



Publication of the
Northern California
Contest Club



Issue 560
January 2019



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NCCC February Meeting

The next meeting will take place on February 13th Wednesday and will be the Joint NCCC / REDXA meeting.

The Program is "FT8. Digital. and Contesting" and the venue is

Boulevard Cafe & Gril, 1096 Petaluma Blvd North, Petaluma, CA.

Activities commence at 6pm.

Presidents Report:

Contest Rules.

There are certain things we like and don't like about each contest. Those in New England enjoy a big advantage in DX contests by having a direct path to the large number of countries in Europe, while we in California are disadvantaged by the longer over-the-pole path. Or perhaps the Asian contests give the West coast a big advantage over the Southeast US. In domestic contests the East coast stations have far more close-in states and sections to work versus those of us on the West coast. Of course depending on propagation conditions this can be an advantage or disadvantage. So why are rules written to the advantage of one group and disadvantage of another?

In the software world there is a saying, "Code Rules". Basically the person who writes the code also determines how the system runs. Applying this to contesting, the person or group who creates and sponsors a contest determines the rules for that contest. Many DX and domestic US contests are sponsored by organizations in the Northeast US, either New York or Connecticut. Their target audience, the ones who pay the bills, were located in the same area at the time the contests were created - meaning the East coast of the US. Thus the contest rules were set to help those folks achieve big scores, and buy more magazines or whatever else the organization sells.



Northern California Contest Club

Excellence In Amateur Radio Contesting

Officers:

President	Jack Brindle	W6FB	jackbrindle@me.com
Vice President /Contest Chair	Chris Tate	N6WM	ctate@ewnetinc.com
Treasurer	Tom Carney	K6EU	treasurer.nccc@gmail.com
Secretary	Ian Parker	W6TCP	secretary.nccc@gmail.com
Past President	Bob Hess	W1RH	w1rh@yahoo.com
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Director:	Bill Haddon	N6ZFO	n6zfo@arrl.net
Director:	Bill Fehring	W9KKN	bill+nccc@w9kkn.net

Volunteers:

New Member Mentor	Al Rendon	WT6K	wt6k@arrl.net
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Webinars	Bill Fehring	W9KKN	bill+nccc@w9kkn.net
JUG Editor	Ian Parker	W6TCP	w6tcpian@gmail.com

Thursday Night Sprint:

The Northern California Contest Club sponsors Thursday evening (NA local time) contest practice sessions of 30 minute duration.

On the Thursday (and, sometimes Friday also) prior to a major contest weekend, the practice format follows the upcoming contest.

Generally, on other 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.

Thursday Night Contesting Director and Founder
 NCCC CW Sprint
 NCCC RTTY Sprint
 NCCC Sprint Ladder
 Sprint Web master www.ncccsprint.com

Bill, N6ZFO
 Tom, N3ZZ (initially, Ken N6RO)
 Ken, K6MR
 Bill, N6ZFO
 John, K6MM.

non-NCCC:
 Thursday night Contesting Advisory Group:

Tim N3QE (Ladder Scores manager)
 N6ZFO, Bill (Chair)
 Mark K6UFO, (with W4NZ, N4AF, W9RE, K4BAI, N3BB and W0BH).
 Ken, N6RO

The Thursday night NCCC Net

Contests sponsored in Europe likewise give an advantage to European stations, Asian sponsors to Asians, and so forth. In this case we change the saying to “sponsor rules” since the contest sponsor is the one who decides who has an advantage or disadvantage in the contest. Once a contest is established, there is usually little reason to change the rules, especially since a significant change might cost the organization support, or sales. In other words, “Things are just fine, let's not change things.”

Sure, some contests come and go. The quarterly League QSO Parties, who's main purpose seemed to be to build up the ARRL Field organization gave way to the NAQPs, and we have had many state QSO Parties come and go. Six contests have been started by NCCC members. They are:

N6ZFO: the NS Sprints,
K5RC: the NAQPs,
K6VVA: the Locust QSO Party
W6RRR: the Pirate QSO Party
W6OAT (N6SF at the time): NA Sprint
W0YK: FT-8 Contest

Each one had the opportunity to set their own rules. A very interesting twist was thrown into the NA Sprint, the “Special Rule.” To quote the announcement in the National Contest Journal from August of 1977, “If a station calling CQ NA is called by another station and makes a valid exchange with him, he cannot call CQ again on that frequency, nor can he solicit contacts by calling QRZ, QRZ?, ?, etc. He must move a minimum of 5 KHz away from the frequency before calling CQ NA again; or he must answer a CQ NA on the frequency following a valid exchange call CQ NA on the frequency.” Wow. That sounds like a lawyer made up that rule. Of course, it was, and a very good one also, our own W6OAT. This meant that you could not simply hold a frequency and run all contest, but had to both run along with search and pounce, making the contest very interesting for all. The rule has evolved slightly over the years, but all that time one interesting loophole still exists. What if you answer someone on a frequency, but before you can call CQ NA, or if no one answers your CQ, someone comes on frequency, calls CQ, and you respond to them, then what happens. The answer seems to be that you still get to call CQ before finally having to QSY. Was this loophole even thought of by Rusty? Or did that great legal mind intentionally create the loophole? Rusty?

There are other contests that try to even out the playground, such as the Stew Perry contest, which uses distance-based scoring. This works well on the contest's band of choice - 160 meters, where ground-wave propagation usually rules. But how well would it work on higher bands in the middle of a solar cycle? With round-the-world propagation occurring, how do you determine distance to the station Was it by short or long path? Further, how do you prove which was at play? Things start to become more difficult at that point, and controversy usually erupts. Still, the scoring method works very well for this contest, and the founders chose well.

What all this points out is that if you really want a contest that has a set of rules that you like, create it! I have heard of a suggested contest where the prefects of Japan count as countries, to balance out the inequities of the large number of European countries. Or perhaps a contest where the countries in the European Union make up just a single entity, giving those with good propagation to Asia an advantage. If you like these ideas, create a contest for them. You have to ask when doing so, will it draw an audience that likes the rules? Perhaps contesters in California might like the idea, but will contesters in other parts of the country, or world? If they don't, the contest won't live very long. Do it right and it becomes a classic, like several of the ones started by our own members.

There are other things to consider as well. Revisiting the domestic contests sponsored by the two organizations in the NorthEast, it is very interesting to note that for many years the contest has been won not by entrants in the so-called target areas, but rather those far removed from them. For example, for many years Sweepstakes was won by a station in KP4. Now the op was indeed from the Northeast, so perhaps we should call that in the home-field advantage category. Since that time the contest has pretty much been won by stations in the West, either Montana or New Mexico. East Coast stations have been shut out for quite some time. Who says we cannot win Sweepstakes from the West coast? As N2IC, N9RV and even our own N6TV have shown, a win is within our grasp.

So what does this say about our chances in DX contests? Actually, it says quite a bit. Once contest, CQ WPX bases scoring on the prefix of the station you work. In this contest there are many different calls you will hear, especially in the US where the normal W4 and K6 give way to AA5 or KG8 or many other combinations. This means that there are a large number of multipliers available, and contest scores can skyrocket. Sure, there is still a big advantage to being in the Caribbean (especially the ABC Islands), but those of us here at home can run up very hefty scores as well. This is a big reason the club has targeted the CQ WPX contests for participation this year. With enough of us in the fray, and the scores of our many Caribbean stations we believe that not only we can win this one, but that we will! Join us, it will be a lot of fun. And the first one starts this month - CQ WPX RTTY!

73!
Jack, W6FB

***** NCCC.CC - Members Only Web Section *****

Please note that around mid-February, the password to the NCCC members only section of the website will change.

The new password will only be issued to current members that appear on the roster and the notification will be delivered via Member Planet.

Please do not share this password with anyone!

If you have any questions or need help, contact:
Ian W6TCP w6tcpian@gmail.com



The January NCCC meeting took place on January 8th, Tuesday at Marigold Indian Cuisine, 1214 Apollo Way, Sunnyvale, CA 94085 The presentation was on KB Awards 2019/2020 Contests and rules by Gary NA6O.

There were 22 members and guests in attendance:

Tom K6EU, Don K6GHA, Bob K6XX, Denis K7GK, Jim K9YC, Shawn KC6SCD (guest of N6TV), Giuseppe KE8FT, Tom KW6S, Tom N3ZZ, Ric N6AJS, Rich N6KT, Byron N6NUL, William (son of N6WM), Chris N6WM, Rick N6XI, Gary NA6O, Brian NT6F, Tom NW6P, Jack W6FB, Glen W6GJB, Ian W6TCP and Bill W9KKN

The following new members were voted in at the meeting.

Erik Scott, NI6G
Evan Duffey, KN3O
Jim Smith, KM6PHB
Roberto Sabkowski, AJ6CY

Please extend a big welcome to our new members !

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An Arcane Sub-Hobby in the Amateur Radio Sphere – Monitoring LF Non-Directional Beacons, NDB's

Bill Haddon, N6ZFO.

In 2013 NCCC member Tim Marek, K7XC messaged the NCCC reflector with the description of an international listening group for the so-called Non-Directional Beacons, NDB's. These airport navigational transmitters operate in the frequency range 190-450 KHz between the new ham radio bands at 472-479 Khz, 630m, and 135.7-137.8 KHz, 2200m.

The world's NDB listeners are a small but dedicated group which includes many hams. They participate in monthly "Coordinated Listening Events," or CLE's, which are expertly organized by Brian Keyte, G3SIA. Typically the CLE's are last-weekend-of-the-month events stretching from noon Friday to noon Monday local time. Around the holidays, a very interesting week-long CLE occurs. Logs are sent to the NDB reflector as imbedded text by the following Wednesday. A very talented German database expert, Joachim Rabe, compiles amazingly comprehensive CLE statistical reports very rapidly, usually within a few days. The CLE's, as the title implies, are events, not contests.

What are NDB's? Non-directional beacons are low power transmitters situated at mostly remote airports as a navigation aid to pilots of small aircraft. Your 787 pilot is unlikely, we hope, to use an NDB to locate SF International Airport in heavy fog but the pilot of a small plane on approach to the Ralph Wenz Airport near Pinedale, WY might find the beacon, "392-PNA" to be useful. See www.airnav.com for detailed information. There's a comprehensive data base of NDB's available on the web and in the VE3GOP logging software package. All North American NDB's are shown at <https://www.classaxe.com/dx/ndb/rna> When CLE reports are submitted an "NDB heard" entry is made in this data set.

Are NDB's Obsolete? One might surmise that NDB's are obsolete navigational tools, but surprisingly that's not the case. However their number is diminishing. I suppose they are less obsolete than CW itself, although NDB's can be cited as maybe the last commercial use of CW. There's a good NDB discussion by W3EEE at http://www.hifidelity.com/w3eee/ndb_what.html The author points out that NDB's serve several important functions or have especially useful characteristics: 1) They are inexpensive and low maintenance. 2) Aircraft direct-finding equipment supports NDB's either with stand-alone Auto-Direction-Finders or as part of a more comprehensive airborne navigation electronics package. 3) They are primary in many parts of the world at small airports. 4) They serve as a reliable backup to modern navigational systems.

Signal Characteristic of NDB's. Typically, NDB's have power levels between 25 and 100 watts, although a very few NDB's are in the KW range. The call sign is usually either two or three letters, occasionally a number and one letter. The ID is sent at rather slow speed repetitively, often with an extended dash between ID's. The latter are called DAID beacons - Dash After Identifying. Beverages, loops and other antennas appropriate for receiving on 160m will hear these signals at distances of 6,000 miles or more at nighttime. That's surprising, and it's interesting to experience the propagation characteristics. There might be some correlation with 160m amateur band propagation. LF propagation is an odd phenomenon to say the least. For the most part NDB listening might be ideal activity for those with insomnia.

Reasons to Participate in CLE's. Why would an NCCC'r want to participate in this arcane part of our hobby? There are several reasons: 1) The CLE's are an excellent way to evaluate the performance of low-frequency antennas. The comprehensive statistics that appear post-CLE facilitate such evaluations, which might be carried out with respect to directional selectivity and sensitivity. 2) Local noise. Obviously noise levels vary widely, and a listener will quickly see his/her location's noise situation. 3) The beacon signals are good practice for copying very low CW signals in the presence of QRN and QRM; frequently multiple NDB's are audible on the same frequency. 4) There's a wealth of knowledge about directional antennas and LF receivers within the NDB reflector group. That knowledge base can be queried when designing or selecting an optimal low band amateur receiving antenna. 5) It's fun and addictive, and provides an activity when things really slow down in the contests. 6) The beacons will not be transitioning from CW to FT8 any time soon.

Quick-Start Guide for NDB Listening. How does one get started? Here's the recipe:

1. Join the NDB reflector, with the realization this is a talkative group. On sending your first CLE log you will be assigned a two-letter identifier by Brian. Mine is "ha".

NDB list information site <https://www.ndblist.info/>

2. Download the software for logging NDB's from VE3GOP. See "Alex's Longwave page" at <http://www.ve3gop.com/> The program is WWSU 6.4 (Around \$30.00, maybe optional.)

Note: As far as can be determined, Democrats, Republicans, Libertarians, Greens and various flavors of Independents can all use the VE3GOP software.

3. Practice listening in the frequency range and then participate in a CLE. You will be welcomed by this very friendly, if a little odd, group.

The VE3GOP software package links to the database of all world-wide NDB's and maintains its own database to catalog your own results. Reports suitable for submitting to the NDB reflector can be generated easily as text file. An Excel format also provided. Some participants in noisy areas use internet-accessible receivers for listening. That's allowed in the CLE's so long as only one receiver is used. The VE3GOP program allows for multiple Listening Locations.

A Couple Fine Points. 1) For each NDB the data base lists the center frequency and the LSB and USB offsets, where the CW signals are transmitted. For example NDB "394-SP" in Spencer, Iowa transmits on a center frequency of 394 KHz but with an LSB offset of 412 Hz and a USB offset of 419 Hz. Thus the signal was heard by me at 393.59. 2) Infrequently, two NDB's on the same frequency will have the same call sign. For example, 392-ML is an NDB in Charlevoix, QC or in Monroe, LA. However the two transmitters have different repetition cycles of 10.2 and 5.82 seconds for their CW identifications, allowing assignment on that basis. Nulling with a directional antenna could be used as well.

Appendix. My recent CLE report, as delivered to the NDB reflector for CLE #240 in the series. CLE 240 targeted the frequency range 385-399.9 KHz. Thus NDB's with a nominal frequency of 400 were not included.

Report from N6ZFO for CLE240, January 25-28, 2019.

Twenty-six NDB's logged, 100mi N of San Francisco. As noted by others signals were weak and mushy, especially from the north. Just the same, all NDB's previously logged for this freq range, save one, were heard during CLE 240. Just one new NDB was logged -- on the 3rd night, 394-SP from Spencer IA appeared very briefly. It's a 25w beacon at a distance of 1452 miles. 391-DDP in Puerto Rico was louder than I've heard it in any previous session. From "ha" Kelseyville CA (at Clear Lake, CA).

Log Report for Bill Haddon, N6ZFO "ha"

Listening Location: Location 1, CM89oa (39°01'15"N 122°48'30"W)

Report Created On Jan 28, 2019

Receiver(s): FT-1000MP

Antenna(s): NE/SW Beverage 500' NW/SE Bev 400' and 160m Inv L

Software: WWSU6.4

Report Sorted by Freq in Ascending order, Frequency Range 385.00 - 399.99 kHz

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YYYY-MM-DD UTC  kHz  Call   Pwr mi  Location  
-----  
2019-01-26 07:16 385   QV    100 1291 Yorkton, SK, CAN  
2019-01-26 07:19 385   MR    25  172 MUNSO - Pacific Grove, CA, USA  
2019-01-26 09:57 385   EHM   100 2192 Cape Newenham LRRS Apt, ALS  
2019-01-26 07:50 386   SYF   25  1122 St. Francis, KS, USA  
2019-01-26 07:13 386   HAU   25  764 Hauser - Helena, MT, USA  
2019-01-26 06:43 388   MM    125 1325 Fort Mc Murray, AB, CAN  
2019-01-26 07:48 388   JW    15  920 Pigeon - Jumping Pound Creek, AB, CAN  
2019-01-27 08:42 389   TW    25  502 STRIK - Twin Falls, ID, USA  
2019-01-27 08:48 389   CSB   25  1205 Harry Strunk - Cambridge Muni, NE, USA  
2019-01-26 06:46 389   YWB   500 761 Kelowna, BC, CAN  
2019-01-26 08:08 390   HBT   1000 2061 Borland - Sand Point Apt, ALS  
2019-01-26 06:50 391   TK    100 1098 Telkwa (Smithers), BC, CAN  
2019-01-26 08:45 391   EEF   250 1435 Elephant - Sisters Island, ALS  
2019-01-26 07:28 391   DDP   2000 3635 Dorado - Vega Baja, PTR  
2019-01-28 06:07 392   FMZ   25  1339 'Beklof' Fairmont, NE, USA  
2019-01-27 08:55 392   ML    500 2651 Charlevoix - La Malbaie, QC, CAN  
2019-01-26 06:51 392   PNA   25  726 Wenz - Ralph Wenz Field Apt, WY, USA  
2019-01-28 06:12 394   SP    25  1452 SNORE - Spencer, IA, USA  
2019-01-28 05:05 394   RWO   50  1847 Woody Island - Kodiak, ALS  
2019-01-26 07:37 394   DQ    50  1161 Dawson Creek - Pouse Coupe, BC, CAN  
2019-01-26 08:16 395   YL    1600 1575 Lynn Lake, MB, CAN  
2019-01-26 07:42 395   ULS   25  1164 Ulysses Apt, KS, USA  
2019-01-26 08:17 396   YPH   500 2376 Inukjuak Apt, QC, CAN  
2019-01-26 07:21 397   ZSS   25  1193 Yellowhead (Saskatoon), SK, CAN  
2019-01-26 07:02 397   SB    50  457 Petis - San Bernardino, CA, USA  
2019-01-26 08:24 399   SRI   50  2425 'Pribilof' St George, ALS  
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Output Generated By WWSU 6.4 (2013, Alex Wiecek - VE3GOP, <http://www.ve3gop.com>)

Total stations listed - 26

Total number of stations logged from all listening locations - 273

Point Generator Profile

Tom, K5RC

Tom Taormina, K5RC, an ARRL Life Member, has been involved in HF and VHF contesting for almost 60 years. He is a former NCJ editor, a member of the CQ Contest Hall of Fame, and is on top of the DXCC Honor Roll with 374 entities confirmed.

The Comstock Memorial Station, W7RN, is a not for profit organization chartered to advance the state of the art in radiosport. Since 2007, the station has made more than 300,000 contest QSO's, and holds a number of records on CW, SSB and RTTY. The Station also made another 50,000 QSO's as W1AW/7 NV in the ARRL Centennial Celebration.

Tom was first licensed as WV2GGB in 1959 and has been an avid contester, DXer and experimenter ever since. He apprenticed at W1BU and was part of the early EME experiments. After moving to Texas in 1964, he and K5LZO teamed-up for many years in multiop SS and DX Contesting. He won SS CW SOHP in 1975.

He is past president of The Texas DX Society, co-founder of the Great Armadillo Runs, co-founder of 7QP, Chair of the 1983 ARRL National Convention and co-founder of the North American QSO Parties. He is former editor of the West Gulf DX Bulletin and a Past Director of the YASME Foundation. He organized ARRL DX Contest Dxpeditons to XE2FU for TDXS. He is a member of FOC, A-1 Ops and CW-Ops.

The W7RN station is the fourth multiop station he has built. The first was with K5GA, then with W5FU(NA5R) and then the K5XI superstation. Today, W7RN is host to N6TV and WX5S, both top ten finishers in ARRL SS. It also is the home for WK6I and his SO5V RTTY operations.

A long-time NCCC member, he frequently presents at the IDXC and has been an instructor at Contest Academy. He and W6OAT have done rover operations for CQP.

Name/Call Sign: Tom Taormina, K5RC

Past calls: WA5LES, WA2GGB, FP8CB/FO8

Location: Virginia City, NV

How much property do you have? 10 Acres

Describe your antenna system: The Antenna System belongs to The Comstock Memorial Station, W7RN

Current:

- 160: ½ Wave Sloper, Top at 150'
Two DXE 4 Square RX Arrays, 900' apart
- 80: 3 el K7NV Yagi @ 175' on Rotating Monopole
Dipole @ 120'
K7NV Prop Pitch Rotor
- 40: 4 over 4 M2 4el Yagi @ 70' and 140' with Microham Phase Box
2 el M2 Yagi @ 120'

K7NV Prop Pitch Rotor
K0XG Ring Rotor

- 30: Dipole @ 130'
- 20: 4/4/4 Innova Yagis on 140' Rotating Tower [with Microham Phase Box](#)
6el Innova Yagi, 58' Boom on 45' Tower
5el OWA Yagi Fixed East @ 35'
K7NV Prop Pitch Rotor
- 15: [6/6/6/6 OWA Yagis on 175' Rotating Monopole](#)
6el OWA Yagi @ 150' on 20M Tower
7el Innova Yagi Fixed East @ 35'
- 17/12: 3 el DXE Yagi @ 35'
- 10: 6/6/6/6 OWA Yagis on 120' Rotating Monopole
6el OWA Yagi Fixed East @ 35'
K7NV Prop Pitch Rotor
- 6: 7el Innova LFA Yagi @ 40'
10 el LFA Yagi on 60' boom @ 120'

VHF: Repeater Vertical @ 180' for 2M (K7RC) and 440 (KS7AA)
Future: Keep it all up

What's in your shack?

- Main Station: 3 x Elecraft K3
2 x Acom 2000A+
1 x Elecraft KPA-500
2 x Microham u2R Radio Control
- Second Station: Elecraft K3/0
RRC 1258 Remote Rig
Microham u2R Radio Control
- Remote Hosts: 2 x Elecraft K3
2 x Elecraft KPA-1500
2 x RRC 1258 Remote Rig
- Other: 4 x Windows 7 PC
5 x Flat Screen Monitors
1 x Windows 7 Laptop
HamPlus AS86F 6 x 8 Switch for switching among stations
5 x HamPlus MD8-E Switch Controls for the AS86F
9 x Green Heron RT21 Control Box
4 x Microham 2 x 4 coax switch for antennas
Green Heron GHE controllers and software

What are your previous QTH's? First Licensed on Long Island. Lived near Houston, TX for 33 years. Been at the same QTH near Virginia City NV for 21 years.

If you're working, what is your career?

For the last 30 years I have been a business consultant specializing in helping companies with process optimization, leadership and self-directed work teams.

For the last 20 years I have also been an expert witness in products liability and organizational negligence litigation

Written 12 books on quality, process control and risk. Certified Management Consultant and Certified Manager of Quality and Organizational Excellence

Started my career at Mission Control in Houston (14 years) as a quality control engineer during Gemini, Apollo and Skylab.

Married? Kids? Grandkids?

Married to Midge, K7AFO. Three sons, two grandsons and two great granddaughters all who live in Texas

How many DXCC entities have you worked?

374 Mixed Confirmed, Honor Roll #1

What's your favorite contest?

The 10 Meter Contest. However, for the last 20 years, my passion is making the station world class for others to operate their favorite contests and achieve their highest potential.

Any tips for testers?

- Contesting is being the best you can be. Whether you are limited to 100 watts and a dipole or have access to a mega station, strive to continually improve
 - Play by the rules. Besides certificates, the only reward of contesting is being recognized by your peers
- Find the niche that you excel at. At the same time, stay open to the many new aspects of ham radio

What would you like to see changed in NCCC?

I have been attending NCCC meetings since the mid 1970's when I was travelling for NASA. I have watched the Club evolve over the decades. The Club is suffering from the aging of contesting. The remarkable leaders and innovators of the past have few who can fill their shoes for the future. The members also now have a diversity of interests outside of ham radio. Future change is evolving with the changing interests and demographics while continuing to share the incredible history with the newcomers.

Any other hobbies besides ham radio? I am co-founder of the Nevada Space Center and on the Board of Advisors for the Challenger Learning Center in Reno.

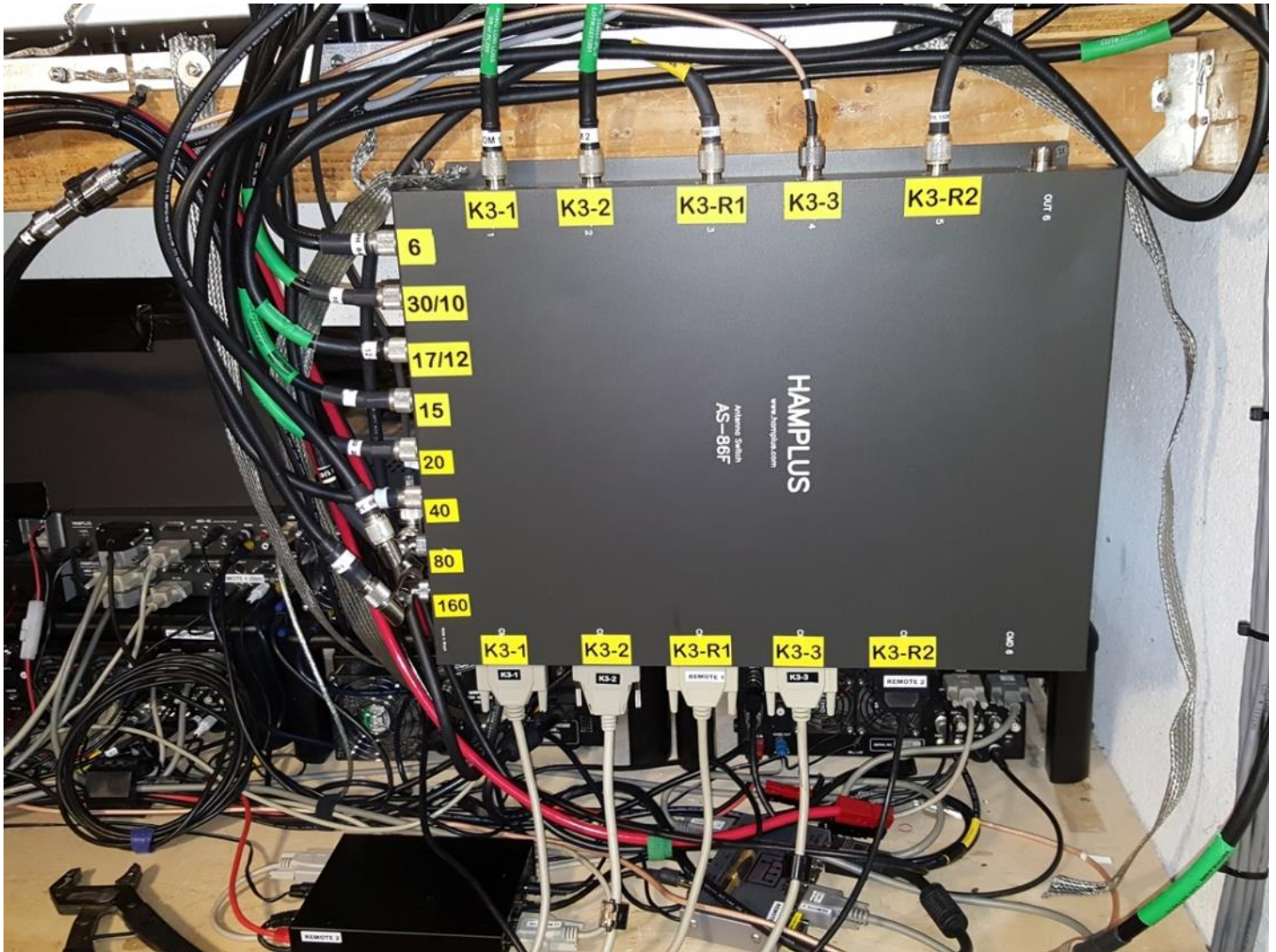
The majority of my radio time is spent maintaining the station and keeping the two remote hosts on the air. Current interest is grooming competitors for the ARRL DX Contests. The long drive over the

Sierras is a real issue for most NCCC members.

We encourage Club members who have the passion to discuss with us using the remotes for the ARRL DX Contests. There can be two single band entries or a full-blown SO2R from the NV multiplier. The remote can also be available for NAQP and Sprints.



ANT FARM 2018 – Most of the antenna farm seen from the driveway

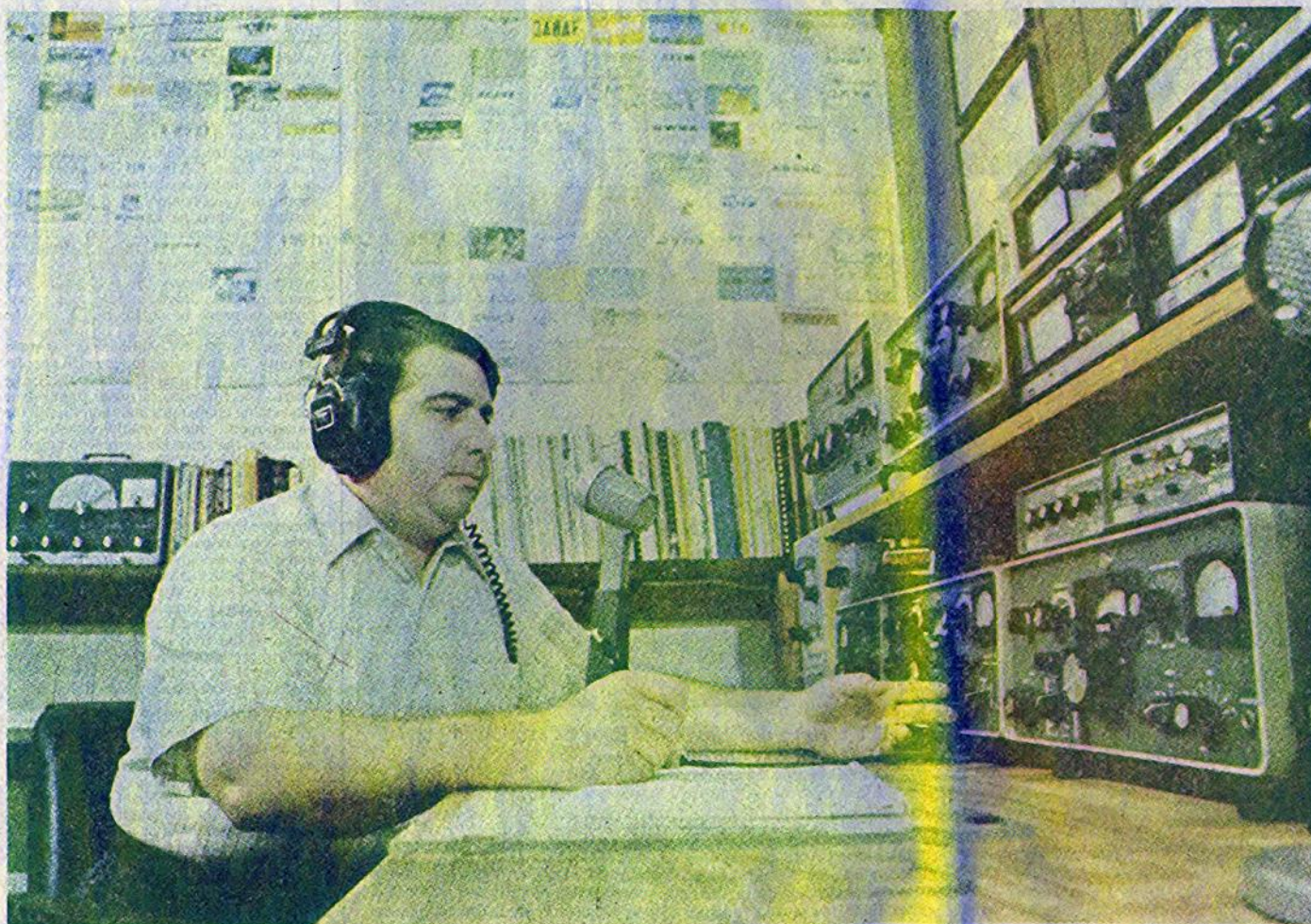


BAND-RADIO SWITCHING – The AS86F matrix wiring



CONTROL SCREEN – All antenna switching, rotor control, phase box control, remote amps and remote switch monitoring on one touch screen. Remote operators’ access this through TeamViewer. W1YL is the star of the remote operators with 2,349 QSO’s in 2018.

Weekend preview



Color photo by Larry Reese, Chronicle Staff

Sitting at the microphone of his ham radio complex, Tom Taormina, a local amateur enthusiast, can contact fellow hams all over the world. Ham radio had its origins in the early days of the 20th century when wireless communication was just beginning.

FIRST MULTIOP STATION 1980 – A clip from the Houston Chronicle about contesting



The Old Man 2018



WA2GGB 1961 – Talk about a primitive station. Operating 6M CW. 5W transmitter. 6M Nuvistor converter into a car radio. Signal generator at 455KHz for a BFO. 3 element Cush Craft beam at 8 feet.



W7RN 2018 – The Remote Hosts on the left, the main operating position on the right. The K3/0 second station in the middle



KB Awards 3.0 Update

Gary NA6O



A new contest list and some revised rules were presented at the January NCCC meeting. All changes were in response to member input and were approved by the Board. Here are the highpoints of the changes, which will become effective March 1. (The current rules and standings will, as always, be available at <http://nccc.cc/awards.html>.)

Contest List

There will be 29 contests, down from the current 38. This is by popular request to reduce “contest overload.” They came from three sources:

- NCCC focus (WPX, RTTY RU)
- NCCC “owned” (CQP, weekly NS)
- Open voting by club members for the rest.

Contest	Month	Mult
CQ WPX SSB	March	10
ARRL DX Contest SSB	March	10
CQ WPX CW	May	5
7QP	May	20
NEQP	May	150
ARRL June VHF	June	500
IARU HF World Champ.	July	10
NAQP Summer RTTY	July	25
RAC Canada Day	July	15
NAQP Summer CW	August	25
NAQP Summer SSB	August	25
CQWW RTTY	September	5
NA Sprint Fall CW	September	150
CQP	October	10
Makrothen RTTY Contest	October	1

Contest	Month	Mult
CQWW SSB	October	6
CQWW CW	November	3
ARRL Sweepstakes CW	November	15
ARRL Sweepstakes SSB	November	15
ARRL 160 Meter Contest	December	30
ARRL 10 Meter Contest	December	100
ARRL RTTY Roundup	January	50
NAQP Winter CW	January	25
NAQP Winter SSB	January	25
CQ WPX RTTY	February	10
ARRL DX Contest CW	February	4
NA Sprint Winter CW	February	150
NAQP Winter RTTY	February	25
NCCC Sprint CW	Weekly	50

Contest Multipliers

Multipliers for each contest were computed from actual score statistics for the most recent year. An “average” score in ANY contest will produce equal KB points:

$$\text{Average_score} \times \text{Mult} = \text{Constant}$$

Exceptions: NCCC focus contests (WPX, RU) have an additional factor of 5 increase.

New Rules

1. Multiplier Limit.

Points from all 29 contests always count, but a maximum of 20 multipliers now applies. Simple participation mults eventually become less valuable if you want to win your bracket. This mainly affects the Platinum and Gold level.

$$\text{Total score} = \text{Sum of scaled contest scores} \times \text{lesser of (Number of contests, 20)}$$

2. Enforced Low-Power.

Scores obtained by use of High Power in the 6 NAQP competitions and the weekly NS CW/NS CW Ladder series will not be counted for the KB competition, either as scores or as contest multipliers. This was implemented in response to popular demand.

How to Improve Your Standing

Post all your scores on 3830. Those are the only ones that count.

Participate! Even the smallest score has value.

Every contest on the KB Awards list is a multiplier.

Try a new mode or a new band (VHF, 10, 160).

Try the sprints. Small score, big multiplier.

Go for a big score in WPX: Exponential score growth and a big multiplier.

Join a multi-op: The score is split among ops.

Let someone else use your station: You get 25%.

Comments are welcome, as always. I log and track every comment and suggestion and try to improve the KB Competition each year. The one thing I can guarantee is that each year will be different!

Gary NA6O

NCCC Awards Manager

gwj@wb9jps.com

NCCC Life Membership!

The NCCC Life member program was introduced for a flat fee of \$250. If you are interested in becoming an NCCC Life member, please contact Ian W6TCP at w6tcpian@gmail.com

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 Ian W6TCP at w6tcpian@gmail.com

Forthcoming NCCC Meetings

February 13th Wednesday

Joint NCCC / REDXA meeting The Program is "FT8. Digital. and Contesting" and the venue is Boulevard Cafe & Grill, 1096 Petaluma Blvd North, Petaluma, CA. Activities commence at 6pm.

March 12th, Tuesday

South Bay, Venue / Presentation TBA

April 9th, Tuesday

Awards Meeting & Annual Elections, Tied House, Mountain View.

BoD meeting minutes

The monthly minutes from the NCCC BoD meetings are available in the members only section of the NCCC website. See <http://nccc.cc/members/minutes.html>

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 about the formatting, we can take care of that if necessary !

Tube Of The Month

Norm, N6JV

Visit the Museum: www.n6jv.com

6146 etc etc

In 1952, RCA introduced the 6146. It was an octal base, 20 watt, beam tetrode that would operate up to 175 MHz. It was basically a 2E26 on steroids. The need for more powerful finals in 2-way VHF equipment was filled with the new tube. In military and amateur equipment the new tube became popular with the production of the first HF transceivers like the Collins KWM-1 and 2. Amateur kit transmitters like the DX100 and DX40 from Heathkit and from Johnson the Viking, Valiant, Ranger, Pacemaker and Invader transmitters all used the new tube.

New variants of the 6146 started with the 6146A, which had a "dark heater" for mobile operation. The 6146B was rated at 27 watts and the 6146W or 7212 was ruggedized. It made some sense that the military would want one for aircraft with a 26.5 volt filament, so they made the 6159 followed by the 6883 with a 12.6 volt filament for the new 12 volt cars. The 6293 was made for pulse operation and would stand 3500 volts on the plate. A new "dark heater" version was made with a 13.5 volt filament that was named the 8032. All this numbering madness came to a head with the 6883B/8032A/8552 with a combination of different features. In the period when there was equipment that was part transistor and part tube, they made the 8042 that had a 1.6 volt filament that lighted in 100 msec. The tube would light as soon as you hit the PTT button so it saved batteries. The cheaper 4652 was similar, but it took an entire second to light.

In recent years production ceased in the US, but they are currently made in China.

Tube Of The Month

Norm, N6JV

Visit the Museum: www.n6jv.com





Contest Calendar— February page 1

NCCC RTTY Sprint	0145Z-0215Z, Feb 1
QRP Fox Hunt	0200Z-0330Z, Feb 1
NCCC Sprint Ladder	0230Z-0300Z, Feb 1
Vermont QSO Party	0000Z, Feb 2 to 2400Z, Feb 3
10-10 Int. Winter Contest, SSB	0001Z, Feb 2 to 2359Z, Feb 3
Black Sea Cup International	1200Z, Feb 2 to 1159Z, Feb 3
F9AA Cup, CW	1200Z, Feb 2 to 1200Z, Feb 3
Mexico RTTY International Contest	1200Z, Feb 2 to 2359Z, Feb 3
FYBO Winter QRP Sprint	1400Z-2400Z, Feb 2
Minnesota QSO Party	1400Z-2400Z, Feb 2
AGCW Straight Key Party	1600Z-1900Z, Feb 2
British Columbia QSO Party	1600Z, Feb 2 to 0400Z, Feb 3 and 1600Z-2400Z, Feb 3
FISTS Winter Slow Speed Sprint	1700Z-2100Z, Feb 2
North American Sprint, CW	0000Z-0400Z, Feb 3
RSGB 80m Club Championship, SSB	2000Z-2130Z, Feb 4
ARS Spartan Sprint	0200Z-0400Z, Feb 5
QRP Fox Hunt	0200Z-0330Z, Feb 6
Phone Fray	0230Z-0300Z, Feb 6
CWops Mini-CWT Test	1300Z-1400Z, Feb 6 and 1900Z-2000Z, Feb 6 and 0300Z-0400Z, Feb 7
UKEICC 80m Contest	2000Z-2100Z, Feb 6
NRAU 10m Activity Contest	1800Z-1900Z, Feb 7 (CW) and 1900Z-2000Z, Feb 7 (SSB) and 2000Z-2100Z, Feb 7 (FM) and 2100Z-2200Z, Feb 7 (Dig)
SKCC Sprint Europe	2000Z-2200Z, Feb 7
NCCC RTTY Sprint	0145Z-0215Z, Feb 8
QRP Fox Hunt	0200Z-0330Z, Feb 8



Contest Calendar— February page 2

NCCC Sprint Ladder	0230Z-0300Z, Feb 8
CQ WW RTTY WPX Contest	0000Z, Feb 9 to 2359Z, Feb 10
SARL Field Day Contest	1000Z, Feb 9 to 1000Z, Feb 10
Asia-Pacific Spring Sprint, CW	1100Z-1300Z, Feb 9
Dutch PACC Contest	1200Z, Feb 9 to 1200Z, Feb 10
SKCC Weekend Sprintathon	1200Z, Feb 9 to 2400Z, Feb 10
KCJ Topband Contest	1200Z, Feb 9 to 1200Z, Feb 10
YLRL YL-OM Contest	1400Z, Feb 9 to 0200Z, Feb 11
OMISS QSO Party	1500Z, Feb 9 to 1500Z, Feb 10
FISTS Winter Unlimited Sprint	1700Z-2100Z, Feb 9
RSGB 1.8 MHz Contest	1900Z-2300Z, Feb 9
Balkan HF Contest	1300Z-1700Z, Feb 10
4 States QRP Group Second Sunday Sprint	0100Z-0300Z, Feb 11
CQC Winter QSO Party	0100Z-0259Z, Feb 11
ARRL School Club Roundup	1300Z, Feb 11 to 2359Z, Feb 15
NAQCC CW Sprint	0130Z-0330Z, Feb 13
QRP Fox Hunt	0200Z-0330Z, Feb 13
Phone Fray	0230Z-0300Z, Feb 13
CWops Mini-CWT Test	1300Z-1400Z, Feb 13 and 1900Z-2000Z, Feb 13 and 0300Z-0400Z, Feb 14
RSGB 80m Club Championship, Data	2000Z-2130Z, Feb 13
PODXS 070 Club Valentine Sprint	0000Z-2359Z, Feb 14
NCCC RTTY Sprint	0145Z-0215Z, Feb 15
QRP Fox Hunt	0200Z-0330Z, Feb 15
NCCC Sprint Ladder	0230Z-0300Z, Feb 15
ARRL Inter. DX Contest, CW	0000Z, Feb 16 to 2400Z, Feb 17
SARL Youth Day Sprint	0800Z-1000Z, Feb 16
Russian PSK WW Contest	1200Z, Feb 16 to 1159Z, Feb 17
Feld Hell Sprint	1900Z-2059Z, Feb 17



Contest Calendar— February page 3

AWA Amplitude Modulation QSO Party	2300Z, Feb 16 to 2300Z, Feb 17
Run for the Bacon QRP Contest	0200Z-0400Z, Feb 18
QRP Fox Hunt	0200Z-0330Z, Feb 20
Phone Fray	0230Z-0300Z, Feb 20
CWops Mini-CWT Test	1300Z-1400Z, Feb 20 and 1900Z-2000Z, Feb 20 and 0300Z-0400Z, Feb 21
AGCW Semi-Automatic Key Evening	1900Z-2030Z, Feb 21
NCCC RTTY Sprint	0145Z-0215Z, Feb 22
QRP Fox Hunt	0200Z-0330Z, Feb 22
NCCC Sprint Ladder	0230Z-0300Z, Feb 22
CQ 160-Meter Contest, SSB	2200Z, Feb 22 to 2200Z, Feb 24
REF Contest, SSB	0600Z, Feb 23 to 1800Z, Feb 24
UBA DX Contest, CW	1300Z, Feb 23 to 1300Z, Feb 24
South Carolina QSO Party	1500Z, Feb 23 to 0159Z, Feb 24
NA Collegiate Championship, RTTY	1800Z, Feb 23 to 0559Z, Feb 24
North American QSO Party, RTTY	1800Z, Feb 23 to 0559Z, Feb 24
High Speed Club CW Contest	0900Z-1100Z, Feb 24 and 1500Z-1700Z, Feb 24
SARL Digital Contest	1400Z-1700Z, Feb 24
Classic Exchange, Phone	1400Z, Feb 24 to 0800Z, Feb 25 and 1400Z, Feb 26 to 0800Z, Feb 27
North Carolina QSO Party	1500Z, Feb 24 to 0059Z, Feb 25
SKCC Sprint	0000Z-0200Z, Feb 27
QRP Fox Hunt	0200Z-0330Z, Feb 27
Phone Fray	0230Z-0300Z, Feb 27
CWops Mini-CWT Test	1300Z-1400Z, Feb 27 and 1900Z-2000Z, Feb 27 and 0300Z-0400Z, Feb 28
UKEICC 80m Contest	2000Z-2100Z, Feb 27
RSGB 80m Club Championship, CW	2000Z-2130Z, Feb 28



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).

JUG Articles Wanted!

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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.



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