

As of July 29:

Need Sponsors: NI8N, W0AG, K7FU

Invitations Extended: K5UZ

For more details about nominees and status, check the "Members Only" pages on

the Website: www.cwops.org.

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

Back to Contents

QTX Report

Enjoying the Art of Conversational CW

QTX is a program for members who enjoy casual CW QSOs. Any time you have a QSO that goes over 20 minutes, jot down the call sign of the other station, and before the fifth of the next month, go to the <u>CWOps website QTX page</u> in the Members Only section and put in your total. 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. June was another record month for QTX activity with total QSOs topping 500 for the first time. Most of

the increase comes from more activity from the regular contributors. That can be seen below by the number of members who had personal best totals in June.

These are the standings at the end of June and year to date for 2014 -

<u>Call</u>	<u>June</u>	<u>CY2014</u>
KI4XH	77	462
WB6BEE	74	346
K5LY	66	196
K5KV	58	301
N5IR	57	253
N1ZX	35	184
NN6T	29	212
K4AHO	20	143
JE1TRV	14	60
K6RB	13	42
K0DTJ	12	56
KE6OIO	11	78
N4SR	10	64
W6JMP	9	24
WA3NZR	8	81
WA8IWK	6	66
K8QI	4	35
N5RR	4	25
K6HTN	3	21
ZS1C	2	2
W4VQ	2	3
N1EN	1	1
K6HP		22
W5JQ		19
KC9EE		19
HB9CVQ		5
KC0VKN		5
K6RQT		4
K3GHH		3

After Benny's K5KV big month in May, Fred KI4XH came roaring back in June for the monthly top score and the year to date overall lead. Don WB6BEE and Lee K5LY were nipping at his heels for June. June personal bests were WB6BEE, K5LY, N5IR, K6RB, W6JMP, and W4QV. Reporting stations were 22, up one from May.

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).

As of the end of May we have three QTX Achievement Award qualifiers, KI4XH has reached the Gold level. WB6BEE and K5KV have reached the Silver level. N5IR, NN6T, and K1ESE have reached the Bronze level. K5LY and N1ZX should make Bronze by next month. You can send me your Achievement Medal totals at any time and update them throughout the year.

Thanks to all for your participation.

73,

John K1ESE, CWops #792

QTX Manager

QTX – All About Conversational CW

Back to Contents

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.

NCCC Sprint

The North American Sprint contest takes place twice a year, and is favored by a hard core of very capable operators. There are CW and SSB weekends. CW Sprint fans long have yearned for additional opportunities to experience the Sprint's unique rules, which do not allow a station to stay on one frequency and "run" other stations. Responding to the demand for more "action," the Northern California Contest Club (NCCC) developed a weekly event, the NCCC Sprint or NS. It's only 30 minutes long, and while the rules vary a little from its famous big brother, it's fundamentally similar. A CQing station must leave its frequency after "soliciting" a contact and the station that answered the CQer may remain on the frequency and either respond to a call or call CQ himself if no one calls. They then must QSY. The premium on fast call-sign recognition and high speed CW capability, as well as the freedom from "Spots" or "Skimmers," makes the Sprint format more of a "purist" sort of old-time CW contest experience.

One additional development has brought additional interest and competitive juices to the NS. A structured series of competitions, between eight and twelve weeks long, called the NS Ladder. These were conceived by Bill N6ZFO, and are supported by the NCCC website and also by the excellent 3830 scoreboard. Check out the details at the NCCC website here: http://www.ncccsprint.com/.

de Jim, N3BB

Typical evenings feature nearly 50 stations, with lots of action on each band. Actual results for each evening are here: http://www.3830scores.com/listeditions.php?arg=6Lfci1z5a0 . Simply click

on the date and the instant as-posted for the session will appear by call-sign. Very slick reporting technology!

Time: 0230-0300Z (Friday UTC), Thursday night in North America.

- o 20, 40, 80 and 160 M 38-44 KHz up from band edge or 1815.
- o 100 watts max power.
- o Sprint format, mults per band and 1 KHz min QSY.
- o Contact stations once only per band.
- o Mults count on each different band

Score reports to http://3830scores.com (Tks, WA7BNM)

NSL Rules: http://www.ncccsprint.com/ladder.html Schedule: http://www.ncccsprint.com/next_ns.html

Geographic Divisions . . see map at http://www.ncccsprint.com/ladder.htm

Check out the up-to-date "Ladder to Date" scoreboard for this XXth Ladder here:

http://www.ncccsprint.com/scores- NSL-20.html de Bill, N6ZFO

NCCC Sprint Ladder	0230Z-0300Z, Aug 1
NCCC Sprint Ladder	0230Z-0300Z, Aug 8
NCCC Sprint Ladder	0230Z-0300Z, Aug 15
NCCC Sprint Ladder	0230Z-0300Z, Aug 22
NCCC Sprint Ladder	0230Z-0300Z, Aug 29

Oberalp Contest and World's Highest Lighthouse

CWops members can work HB9DAX/P on 16-17 August operating from a replica of the lighthouse "Hoek van Holland," the highest lighthouse in the world at 2046 m. It stands at the source of the Rhine River and illuminates the course of the Rhine to Rotterdam. Make at least two QSOs on CW and/or SSB to qualify for an award. Log data goes to Manfred@eisel.ch.

de Fred HB9DAX via Editor

Back to Contents

-30-