



JUG Editor: Bill, N6ZFO n6zfo@arrl.net 415 209-3084

Inside this Issue:

	Page
President's Report — WD6T	1
About the NCCC	2
VP/CC Report — W9KKN	4
Meet the New NCCC BOD — N6ZFO	6
NCCC Awards for 2019/20	8
May 2020 Meeting—Details	9
NCCC 50th — N6ZFO	10
CQP Corner — N6DE	11
P40L-P40Y Antenna Retrofit Party, Part 2	
AE6Y	12
Point Generator Profile, W6IA W6RH	25
Tube of the Month — N6JV	27
NCCC Information	28
HRO Advertisement	29

NCCC May, 2020 Meeting [Zoom only due to Coronavirus]

Contest Academy: "Winning WPX from 6-Land"

*The Two Bobs: – K3EST and K6XX,
Moderated by Bill, W9KKN*

Date: Saturday, May 16, 2020

Time: Chat open at 1230, again at 1500

Meeting is 1300-1500 PDST

Web Access and Zoom instructions: See page 9.

QUICK START Guide to Zoom:

[Zoom: How-Do-I-Join-A-Meeting?](#)

President's Report - WD6T

It is truly an honor for me to have been elected to serve this distinguished organization on its 50th anniversary year. For this, my first column as president, I want to get personal and use myself as an example to show what an impact the club can have on a new member.

My first NCCC meeting was March 2018 at Cattlemans in Livermore, just two years ago. No sooner had I arrived than I was warmly welcomed by NA6O and we immediately hit it off and had a great conversation about signal processing latency in amateur radio receivers. Everyone I met was not only friendly, but impressively accomplished. Even putting aside contesting achievements, what a brilliant and fascinating group of people from diverse backgrounds and with a wealth of varied experience! As if that weren't enough, my jaw dropped as I watched W2SC's presentation on his incredible station and accomplishments in Barbados. His combination of engineering ingenuity and 48-hour contesting grit and determination blew me away.

Shortly thereafter, W1RH interviewed me as a new member in the "Point Generator" column. Although I knew my contest scores from my small-pistol station were not impressive--that year I had contributed 180 Qs to the club's RTTY RoundUp effort and 227 Qs in ARRL DX CW--Bob celebrated my achievement in the club newsletter with "Way to go David!" That's when I realized that I could actually make a contribution to the club, even with my small station, and that the club values every one of its members. I also learned that even by submitting a log with only one QSO, I could help the club through log count and participation multipliers. As W6SX says "every point, every log!"

I responded to one of Bob's questions in the interview as follows: "I'm impressed at how friendly and welcoming everyone has been. I'm hoping being a member will inspire me to do more contesting. I'd also like to get a chance to operate multi at a contest station at some point." I had included this last comment in passing, but had no expectations of it coming to fruition. But no sooner had that issue of the Jug hit the news stands than I received an invitation from Ken N6RO to come out and visit.

President's Report Continues on Page 3



Northern California Contest Club

Excellence In Amateur Radio Contesting

Officers:

President	David Jaffe	WD6T	k6daj@arrl.net
Vice President /Contest Chair	Bill Fehring	W9KKN	bill+nccc@w9kkn.net
Treasurer	Tom Carney	K6EU	treasurer.nccc@gmail.com
Secretary	Gary Johnson	NA6O	secretary.nccc@gmail.com
Past President	Jack Brindle	W6FB	jackbrindle@me.com
Director	Bob Wolbert	K6XX	K6XX@arrl.net
Director:	Bob Cox	K3EST	bobk3est@gmail.com
Director:	Rich Smith	N6KT	n6kt1@sbcglobal.net

Volunteers:

Charter Member	Rusty Epps	W6OAT	w6oat@sbcglobal.net
Awards Chair	Gary Johnson	NA6O	gwj@wb9jps.com
CQP Chair	Glen Brown	W6GJB	210glen@gmail.com
K6ZM QSL Manager	George Daughters	K6GT	k6gt@arrl.net
K6CQP,N6CQP,W6CQP QSL Mgr	Ed Muns	W0YK	w0yk@arrl.net
NCCC Email reflector Admin	Phil Verinsky	W6PK	kb-w6tqg@verinsky.com
Webmaster	John Miller	K6MM	k6mm@arrl.net
Webinars	Bill Fehring	W9KKN	bill+nccc@w9kkn.net
JUG Editor	Bill Haddon	N6ZFO	n6zfo@arrl.net

Thursday Night Sprint:

The Northern California Contest Club sponsors a Thursday Night Contesting session of thirty minutes duration.

Often, on Fridays prior to a major contest weekend, a special practice session is held.

Generally, on Thursday evenings, a special format is followed, called NS or "NCCC Sprint". The NS began in the summer of 2004 as a snappy, concise contest occurring most Thursday nights, North American time. The power limit is 100 watts. Occasionally multi-week ladder competitions are held. See www.ncccsprint.com for details.

Thursday Night Contesting Director and Founder	Bill, N6ZFO
NCCC CW Sprint	Tom, N3ZZ (initially, Ken N6RO)
NCCC RTTY Sprint	Ken, K6MR
NCCC Sprint Ladder	Bill, N6ZFO
Sprint Web master www.ncccsprint.com	John, K6MM
Ladder Scores Manager	Tim N3QE
Thursday night Contesting Advisory Group:	N6ZFO, Bill (Chair)
	Mark K6UFO, (with W4NZ, N4AF, W9RE, K4BAI, N3BB, VE3YT and W0BH).
	Ken, N6RO
The Thursday night NCCC Net	

President's Report (Continued from Page 1)

I had heard about the N6RO station from K6SRZ, who was an Elmer for me when I first got back into ham radio in 1999 after a 30 year hiatus. I had certainly worked them in a few contests. I made the drive out to Oakley, arriving at 3 PM on the Sunday afternoon of the phone WPX contest. Ken was off at a jazz gig, but N6WM practically jumped out of his seat to welcome me (in truth, 15 meters was probably dying at that point, and he needed a break!) He gave me a tour of the antenna farm, which I could barely follow... "you see that wire there, that's part of the 160-meter four square." I made a mental note to research "four square" in the ARRL Antenna Book. I also watched as W9KKN frenetically operated two radios at once in the last few minutes of the contest, begging for a few more end-of-contest Qs.

A month later, I was back at RO for my first chance to operate there: a single-band 15 meter effort in the JIDX CW contest. Ken tutored me on N1MM, which I had never used before (I had been using Write Log), giving me a simulated QSO by vocally intoning the Morse code while I typed it in and learned which function keys did what. During the next 4.5 hours, I made a grand total of two QSOs! (In contrast, K6LRG had three.) Thus began my two years of "contesting dangerously."

NCCC inspired me to go deeper and improve my skills in a myriad of ways. NW6P opened up his home and station, and I had the thrill of operating the NAQP CW as an M2 along with K7GK, W9KKN and N6DE, when Denis and I set the current record for highest QSOs in an hour in an NAQP. I operated NA CW sprints first from W6JZH's station, then from AD6E's station in San Jose. To support the 2019 NCCC RTTY Roundup focus contest effort, N7MH allowed me to operate at W6YX in a parallel effort (two simultaneous call signs) with four radios and three amplifiers, juggling antennas between us. N6DE and W6GJB encouraged me to go on a CQP county expedition in 2018 so I joined K6SRZ's team in Mendocino at an idyllic ranch. Then in 2019, I helped activate Sierra County at W6MY's station. I was astounded that these station owners opened up their stations and homes to me, a newcomer whose contest skills were (and still are) rough around the edges.

The other eye-opener was the NCCC reflector. Truly a "brain trust." Lots of fascinating discussions and numerous contest postings from large and small stations. It took a few months before I learned about 3830. (Note to self: remember to tell new members about 3830). But who was that guy who worked every contest under the sun and made big scores with "Matchbox and wires"? And what did "SOAB" mean? There are so many small details of contesting that are second nature to experienced testers but may not be obvious to newcomers. Luckily, nobody gave me a hard time for asking naive questions. Every now and then there was a post "this weekend is a KB contest." What was that about? I found out and made plans to do every contest in the list. In May 2018 I actually won my first plaque ever in one of those contests — in the 7th Area QSO Party from my home station in the Low Power Mixed Assisted category. This was one contest where I could actually do well from my home station with its too-low quasi-NVIS antennas. I'm especially proud of that plaque because it represents "the little engine that could."

Meanwhile, Ken kept talking about something called "SO2R" and how I should learn it. My first attempt was in the summer 2018 RTTY NAQP, though I made a mess of it until the last few hours when it finally started to fall into place. But the real trial by fire was doing it with CW. Luckily, I had a gentle introduction in the December RAC contest, slow enough so that I would not be overwhelmed, and with polite Canadians. Operating unassisted, I loved the engagement that SO2R provided. But I wanted to improve. I practiced with MorseRunner and in NS and CW-Ops mini-contests, but my high local noise level was limiting my progress, so Ken allowed me to try these two contests as a remote op to his station. From then on, every week he'd look over my shoulder, critique my performance and offer invaluable tips, often suggesting more SO2R. Yet every time I tried it, it just seemed to slow me down, as I typed to the wrong radio or some such havoc. Yet another NCCC mentor to the rescue: W9KKN got me set up with the dual Morserunner integration in DXLab.net and two keyboards and explained the technique of muting the transmitting radio, which was a revelation to me. I "worked out" with it for months until I finally had a chance to try it in a real contest in the 2019 IARU. Though I have a long way to go, I am determined to get the hang of this and rewire my brain, even if I never manage to qualify as an official "mutant."

I hope I've managed to convey how it was through NCCC and its friendly, welcoming and inspiring members that I as a new member was challenged to develop along the path of the four C's, presented to the club by K6MM in 2008... from "curious", to "comfortable", to "committed" and finally to "competitive." Or, perhaps, to four additional C's: "completely coo-coo crazy!"

Many thanks, and let's all continue mentoring and sharing our expertise, so all our members can be inspired and engaged, develop their skills and stations, and have a blast with this great radiosport hobby/obsession. Congratulations to all the award and certificate winners at the April meeting and to the whole club for winning the gavel for 2020 RTTY Roundup! Let's go K some B in the CQ WPX CW!!

73, Dave, WD6T, NCCC President 2020/21

(formerly K6DAJ)



Vice-President / Contest Chairman's Report -- W9KKN

First of all, I want to thank everyone for the kind wishes and warm welcome in becoming your new VP/CC. If you had asked me a few years ago, if this was a possibility, I couldn't have even imagined stepping into these shoes. Dave, I and the 2020-2021 Board have some big plans coming together for this contest season, and we hope you're as excited as we are.

I'm not sure I can take another mention of COVID-19 in the news media or hear about yet another canceled event, or hear how everyone is becoming stir-crazy from the stay-at-home order. I've been pretty busy at work, but outside of work I've been using the time to prepare for the upcoming contest season. See, before any of this happened, I was in the middle of a transition. When I joined NCCC and started getting more and more into contesting, the addiction came shortly afterward, and I found myself in a situation where I was on the air almost every weekend. I soon found myself motivated by the NCCC KB competition and in an epic battle to the top with WD6T, our new president, another relatively new entrant to NCCC. I'm not sure why either of us got so motivated by such a thing, but we did. In talking to Dave about it afterward, it turns out that we were thinking similarly. We both wanted to build skills, realizing that the only way that you can do that is with a lot of practice. There simply are no shortcuts in this game. Two, we wanted something realistic and attainable but challenging at the same time.

I also wanted to start being a lot more strategic about my contesting efforts, thinking ahead to more than just next weekend, but to which contests will I be playing in this year, what are my goals, what skills do I need to improve, what kind of station improvements can I make to get the largest advantage? When you start to look at the bigger picture, and you start to figure out where you want to be in relation to where you are, you're much more likely to be successful in getting there. This is proven psychology. You can ask yourself, in everything that you do, is this getting me further or closer to my goal?

When I look at NCCC, I think we're in the same situation: We need to step back and look at the bigger picture, set some realistic goals for ourselves, and figure out how to get ourselves to where we want to be. The best news is, once we start to meet or exceed your goals, we can use the confidence we gain to set even harder ones.

In the past few years, thanks to the leadership of the two VP/CC's preceding me, Hank W6SX and Chris N6WM, we've seen NCCC be very successful in a few things, namely RTTY Roundup, WW Digi, and we've always managed to put together some of the top teams in NAQP tests along with Sprints.

But, you might say, "Bill, we're at the bottom of the solar cycle, 10 and 15 meters don't work for anyone without stacked yagis on top of a hill (and even for them, not really), Europe is only open for tiny little watery windows on 20/40 meters, we're old, and we're tired, a lot of our once very active members are moving out of circle and leaving us!", and you might even be right about some of it, but,

I'm not going to give up that easily and neither should you. Realize that there are a lot of good things happening right now, some of which I've personally benefited from. Just as an example, I live on a city lot in a townhome in Sunnyvale. I have a weak dipole in the attic and can't run power without setting off the fire alarm (and hey, in that case, it might be legitimate.) Thanks to Tom/NW6P, I've had regular access to a super station, and

I've been able to learn a thing or two, I've also been able to operate N6RO thanks to Ken, KH6TU thanks to Alan/AD6E, and even W7RN thanks to Tom/K5RC. In my current situation, there's no way I could build any of these stations, and without the generosity of these folks, I simply would not have been able to grow this quickly as a contester, now operating on the DX side as ZF1A or ZF2WF. David/WD6T has more or less become the regular single-op of N6RO, gaining not only access to a superstation but a wealth of competitive knowledge from Ken. We have had several new members join in the last couple of years that are up and coming, like Roberto K6KM – and we can keep making this happen. Some of these guys aren't just up and coming, they've arrived! KI6RRN and K6JO are teenagers and are murdering the bands from SoCal. The east coast has quite a few examples as well; take a look at NN1C, KG5HVO, or AA4LS. The other day in a McDonald's drive-through, I heard some kid with a voice made for pileups.

The next solar cycle is coming! Let these guys sit down in the chair and get hungry/addicted while rates are still manageable so that they're ready when the pileups are deeper again.

It's time to expand these success stories. Do you have a station you're not operating, or would you like someone to help you in the next contest? Don't let a great station go without an operator! Are you looking for a station? What skills do you want to work on? What skills can you pass along? What would you like help with at your station? Even if you can't (or don't want to) necessarily stay awake for a 48-hour contest anymore, form a multi-op. What contests should we be focusing on? Forget what NCCC is doing, what contests will YOU be focusing on this season? And to be clear, it's ok if contesting isn't your life's number one priority – we won't think anything less of you but be honest with yourself and your family/health situation. The W6SX prime directive is to have fun contesting, but don't assume that the only way fun happens is if you're sitting in the chair.

Very shortly, we'll be sending out a survey asking questions along these lines. As far as I am aware, we last did this in 2008 when K6MM was president and K9YC was VP/CC, and quite a bit has changed since then. Please fill it out, and if you don't, there's a chance one of us will track you down.

I'll leave you with one anecdote: One of the focus contests we've been working at for a while is CQ WPX. It turns out that it's a pretty fair contest from the west coast because we have access to plenty of Asia prefixes to balance out the number of DXCCs that the east coast can come up with in CQ WW. It also turns out that during May, chances are we'll have some pretty good DX openings to Europe from W6. This year is no different, and you'll be hearing about it shortly in our May meeting.

In 2019, there were 5,516 SSB entries submitted to the CQ WPX SSB contest, along with 4,420 CW entries to the WPX CW contest. This year in 2020, thanks to COVID-19 shelter-in-place, while there were certainly not as many Caribbean DX stations to work, the currently submitted log total for the SSB contest a few weeks ago is a whopping 7,575. Once we see the CW numbers come out, the combined total will likely be an all-time record by a significant margin. Let's make sure that plenty of NCCC logs are part of that, and let's start to build the momentum of making WPX the next big NCCC success story. I'm not even going to claim that we'll win the club competition this year, but if we start getting strategic about it, it's well within reach.

Enough from me, time to go kick some butt!

73, Bill, W9KKN , Vp/Cc for 2020/21

Meet the 2020/2021 NCCC Board of Directors

On April 11, 2020 the 75 NCCC members attending the Zoom on-line meeting elected, by acclamation, a new suite of Board Members for the coming contest year. We owe great thanks to outgoing NCCC President Jack, W6FB for much creative and persuasive behind the scenes arm-twisting. We're very pleased to have Tom, K6EU, continue as NCCC Treasurer and to have Jack continue to occupy a BoD position as Past-President. The mixture of new and seasoned talent augers well for a grand 50th-anniversary year for the NTriple-C. *N6ZFO, JUG Editor*



President: Dave, WD6T

David A. Jaffe was first licensed as WN2BHI at twelve years of age. In 1982, he received the Doctor of Musical Arts degree in music composition from Stanford University and has maintained parallel careers in music composition and software development. In 1987, he was hired personally by Steve Jobs to create the NeXT Music Kit. In 1997, he co-founded Staccato Systems Inc., acquired by Analog Devices Inc. in 2001. He has taught composition and computer music at Princeton University, Stanford University, the University of California at San Diego, and Melbourne University and is currently Senior Scientist/Engineer at Universal Audio, Inc. Jaffe's music has been widely commissioned and presented by ensembles such as the San Francisco Symphony, the Brooklyn Philharmonic, the Russian National Orchestra, and the Saint Paul Chamber Orchestra, and at international festivals in twenty-seven countries. His technical accomplishments have included the development of the first physically-modeled plucked string, techniques for simulating ensemble interactions, numerous papers and several patents. He has also pioneered the musical use of the 3D "Radio-drum" controller. Further information at jaffe.com



VP/CC: Bill W9KKN

W9KKN: In one way or another, I have been involved with Amateur Radio for roughly twenty years. At my day job, I work with distributed computer systems and large-scale networking, and that's also been both my hobby and career for as long as I can remember.

The call sign W9KKN was inherited from my grandfather, Dean F. Bungler, who got me into Amateur Radio. I didn't quite realize or appreciate it at the time, but Grandpa was a genius. I've met several very impressive people in this hobby, but I've never met anyone that quite exceeded grandpa in all of the areas that he excelled (though there are a few that have gotten close.) He was simultaneously a master engineer, pilot, machinist, and carpenter. To this day, I still run into people who he helped with an engineering problem. The team that he led at Bell Labs in Chicago literally invented touch-tone telephony and the associated crossbar switching systems. I'd see him working the world with a bunch of glowing tubes and several dipoles and multi-element beams in his backyard in Rochester IL, along with auto-tuners where all of the mechanical parts (gears, inductors, chassis, etc.) were self-machined.

In high school (2001-2004) I ended up with an internship (and eventually employment) at a small broadcast television network that consisted of 3 PBS affiliate stations WSEC, WQEC, and WMEC serving Central Illinois. Fast forward about 6 or 7 or so more years where along the way I moved from Chatham, Illinois to Chicago and then moved to the San Francisco Bay Area, started a career at various Internet Security/Enterprise IT Networking vendors, had a *wild* early twenties, traveled around the world, and ended up getting married to the YF. Amateur radio came up a few times in random conversation with friends and co-workers that had licenses. It took a few years, but with a gradual re-introduction to the hobby, I seem to have fallen head-first.

Director: Bob, K3EST



K3EST, Bob, holds a PhD in human anatomy and physiology from George Washington University. He has worked with an Intraoperative Monitoring Company as a Director of Education. He retired in 2012 after 35 years as Director of the CQ WW DX contests. Bob was also Director of the WPX contest and helped redefine the CQ VHF contest. He was the founder and editor of CQ Contest magazine. He is founding member of the WWROF and a board member of the WRTC. He also serves as Deputy IOTA Manager. The picture shows Bob with XYL, Junko, in Iceland visiting TF3IRA.



Director: Bob, K6XX, shown at a recent WRTC. (Bob is on the left)



Director: Rich, N6KT

N6KT is, arguably, NCCC's top SSB contest fanatic, having scored multiple world-class SSB operating stints at HC8A, EA8BH, EA9UK, KH6XX, PY0FF, and many others. Rich's operating preference are reflected in his scores, for example in a 2018 NAQP: CW, 1 point; SSB, from W6NL, 276,966 points. For a full accounting of KT-ism's see

http://www.nccc.cc/archived_meetings/pdf/N6KT-2009APR13.pdf

K6XX was first licensed at age 12 as WN6HPF. Later callsigns were WA6HPF and N6IP. Changed to K6XX in 1996. Has also operated /KH6, /6Y5, S5/, R3/, DL/, R31A, Y84X, and 7J1AGQ/2. Often says "life ends at 30MHz", yet is active from 1.8MHz to 1.2GHz. Most activity is on CW, but a microphone is available and is occasionally even used.

When not on the air or filling out QSL cards (bureau shipments are always several kilograms), is an electronics engineer, specializing in linear (analog) integrated circuits and is presently employed by the local radio manufacturer.

The K6XX station moved to its present location in rural Santa Cruz county in 2000. The station uses more than 40 antennas spread out over approximately 70 acres of land. Antennas are grouped by the target region of the world to take advantage of the varying slopes of the mountain-top. This allows using fixed (no rotator) monobanders positioned at the optimum height to achieve the best RF take-off angle toward the major ham-important directions. There are antenna sites with good slopes toward Japan and East/Southeast Asia, the south Pacific, Europe, the population center of North America, and South America. Additional sites have rotatable antennas for covering the remaining "holes". All antennas are fed with individual hardline runs. A matrix of coaxial relays route the desired antenna to one of the six stations. The antenna select system allows driving more than one antenna simultaneously. Six individual operating positions are inside the shack. Two of these stations set up for single-operator, two-radio contesting.

Married to Miki, and has three daughters: Sarah, Lisa, and Emily. Through bribes and extortion, this is an "all-ham family", although no one ever fights for an operating seat.

Previous WRTCs: served on the committee for WRTC-96 in Northern California, overseeing station site qualification and serving as webmaster. Was team leader at WRTC-2010 (R31A) and WRTC-2018 (Y84X). Attended WRTC-2000 and WRTC-2014 in Massachusetts as an observer.

President of NCCC 2000-2001. VP/CC 1992-1993, 1994-1995, and 1999-2000. Member of the Bored a few times. Signed up in '89 and almost immediately turned from DXer into contesteer.



Treasurer: Tom K6EU

Tom begins his 2nd year at managing the NCCC's vast financial resources.

Tom was first licensed as WN4QVQ in 1963 while living in Lexington, KY and attending the University of Kentucky. At the time he was active at the university club station W4JP. After moving to Huntsville, AL in 1966, he upgraded to a general class license. While in Huntsville, was one of the founding member of the Northern Alabama DX club, followed by a stint as WA5SNY in San Antonio while a member of the USAF. Continuing the migration west, Tom operated briefly from Salt Lake City, UT as WA4QVQ/7.

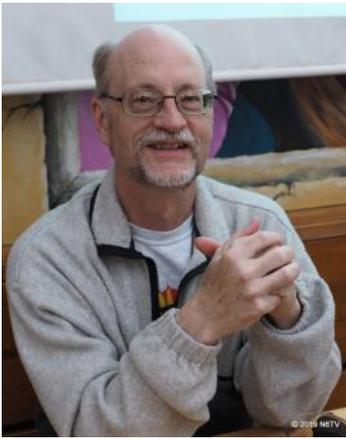
Tom moved to the west coast in 1973 and became WB6AZL, KA6CQQ and then KE6FI. Tom resumed ham radio activities, as K6EU after retiring in 2001.

Currently K6EU is active in various forms of contesting including VHF contesting as a rover.



Past President: Jack, W6FB

Jack, W6FB, one of our most dedicated NCCC members, has just completed his 2nd stint as club President and thus assumes his new BoD position as Past President of NCCC. As he contemplates retirement and a QSY to his native Louisiana Jack leaves a legacy of superb leadership of NCCC, having previously served in the 2010/11 Contest year. Jack's talent as a gentle and persuasive arm-twister has produced an outstanding and exciting new suite of officers for the 2020/21 Contest year, NCCC's 50th Anniversary. During the year Jack, working with Bill, W9KKN, strongly encouraged NCCC to broaden its remote, on-line meeting presence so that when the Corona Virus crisis hit the country in March 2020 NCCC was already well-postured to conduct its meetings exclusively on-line. . . another example of superb leadership from W6FB.



Secretary: Gary, NA6O

Gary Johnson is a retired electronics engineer with a degree from the University of Illinois. His entire career was spent at Lawrence Livermore National Laboratory where he used his diverse skills in measurement and control systems, electro-optics, transducers, circuit design, and technical writing. Gary holds nine patents and wrote two books. He grew up near Chicago and was first licensed as a junior high student in 1972. These days, he enjoys station building and anything to do with CW, in addition to his other hobbies of woodworking and metalworking. He and his wife, Katharine, live in Livermore.

Gary has served NCCC as Awards Manager for several years, and has been the key person implementing Bob, W1RH's ideas for the KB Competition as a replacement for the clubs former ARRL Sweepstakes award focus. Working closely with Matt, WX5S, Gary has managed this complex award system, now in its fourth year, expertly with both a steady hand and admirable competence.

NCCC Operating Award Winners for the 2019/20 Contest Year

AWARD

2019 CQ-WW DX Founders Award

NCCC Contester of the Year

NCCC Rookie of the Year

Most Improved Contester

Elmer of the Year

Team Builder

Operating Excellence, CW

Operating Excellence, SSB

Operating Excellence, Digital Modes

Most Valuable Player

Recipient

K6XX, Bob Wolbert

W9KKN, Bill Fehring

K6KM, Roberto Sadowski

WD6T, David Jaffe

K9YC, Jim Brown

N6RO, Ken Keeler

K7GK, Dennis Pochuev

KA6BIM, Dave Tucker

K6UFO, Mark Aaker

K6DGW, Fred Jensen

PRESIDENT'S AWARDS

Outstanding Service to NCCC as Web

Manager and CQP Chair

Treasurer, Long Time Service

Contest Flogger and Promoter Award

Contest Flogger Award, NA Sprints

K6MM, John Miller

K6EU, Jack Carney

K6DGW, Fred Jensen

W6RGG, Bob Vallio

NA6O Special Awards

We've Got Our Eye on You

Iron Butt Award

Swimming with Sharks Award

Tuning for Maximum Smoke

K6OK, Jim Varney and

N6TVN, Carl Manney

KF6NCX, Larry Mitchell

K6KM, Roberto Sadowski

N6ZFO, Bill Haddon

CQP Awards:

See <http://cqp.org/Awards.html>



NCCC Meeting – Saturday, May 16, 2020

Contest Academy: "Winning WPX from 6-Land"

*The Two Bobs: K3EST and K6XX,
Moderated by Bill, W9KKN*

Date: Saturday, May 16, 2020

Time: Open Chat: 12:30 PM Meeting: 1:00 PM to 3:00 PM followed by open chat.

Location: On-Line only due to continuing Corona virus pandemic.

Menu: We encourage you to consume delicious foods and enjoy appropriate (or inappropriate) libations while sheltering in place.

Cost: Free Zoom access provided, courtesy of Bill, W9KKN

Instructions for connecting to the meeting by Zoom Video Conferencing:

WEB ACCESS: <https://us02web.zoom.us/j/89980715638>

Meeting ID: 899 8071 5638

OR Join by "one tap mobile":

One tap mobile +16699006833,,89980715638#

Or . Join Zoom Meeting audio by dialing in and then typing in the Meeting ID:

Phone number: (669) 900-6833

Meeting ID: **899 8071 5638**

Need help with Zoom? [Zoom: How-Do-I-Join-A-Meeting?](#)

The NCCC 50th Anniversary



Guess the Contester

Last month we published a picture of an NCCC Mystery Contester. It's none other than our esteemed Awards Chair, and now NCCC Secretary for 2020/21; Gary, NA6O.

NCCC WPX From Long Ago—1985

As we move toward WPX CW, 2020, an NCCC Focus contest, here, for your reading pleasure, are the NCCC claimed scores from the 1985 WPX CW contest. There are a few familiar calls here. The JUG hereby challenges Ed AJ6V to exceed his fine 1985 score of nearly 1M points!

The Contest

JUG



NEWSLETTER OF THE
NORTHERN CALIFORNIA CONTEST CLUB
44 Toyon Terrace
Danville, CA 94526
June 1985
No. 157

PRESIDENT:	K6GSS	VP/CC:	WB6FCR	PROGRAMS:	WB6KBZ
SEC/TREAS:	K6ZM	FINANCE:	WA6AUE	AWARDS:	KA6ING
JUG EDITOR:	W6SZN	DIRECTORS:	W6RGG, WB6KBZ,	MEMBERSHIP:	WB6FCR
JUG POST PROD:	K6HNZ		AJ6V, WA6AUE		

WPX VICTORY ??

WPX CW 1985

	Q's	Mult.	Est. Score
AI6V (+ W6SZN)	1858	564	3.0 M
KI6P (WA6VEF) (duped)	1678	490	2,684,710
NU6S (+ N6CQ & W6RGG)	1250	400	1.4 M
WC6I (+ N6AUV) (duped)	1142	401	1,472,472
AJ6V (duped)	1011	388	985,520
AK6T (+ K6ZM & K4UVT) (duped)	918	369	1,010,322
N6ICV	972	?	?
KJ6V	760	384	817K
WA6AUE	747	277	580K
K6XO (duped)	595	324	504,144
W6CF (duped)	362	255	228,375
WA6TKT	421	180	212K
WA6OCV (N6RZ)	210	165	97K
K6CSL	161	132	59K
N6TU	190	100	53K
K6LRN (duped)	107	95	17,955
WE6G (duped)	83	69	8K

CQP Corner

Dean, N6DE

cqden6de@gmail.com

Past Article Feedback

Thank you to those who provided feedback on my previous three CQP articles. As a result of your input, I have modified my recommendations for CQP 2020 rules changes.

- 75m suggested frequencies: 3610kHz and 3750-3820kHz. Avoid 3790-3800kHz DX window.
- 75m rally times: 0300Z and 0600Z. Thanks to N6RO and W6IA.
- Club expedition scoring: bonus points apply if CA expedition station makes at least 100 QSOs outside of CA. Thanks to K9YC.

We will evaluate whether the proposed expedition bonus point incentive for clubs is appropriate for CQP 2020, in light of COVID-19.

Future Articles

I'm taking this month off from a heavy CQP article. Following are topics that I will write about in upcoming newsletter issues:

- CQP health check. Detailed 2019 participation trends. How many hours do stations participate? Are we attracting new participants or losing past participants? Discuss the positive impact of home stations. Evaluate 2020 contest participation trends during COVID-19 shelter-in-place period and review rules changes from other QSO Parties this year to understand if any are appropriate for CQP. I'll cover what we can conclude from it all, how we should market CQP 2020, and what we should focus on this year.
- CQP 2019 county tracker page. Analyze effectiveness of the signup form, QSO estimates, tracker spreadsheets on Google Docs, tables of expeditions/mobiles/fixed stations, county rareness rank map and charts. Determine improvements for CQP 2020.
- Mobiles. Discuss K6AQL/M impact on county coverage. If mobiles happen to be allowed in CQP 2020, understand whether a few more mobile stations could cover potential county expedition gaps this year.
- Remote operating. Immense opportunity possible to reshape the way we think about covering counties and generating activity in CQP. Discuss setup of existing stations across the state and potential plan for implementing to offset the negative impact if we are sheltered-in-place during CQP 2020.

P40L-P49Y Feb. 2020 Tower/Antenna Refit Party (Part 2)

By Andy Faber (AE6Y) with edits and additions by Ed Muns (W0YK) and John Fore (W6LD)

Sunday, February 9, 2020. Up at 3:30 a.m. to drive to the house of John Fore, W6LD, in Atherton, where we did some suitcase repacking. I had a 47-pound suitcase (heavy items are a rebuilt rotor and a bag of tools, though not as many as last time). I added one of the two 12-pound spools of 12-gauge antenna wire to the second suitcase that John had set aside for me at his house. Not many clothes are needed, particularly since I keep shoes and heavy work pants on the island.

This trip was for the purpose of finishing the tower and antenna rebuild that we had started last October, primarily erecting the 46-foot south tower and installing the JK Mid-Tri antenna on it, installing the 2-element SteppIR on the 66-foot Rohn 45 tower, plus several other wrap-up tasks including replacing the remaining older beverage wires. We had assembled the Mid-Tri boom and all the element halves then, but had run out of time to install them.



In the preceding week, Ed, who had been there for the CQ WPX RTTY contest the weekend before, had also been busy on the antennas. He had installed the 160m vertical dipole and the 80m inverted vee on the back tower.

Connections were on time, and we had some food in between at the MIA Admiral's Club also. After arriving as scheduled at about 9:20 p.m., Immigration was a breeze – just showed my passport to the machine. Customs, however, was scanning all bags, so I ended up having both of mine opened for inspection. I managed to talk my way out any duties, on the grounds that it was mostly just tools for our repair project and a bunch of used stuff. Same for John, and we got our Avis car. Coincidentally, Ed Muns, W0YK, had just driven up in his small Avis car, and when I walked in the front door he walked in the back door.

View up the Rohn 45, showing the 80m and 160m antennas

Ed had had a nightmare bringing his K3 to the island the previous week. Customs impounded the radio, and he had to go to the DTZ (the Aruban FCC) the next day to get a paper stamped, whereupon Customs released the radio. Apparently, in the future with that paper he can keep bringing the radio in duty-free. This process could be a real headache for us all. And, after hearing this story, when John Crovelli, W2GD, went to the DTZ to get such a paper for his radio, they said they couldn't give it to him unless Customs required it – man, this is bureaucracy on steroids.

Monday, February 10, 2020. Woke up at 6:45 a.m. and went out for a morning run. Moderate temp, low humidity, but windy, which was fine for running but could be a problem for the lift. In fact all day it was windy, but with the wind and slightly lower temperature and humidity it was much more pleasant outside than last fall. Then it seemed that just going outside in the morning I would start to sweat – not so today or for the rest of this trip.



Back at the house no one was awake, so I drove off to Lings Supermarket for groceries. We then drove over to JARA Equipment Rentals and talked to David Aguirre, our friend from last fall. Our old Snorkel 126 was there proudly holding up its bucket. But we settled on a more modern and smaller JLG 660 SJ, which has a nominal height limit of about 66 feet. John and David went up to practice using the controls and to gauge its usability in the wind (which was increasing throughout the morning and was about 15 mph, with 20 mph gusts at this point). The controls were a little jumpy, but David promised to have his tech have a look at them. He said it can be delivered at 3 p.m

Man lift central. Our 66-footer in the middle, and the 126-foot monster from last fall at the end

[W6LD note: The winds were an issue throughout the week, and we tried to accomplish as much man-lift work as possible in the early mornings since winds generally were lighter before 10 a.m. The man lift safety manual proscribes use of the lift when wind gusts exceed 28 mph. There were many times, especially Wednesday afternoon and Thursday when attaching the Mid-Tri elements, when we came close to suspending work due to wind conditions; however, the wind never got quite strong enough to have to do so.]

Outside, I assembled the SteppIR tubes for our two-element version into the boom (a pretty simple job, since we had fully extended, taped, and painted them last fall), and mounted the boom-to-mast plate after Ed had drilled new mast holes to fit smaller U-bolts so it can be mounted on a leg of the Rohn 45. We checked it using the full run of cable by mounting it at five feet or so on the Rohn 45, and it seemed to work OK. The resonance points were too low (as expected), but there were good dips, as measured on the AA-55.



The SteppIR at rest

Next John and I weatherproofed the Mid-Tri, the boom of which was lying on two 55-gallon barrels in the garage. This job consisted of spraying clear Krylon on the various nuts and bolts and following up with silicone caulk spread around with the nitrile gloves from last fall. It was tedious, tiring work, but not difficult, and we were in the shade of the garage.

We were waiting for the boom truck to arrive at 3:00 however, David called and said it wouldn't be available today, but promised to bring it over tomorrow by 6:30 a.m. We'll see. When JP came over this evening to talk about guying the south tower, he asked if that was "Aruba time." I said, "No. Aruba time was 3 p.m. today!"



Ed W0YK on the south tower

In the late afternoon we turned our attention to the south Rohn 25, one of the main goals of this trip. [W6LD note: Last December, JP had reinforced the base by adding an additional 18 inches of concrete (this was considered a prudent step due to apparent rust developing inside the base section at the top of the pre-existing base; the rust had progressed so much on the north Rohn 25 tower that we had JP completely replace the base section there) and he had already added one 10-foot section in connection with his concrete work.] John and I spent quite a bit of time enlarging the holes, filing off paint residue, and generally trying to get the sections in shape to be assembled. Then Ed went up the 14-foot tower in "classic" fashion (i.e., by climbing, without the lift) and with us pulling on the gin pole, managed to install two more sections. We couldn't find the two punches that are normally very useful for precisely locating the mating holes, but Ed managed the task nonetheless. [

Before that, we had spent some time on the phone with Ken Garg, the designer and owner of JK Antennas, to get ideas about the desired fine-tuning of the 1015 for 10 and the 2040 for 40. The former doesn't seem to have the flat bandwidth that it should. The latter is pretty good, with about 200 kHz of bandwidth under 2:1 SWR, but we would like to move the resonance point from 7025 to 7050 or so and lower the minimum SWR, which currently actually isn't bad at about 1.2:1. Ken had sent John some replacement tuning coils for each, and offered ideas on minor dimension changes. On the 40, if we decide we want to raise the resonance point, he wants us to change both elements by the same amount, and again said that a one-inch shortening of all of the half-elements should move the resonance point up by 22 kHz.

Tuesday, February 11, 2020. Up at 6 a.m. to await the delivery of the 66-foot man lift. Carlos from JARA showed up at around 6:30, parked the truck on the side street where there is a large dirt area, and proceeded to drive the lift through the gate and into the backyard in just a few minutes with none of the agonizing, slow-motion drama of last fall with the larger lift.



Pre-dawn full moon



Carlos arrives with the lift

He showed us how to work it and departed, but unfortunately didn't mention – and we didn't figure out on our own – that the red emergency knob on the bucket control panel was actually depressed (even after being released “one level”). Turns out it has to be rotated to allow it to pop out and be released fully– as mechanic Bob, who came following a telephone call, told us. John noted that it is much easier to use this smaller lift than the giant from last fall.



The lift maxed out to reach the 40m driven element

Ed and John first went up on the lift to almost maximum height in order to experiment with different loading coils on the 40 driven element, while I stayed in the shack and ran successive SWR curves on the AA-55. Eventually, with a new coil they got the SWR at minimum down to about 1.07 to one, still at about 7025 kHz. Due to the wind, they did not make any adjustments on the tip lengths, as the resonance curve is really quite good, though ideally the point of minimum SWR should be little higher in the band. Now the SWR reaches 2:1 at about 7.190 MHz.



Adjusting the 40m loading coil

Moving over to the 1015 tower, we initially could not rotate the antenna. The brake seemed to be jammed. Eventually John freed it by physically yanking on the boom, but we were seriously worried about the rotor, which continued to seem erratic. We even tried using a Tailtwister control box to give us access to a manual brake button, but that didn't help. With these rotors, jamming of the brake isn't uncommon, so it's hard to know when the condition is terminal and requires replacement. [W6LD note: We elected to monitor the situation over the next days before deciding on whether to replace the rotor with our one rebuilt spare. The existing rotor had been rebuilt by C.A.T.S. in 2016, but it had only been deployed about a year earlier.

Meanwhile, on the 10m antenna, we replaced the hairpin coil with the smallest coil provided by JK Antennas and lengthened each half of the driven element by 3/8 inch and each half of D1 by 1/4 inch. After these changes, the SWR was much improved, basically flat across the band until 28900 kHz where it started to increase rapidly, reaching two to one at about 28950 kHz. We were intrigued that the optimal inductance for the hairpin seemed to be very low (even with the smallest coil we ended up spreading the coils significantly), so much so that we tried removing the coil altogether. But that resulted in the SWR dips being substantially worse, so we went with the smallest coil.



Replacing the 10m loading coil

The next order of business was installing the SteppIR. I first disconnected the tubing elements, a very simple job just involving loosening one hose clamp on the rubber boot that holds each tube to the EHU units. John and Ed took the boom up to about 40 feet and clamped it to the southernmost tower leg of the Rohn 45, then came down to take up the element tubes. That was a bit tricky, particularly maneuvering the lift to install the two halves that are on the back side of the tower, but eventually they managed. Then they lowered a rope down through the tower which I attached to the control cable that had been added to the catenary in October, and on which Ed had fastened his Weath-erpack connectors. They pulled it up and taped everything up. It seemed to work fine, though the calibrations are about 100-200 kHz high. It will be fun to play with this antenna.

The next order of business was installing the SteppIR. I first disconnected the tubing elements, a very simple job just involving loosening one hose clamp on the rubber boot that holds each tube to the EHU units. John and Ed took the boom up to about 40 feet and clamped it to the southernmost tower leg of the Rohn 45, then came down to take up the element tubes. That was a bit tricky, particularly maneuvering the lift to install the two halves that are on the back side of the tower, but eventually they managed. Then they lowered a rope down through the tower which I attached to the control cable that had been added to the catenary in October, and on which Ed had fastened his Weath-erpack connectors. They pulled it up and taped everything up. It seemed to work fine, though the calibrations are about 100-200 kHz high. It will be fun to play with this antenna.



The SteppIR boom installed



Now with the elements

Andy Bodony, K2LE, P40LE, stopped by as we were finishing installing the SteppIR and were about to break for lunch, so he joined us as we ate sandwiches of Ling’s salads.

After lunch John and I spent some time preparing the Rohn 25 top section. This was a standard 10-foot section, but with a top plate piece with three misaligned short legs, maybe adding about another 18 inches of length. We mounted the DXE stainless steel thrust bearing on the top plate, and then the “get a bigger hammer” theory of repair work was vindicated, as it took some judicious tapping with our sledge hammer to get the three legs properly lined up and in position. I had earlier spent quite a bit of time trying to file off extra paint (easy) and extra galvanized metal (very difficult) from inside the legs of the top plate



Ed applying the “bigger hammer”



John puzzling over the Rohn 25 top section

Then we had to mount a rotor plate about two rungs down from the top. We recalled having had a lot of trouble with this piece last fall on the north 25, but John and I didn’t remember exactly what needed to be done; looking at the north tower with binoculars reminded us that we had had to grind off the diagonal braces on all three sides above the plate just to get it in the tower. Then the plate didn’t quite fill the interior space, so that when the three U-bolts are fastened in, there are still small gaps between the edges of the plate and the legs. Like last fall, I was incredulous about this strange example of industrial design; how can a factory-designed accessory for the tower, used by many purchasers, possibly require that the diagonal braces for the tower be ground off just to install it, and then still not fit properly?? – but there you have it.

As our final task in fitting out the top section, John and I put in a guy bracket set one rung below the rotor. We were then ready to finish the rest of the south tower, which now stood at about 34 feet after yesterday’s two-section addition. It first needed a set of lower guys. We had four EHS pigtailed left



There just must be a better way to mount the rotor plate

over from the fall, and needed to use one for the lower west guy, which was going to a buried guy anchor which also was the south anchor of the Rohn 45. John and I followed the same process from the fall, but this time with only Ed on the tower and without JP. We first put a big grip on the Phillystran end from our big roll (using black tape in place of the plastic end caps until I found the little envelope of caps later on). Then with John holding the big grip and keeping the large thimble in place, I wound the big grips.

We then attached the end to the pigtail and Ed pulled up the Philly from the roll and cut it to length. Finally, we put a big grip on the other end and Ed attached it. Pretty smooth, and we then employed same process for the southeast guy in the front yard, this time to the new raised guy anchor that JP had installed that looked really solid. For the third leg, for the time being we are just running a guy as before to the north tower. John found the old guys, and after grinding off the old rusty turnbuckle and putting on a new one, it still fit fine. Ed installed a surplus set of guy brackets on the north tower and attached this guy to them so it would be horizontal. Finally, we gin-poled the top section up to Ed and he installed it on the tower. This was quite a feat, as the wind was pretty strong at that point, but he managed it, albeit with some harsh words for the crummy condition of the gin pole bracket.

We knocked off at about 5:45. I decided to go for a run but felt pretty slow; still, it was nice to be doing something other than lifting or shoving. At this time of day there was much more activity on the trail north of our roundabout than there had been Monday morning.



Ed tightening the lower guy, which passes right over the roof of the house

Wednesday, February 12, 2020. This day started out OK, but ended badly for me. We all got up early to try to go up in the air in relative calm, which usually is the case here early in the morning. The trouble with that plan was that there were sporadic rain showers all morning, though none of them lasted more than 10 minutes or so. You could see the clouds moving at high speed all morning, but it finally cleared up after lunch.



Ed and John waiting out the weather

[W6LD steps in here due to my addled memory as a result of events described below: The first order of business was to finalize and weatherproof the new coil connections on the 40m driver. Next, after some additional testing, we determined that the brake on the 1015 Tailtwister was continuing to lock up, so, while the lift was still in the backyard, John and Ed swapped out the north tower Tailtwister for one of the two newly rebuilt ones we had just brought down after taking them back to the U.S. to have them rebuilt at the end our November trip. The rotor replacement is a pretty straightforward job, involving putting a U-bolt on the mast above the thrust bearing, removing the mast bracket from the rotor, unbolting the rotor, bolting in a new one, and taping up the connections after checking for the proper orientation on the control box. The new one seemed to work fine. We had decided not to put any more effort into that antenna, nor the 2040, since the SWR curves on both were very good.]



Swapping out the rotor on the 1015

We then moved to working on the south tower which required moving the man lift from the back yard to the wall along the front of the house as close to the south tower as possible. With the smaller size of the 66-foot lift we were able to move the man lift quickly and without incident although there were only about four to six inches of clearance on each side when passing through the front driveway gate.



Moving the man lift to access the south tower, right next to the neighbor's house

The next task was to rig up the top set of guys for the south tower. This involved, as before, putting a Philly big grip on the end of the cord on the roll, attaching it to the guy anchor, then sending up a loop of Phillystran from the roll to Ed, who would cut the guy wire to length and toss the end down. We'd then put a big grip on the cut end and send that back up with the pull rope for Ed to fit.

In this way we did the two south guys for the south tower. Then the day turned bad for me. The north guy was to go over the house to a sunken guy anchor that also is the north anchor for the Rohn 45. Unfortunately, the guy wire had to run through the tree just to the west of the north tower. I climbed about a foot above the 5-foot step ladder's top, then sawed off one big branch, and was just about done with a second large branch, when something happened, and the next thing I knew, I was lying on my back on the ground, stunned. Somehow, I had slipped or miscalculated my hold (I have no memory whatever of exactly what went wrong).



An innocent looking tree

My worried friends gathered around me, and I was able to report that I seemed to have no internal injuries, though I was certainly "shaken up on the play." I had been wearing my hard hat, which ended up about 20 feet away, and I think that prevented any head injury. I came inside and lay down on the couch, later taking the back medicine that I always carry with me on trips: a mild painkiller and a mild sedative.



Andy doing a reenactment of his ill-fated climb

I seemed to be fine physically apart from bruises and back pain, though at dinner we discussed how checking for head trauma should be done more carefully whenever you come upon a fall victim. In retrospect, I should have just taken the whole afternoon off, but instead, since I didn't feel too bad, I wondered around outside and tried to help without doing any heavy lifting.

After lunch John and Ed checked the verticality of the south tower with our four-foot level for the first time and found that it was seriously out of whack; we had to do a lot of guy wire loosening and tightening, even redoing the southwest upper guy, as the Phillystran segment was about eight inches too long. They eventually got everything reasonably plumb. They then started to clean the mating sections on the Mid-Tri, using some of the wire brushes that I had brought down for that purpose in October. The tubes had accumulated dirt and crud just from sitting around in the garage. I had to break from about 5 to 6 for a conference call with the office. While I was on my call, the guys took the boom of the Mid-Tri up on the lift and attached it to the tower.



The Mid-Tri mounted but without elements

Thursday, February 13, 2020. I slept fitfully due to back pain and didn't get out of bed (with considerable difficulty) till 7:30 a.m. Nothing was happening at that time, however, since it was raining. It had also rained heavily off and on during the night. After a quick breakfast we got ready to put the elements on the Mid-Tri. I bundled them into two groups: one contained the drivers and reflectors that are one side of the mast and other contained all the directors that go on the other side of the mast. The rain had stopped and it was still breezy on the ground, but it didn't seem to bother them, although they

had to take several breaks throughout the day as squalls passed through, and there were times when they came close to suspending work due to high wind gusts which were peaking somewhere in the vicinity of 25 mph. There were continuing winds from the southeast, the clouds were moving very fast, and several squalls passed through during the morning and early afternoon.

The first order of business was to attach the boom truss. We had decided yesterday just to use the stainless steel truss furnished by JK. Although Lisandro had warned last fall against using it, JP thought it would be fine, and since it was pre-cut and took no preparation time, it seemed like a good idea. John and Ed then started putting in the element halves. Since they could reach both sides of the boom when it was rotated into a suitable orientation, that went pretty smoothly. They first put in all the directors, then after rotating the antenna they worked on the other side. They used the hardware that I had bagged up and labeled when we left in November.



Installing elements on the Mid-Tri



Each half element is held on to the center section by one screw and nut

ing boots. We ultimately found one break and caused several more when attempting to pull the new wire, but were eventually able to pull the new wire off the spool that Ed was holding at the feed point (Andy B having left by then). I was stationed in the middle pulling the wire while John pulled from the end and eventually got to the original far end termination point (but did not reattach the new wire to the radials, as it was getting dark and the barking dogs and suspicious neighbor made it uncomfortable to work at that location any longer than absolutely necessary.)



The finished Mid-Tri

W6LD steps in again due to my addled memory: We all went out into the cunucu at about 4 to see about replacement wires. In anticipation I put on long pants and We all walked out to the common feed point and split in

two, with John and I tracing the East U.S. beverage to the end (right near a house on our road which had two barking dogs and a somewhat suspicious lady). We ultimately found one break and caused several more when attempting to pull the new wire, but were eventually able to pull the new wire off the spool that Ed was holding at the feed point (Andy B having left by then). I was stationed in the middle pulling the wire while John pulled from the end and eventually got to the original far end termination point (but did not reattach the new wire to the radials, as it was getting dark and the barking dogs and suspicious neighbor made it uncomfortable to work at that location any longer than absolutely necessary.)

To trace this beverage wire required crawling through the thorn bushes, and was a big mistake for my back. I was very foolish to attempt to do this kind of physical activity, as I think it set back my recovery by several days. It was getting darker and there were scattered rain drops, and eventually I could not hear either one of them (they had the two walkie-talkies), so I left and, having missed the main trail in my dulled state, ended up coming out of the cunucu next to the big white house with the red roof a few houses down from ours. [W6LD: John eventually made it back to the common feed point where Ed was waiting and they attached the new wire using one of the new transformer boxes John had built based on the VE6WZ design. Ed and John then carefully made their way back to the cottage in almost complete darkness and without flashlights. The work at the far end of the wire had been much more difficult than anticipated. Fortunately, other than the usual scratches and small puncture wounds the only casualties were a loss of a pair of electrician's scissors and our good vegetation loppers.]

We were all pretty beat when we made it in after 7, but had a pre-arranged dinner with JP, Cris, and John Crovelli at Pinchos in Oranjestad. John elected to stay in the cottage, but Ed and I went. I wasn't very good company, as the medications had made me quite sleepy and I suspect a bit incoherent as well.

Friday, February 14, 2020. I slept until 8 with my back still hurting. Meanwhile John and Ed hooked up a come-along to the boom truck to straighten out the fence pole at the gate that had been hit a glancing blow by the man lift yesterday; though the gate now works, the top hinge has rusted through, and we asked JP to weld on a new one.

Ed spent most of the afternoon hooking up his slick system that allows two operators to listen to the pileup on two K3s; whichever one hits a button on the computer first will transmit on the left K3 and lock out the other operator. It works great. John meanwhile got the computer network and logging configurations going with Win-Test running on the two logging computers and a third spare one on the back table and a fourth running VE7CC feeding spots to the network. This took many hours.

We were ambivalent about putting in a full-scale effort in ARRL DX CW, as John and Ed were pretty tired from all their work and I was only semi-competent, but decided to start out and see how it went. The contest started off at 8 p.m. local on 40 meters for us. Andy B came over close to midnight and helped out with the late night shift. I spent most of this time in bed.



John and Ed operating in partner mode, operating the ARRL DX CW Contest

Saturday, February 15, 2020. From my perspective mostly a wasted day, but the contest raged on. Although my back still hurt, I found that if I ensconced myself in a comfortable position, I could operate OK, and I did put in several hours in the afternoon, all on 15, which we had just switched to. I think I had 54 mults on that band when I was relieved. The pileups were continuous, and I must say, that for all the clever tricks on how to break through them, the best approach on CW is just to be loud; second best is to call about 100-200 Hz above the DX stations frequency. Third, if the DX station doesn't come back to anyone, drop your call in again.



[W0YK, W6LD note: After Ed was relieved by John and got some breakfast, he went out and began the tedious task of collecting the 32 radials and the five sets of four Kevlar cord guys from the Spiderpole. This involved meticulously unsnarling them from the Cunucu thorn bushes and rolling them all up, in order, end-to-end, on two orange power cord spools. It took about three hours to complete the job, with a lunch break in between.]

Sunday, February 16, 2020. I slept pretty soundly, but had irritated my back just before bedtime and had trouble, once again, getting out of bed. But once up and with some coffee and two pain pills, I felt quite a bit better. At about 8 a.m., Andy B had gone home, Ed was operating still on 40, John was starting to get organized and clean up the mess outside, and I was checking email, etc.

The 85-foot Spiderpole for 160 erected by Mat (DL4MM)

I took over operating about 9:20 and stayed for about three hours. These are normally very slow times in this contest, as EU and US stations are working each other and no one wants to try the Caribbean. So I probably didn't hurt our score much, but I did make a few hundred QSOs and got one new mult (number 61 out of 63) on 20: VO2AC, whom I saw spotted and easily worked. I also went to 15 for a while and a VE9 (NB) called for a new one (number 56 on that band).

[W6LD notes: John took over for me at the end of my morning stint and not long into his operating stint saw indications of an opening on 10 meters. He QSY'd there and worked a handful of loud stations and then had a period where many stations were calling but all ESP levels. He thought maybe that was it for the brief opening but decided to stick with it doing his best to pull ESP signals out through the noise (there was at least one station on the band with disturbingly broad key clicks, further exacerbating the local noise issues) and over time the signals and rate picked up. The opening was characterized by very rapid and significant QSB as well as a "spot light" effect as the opening moved around the eastern half and southern portions of the U.S. About half way into the opening, I relieved John to allow John and Ed to do some more tasks, including replacing the EU beverage wire.]

At about 6:50 p.m. local time, Ed and John returned from replacing the wire on the West U.S. beverage, which Ed said was not as difficult at the East U.S. one we did earlier, though nothing in the cunucu is actually easy to do. I had been operating for the last four or five hours, starting on 10, then moving to 15 and 20 as propagation faded. We ended up with only 33 mults on 10 meters, which never really opened to the West or to Canada. This has happened before and was disappointing, but it's better than not having 10 open at all. The K3, Alpha 91b amp, and antennas all were working great. And by the end of my second solo stint, I was finally feeling reasonably comfortable with Win-Test, which does have a lot of nice features.

	Q	S/P	Dup
160	403	55	7
80	905	60	25
40	1449	61	59
20	1431	61	40
15	1139	58	49
10	280	33	5
<hr/>			
	5607	328	185
<hr/>			
	5,484, 816		

Our summary sheet, good for second place in the world

[W6LD note: Despite our initial ambivalence, ultimately we put in a full 48-hour multi-single effort, finishing second in

the world to ZF1A, and were glad that we had persevered.] In the last hour we took showers in shifts, drove off to see Cris and JP and have a Balashi Chill with them, then on to meet John Crovelli and Andy Bodony at Urataka for some outdoor pizza and beer/diet coke (me)/wine (Ed).



The finished job

Picture by KK9A, who photoshopped out the power lines.

Point Generator Profile

Mark, W6IA

(as interviewed by Bob, W1RH)

NCCC likes point generators and that includes all Point Generators, big and small. The points all add up and we can't win contests without both the big guns and the small pistols. With that said, our Point Generator this month, Mark, W6IA, falls under the category of Small-Pistol who generates lots of points for the Club.

Mark is currently ranked at #17 in the Gold Bracket of NCCC's KB Awards program. With the season just beginning, Mark has already participated in three KB contests.

I always look at 3830Scores when I do a Point Generator Profile. Mark is now in his 5th year of filing contests with 3830. The first year was 2015 and, with the call sign of KA6AMB Mark participated in four contests including Phone Fray and All Asian SSB. Prior to the end of 2015, however, and with the call sign of W6IA, Mark added four more contests making it a total of 8 contests for the year. It was 12 contests for Mark, in 2017; 27 in 2018; and a whopping 52 contests in 2019, including several NCCC RTTY Sprints, all three modes of NAQP, Sweepstakes phone, WPX CW and SSB, a bunch of QSO parties, WW Digi, and several other contests. Mark even submitted scores for three VHF contests! A well-rounded contester is W6IA!

This is what contesting is all about and this is why I keep doing this column for the Jug. Every member who generates points for NCCC is a key player for the club in my book.

Now that you know what this guy can do for the club, here's more, from W6IA:

Name/Call Sign: Mark Sayre W6IA

Past calls: KA6AMB

Location: San Jose, CA CM97bg

How much property do you have? City lot... about 50' x 35' usable but with power lines directly adjacent to one side and a nearby transformer. Pretty standard city lot challenges.



Describe your antenna system: Guyed mast on roof 35' above the ground; inverted vees for 20 and 40. Moxon for 6 meters. I deploy a 2-el Mosley Mini-32A or a 3-el YP-3 on a 28' portable mast in the backyard for major contests.

Future: Still trying to figure out an 80-meter antenna solution.

What's in your shack? Elecraft K3, KPA500, P3, KAT500.

What are your previous QTH's? Previously active on HF only from the City of Santa Clara. Mostly VHF/UHF, or inactive, for a long period of time due to work, family, etc. This does seem to be a fairly common ham radio trajectory.

If you're working, what is your career? I am a journalist covering mostly local community issues. I struggle with IT and software-related issues more than most but I have some excellent elmers, several in NCCC, who are always happy to help!

Married? Kids? Grandkids? Married, 1 son.

How many DXCC entities have you worked? 183 confirmed.

What's your favorite contest? Contesting is such a great aspect of this hobby it is hard to choose. I like the entire CQ WW series (CW, SSB, RTTY) as well as the ARRL DX series but CQP and 7QP always create the best memories because I usually get out on expeditions with friends for those contests.

Any tips for contesters? When you have a small station you have to use every advantage that you have... particularly propagation. I will get up at 3am in some domestic contests to work an hour or so of east coast on 40 at their sunrise to pick up needed mults. It helps that there are fewer W6/W7 stations on the air at those hours. On 20, I will try to work Asia/Oceania as late into the night as I can, hopefully after the path from the east coast closes. If you can find ways to 'minimize' the competition that can really help the small operation.

What would you like to see changed in NCCC? I was hesitant to join the club because I felt it might actually reduce my enjoyment of the hobby by adding an extra expectation for BIC time that I just don't have. To the contrary -- I have found the depth of knowledge in this club to be incredible and, even if you turn in a log with just 25 Qs, the participation mult is still appreciated. I hope to be able to increase activity in club focus contests in the years ahead.

Any other hobbies besides ham radio? For now... mostly parenting.



W6IA Antennas



W6IA, Mark, Enjoying Field Day Operation with the WVARA

Tube of the Month – 849(*)

Norm, N6JV

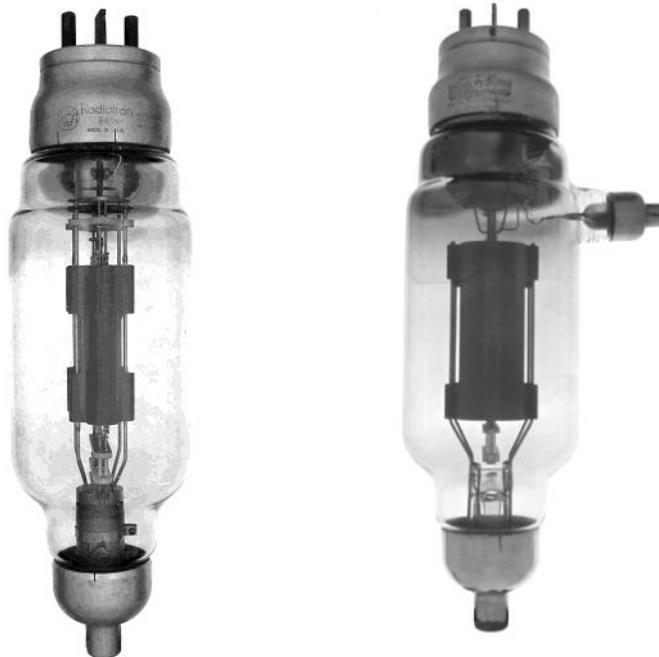
The original “250 Watter”, the 204/204A, was one of the first tubes capable of high power to be produced. A single tube had an output of 250 watts up to 3 MHz. In 1927 the basic tube was redesigned for higher power output and designated the 849. This tube produced 350 watts output. The low frequency was still a problem, so the 849A was introduced. It operated with up to 3000 volts at 500 mA to produce 1200 watts output. They also changed the interelectrode capacitance so the tube could operate up to 7.5 MHz at full power.

The 849 type tubes were often used for audio applications, but there was interest in using them more for RF in transmitters as well as industrial heating applications. Lead length and high minimum capacity were the factors limiting frequency. In the early 1940s, Amperex and United modified the 849A by bringing the grid out the side of the envelope. This reduced the lead length and reduced the input capacitance by 25%. The new tube was called the 849H by Amperex and 949H by United. This tube could be used up to 30 MHz.

The examples shown were made by RCA and United. We usually look at a tube with the base down, but these tubes are usually shown upside down. The tube marking reflects this orientation. Before WWII, ham radio transmitters as well as commercial units were usually built in racks. Enclosed racks protected the operator as well as his cat, but open racks were common. The heavier components had to be mounted in the bottom of the rack and any low-power stages needed to be near the top so you could tune up or change plug-in coils. Stages needed to be in close proximity in order to couple the output to the input of the next stage. By mounting the amplifier stage under the driver stage and mounting the power tube with its grid close to the driver stage, adequate drive could be available. Coupling feed-lines were mostly twisted pairs as coax wouldn't become common until after the war.

Visit the museum at N6JV.com

Norm N6JV





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.

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).
- Life Memberships.— \$250.00 Contact secretary.nccc@gmail.com. The 80/20 Rule: Members who have reached 80 years young and been a NCCC Member for 20 years are eligible for Honorary life membership. Contact secretary.nccc@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.

The soft deadline is 7 days before month-end. The preferred format is MS Word, Arial 12 point. Pictures should be full resolution. Send your material to Bill, N6ZFO at n6zfo@arrl.net. Don't worry about the formatting, we can take care of that if necessary! For pictures: Include them in-line with the text, OR identify them by file name at the insertion point.

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.



Find us on Social Media

NCCCKB



HAM RADIO OUTLET

MULTI-STORE BUYING POWER!

ICOM



IC-7610
All Mode Transceiver



IC-7200
HF Transceiver



IC-7100
All Mode Transceiver



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



ID-51A Plus2
VHF/UHF D-STAR Portable

KENWOOD



TS-590SG
HF/50MHz Transceiver



TM-D710G
2M/440 Dualband



TM-V71A
2M/440 DualBand



TM-281A
2 Mtr Mobile



TH-D74A
2M/220/440 HT

YAESU
The radio



FT-991A
HF/VHF/UHF Transceiver



FTDX1200
100W HF + 6M Transceiver



FT-450D
A100W HF + 6M Transceiver



FTM-400XD
2M/440 Mobile



FT-60R
2M/440 5W HT

5 Ways to Shop!

- RETAIL LOCATIONS - Store hours 10:00AM - 5:30PM - Closed Sunday
- PHONE - Toll-free phone hours 9:30AM - 5:30PM
- FAX - All store locations
- ONLINE - WWW.HAMRADIO.COM
- MAIL - All store locations

MRO is family owned and operated by active hams!

ANAHEIM, CA
(800) 664-6046

OAKLAND, CA
(877) 892-1745

PORTLAND, OR
(800) 745-4267

PHOENIX, AZ
(800) 558-7358

MILWAUKEE, WI
(800) 558-0411

WOODBIDGE, VA
(800) 444-4799

PLANO, TX
(877) 455-8750

SURBANK, CA
(877) 892-1746

SAN DIEGO, CA
(877) 520-9625

DENVER, CO
(800) 444-9476

ATLANTA, GA
(800) 444-7927

NEW CASTLE, DE
(800) 644-4476

SALEM, NH
(800) 444-0047

ONLINE STORE
WWW.HAMRADIO.COM