



Publication of the
Northern California
Contest Club



Issue 532

September 2016



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NCCC Next Meeting

When:

Tuesday 18th October

Time:

6:00pm social hour; 6:30pm dinner, 7:00pm program.

Location:

Sneha Restaurant, 1214 Apollo Way, Suite 404 B, Sunnyvale, CA 94085



See [page Three](#) for full details

President's Report

Hey KB'ers,

It's just a few days until CQP. Are you ready? This is our party and I'm hoping we can hit 1,000 logs this year. We will see!

The NCCC BBQ last week was a huge success. We have some really hard working members who deserve a big thanks for making this happen. Included are Ian (W6TCP), Gary (NA6O), Dick (K6LRN), Carolyn (K6TKD), and John (K6MM). I also want to thank our host, Ken (N6RO). I believe we had 65 in attendance, which was 10 more than last year. Everyone had a great time and it was really nice to see some of our members make the long trip from the outer reaches of our 175 mile circle. With all of the positive response, I've got to believe that the NCCC BBQ/Picnic will, again, be an annual event for our club.

We tried to get some new rigs at the BBQ so those in attendance could play with them. Thanks go out to Wes (WA6IRQ), from Icom, Scott (AF6RT), from Elecraft, and Chris (N6WM), who was doing Flex 6700/Maestro demos all day.

By now, you've all heard about Member Planet, our membership service. With a lot of help from Ian W6TCP, we have pretty much cleaned up a very outdated membership list. What Ian has done, using the Member Planet service, will make the jobs of our future Secretary's and Treasurer's so much easier.

Continued on page 3



Officers:

President	Bob Hess	W1RH	w1rh@yahoo.com
Vice President /Contest Chair	Steve Dyer	W1SRD	w1srd@arrl.net
Treasurer	Dick Wilson	K6LRN	treasurer.nccc@gmail.com
Secretary	Ian Parker	W6TCP	secretary.nccc@gmail.com
Past President	Rick Karlquist	N6RK	richard@karlquist.com
Director	Rusty Epps	W6OAT	w6oat@sbcglobal.net
Director:	Rich Cutler	WC6H	wc6h@yahoo.com
Director:	Ron Castro	N6IE	ronc@sonic.net

Volunteers:

New Member Mentor	Al Rendon	WT6K	wt6k@arrl.net
Charter Member	Rusty Epps	W6OAT	w6oat@sbcglobal.net
Awards Chair	Joanna Dilley	K6YL	joanna.k6yl@gmail.com
CQP Chair	Kevin Rowett	K6TD	k6td@arrl.net
CQP Certificates	John Miller	K6MM	k6mm@arrl.net
K6ZM QSL Manager	George Daughters	K6GT	k6gt@arrl.net
K6CQP,N6CQP,W6CQP QSL Mgr	Ed Muns	W0YK	w0yk@arrl.net
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JUG Editor	Ian Parker	W6TCP	w6tcpian@gmail.com
jug@nccc.cc			



NCCC Net

Thursday 8 PM
 Freq: 3.610 +/-

NCCC

Visit the meetings page of the NCCC website [here](#) for details of the next meeting

NCCC Membership Information

If you wish to join NCCC, you must fill out an [application for membership](#), which will be read and voted upon at the next monthly meeting. ([PDF application form](#))

To join, you must reside within [club territory](#) which is defined as the maximum of:

- Northern California, anything north of the Tehachapi's up to the Oregon border, and
- A part of north-western Nevada (anything within our ARRL 175-mile radius circle centered at 10 miles North of Auburn on Highway 49).

We can now easily keep track of dues payments and many other aspects of the financial and membership functions of our club.

Member Planet is also very timely for us in that it makes it very easy for the Club Secretary to comply with the new ARRL club competition eligibility changes. Not only is the ARRL requiring a club roster upload prior to ARRL Affiliated Club contests, they are requiring the inclusion of each member's six-character grid locator. Ian has added a field in the Member Planet member profile allowing the member to include the grid square. MLDXCC, PL259, and REDXA will have to also comply with this. Since most members of those clubs are also NCCC members, it's my hope that we can assist those clubs so they can also comply.

In my own contesting world, I am now fairly adept with the new Flex 6700 and Maestro. I recently replaced my second amp, a Henry 3KD, with an Alpha 76PA, and I'm adding another beam to tower #2. Although the Flex is really helping with noise mitigation at my hill location, I am still experimenting with receiving antennas.

Hope everyone has fun in CQP! Hope to see many of you at Pacificon.

Bob W1RH

NCCC October Meeting



When:

Tuesday 18th October

Time:

6:00pm social hour; 6:30pm dinner, 7:00pm program.

Location:

Sneha Restaurant, 1214 Apollo Way, Suite 404 B, Sunnyvale, CA 94085

Phone: (408) 481-0700

Indian Buffet Dinner \$14.15 (approx, not including drinks)

(see http://www.sneharestaurant.com/sneha_bufferet for description of available food)

We ARE NOT collecting money for this event. You pay the restaurant directly (cash or credit card) when you show up.

Presentation:

"The Advantages of Waterfall Displays for Contesting and DXing" Bob N6TV

RSVP to Ian W6TCP w6tcpian@gmail.com

California QSO Party

51st Running Of The CQP!

1600 UTC October 1, 2016 to 2200 UTC October 2, 2016



The California QSO Party (CQP) is held every year on the first weekend of October. The first CQP took place in 1966. Since 1974, the Northern California Contest Club ([NCCC](#)) has sponsored CQP. CQP has traditionally opened the annual contest season by providing an opportunity for contesters to prepare for the ARRL November Sweepstakes since the format is similar.

Stations outside of California, worldwide, work stations in California only. The 58 counties of CA are the [multipliers](#). California stations work all stations in or out of CA. The 50 US states and 8 Canadian areas are the multipliers. Stations outside of Canada and the US add to one's QSO total but do not count as multipliers. See the full set of [CQP Rules](#) for more details.

On this site you will find lots of information, so peruse the index above and learn all about the California QSO Party! Also, be sure to visit the [NCCC](#) website for the latest scoop on a super contest club.

Before CQP:

Review the current [County Operating Plan](#) for CQP 2016

Please "[Register-Your-County](#)" (county listing of active stations and form for CA stations to input their county plans)

[Read The 2016 Rules](#)

[Read CQP Operating Strategy](#), by K6RB

After CQP

Send In Your Log Before The Deadline: 23:59 UTC on Monday, October 17, 2016.

Start [HERE](#) NOTE: See the Rules page for submitting via email.

After you submit your log, you can check to be sure it's listed on the CQP server: [HERE](#)

CQP T-Shirts - Like the wine, each year's T-shirt is a special vintage. All entries qualify for the special CQP T-shirt -- no minimum number of QSOs needed. The 2016 CQP T-Shirt color will be TBD. Place your order for a T-shirt by sending an email to shirts@cqp.org stating the sizes and quantities for each size (M/L/XL/XXL), the call sign of the CQP operation, the call sign of the person placing the order, and the address to ship to. Send payment, \$15 (\$20 for DX entries), either via PayPal [using this email address: paypal@nccc.cc] -- or a check to: NCCC, c/o [Dick Wilson K6LRN](#), P.O. Box 273, Somerset, CA 95684-0273. All orders are due by November 15, 2016.

All 58 Counties WILL BE active !



**SUMMER
BBQ**

Radio Oakley - N6RO



Photos in the **October
Edition of the JUG !**

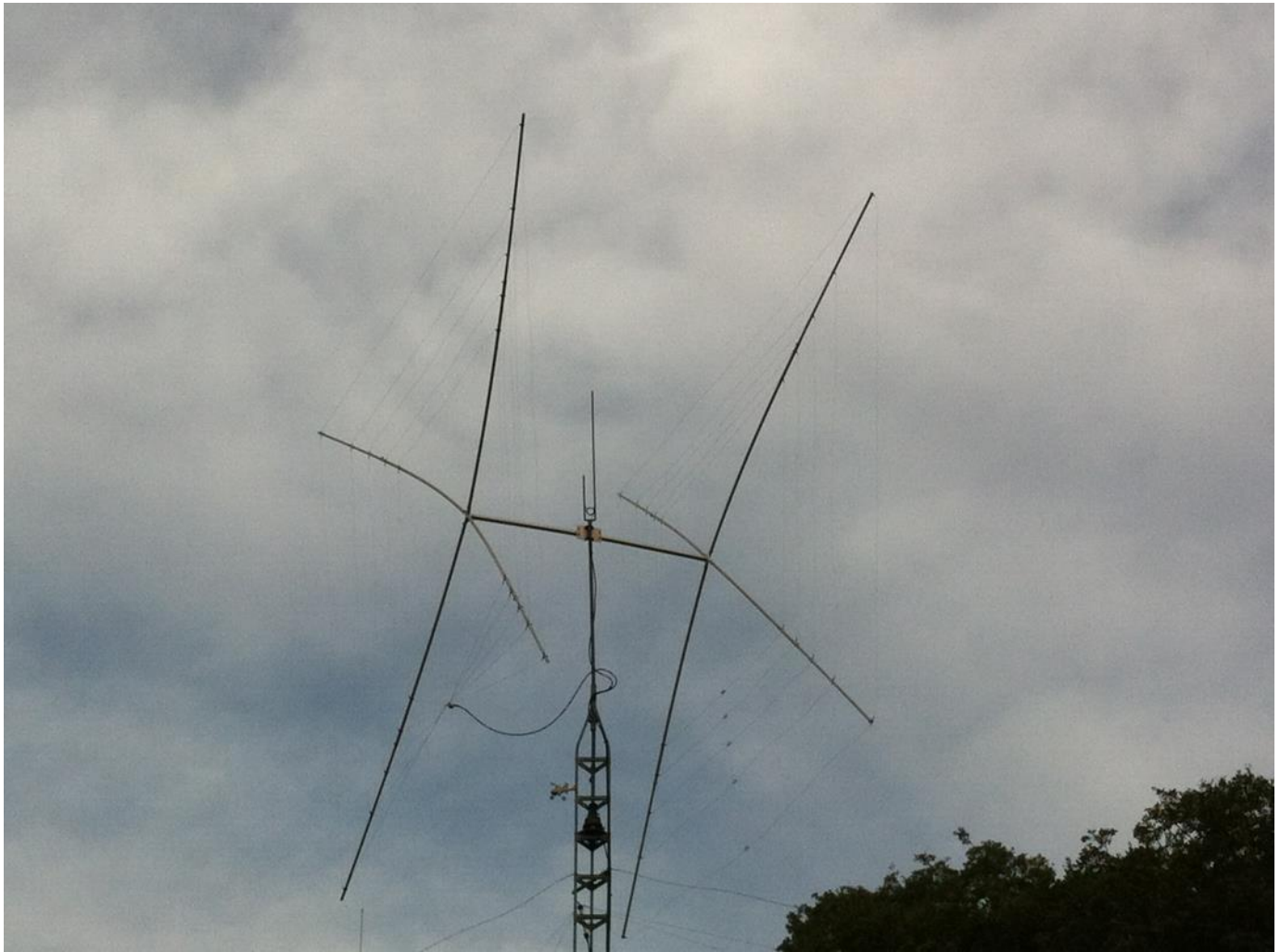


Dennis WU6X

I was first licensed in 1973 and played on CW for a whole year! Woohoo! CW is still a love of mine and I try to make at least one CW QSO every day, rain or shine! I'm usually on between 5:30 and 6:30 AM PST(CW), and on SSB from time-to-time staying in touch with my RV friends. I operate HF mobile with an IC-706 MkIIIG and High Sierra screwdriver. The main shack radio consists of an FT-1000D with AL-80B amp feeding a 5-band, 2-element Quad at 50 feet. Other antennas are 80m and 40m V's and VHF/UHF. I frequently work RV portable with my KX3 and 100w amp, and love CQP and other contests, as well as attending the Int'l DX Convention in Visalia. I'm a member of Sierra Foothills Amateur Radio Club and manage their Yahoo! Group. 73, Dennis-WU6X



Dennis WU6X





Tyler K6TLR

I have had my general for a little over 4 months. Only really got on the air and transmitting in June. Since then I have worked 38 states and 11 DXcc entities. If I can hit Lithuania, China, Slovenia, and Slovakia with my setup... I can't wait to see what else I can reach!

ARRL Outgoing QSL Service to Raise Rates

09/22/2016

Although ARRL believes it's important to maintain the long-standing tradition of the ARRL Outgoing QSL Service as a membership benefit, increased administration costs will require an increase in rates, in order to keep the Service available and viable.

"The Service has been a member benefit for decades," an ARRL statement said. "Since its official formation in November 1976, tens of millions of QSL cards have been shipped from ARRL Headquarters to Amateur Radio QSL bureaus of other national societies worldwide. At one time, this benefit offered a safe, reliable, and inexpensive way to exchange QSL cards for a fraction of the cost of the postal service. What Amateurs saved in financial cost, however, was made up for in time; it could take months, or even years, to send and receive a QSL through the bureau."

Effective November 1, the rate for 1 ounce of outgoing QSLs via the Service will increase to match the 1 ounce USPS international postage rate. As of September 2016, this rate is \$1.15 per ounce — about 10 cards. An additional service fee of \$7 will be charged per individual transaction, to cover administrative costs.

ARRL said QSLing is very different now, and, while postal services are generally more reliable than in years past, international shipping costs have risen significantly. "With the advent of the Internet and online QSL confirmation services such as ARRL's Logbook of The World, fewer and fewer paper cards are being exchanged," the ARRL statement observed.

Calling the Outgoing QSL Service "a significant tradition in the world of Amateur Radio," the League said it's committed to keeping that tradition and service alive for members who enjoy using it. "We are committed to ensuring our members will be able to send their QSL cards through the Service for decades to come," the ARRL statement concluded.

The 80 Meter Beam Conundrum To Be or Not to Be?

Tom Taormina, K5RC

There are many of those who really want the competitive edge of an 80 meter yagi. Many have tried to erect 2 to 4 element 80M beams. Most have not had the competitive results they were anticipating. Others have not been able to keep them in the air due to marginal design, wind, ice and lack of appropriate infrastructure. There is also the consideration of the cost of such an undertaking versus the value. A stack of 6 element 20 meter beams is but a fraction of the total cost of ownership of a 2 element 80 meter beam that might survive the wrath of Mother Nature.

Let's look at the realities of erecting a no-compromise 80 meter 3 element yagi.

- A full size 3 element 80 would have elements of at least 140' in length
- An efficient boom length would be about 75'
- It would only cover a limited bandwidth on 80 or 75, not both
- To overcome ground loss and have a low angle pattern, it would have to be at least 275' high.

The W7RN Approach

We chose the location for the Comstock Memorial Station, W7RN in Northern Nevada because the site is at 6,500' elevation and is on a ridgeline with 300' to 400' drops in the eastern and western direction. Theoretically, we could overcome the issue of having 300' towers because Mother Nature provided us with the height advantage. We believed we had the answer to erecting an effective 80 meter beam, on a reasonable structure, that should defy history and stay up for years.

The anemometer we have at 30' had never registered a gust higher than 52MPH over 15 years. We spent endless hours with N6BV's Terrain Analysis plotting the gain/cost benefit. The results were compelling.

Further terrain plotting showed that putting up stacked 3 element 80M beams would lower the take-off angle to the point where it would be as much as an 18 db advantage over a dipole at 70'. How could we resist the challenge to be the first known station with stacked 80 meter beams?

After months of research, we selected the Optibeam OB3-80 yagis to stack on a 175' Monopole. The mean height above average terrain would be about 500'. K7NV evaluated the specs. It appeared to be about an 80MPH survival design, but Kurt added additional struts on the elements. The boom appeared to be adequate.

Obviously, the time and expense were excessive, but, in the fall of 2013, we blazed new trails in ham radio by erecting a stack of 3 element 80M beams.

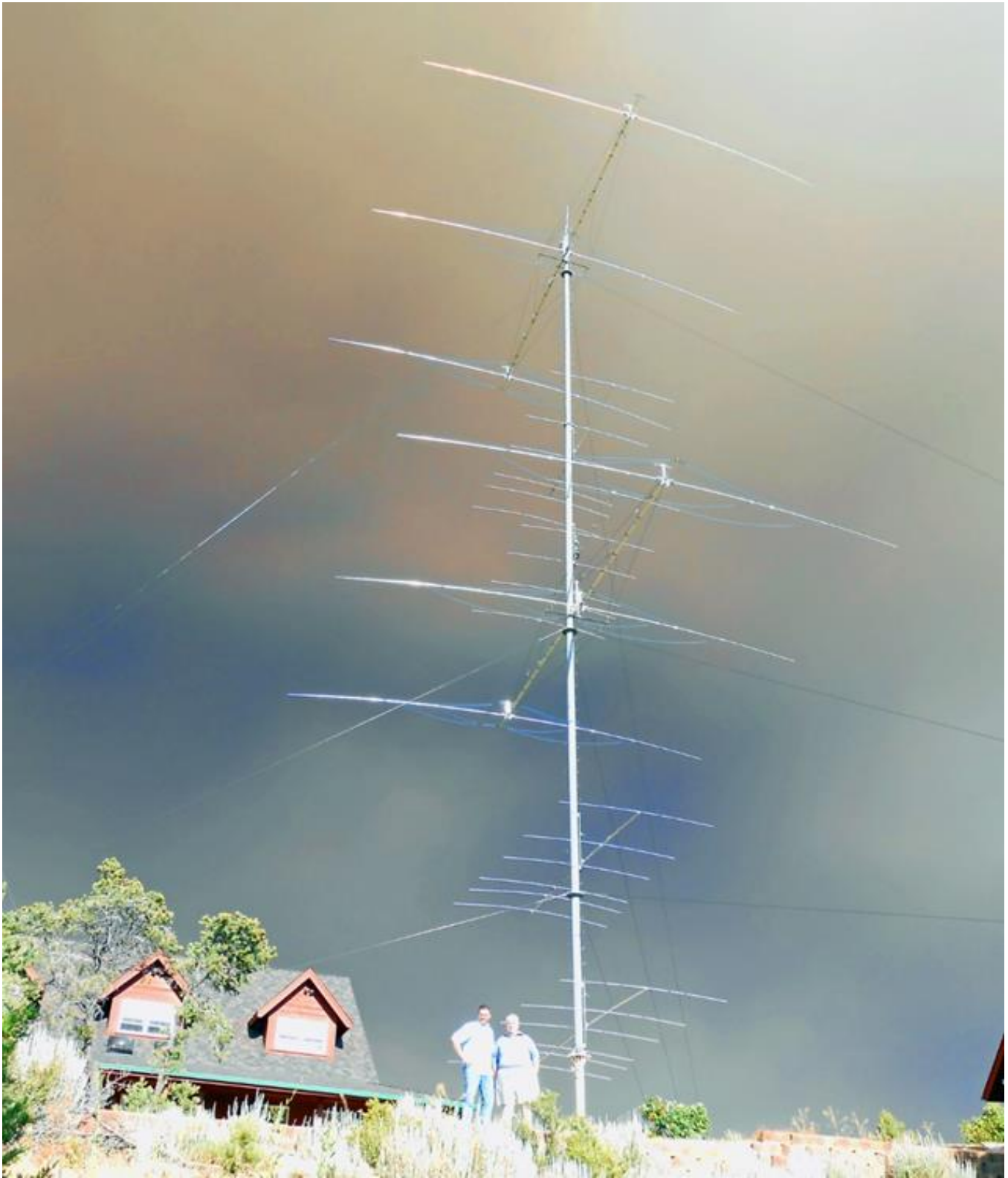


Figure 1 – WW2DX and K5RC under the 175' monopole with 6/6/6/6 on 15 and 3/3 on 80

There should have been an alarm going off when the blue “rope” provided by Optibeam for the element trusses began sagging after a couple of weeks. Any warning would not have mattered because one month later, a rogue wind storm destroyed both antennas. The anemometer at 25’ reported only a 50 MPH gust.

Unfortunately, I had already written an article that appeared in June, 2014, QST and there was an article and picture on the cover of FOCUS, the FOC Magazine. Both closed with “stay tuned” to see if it makes it through the winter. K7NV was stunned at the failure modes in the elements and boom.



Figure 2 – Elements broken on both 80's. Boom broken on bottom 80.

Since K5RC and W5FU (the host and the mentor of W7RN) came from a common background at Mission Control, Houston, “failure was not an option.” K7NV conferred with Optibeam and we were sent a new set of elements, in warranty, but did not include the \$1,200 shipping cost.

Kurt set out on a mission to make version #2 of this antenna a 100MPH+ antenna. Months of calculations (using the Optibeam metric aluminum specs) led to one monster 500lb antenna with 38 struts using 1,100 feet of Phillystran instead of ropes.

In October, 2014, we erected the new K7NV-DF2BO design at the top of the 175' monopole.



Figure 3 – Super-trussed second erection of the 3 element 80.

We went to the trouble to put a weather station on the boom of the antenna to determine the delta between the winds at 25' and the winds at 175'. One week later, the elements broke, all at the same place, at 82 MPH.

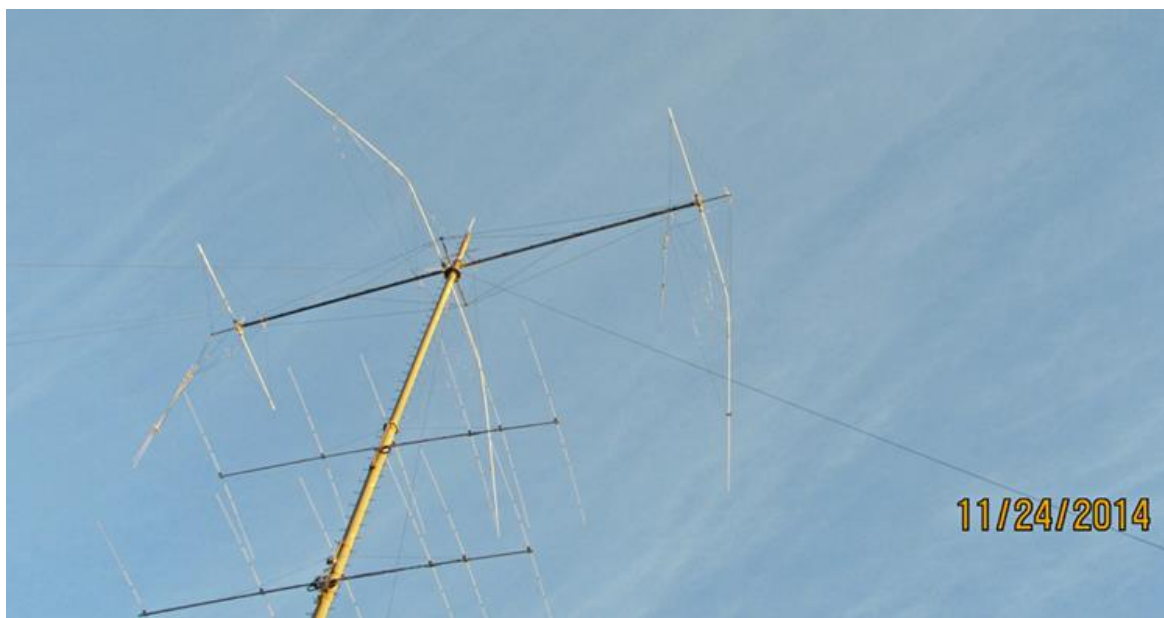


Figure 4 – The wreckage of the second 3 el 80.

On a bitterly cold December day, K7NV and K6NV made the trip in the man basket of the 100 ton, 200' crane and sawed off the broken elements. It remained in that condition until November of 2015.



Figure 5 – The “NV’s” sawing off broken elements and cutting trusses.
One of the stacked 4 element 20M beams in the background.

It became apparent that the metric aluminum did not conform to the specs we were given when we designed version #2. We now have it on reasonably good authority that the aluminum used was imported from Turkey and there is no telling what the yield strength was. The sawed-off elements were single wall, seamed tubing. Something you might use for curtain rods.

Failure is not an option now took on a whole new meaning. K7NV was tasked by W5FU to scrap the metric aluminum, redesign the antenna from scratch using high-strength US aluminum and perform extensive computerized failure mode analyses until Kurt was satisfied that the new design would withstand 120 MPH winds.

On November 1, 2015 we began final assembly of the new antenna. The elements were fabricated by Force 12, to K7NV’s design. The modified original boom was deemed serviceable.



Figure 6 – Final assembly of the version 3 of the 80M elements.

On November 2nd, it began snowing and virtually did not stop until April 2016.



Figure 7 - XE2K shoveling snow for the first time in his life.

Rounding up the three members of Tower Busters (K7NV, K6NA, XE2K) took until the end of June, 2016 to coordinate and to schedule a minimum number of crane days. AA7XT from Force 12 also wanted to be the official photographer.

Unfortunately, I forgot to apply K6NA's "Pi Factor" to the project. It states that the work and cost will be approximately 3.14 times the estimate. We had planned 5 work days and 4 crane days to do repairs on all 8 towers and to reinstall the new 80M beam. It took 13 days and 8.5 crane days to complete the planned work.



Figure 8 – Finally, XE2K is attaching the new 3 element 80 at the top of the 175' monopole. This photo was taken by AA7XT and his drone.

Since July, the antenna has performed as expected in IARU and NAQP contests. Until the fall and winter contests, we can only wait in eager anticipation for performance reports and wind survival observations to determine if it is all worthwhile. It will take a while to calculate and to amortize the cost of \$75,000 in repairs since the first stack failed. This "final" design weighs 600lbs, boom is 75' and the elements are 91'. Wish us luck!

If you want to see more photos and videos of the massive station rebuild in June, 2016, you can find them at www.w7rn.com. Click the photos link on the home page.



Figure 9 – The F12-NV 3 element 80 in the air. July, 2016

Tom Taormina, K5RC, has been involved in HF and VHF contesting for more than half a century. He is a former NCJ editor and a member of the CQ Contest Hall of Fame. He is on top of the DXCC Honor Roll with 373 confirmed. He has written 11 books on quality management and business excellence. His 12th book, *It WAS Rocket Science* is being published in 2014. The Comstock Memorial Station, W7RN, is a not for profit organization chartered to advance the state of the art in Radio-sport.

NCCC Life Members

Welcome to the following NCCC LIFE members:

Alan AD6E,
Ross K6GFJ
Kip W6SZN
Hank W6SX
Mark K6UFO
Ed W0YK
Steve W1SRD



Northern California Contest Club Reflector—Guidelines

This reflector is devoted to the discussion of contesting.

This includes contests, station building, dxpeditions, technical questions, contesting questions, amateur radio equipment wants/sales, score posting, amateur radio meetings/conventions, and membership achievements.

This does not include personal attacks, politics, or off-subject posts which will be considered a violation of the Guidelines.

Violations may result in removal of the violator from the reflector and possibly from club membership in good standing.



Member Planet

Transition to member planet is underway. If you haven't completed the sign in process please do so as soon as you can. If your unable to find the invite, please contact Ian W6TCP at w6tcpian@gmail.com

JUG Articles Wanted!

Without your help we cannot reproduce a quality newsletter so please consider submitting a suitable article!

We welcome any and all relevant articles for inclusion in the JUG.

Deadline is 7 days before month end. Preferred format is MS Word, Arial 12 point and pictures should be full resolution. Send your material to Ian, W6TCP at w6tcpian@gmail.com Don't worry

Point Generator Profile

By Bob, W1RH

The Northern California Contest Club is just that.....a contest club. If you don't generate points, you don't get featured in the Point Generator Profile.

I always use Rick, W6RKC, as an example of a solid member of our club. He doesn't necessarily generate high scores, but he is always in the hunt with the Club in mind. Rick never misses a Focus Contest, and I really appreciate that. Rick will ALWAYS contribute points to the Club and he will ALWAYS seek out NCCC members to exchange points.

Although Rick didn't mention it, he is also a member of the Mother Lode DX/Contest Club and, as he does for NCCC, you can always see Rick's participation in the MLDXCC focus contests.

Rick has assembled a really nice shack. Be sure to check out the pictures, especially the picture of the antenna switching system.

Also, I want to note that Rick has one of the W6SR/N6JV design 40 meter rotatable dipoles. Rick (W6SR), and Norm (N6JV), both NCCC members, have built several of these for 30 and 40 meters. They are modeled and first class performers.

And now, let's hear from Rick.....

Name/Call Sign: Rick Casey - W6RKC

Past calls: WN1AHQ, WA1AHQ, AB1U, VP2MIU

Location: Pine Grove, CA

How much property do you have? 5 Acres

Describe your antenna system:

Current: .Currently 75 feet of Rohn 25 with a Hy-gain (original, not MFJ), TH-5 that I put up in Plantsville, CT in 1987, moved to North Haven, CT in 1994, then moved to Pine Grove, CA in 1998. Twenty-nine years and counting. It has a force 12 DB12/17 eight feet above that. The tower also has a W6SR/N6JV designed rotatable 40 meter dipole, and an 80 meter dipole and a 160 meter Inverted-L with about 4400 feet of radials. I use a K9AY loop for receive on 160 & 80. It can also help on 40 using an old Ameco PT-3 as a preselector/preamp to improve the SNR. Some years ago I also strung a G5RV East - West at about 12 feet for an attempt at a NVIS antenna for NAQP, CQP, SS, etc. It seems to do a nice job on 40 meters with good signals within a few hundred mile radius and really well to the Kbers in the Bay Area. Another antenna I use for 80 meters is a GAP Voyager designed for 160/80/40/20. I got it from a friend when I was back in CT because the lot was only 90' by 90' and I wanted to get on 160 from that small lot. The best that can be said about that antenna is you can make some contacts on 160. In 3 years from Connecticut I had ONE QSO with Europe, with the only European you would expect to work with that antenna and a KW - ON4UN. Brought it here and one night during ARRL DX CW, the amp was going nuts. Long story short, the next day I looked at it and a couple of the PVC spacers for the tuning stubs were crispy black. A while later a friend and I laid it over, striped the stubs off, bridged the GAP, stuck one of the recovered stubs above the capacitive hat, added a few radials and the 2 : 1 SWR is from 3500 to 3690. It is useful

for 80 meter Asia / Oceania DX.

Future: After putting all those antennas up, I decided to run HFTA. As a result of that analysis, I see that I cannot make contacts through the Sierra-Nevada mountains from a bearing of approximately 350 degrees thru 170 degrees and will thus become a stamp collector.

What's in your shack? My main transceiver is a Yaesu FTDX5000 which I am very happy with, especially because of the ergonomics. The good size knobs and buttons fit my sausage fingers well. I am also the second owner of a pristine Yaesu FT1000D which I bought from a friend who I have known since our first QSO in high school in 1963. He is even more anal than I am about babying his radio equipment and I have pestered him to sell me the FT1000D since the day he purchased it and finally got him to part with it. I added the W8JI IM and Key Click modification boards as well as an Inrad roofing filter (had to wait until the January 1 one day sale to order it though) and it is a super rig. Side by side with the FT5K, I like the 1KD audio much better and the APF is the way it should have been implemented in the 5K. I also have a Yaesu FT-897 which I use during the ARRL VHF Contests on 2 & 432. Unfortunately, the activity level is very low compared to the land of the PackRats/Grid Pirates/Mt. Airy VHF Society. I brought my transverters for 902/1296/2304 from Connecticut but never hooked them up because it is just not worth the effort. I currently have two amplifiers an Alpha 76 and an Alpha 78. I purchased the 76 in 1979 and after 28 years, one of the 8874's died. Converted to a pair of 3CX800's and recapped, it easily does full legal power and hums along nicely at 800 or so watts in RTTY contests because I do not like to stress those expensive tubes. The 78 was purchased from the same friend I bought the FT1000D from and it has the original 8874's but has also been recapped and has a new plate choke so I can use it to DX on 17 & 12 meters.

What are your previous QTH's?

Connecticut

If you're working, what is your career? If not, what was your career?

After being there for 30 years, I was made a retirement offer I could not refuse (the department was eliminated) from So. New England Telephone when this outfit called SBC purchased the company. Then worked for various communications companies until I fully retired a few years ago.

Married? Kids? Grandkids?

Married (X2) with three sons and six grandkids.

How many DXCC entities have you worked?

I prefer Dxing to contesting and enter DX contests to mainly try and add a band country or two.

Mixed 356/339

Phone 349/335

CW 343/331

RTTY 171/170

9 Band DXCC

What's your favorite contest?

My all time favorite contest was the 1964 Novice Roundup where I made exactly 100 contacts in 20 sections with 22 hours on the air over the 9 day contest period using not one but TWO!!! crystals – 3705 & 3740. I still have those and the log. A staggering rate of 4.5 QSO's / hour using a Knight-Kit Spanmaster regenerative receiver and Knight-Kit T-60 transmitter! The only time I beat my best friend WN1AHI (later K1WJ of ARRL Contest Dept fame).

Second all time favorite was the BiCentennial Contest in 1976, with the incentive of the BiCentennial WAS and the BiCentennial Awards. (Still have those also).

Not a contest but an exuberant event was the W1AW/6 Centennial operation organized by Steve, W1SRD and composed of a very large number of Kbers among others. During this one week operation, I was able to best my Novice Roundup Q total with 1400 or so and I was exuberant to be sure! I've got plans for the TriCentennial.

Now, from the Left Coast, SSCW, then NAQP CW followed by the focus RTTY Contests. As I get older and my hearing deteriorates, SSB is more difficult and tiring to decipher, especially with accents, so phone contests are my least favorite.

Any tips for testers?

I consider my contest operating to be part of the "participant" class. I try to make every focus contest the club is entering and still, it seems, I'm always at the bottom of the final standings. But, I am on the air, trying to add as many points as I can for the club.

So, my advice is for the participants, the big guns certainly need no advice from me, to put up the biggest antenna your circumstances allow as high as you can get it, turn on the radio when you are able and enjoy making contacts. Especially be sure to look for fellow club members. The last NAQP, I made 165 QSO's, in 2 to 5 minute increments on the air, over the 10 hour contest period. All were S & P and a high percentage were fellow Kbers. There are also 3 or 4 club members that are superb SO2R operators and also know that when they ask me to QSY to their other frequency I do. Usually within 30 seconds, we both have an additional QSO in the log (and many times it is a multiplier for me) so it is well worth your effort to move to another band, if you are able to, when requested by the competitive people. And competitive people, make note of the participant folks who purposefully seek you out and will gladly move to your second radio frequency when requested. It could possibly add a double digit worth of extra QSOs to your log. Sending "Also 3532.5" is easy and can add up. It amazes me how they can concentrate like that! And WK6i does SO3R RTTY!

As Hank, W6SX so eloquently states " Contest Exuberantly!!!"

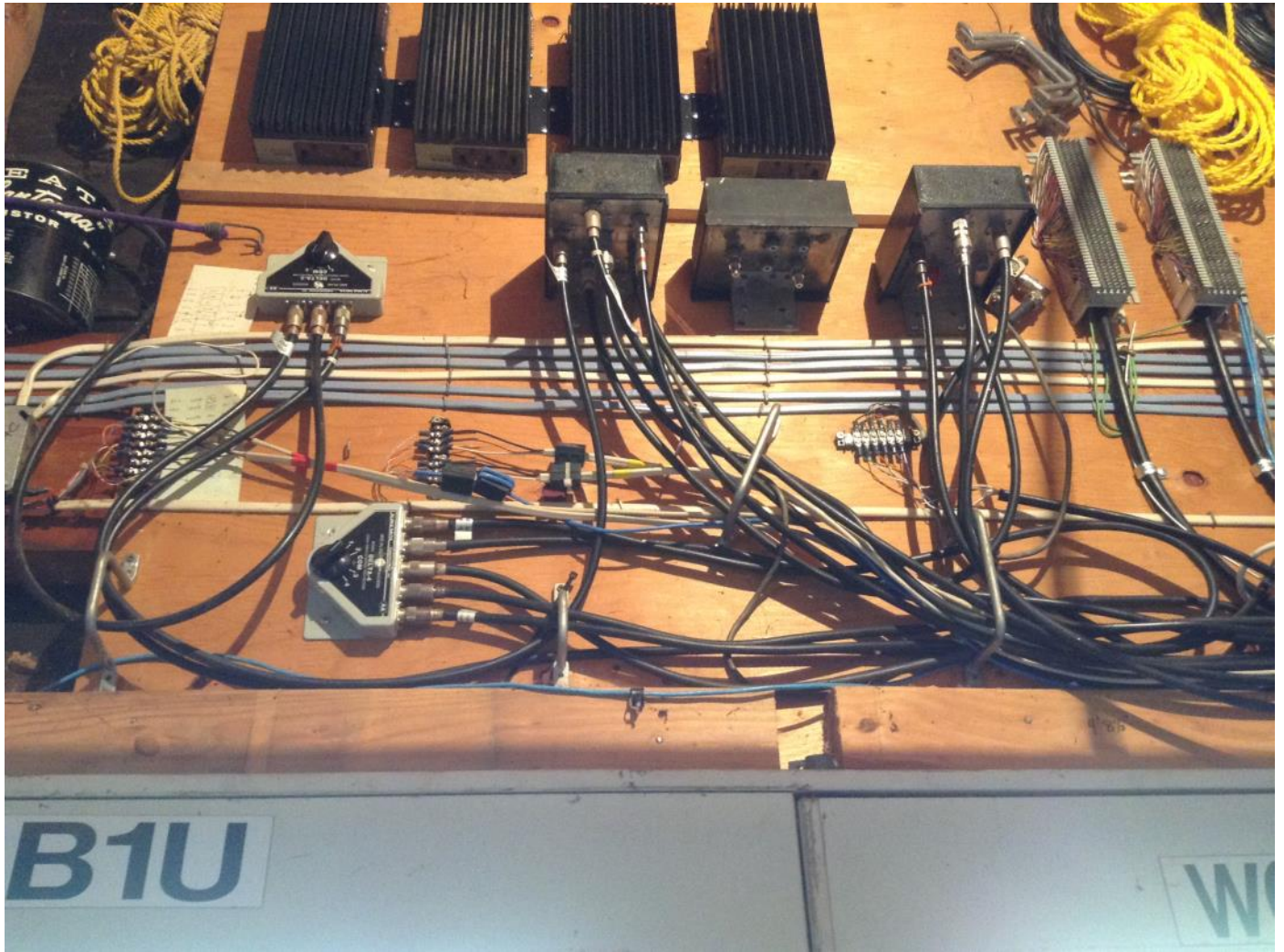
What would you like to see changed in NCCC?

I would like to see more club members make a few contacts for the club focus contests. In my house, it is impossible to keep my butt in the chair for a full contest. Sometimes I can spend a few hours, other times, it is only minutes but I have tried to make all of the focus contests. You don't have to make 500,000 points like Rich, WC6H in SS. 25 Q's with 20 sections is 1000 points and they all count!

Any other hobbies besides ham radio?

Genealogy (an obsession) and the occasional woodworking project.







July 2016 NAQP RTTY



A lovely plaque came in the mail yesterday, for winning single op in the July 2016 NAQP RTTY contest at W7RN. Thank you very much! Jeff WK6I

Scandinavian Activity Contest

You're most welcome to participate in the upcoming Scandinavian Activity Contest as follows:

* SSB: 8-9 October, 12 UTC - 12 UTC

Each part of this "Polar Battle" gathers 1000+ contesters from all around the world. As the Nordic hams enter their radio huts en masse, SAC offers you a unique opportunity to work the propagationally challenged Arctic nations and practice your skills.

* Rules:

<http://www.sactest.net/blog/rules/>

* Results booklet from SAC 2015:

<http://www.sactest.net/blog/sac-2015-result-booklet/>

* Sponsored plaques (geographical, special skills, etc.):

<http://www.sactest.net/blog/rules/sac-sponsored-plaque-program/>

* Learn about propagation to Scandinavia:

<http://www.sactest.net/blog/propagation/>

* Announce your activity and challenge your friends:

http://www.sactest.net/blog/announce_form/

73 & CU!

SM5AJV, OH6KZP, OZ1BII

SAC Contest Committee

Web: <http://www.sactest.net>

Facebook: <http://www.facebook.com/ScandinavianActivityContest>

E-mail: support at sactest.net

Here is an invitation to NCCC members to participate in this year's Scandinavian Activity Contest (SAC). This contest usually has lots of activity although it might be a real challenge this year with high band conditions as poor as they've been recently.

73 de Rusty, W6OAT

TUBE OF THE MONTH

Visit the museum at N6JV.com

Norm N6JV

VT-127

When World War II began in Europe, it became obvious that the new RADAR technology was going to play a leading role. The United States needed to catch up in a hurry. There were few tubes in production that would operate above 200 MHz and have enough emission to produce high power. The Eimac line of triodes showed potential. The US Navy contacted Eimac in 1938 and requested a 100-watt dissipation tube with extra plate and grid leads protruding out the sides. A 100TL with a standard 4 pin base, twice the filament current and the required leads was made and it was designated the 100TS. The first Navy RADAR tests were made with these tubes.

The circuit that these tubes were to be used in is called a ring oscillator. Most old hams know that you get an oscillator when you build an amplifier with poor isolation between grid and plate tanks. We have made them when we didn't mean to. A ring oscillator is like two pairs of push pull tubes with the grid tanks connected to the opposite pairs. The outputs from each pair were then combined. Push pull circuitry doesn't require perfectly matched tubes so this circuit would allow four tubes to be combined. The oscillators were pulsed with 16,000 volts for short durations. The average power was low, but the peak power was several KW for a 100-watt dissipation tube.

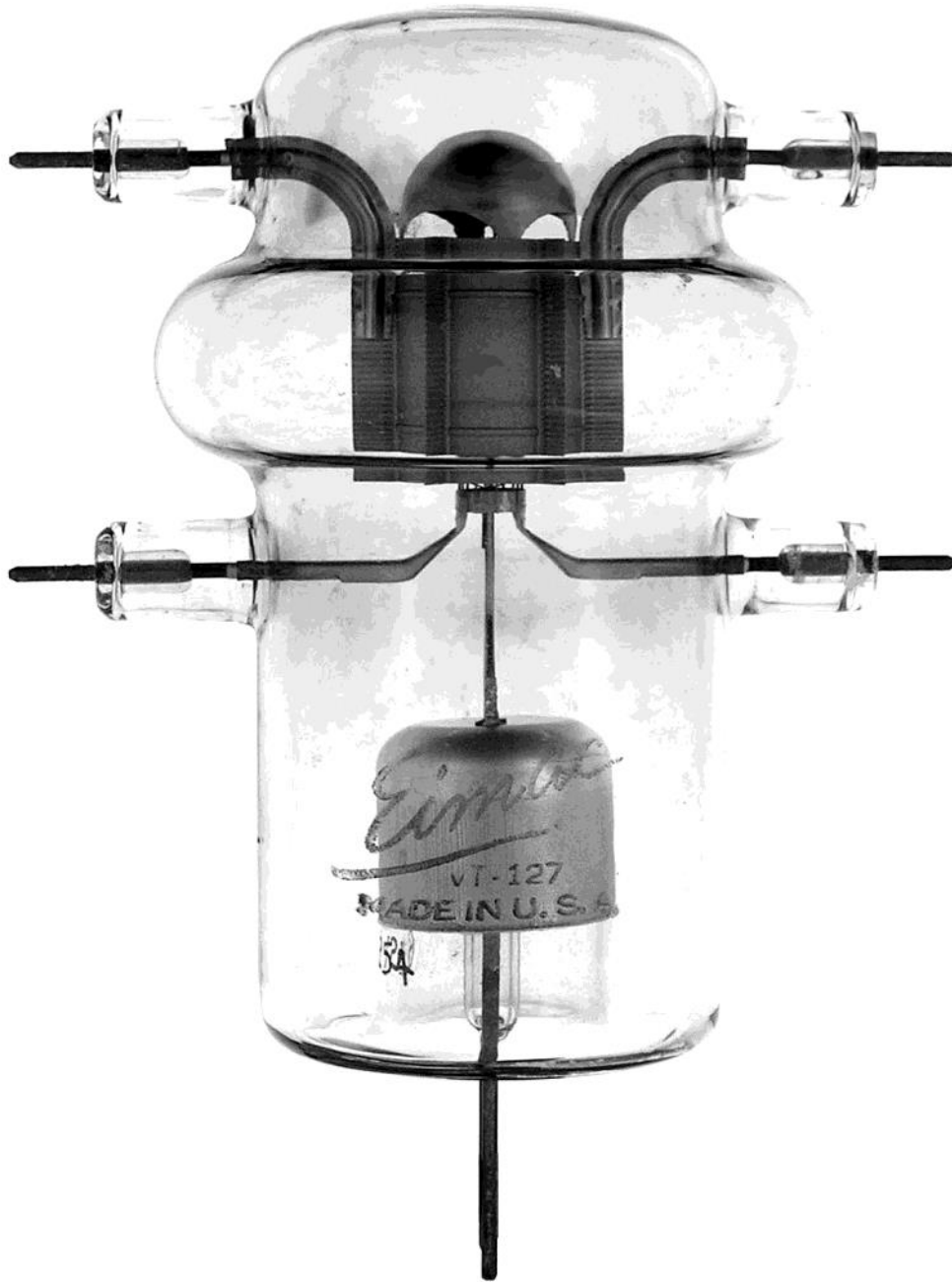
The prototype tube worked, but it wasn't easy to install. A new version called the VT-127 was the same tube without the base. The filament leads could be clipped into the frame. A more easily produced version was developed in about 1942 and became the VT-127A. If you stack a pair of four tube units, you get the output of eight tubes. The larger frames that were used in the field had 16 tubes and produced outputs of about 1,000,000 watts pulse. It was good that the Navy had very large ships, as the equipment wasn't very portable. The Army used this configuration in their early air search RADAR and to direct anti-aircraft guns. Very large numbers of these tubes were made and they became very common for small change after the War. Hams could buy a pair and run a KW input for almost nothing. They never became very popular and new tubes are still seen at swap meets today.

TUBE OF THE MONTH

Visit the museum at N6JV.com

Norm N6JV

VT-127

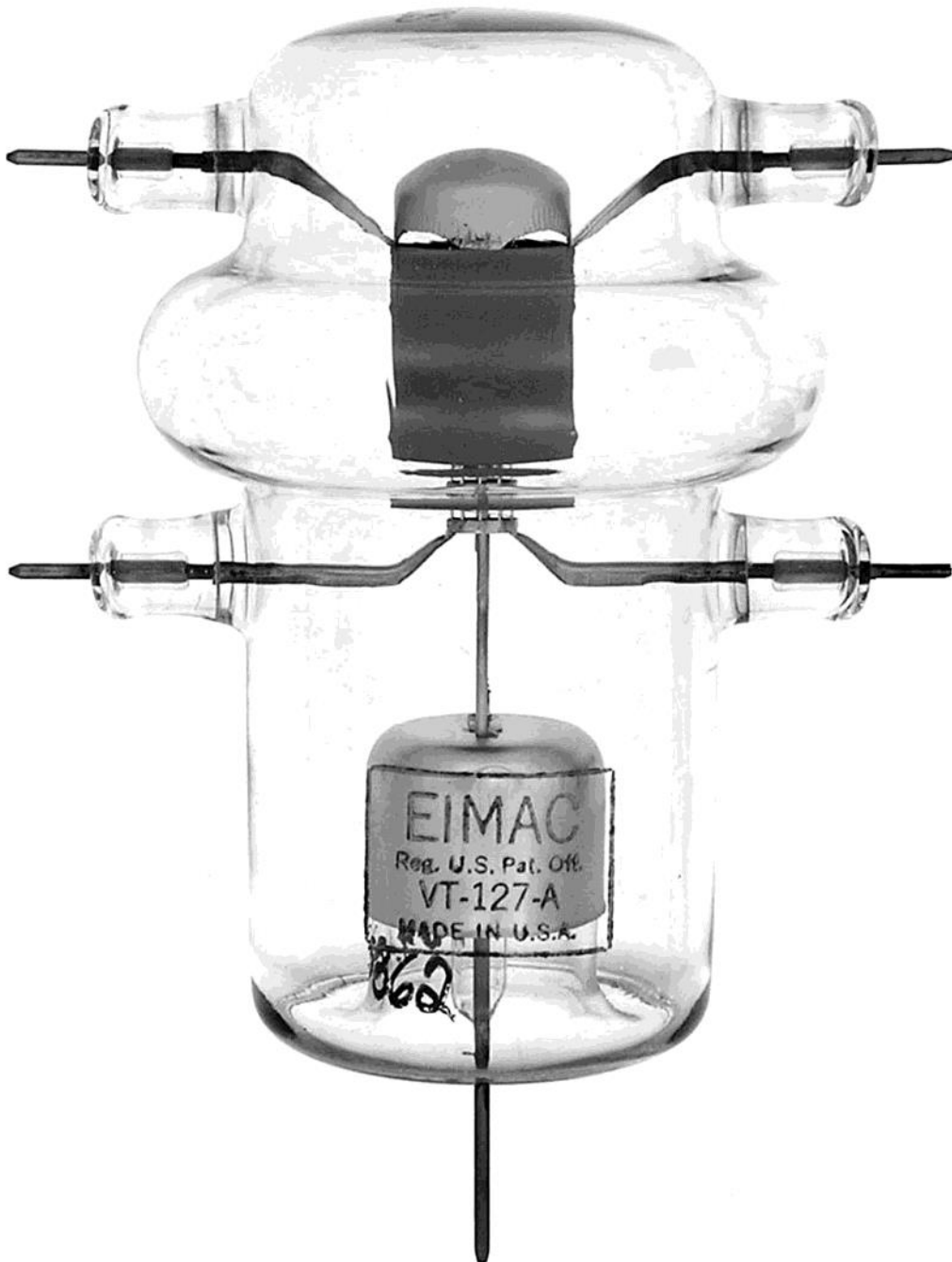


TUBE OF THE MONTH

Visit the museum at N6JV.com

Norm N6JV

VT-127-A





Contest Calendar— October page 1

TARA PSK Rumble Contest	0000Z-2400Z, Oct 1
15-Meter SSTV Dash Contest	0000Z, Oct 1 to 2359Z, Oct 2
Oceania DX Contest, Phone	0800Z, Oct 1 to 0800Z, Oct 2
WAB HF Phone	1200Z, Oct 1 to 1200Z, Oct 2
TRC DX Contest	1200Z, Oct 1 to 1200Z, Oct 2
GTC CW Cup	1200Z, Oct 1 to 1200Z, Oct 2
Russian WW Digital Contest	1200Z, Oct 1 to 1159Z, Oct 2
International HELL-Contest	1600Z-1800Z, Oct 1 (80m) and 0900Z-1100Z, Oct 2 (40m)
California QSO Party	1600Z, Oct 1 to 2200Z, Oct 2
FISTS Fall Slow Speed Sprint	1700Z-2100Z, Oct 1
UBA ON Contest, SSB	0600Z-1000Z, Oct 2
RSGB International DX Contest	0700Z-1900Z, Oct 2
German Telegraphy Contest	0700Z-1000Z, Oct 3
ARS Spartan Sprint	0100Z-0300Z, Oct 4
Phone Fray	0230Z-0300Z, Oct 5
CWops Mini-CWT Test	1300Z-1400Z, Oct 5 and 1900Z-2000Z, Oct 5 and 0300Z-0400Z, Oct 6
432 MHz Fall Sprint	1900 local - 2300 local, Oct 5
UKEICC 80m Contest	2000Z-2100Z, Oct 5
NRAU 10m Activity Contest	1700Z-1800Z, Oct 6 (CW) and 1800Z-1900Z, Oct 6 (SSB) and 1900Z-2000Z, Oct 6 (FM) and 2000Z-2100Z, Oct 6 (Dig)
SARL 80m QSO Party	1700Z-2000Z, Oct 6
NCCC RTTY Sprint	0145Z-0215Z, Oct 7
NCCC Sprint	0230Z-0300Z, Oct 7



Contest Calendar— October page 2

Makrothen RTTY Contest	0000Z-0759Z, Oct 8 and 1600Z-2359Z, Oct 8 and 0800Z-1559Z, Oct 9
Oceania DX Contest, CW	0800Z, Oct 8 to 0800Z, Oct 9
Microwave Fall Sprint	0800 local - 1400 local, Oct 8
SKCC Weekend Sprintathon	1200Z, Oct 8 to 2400Z, Oct 9
Scandinavian Activity Contest, SSB	1200Z, Oct 8 to 1200Z, Oct 9
QRP ARCI Fall QSO Party	1200Z, Oct 8 to 2359Z, Oct 9
Pennsylvania QSO Party	1600Z, Oct 8 to 0500Z, Oct 9 and 1300Z-2200Z, Oct 9
Arizona QSO Party	1600Z, Oct 8 to 0600Z, Oct 9 and 1400Z-2359Z, Oct 9
FISTS Fall Unlimited Sprint	1700Z-2100Z, Oct 8
PODXS 070 Club 160m Great Pumpkin Sprint	2000Z, Oct 8 to 2000Z, Oct 9
North American SSB Sprint Contest	0000Z-0400Z, Oct 9
UBA ON Contest, CW	0600Z-0900Z, Oct 9
10-10 Int. 10-10 Day Sprint	0001Z-2359Z, Oct 10
NAQCC CW Sprint	0030Z-0230Z, Oct 12
Phone Fray	0230Z-0300Z, Oct 12
CWops Mini-CWT Test	1300Z-1400Z, Oct 12 and 1900Z-2000Z, Oct 12 and 0300Z-0400Z, Oct 13
RSGB 80m Club Sprint, CW	1900Z-2000Z, Oct 12
NCCC RTTY Sprint	0145Z-0215Z, Oct 14
NCCC Sprint	0230Z-0300Z, Oct 14
MCG Autumn Sprint	1500Z-1900Z, Oct 14
JARTS WW RTTY Contest	0000Z, Oct 15 to 2400Z, Oct 16
10-10 Int. Fall Contest, CW	0001Z, Oct 15 to 2359Z, Oct 16
Iowa QSO Party	1400Z-2300Z, Oct 15



Contest Calendar— October page 3

New York QSO Party	1400Z, Oct 15 to 0200Z, Oct 16
Worked All Germany Contest	1500Z, Oct 15 to 1459Z, Oct 16
South Dakota QSO Party	1800Z, Oct 15 to 1800Z, Oct 16
Feld HELL Sprint	2000Z-2359Z, Oct 15
Asia-Pacific Fall Sprint, CW	0000Z-0200Z, Oct 16
UBA ON Contest, 2m	0600Z-1000Z, Oct 16
Illinois QSO Party	1700Z, Oct 16 to 0100Z, Oct 17
RSGB RoLo CW	1900Z-2030Z, Oct 16
Run for the Bacon QRP Contest	0100Z-0300Z, Oct 17
ARRL School Club Roundup	1300Z, Oct 17 to 2359Z, Oct 21
Telephone Pioneers QSO Party	1900Z, Oct 17 to 0300Z, Oct 18
Phone Fray	0230Z-0300Z, Oct 19
CWops Mini-CWT Test	1300Z-1400Z, Oct 19 and 1900Z-2000Z, Oct 19 and 0300Z-0400Z, Oct 20
NCCC RTTY Sprint	0145Z-0215Z, Oct 21
NCCC Sprint	0230Z-0300Z, Oct 21
ARRL EME Contest	0000Z, Oct 22 to 2359Z, Oct 23
UK/EI DX Contest, SSB	1200Z, Oct 22 to 1200Z, Oct 23
Stew Perry Topband Challenge	1500Z, Oct 22 to 1500Z, Oct 23
SKCC Sprint	0000Z-0200Z, Oct 26
Phone Fray	0230Z-0300Z, Oct 26
CWops Mini-CWT Test	1300Z-1400Z, Oct 26 and 1900Z-2000Z, Oct 26 and 0300Z-0400Z, Oct 27
UKEICC 80m Contest	2000Z-2100Z, Oct 26
RSGB 80m Club Sprint, SSB	1900Z-2000Z, Oct 27
NCCC RTTY Sprint	0145Z-0215Z, Oct 28
NCCC Sprint	0230Z-0300Z, Oct 28
CQ Worldwide DX Contest, SSB	0000Z, Oct 29 to 2400Z, Oct 30

HAM RADIO OUTLET

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- 100W HF/6m Transceiver, gen cov. receiver • Dual DSP 32 bit • Three roofing filters- 3, 6, 15kHz • 5.8 in WQVGA TFT display • Hi-res real time spectrum scope



IC-7200 | HF Transceiver

- 160-10M • 100W • Simple & tough with IF DSP • AGC Loop Management • Digital IF Filter • Digital Twin PBT • Digital Noise Reduction • Digital Noise Blanker • USB Port for PC Control



IC-7100 | All Mode Transceiver

- HF/50/144/430/440 MHz Multi-band, Multi-mode, IF DSP • D-STAR DV Mode (Digital Voice + Data) • Intuitive Touch Screen Interface • Built-in RTTY Functions



ID-5100A | VHF/UHF Dual Band Digital Transceiver

- Analog FM/D-Star DV Mode • SD Card Slot for Voice & Data Storage • 50W Output on VHF/UHF Bands • Integrated GPS Receiver • AM Airband Dualwatch • FM Analog/DV Repeater List Function

ID-51A | VHF/UHF Dual Band Transceiver

- 5/2.5/1.0/0.5/0.1W Output • RX: 0.52-1.71, 88-174, 380-479 MHz** • AM/FM/FM-N/WFM/DV • 1304 Alphanumeric Memory Chls • Integrated GPS • D-STAR Repeater Directory • IPX7 Submersible



TH-F6A | 2M/220/440

- Dual channel receive • .1 - 1300 MHz (cell blocked) RX • FM, AM, SSB • 5W 2M/220/440 TX, FM • 435 Memories • Li-Ion Battery

KENWOOD



TS-590SG | HF/50MHz Transceiver

- Equipped with 500 Hz/2.7 kHz roofing filter as standard • ALC derived from TS-990S eliminating spike issues • Antenna output function (shared with DRV connector) • CW - morse code decoder function



TM-D710G | 2M/440 Dualband

- V+V/V+U/U+U operation • Built-in GPS • Built-in TNC for APRS & DX-Cluster operation • 50W 2M & UHF • 1,000 memories • Dual receive • Green or amber backlight colors • Latest APRS firmware w/new features • Sky Command II remote functions



TM-V71A | 2M/440 Dualband

- High RF output (50W) • Multiple Scan • Dual receive on same band (VxV, UxU) • Echolink® memory (auto dialer) • Echolink® Sysop mode for node terminal ops • Invertible front panel • Choice of green/amber for LCD panel • 104 code digital code squelch



TM-281A | 2 Mtr Mobile

- 65 Watt • 200 Memories • CTCSS/DCS • Mil-Std specs • Hi-quality audio



FT-60R | 2M/440 5W HT

- Wide receiver coverage • AM air band receive • 1000 memory channels w/alpha labels • Huge LCD display • Rugged die-cast, water resistant case • NOAA severe weather alert with alert scan

YAESU
The radio



FT-991 | HF/50MHz/2M/440 Transceiver

- 160 M-440MHz - SSB/CW/FM/C4FM Digital/AM/RTTY/PSK • 100 W (2M/440: 50 Watts) • 3.5" TFT full-color touch panel operation • High speed spectrum scope • Roofing filters: 3kHz & 15kHz • 32-bit high speed floating point IF DSP



FTDX1200 | 100W HF + 6M Transceiver

- Triple Conversion Receiver With 32-bit Floating Point DSP • 40 MHz 1st IF with selectable 3 kHz, 6kHz & 15 kHz Roofing Filters • Optional FFT-1 Supports AF-FFT Scope, RTTY/PSK31 Encode/Decode, CW Decode/Auto Zero-In • Full Color 4.3" TFT Display



FT-450D | A100W HF + 6M Transceiver

- 100W HF/6M • Auto tuner built-in • DSP built-in • 500 memories • DNR, IF Notch, IF Shift



FTM-400DR | 2M/440 Mobile

- Color display-green, blue, orange, purple, gray • GPS/APRS • Packet 1200/9600 bd ready • Spectrum scope • Bluetooth • MicroSD slot • 500 memory per band



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