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Publication of the
Northern California
Contest Club



NCCC – 53 years
of contesting
excellence

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President's Report David West, KO6M

It's here! It's finally here! **Holiday** Contest Season. However, before I get into that, it was great seeing so many of you at the BBQ. Plenty of fun and wonderful discussions abounded. Thank you to everyone involved in getting it organized.

To date we have had CQWW DX – SSB, Sweepstakes – CW, and as I write this many of us are getting ready for JIDX or NA SSB Sprint. With Sweepstakes – SSB, CQWW DX – CW, and ARRL EME waiting in the wings. Of course, there are plenty of others contests out there too. Too many to list in my small article. I should make a website for such events. Oh...Bruce (WA7BNM) already did that -- check contestcalendar.com for all the contests and their schedules. I've been tempted to subscribe on one of my calendars, but I think that might drive me crazy.

Remember, practice makes perfect. Try one of the mid-week contests just to keep your rates up or to test your rigs. Nothing beats actual hands-on training and some of these mid-week contests are a perfect time to try something new. For instance, the “Worldwide Sideband Activity Contest” is a Monday night event that has few people calling CQ but I always hear them getting returned calls. For instance, it's one I've used to make sure new power supplies and gear layout can handle the pressure of constant CQing. Of course, the NCCC Sprints are

NCCC MEETING

<https://nccc.cc/meetings.html>

Next ZOOM Meeting Tue 14 Nov
1800 PST

“10 meter Contest Update”



spectacular ways to get RTTY, CW, and FTx experience as well! Now that the clocks changed it may be easier for some of you to make it on the air for them. I always find I'm in the middle of figuring out dinner in the none DST time frame.

About NCCC

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I could go on and on about what contesting means to me. I could add tips and tricks that I've learned in the few short years that I've been doing this. However, you, the contest club, are wiser than I can ever imagine so instead, I'll let you all pass that info to us in the pre-contest discussions and post contest reports.

In the time between when this note should be going out and my next rambling, we have the following KB contests:

ARRL SS SSB: 18 Nov 2100Z – 20 Nov 0300Z

CQ WW DX: 25 Nov 0000Z – 26 Nov 2359Z

ARRL 160 meter 1 Dec 2200Z – 3 Dec 1600Z

ARRL 10 meter 9 Dec 0000Z – 10 Dec 2359Z

As Hank (W6SX) says: "KB Exuberantly!"

David, KO6M

VP/CC Report

Chris Tate, N6WM



Greetings KBers.

Well the contest season has begun and as such its time to look forward to our next club competition, the ARRL 10m contest. I have been working diligently with our awards manager to put together a

reasonable awards program, and I am excited to share some of it with you.

Gary NA6O has designed a new and I might say quite attractive plaque for the top scorers in various categories and I hope as many of our KBer population gets involved in the contest. Some ARRL 10M facts

Band has been on FIRE! We are in solar peak conditions for the next couple years and should make participation in this contest FUN and EXCITING

The ARRL 10m contest is really the only ARRL sponsored TRUE DX Contest. You may ask what about



the ARRL DX? Answer – No. ARRL DX is basically the equivalent of a large QSO party , as DX stations cannot work each other, making it exponentially less interesting for rare dx to participate. The ARRL 10m contest does not suffer from this, everyone works everyone.

In solar peak conditions, anyone can play in this and make lots of qsos.. it's a dual mode contest, both SSB and CW, you can operate SSB only, CW only, or mixed at your preferred power level.

There are no meters like 10 meters.. you can make hundreds of qsos with a modified mobile Cb antenna... you don't need to have stacked yagis to have fun

The award categories are as follows –

Single operator and single operator unlimited(assisted) stations may enter as Mixed mode, SSB mode, or CW mode. Power categories are QRP, Low power; High power

There is also a multi-single category for those who want to enter as a team

Full rules are here <http://contests.arrl.org/ContestRules/10M-Rules.pdf>

This is a preview of what an NCCCC 10m club competition award looks like.... Drum roll please...





Some Aruba Contesting History

20 years and (almost) 200 Contests from P40I/P40Y

Andy Faber, AE6Y

Part 1

"What do you think Rusty – is it OK to do business with Carl?" I was enquiring of Rusty Epps, W6OAT, who I knew had a long acquaintanceship with Carl Cook, AI6V. I didn't know Carl well, but was aware that he had a reputation for being a bit of a wild man. Carl had just put his Aruba station, P49V, up for sale; I hadn't known that, but was informed of the listing by John Fore, W6LD, a fellow member of the NCCC whom I only knew relatively slightly. John was aware that I had operated the CQ WPX CW contest from Carl's station – my second ever contest expedition, in 2002 – and reached out to me to get my impressions and, in the course of that call, made the fateful comment that "this could be a good opportunity to partner with someone on."

"That's funny," Rusty replied, Carl asked me the same question about you." Fortunately, Rusty assured both parties that the other could be trusted, and we proceeded to negotiate the sale.



Sue (AI6YL), Carl (AI6V), Andy (AE6Y) Celebrating Purchase

Sales in Aruba are closed by notaries, who are like lawyers but specialize in property transactions, and there are only a few on the island. After a few last-minute hiccups obtaining appropriate signatures from Carl's ex-wife (a story the details of which are unfortunately not fit for a family publication), we consummated the deal at our notary's office in early 2003.

By the way, although John and I are both lawyers, we have no written partnership agreement between us. We do understand the value of written contracts, and I have even litigated contract disputes in court. I

always advise clients that there are three ways to memorialize an agreement. The first is a handshake with someone you trust. The second is a very detailed contract that you hope covers all contingencies. Both of those are fine. Where people get in trouble is everything in between: inadequate oral or poorly written agreements that don't accurately reflect their intentions. John and I proceeded to buy the station, operate it, and make substantial investments in maintenance and repairs all based on the handshake model, which has worked well for us for 20 years.

What we bought from Carl was a complete, turnkey operation. It consisted of:

The property: This is a lot that is 100 feet square, containing a



House at purchase - 2003



small, 3-bedroom, one-bath house. It's on a normal suburban street with houses on either side and across the street. Like most such property in Aruba, it is not "fee property" that we own, but rather it is leased from the Government. We have a lease, written in Dutch, that originally had a 60-year term, but now has only a few years remaining. We are assured, however, that it will be renewed. Lissette Maduro (the wife of Lisandro, P43L) is a lawyer working for the government, and she says that if not renewed, the government would have to buy all the improvements from us. Since the house is not in a development or tourist area, that would seem to be very unlikely.



Behind the property is a vast swath of open, undeveloped ground, locally called the "cunucu." Although it is public property, it is highly inhospitable to pedestrians, as it's full of cacti and other dense growth, all of which seem to be armored with nasty thorns. I keep a special pair of heavy pants and hiking boots in the house just to wear in the cunucu. We are fortunate in having this land behind us, as it allows us to install beverage antennas and other temporary receive and transmit antennas.

Carl used to just set out two beverages, roughly 300-foot wires strung several feet off the ground among the vegetation in the cunucu, that he would install and remove for each visit. We did that also for a few years, but in 2008 John and Denny, KX7M, laid out a system of four 500-foot-long beverages in different directions (EU, US-West, US-East, and East-West) that we have mostly left in place ever since, with only a handful of improvements and modifications, including extending the US-West and EU beverages to around 800 feet. We have regularly replaced all the wires but otherwise have only had some occasional troubles with them, involving

breakage of wires, corrosion of connectors, or inadvertent severing of feedlines by construction equipment. In general, the system has been quite reliable and has allowed us to hear much better on the low bands than with just our transmitting antennas.

The house is a small structure with cinder-block walls, but quite comfortable and livable. It contains three bedrooms; we use one for the radio shack, and the closets of the other two are filled to bursting with various radio-related supplies and equipment. There is a kitchen and a combined living/dining room. The one bathroom uses waste disposal in a septic tank outside, which somehow works (as far as I know) without associated leach lines, etc. As is typical for older Aruban houses, the water is not heated, so its temperature fluctuates with time of day and amount of sunlight. A few years ago, we had Jean-Pierre, P43A, install a small electric spot heater solely to heat the water for the shower, and that makes a big difference when you need a shower but are tired or cold late at night.

Carl had bought the house in the early 90s in very sad shape (e.g., dirt floors, no electricity or plumbing). He enjoyed doing complicated projects like rebuilding the house and station building as much as he enjoyed contest operating. He had been told by his doctors that for medical reasons he should give up contesting, and that's why the property was for sale. After we bought it, his health improved and he bought another property with a semi-finished house about six or seven miles away; that became his new station, which was sold after his death to Ben, DL6RAI (now SK). I have joked that we neglected to put a "noncompete" clause in our purchase contract – though actually it has been fun to have that station and its flow of visiting operators on the Island.



We have cable TV, which is very rarely used, and Wi-Fi, which works well. The house has a propane stove and a washing machine (neither of which I have ever used in my scores of trips there, though John and Ed, W0YK, have).



As you would expect, the property needs ongoing maintenance and inspection. We have been fortunate to have had the support of Jean-Pierre (P43A) and his wife Cris (P43C), who live about a mile away, very close to John Crovelli's station. JP and Cris have taken excellent care of the property and have also participated in major repairs and maintenance that has been required from time to time. Cris prepares the house for visitors, obtains licenses from the DTZ (their FCC), and actually enjoys repainting the house every few years. JP is a mechanical genius (he's a service manager for the local Toyota dealer) and has been extremely helpful in our various tower and antenna projects.

In the category of repairs and upgrades, I should note that W6LD has generally taken the lead, including recently spending several extra weeks on site to make sure projects were completed. Some of the maintenance to the house has included all new kitchen counters, replacing the window air conditioners with more modern units with heat exchangers outside, new ceiling, new doors, replacing metal fencing and gates, raising the block wall behind the house, and on and on.

Additional Stuff: The house came fully equipped with sheets, towels, silverware, pots and pans, and lots of tools and supplies. Radio equipment included an FT1000D and Alpha 87, a DOS desktop computer, and three towers with antennas. Over the years we have accumulated a large stock of spare parts, equipment, and supplies, along with manuals and other records that have required significant effort to organize, resulting in lots of labelled containers and files, thanks mainly to W6LD's organizational skills. There was also a car, a 1990 Mercury Tracer. Though it was convenient, the car caused us lots of grief due mainly to lengthy period of disuse between visits. We were glad to sell it a few years later, and now rely on rentals.





The three towers are a lot for a small parcel, and are not optimally guyed due to lack of space. We've replaced the towers and antennas twice, as galvanized towers seem to last at most 10-12 years on Aruba. It's a moderately salty climate, and we are about a mile as the crow flies from the ocean. There are constant trade winds that combined with the salt and fine sand in the air eat away at any ferrous metals (in fact, the house has an aluminum roof for that reason). The corrosion on the tower gets progressively worse as you go up, to the point where near the end of their useful life there have been actual holes in the legs near the top, making for an obviously unsafe situation.

The Island: The island itself is a great place to visit. It's pretty much a first-world country, with modern government, infrastructure, shopping, and recreational facilities. It encompasses about 70 square miles, and has a population officially listed as 108k. Although Dutch is the official language, almost everyone knows English. The locals all speak a local language called Papiamento, which in written form closely resembles Spanish (for example, a water tower nearby has a slogan on it: "Usa awa conscientemente" – Use water responsibly). Aruba became independent

from the Netherlands Antilles in 1986 but remains within the Kingdom of the Netherlands; thus, Holland manages, e.g., foreign relations and defense.

At right is a sign in both English and Papiamento. At first, I wondered why there seemed to be a problem with people throwing sushi on the beaches, but realized that is just the Papiamento word for garbage.]

Getting there is easy from the East Coast, as there are direct flights on several airlines from several East Coast cities. For us in California, it's more complicated, as we have to take two flights. I prefer to fly through Miami (weather permitting), but on several occasions recently have been forced to go through Charlotte due to the vagaries of American's constantly changing schedules. Aruba has a modern jet airport, and there is generally no delay going through Customs for flights that arrive in the afternoon (as mine customarily do after a red-eye from SFO, a layover somewhere, then a late morning flight to the Island); flights that arrive at night can be subject to Customs delays, as the inspectors seem to be looking mainly at locals returning from shopping expeditions to Miami.

Aruba has its own currency, the unit of which is the florin (often called a guilder, in the Dutch tradition). Its value is fixed to the dollar, which means that everyone treats the two currencies as being interchangeable, so you don't have to obtain local currency when you arrive, and you can pay in stores with dollars or florins. Another very nice feature of the Island is that the potable water is produced by a desalination plant, so, unlike most such destinations, you can safely drink the tap water.

Also unlike some Caribbean islands, Aruba is a very safe environment for a visitor. There is no need to stay in a resort or be escorted anywhere. I've driven all over the island in rental cars and never felt the slightest threat to





my personal safety.

The weather is generally reasonable with highs in the mid 80s to low 90s. The average annual rainfall is only 18 inches, so the dominant vegetation is cactus and succulents, not what we normally think of as “tropical.” I tell people Aruba looks like Tucson with beaches. Here’s what the Visit Aruba website says:

Aruba is situated 12 degrees 30' north of the equator. The weather is tropical but not extreme, with a median and fairly constant temperature of 82 degrees Fahrenheit (28 degrees Celsius) [See above – it gets hotter than that!]. It is important to mention that Aruba lies south of the general hurricane paths and usually only experiences fringe effects of nearby tropical weather.

Trade winds cool the island, making lying in the sun on one of the many beaches much more tolerable although care should be taken since this is deceptive - the sun is strong, in particular between 11am and 2:30pm and the use of high-SPF sunscreens is strongly recommended especially for fairer-skinned people.

Speaking of beaches, on Aruba they are extensive and are all open to the public (even the hotel beaches). It's usually breezy, which makes the island a mecca for wind- and kite-surfing. The tourist centers are concentrated in two areas called the “low rise hotel area” and the “high rise hotel area.” Our house is several miles away from these areas, but Andy Bodony, K2LE, P40LE, maintained a condo for years in a building in the high-rise area, operating with a simple antenna on the roof. There are many good restaurants on the island, including several that allow barefoot dining on the beach. There is also good shopping for the basics of life, including large supermarkets that carry American as well as European brands, and lots of hardware stores and home improvement centers for tools and supplies. And many American chain stores are present, including McDonald's, KFC, Subway, Domino Pizza, and Ace Hardware.

As you can probably tell, Aruba is just different enough to be a foreign country, but one that is not at all challenging for Americans to visit.

(Ed. Note: While located in what would seem to be the Caribbean Sea ... or maybe the Gulf of Mexico ... P4, as well as PJ2 and PJ4 are actually in South America for ham continental purposes. Aruba, whose inhabitants refer to as “One Happy Island,” is only 29 km off the coast of Venezuela. Part two of this story will appear in the Dec 2023 JUG)



CQP: A Small-scale Expedition to Sutter County

Jim, Peterson, K6EI



Some years, CQP is an opportunity for me to pursue a big score and maybe a chance at getting a plaque to hang on the wall in the shack. This year was not destined to be one of those years. But that didn't stop some of us from having a lot of fun.

In a typical year, Tom Dunbar (W6ESL) and I assist Bob Olson (W6BO) in the activation of his multi-to multi. Bob owns 10 acres, an impressive antenna farm, and plenty of space for additional temporary antennas. But a phone call from Bob three weeks prior to this year's contest brought news that he would be out-of-state during CQP weekend and his station would not operationally ready. So Tom and I needed to quickly come up with a Plan B.

Tom and I were already committed to activating Sutter County – a fairly rare multiplier – and so with the M/M option off the table, a small-scale county expedition was the obvious way to go. Sutter is a sparsely-populated county consisting of rice fields with more water fowl than people. A quick Google search revealed that there were no camping options to be found anywhere in the county.



Our Sutter County Expedition destination in Yuba City

The QTH: Given that it was now mid-September, housing options available through AirBnB and VRBO were rapidly dwindling. So after a thorough review of the options, we chose to rent a house on a small lot in Yuba City – Sutter County's biggest town. The location wasn't ideal from an RF standpoint (limited space for antennas, nearby power lines, etc), but this was the best choice available under the circumstances.

The Antennas: Our solution was to install a half dozen simple, low-profile antennas that would enable us to run two transmitters (Tom on SSB and me on CW) on 10- through 80-meters. Having never been to this location before, we relied on GoogleMap's overhead view feature to provide us with a preview of the property's layout as well as the location of nearby power lines.

The next step was to come up with a plan regarding antennas. The AirBnB house had a small backyard and an even smaller front yard. And being a rental, we didn't want to install any crazy antenna structures that would upset our host. So we came up with four basic multiband antennas that could fit on the available property:

1. Hygain 14AVQ Trap $\frac{1}{4}$ wave vertical (covering 10/15/20/40) with twenty radials
2. Rotatable trap dipole (covering 10/15/20) up 20 feet
3. End-fed inverted-L (covering 10/15/20/40) supported by 30ft fiberglass mast
4. Buckmaster OCF Dipole (10/20/40/80) with its feedpoint supported by a 30ft steel pushup mast



At a previous Winter Field Day I had encountered significant receive noise when using this OCF dipole. Reviewing available documentation, I found that this antenna uses a voltage balun instead of a current balun. Voltage baluns try to force the output terminals to equal voltages and can sometimes introduce phase shift between each output terminal and ground. (Voltage baluns are notorious for introducing common-mode current on the outer surface of the coax's braid which can cause the feedline to pick up local electrical noise.) As a result, I added an external 1:1 current balun at the feedpoint whenever as shown on the right for the CQP installation.



We completed the installation on Friday afternoon (with an outdoor temperature 105 degrees) and set up our two stations in the dining room and living room, using Comet CTC-50M window feed-through jumpers to get each of the feedlines. We had a 10/15/20 triplexer which we could use to share any of our antennas between our two stations as needed, and as well as individual bandpass filters to reduce unwanted harmonics when using separate antennas.

Making It All Work: Friday evening was spent debugging our installation. Murphy immediately made his presence known with significant RFI on 15 meters from the 14AVQ trap vertical that locked-up my logging PC. I had placed an RF choke at the feedpoint of the vertical, but the feedline lay on the ground adjacent to the radials which were inducing common-mode current on the exterior of the coaxial cable's braid. The simple solution was to add a second RF choke where the feedline from the trap vertical entered the house. This completely solved the problem. Important lesson: always bring extra ferrite toroids!

On receive, the observed noise levels with each of the four transmission tests Friday evening using the Reverse Beacon Network showed that on 20- and 40-meters, the OCF Dipole (with its legs extending east/west) was superior for West Coast contacts, while East Coast signal reports associated with the rotatable 10/15/20 dipole, EF dipole, and trap vertical were all about equivalent.



The Contest Begins: Given schedule constraints, we had decided to operate in the One-Day Expedition Category – focusing our 12-hours of radio time on Saturday. A week or so prior to the contest, Gina Salazar (KN6ZMT) had posted on the WVARA Chat Reflector that she was interested in participating in a CQP operation. Gina had passed her licensing exam a few months before, and was interested in seeing what SSB contesting was all about. Tom and I figured that our small-scale expedition was a perfect venue to introduce a new ham to the fun of contesting, and so we let Gina know that she was welcome to come help us out in Yuba City. Sure enough, that Saturday morning Gina and her chihuahua arrived at our QTH, and Tom immediately put her on the air handing out Sutter County multipliers. While



the two of them ran the SSB station (using a thirty year old Kenwood transceiver), I kept busy running CW QSOs with my Elecraft K3S.

As the contest progressed, it became clear that the local noise level was going to be a bit of a challenge. We were running low power (100 watts) but even so, frequently found ourselves being called by stations that we couldn't copy. Because we were traveling light, both of our stations were using switching power supplies (with ferrites on the DC lines), and some of our RFI issues were undoubtedly from those. Being adjacent to overhead power lines didn't help either.

The other obvious noise source was the home's air conditioner. When the AC was running, the noise level from the trap vertical (located about 15 feet from the air conditioner), would jump about 10 db. The simple solution was to only run the AC when we didn't need the trap vertical.

We used bandpass filters and previous testing had indicated anywhere between 0.6 and 1.2 dB of insertion loss. And whichever Dunestar filter was in use during the contest became physically warm after a few minutes of CQing. In an ideal setting, we would have deployed a set of monoband antennas with plenty of physical isolation so that bandpass filters would not be needed. (Or else higher quality filters with less insertion loss.) But for our small-scale operation, we settled for the non-ideal.

That's me at the CW station on the right. In spite of our site's limitations, CQP was a real hoot. Ours was the only callsign active from Sutter County on Saturday, and the excitement of some of the operators who worked us was palpable. I never got tired of listening to pile-ups when multiple stations competed to get my response. And on at least four occasions, we were told that our contact was the final county enabling a non-California CQPer a clean-sweep of all 58 counties.

By the time we pulled the plug Saturday evening after our 12-hours on the air, we had completed almost 500 contacts and had worked all 58 multipliers for a final score of not quite 100,000. While this wasn't a big score, we were pleased that we had been able to provide a rare county multiplier to so many out-of-state CQP participants.





An Excellent Soldering Iron for the Field

Gary NA6O



Someone asked recently on TowerTalk for suggestions regarding a cordless soldering iron that was adequate for heavy wires, such as #10 AWG. I have such an iron: The Weller WLBU75, a compact butane-powered pencil-style iron. They rate it at "75 Watts" but in my experience it's more powerful than that.

There is much to like about this tool. It's solidly built, compact, and fits nicely in your hand as well as your tool bag. It lights with a flick of a switch and heats to soldering temperature in less than 15 seconds. There's a tiny hole you can look into and see the orange glow of the flame Wind will not blow it out, ever. It has a temperature adjustment valve but I've always left mine wide open for single, quick jobs. After turning it off, carefully slip the ventilated protective cover back on and you can safely place it back in your tool bag. There's a window where you can inspect the butane level and it refills just like an ordinary lighter. I don't know how long it will run on a full tank but it has to be an hour or more. Also I think the tip will last a very long time (they charge way too much for replacements).

After a demo for W6SX at the NCCC picnic soldering a pair of #10 wires twisted together, he purchased one as did W6TCP. Weller used to sell the iron alone but now it seems only to come in a kit which costs more. The kit is part number WLBUK75 and at the moment costs about \$76 at various online stores including Amazon and Zoro. The kit also contains open-ended tips so it works like a mini-torch.



Usage of Popular Logging Programs in 2022 CQP and NEQP

Bill Haddon, N6ZFO



Ideally, a station's contest logging software has similarities to that comfortable old shoe or old dog you've loved for years – durable, functional, and gets you through the day while you're pretty much unaware of its presence. Like shoes and old dogs, the logging program needs some attention, shining in case of the shoes, upgrading in the case of the logging program, feeding and petting for the dog plus an occasional trip to the vet – or to the NCCC Reflector for the logging software. The shoes, dogs and logging program might be a bit out of shape and a little worn around the edges, but they fit well.

Both NEQP and CQP, two of our hobby's most popular and expertly managed QSO parties, maintain detailed logging records of logging software in use by their many participants. For NEQP this information is available at <https://neqp.org/2022-New-England-QSO-Party/>. For CQP, Dean, N6DE provided the information, also for the 2022 CQP, within ten minutes of my asking him.

The significant use of the N3FJP software surprised me. It's run by a family, OM, XYL and Son who appreciate some contributions for their hard work. The data are not to be taken as a recommendation or a judgment for any of these programs, nor do they apply to RTTY and other digital modes. I know, for example, that many RTTY enthusiasts prefer the WriteLog/MMTTY combination. The percent of scores total, listed for NEQP, is higher for N1MM+ than for the second most used, N3FJP, suggesting the latter might be more comfortable for less experienced ops and smaller stations.

My own use of N1MM+ is based on their providing three modules for our Thursday night contesting activities. I was a happy and satisfied customer of WL for many years, having migrated from my own logging program after winning a subscription to WL at a Visalia Contest Banquet.

Software Program 2022 NEQP, CQP	# of Logs NEQP# of Logs	# of Logs CQP# of Logs	% of logs NEQP% of logs	% of Logs CQP% of Logs	Points NEQP Point § NEQP	% of Pts NEQP% of Pts
	NEQP	CQP	NEQP	CQP	NEQP	NEQP
N1MM Logger+	526	662	63.1	65.1	8,560,202	78.7
N3FJP	193	266	23.1	26.2	1,106,899	10.2
WA7BNM Web2Cabrillo	30		3.6		90,537	0.8
WriteLog	16	33	1.9	3.2	200,232	1.8
ADIF2CABR	9		1.1		128,276	1.2
DXLog.net	8	22	1.0	2.2	239,111	2.2
SkookumLogger	8	8	1.0	0.8	297,476	2.7
GenLog	7	9	0.8	0.9	29,764	0.3
CQPWIN	0	6		0.6		
RUMlogNG	6		0.7		43,714	0.4
N1MM Logger	3		0.4		29,891	0.3
TR Log POST	3		0.4		30,996	0.3
TR4W	3	6	0.4	0.6	22,280	0.2
Contest LogChecker	2		0.2		1,339	0.0
DXKEEPER	2		0.2		1,487	0.0
fldigi	2		0.2		110	0.0
SD by E15DI	2	5	0.2	0.5	1,192	0.0
Others	14		1.7	0.0	92,472	0.9



Tube of the Month

Norm Wilson, N6JV

(*Department of Thermionic Paleontology*)

Visit the Tube Museum at n6jv.com

WE 241B



Western Electric was a major manufacturer of equipment and tubes for the military and broadcasting in the 1920s. Military types developed in WW1 were refined for civilian use. In 1921, Western Electric announced a new triode that looked like an enlarged "U" pioletron or WE 211A, but was about 13 inches tall. In 1924 a refined type called the [WE 212D](#) replaced the original tube. Many of Western Electric's commercial broadcast transmitters utilized the 212D in their finals and modulators. The 212D could operate at full power up to 1500 KHz, but up to 4500 KHz, it had to operate at reduced power.

The late 1920s saw much development in the use of higher frequencies in the "short waves" for long distance communications (DXing). W6AM's "[California Kilowatt](#)" on 40 meters is an example. Western Electric wished to enter this market for sales as well as for its in-house equipment. The basis 212 envelope was equipped with a plate cap and was introduced as the 214A in 1928 followed by the [214B](#) in 1934. This new tube was rated as having a dissipation of 275 watts with a maximum of 3000 volts at 350 ma on the plate. The filament uses 14 volts at 6 amps. Maximum full power is 7.5 MHz but could be used at 22.5 MHz with 1000 volts on the plate. This tube is 14.5 inches tall and 3.63 inches in diameter. The base is a bayonet style with a side pin, but has only 3 pins.

The 241B was in production into the 1950s, but is a seldom seen tube today. The old 212D and E tubes were produced in much larger quantities. Their usefulness as modulator tubes wasn't affected by their poor frequency range. One reason that this tube wasn't widely used, is because of its competition. In 1934, some hams in California began offering the EIMAC [150T](#) (later 250T) that filled that operational niche and dominated the competition.





WACC #12 – 1950

Mike Heidman, N7MH

I read the article on the WACC award pre-NCCC by Brian, K6STI, and remembered that there is a WACC certificate hanging on the wall at W6YX.

This WACC certificate is #12 issued by the Oakland Radio Club and is dated December 21, 1950. It is identical to the K6STI certificate except for the filled-in information and signatures.

I don't know who the operator or operators that earned the certificate were. W6YX was active in Phone SS in 1949 with 6 operators and in 1950 with 9 operators so the station was in heavier use at that time as the previous SS effort was in 1941 (just before Pearl Harbor) and the following was in 1960 (by W6QHS/W6NL, CW division winner).

This pushes the history of WACC back another 15 years to 1950.





Editor Notes

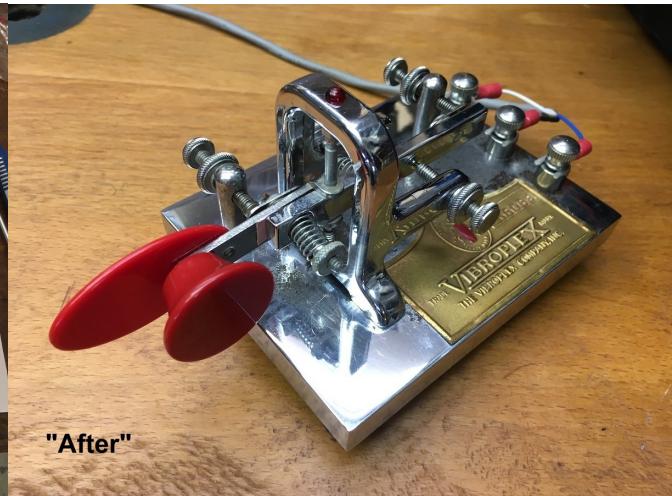


We're closing in on the end of 2023, SS CW will be history by the time you read this. The latest NIST forecast for Cycle 25 now has it peaking somewhere between Feb and Oct 2024 with a broader, possibly double peak (like Cycle 24), and thus lasting somewhat longer than average. Of course, high SFI numbers do not guarantee great propagation ... witness the last SS on Sunday with Kp=7. As usual, many thanks to all the contributors this month!

NA6O Morse Key Service



Do you have a Morse key, bug, or paddle that's suffering from too many birthdays? Bent, broken, or missing parts? I can fix it for you and restore it to any level of perfection that you may desire. Complete machine shop and plenty of experience with many makes and models. Bugs are my specialty! As a service to NCCC members, I'll do this for the price of... well, how about lunch or a beer sometime, plus parts if I have to buy any. We can ship things back and forth if you're far from the East Bay. The photos show the process for a typical paddle in distress. Contact me at gwi@me.com





NCCC Membership Information

If you wish to join NCCC, please fill out an application for membership, which will be read and voted upon at our monthly meeting. To join, you must reside within club territory which is defined as everything in California north of the Tehachapi's up to the Oregon state line, and part of northwestern Nevada (anything within our ARRL 175-mile radius circle centered at 10 miles north of Auburn on Highway 49).

Life Memberships

Life memberships are \$250.00 Contact secretary.nccc@gmail.com. Members who have reached 80 years of age have and been an NCCC member for 20 or more years are eligible for Honorary Life Membership ("80/20 Rule"). Contact secretary.nccc@gmail.com

JUG Articles Wanted!

Your help allows us to produce a quality newsletter. Please consider submitting an article! The editor welcomes any and all relevant articles for inclusion in the JUG. The preferred format is plain, unformatted ASCII text, MS Word (.doc/.docx) are acceptable. Indicate the insertion point and title of diagrams and pictures in the text and attach photos/diagrams separately. Pictures should be as high a resolution as available. Please do not spend time formatting your submittal, the publication templates will re-format everything. Send your material to k6dgwnv@gmail.com indicating "JUG Submittal" in the subject.

Northern California Contest Club Reflector—Guidelines

The NCCC email reflector is devoted to the discussion of contesting. Topics include contests, station building, dxpeditions, technical questions, contesting questions, amateur radio equipment wants/sales, score posting, amateur radio meetings/ conventions, and membership achievements. Postings may not include personal attacks, politics, or off-subject posts. Such postings will be considered a violation of the Guidelines

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Thanks to W6TCP for helping to set this up. Instructions for purchases from Lands' End NCCC Store

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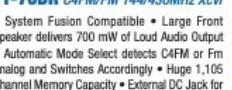
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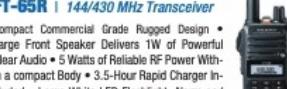
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