



Publication of the
Northern California
Contest Club



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NCCC August, 2020 ZOOM Meeting
Saturday Aug 22 1230 PDST

"Remote Controlling Your Station for Contesting"

Mark Aaker, K6UFO (NN7SS)

Date: Saturday, Aug 22, 2020

Time: Chat at 1230 and after talk

Presentation is at 1300 PDST

Meeting ends at 1500 PDST

Mark presents an overview of setting up your station for remote-control operation. He has recently completed a series of articles on remote control featured in NCJ, and operates his own remote station, the famous NN7SS.

Web Access Instructions — see

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

QUICK START Guide to Zoom:

<http://support.zoom.us>

President's Report - WD6T

Everything Reminds Me of Contesting

Two old jokes:

A student undergoing a word-association test was asked why the word "snowstorm" elicited a response of "sex." He replied frankly,

"Everything reminds me of sex."

At a party, a man was playing jazz on a vibraphone. A woman comes up and remarks "you play beautifully." The man replies, "I only do it to sublimate my sexual tension." The woman responds, "why don't you let me sublimate it?" The man thinks, "Great! A woman who plays vibraphone!"

Well, not to suggest any sublimation or anything, but when properly viewed, everything is clearly about RadioSport. Here are some common English proverbs and their true interpretation:

"A journey of a thousand miles begins with a single step." - First Q

"All that glitters is not gold." - Don't waste too much time on a mult.

"Beauty is in the eye of the beholder." - All that glitters is aluminum.

"A rolling stone gathers no moss." - ...except in a Sprint

"You can't have your cake and eat it too." - 10 minute rule

President's Proverb List Continues, almost endlessly, on Page 3



Northern California Contest Club

Excellence In Amateur Radio Contesting

Officers:

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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	



"A bird in the hand is worth two in the bush." - If someone responds to your CQ, favor him over the one you're calling on the other radio.

"A chain is only as strong as its weakest link." - PL259s

"An idle brain is the devil's workshop." - Middle of the night, no callers, read email...zzz.

"Life begins at forty." - meters

"Beware of Greeks bearing gifts." - Especially 20 over S9 signing /A

"Don't trust anyone over 30." - MHz.

"The whole is larger than the sum of its parts." - Mults per band

"A watched pot never boils." - 6 meters

"It takes two to tango." - Or you're an SWL

"Make hay while the sun shines." - 15 meters

"A rising tide lifts all boats." - Sunspots

"Any port in a storm." - COM ports renumbered

"If it ain't broke, don't fix it." - Windows Update

"Many are called but few are chosen." - DX contest

"The darkest hour is just before dawn." - 20 meters

"All good things come to an end." - Last Q

"Adversity and loss make a man wise." - (No comment)

"Absence makes the heart grow fonder." - And it's only Tuesday

73, Dave, WD6T

The 30th NCCC Sprint Ladder Competition—Aug 22 through Sept 12, 2020

The NCCC Sprint Advisory Group is pleased to announce the 30th running of the NCCC Sprint Ladder competition, NSL XXX, beginning Thursday night August 20 and for four weeks, ending September 11. The final week is just prior to the NAS CW Sprint. A station's three highest scores in the four-week NSL 30 count toward the final score. See: <http://ncccsprint.com/ladder.html> and http://ncccsprint.com/next_ns.html for details on scoring, rules and schedule. The sessions serve as excellent practice for the NAS CW Sprint and will prepare you to be on Bob, W6RGG's many teams.

Ladder results, based on 3830scores.com postings, appear at <http://n3qe.org/ladder.html>

Bill, N6ZFO with Mark, K6UFO, Bob, W0BH, Mike, W9RE, John K4BAI, Ted, W4NZ, Jim, N3BB and Vic, VE3YT.



The July's NCCC Zoom meeting: **"Cosmology, Meaning, and Destiny"** Talk presented by Dr. Sandy Faber, Emerita Prof. of Physics and Astronomy, University of California at Santa Cruz.

Summarized by Dave, WD6T

At the July NCCC Zoom meeting, renowned cosmologist Sandra M. Faber gave a thought provoking presentation on cosmology and the future of humanity and the Earth. Dr. Faber is currently serving as the Director of the Earth Futures Institute at UC Santa Cruz, the only institute of its kind in the world, with the charter of investigating the ethics of the future. I assembled this summary from the slides she presented, which are available on the NCCC web site under "Resources/Misc. Presentations." Any mistakes or misrepresentations in this summary are my own!

Dr. Faber began her presentation at the very beginning with a tiny fraction of a second after the Big Bang, 14 billion years ago. At age 10^{-35} seconds, the universe went through a remarkable "inflationary period," in which the size of the universe was expanding so fast that quantum behavior ("quantum noise") became significant. The entire inflationary period lasted only until 10^{-32} seconds, during which time it grew by a factor of at least 10^{26} at a temperature of 10^{27} Kelvin. (Note that the size of the universe cannot be visualized as an object surrounded by space; it is the actual size of the space itself. Similarly, the expansion cannot be viewed as expanding "into" space; space itself is expanding. To visualize this, consider a two-dimensional analogy. Dots drawn on a balloon will move apart from each other as the balloon is inflated. The balloon's two-dimensional surface is stretching, rather than the dots themselves moving along the surface of the balloon.)

Despite the apparently homogeneous beginning of the universe, these "density fluctuations" ended up causing "clumping" of matter. Even though the matter-energy density fluctuation was only 0.001%, it was enough to ultimately lead to the formation of stars, as the unevenness allowed gravity to group matter into larger and larger objects, creating the heterogeneous universe we find ourselves in. These fluctuations were extremely small... one billionth the size of the smallest elementary particle, but were "frozen in"--Dr. Faber used the analogy that "particles couldn't find each other"--because the universe was actually expanding faster than the speed of light. This does not contradict Special Relativity because nothing is "travelling;" rather, space is expanding. The evidence that lends confidence to this cosmological model includes the properties of galaxies today, our ability to look backwards along the arrow of time, and the cosmic microwave background radiation. Dr. Faber examined each of these in turn.

Galaxies exhibit both spheroid (elliptical) and disk-like (flat) shapes, as predicted by the model. Beginning as spinning clouds of gas and dust, both types of galaxies will result, depending on the speed at which the cloud rotates and the mass, with more massive and rapidly rotating clouds more likely to become disk-like galaxies. Within these galaxies, gravity forms stars from dense clouds of gas, as do rocky planets. A planet like ours begins when tiny micrometer-sized interstellar dust grains stick together and coagulate, continues with gravitational attraction between objects on the order of 10 kilometers, and concludes through the process of "gas sweeping" (gravitational attraction of gas, such as hydrogen and helium) when objects reach the size of 10^4 kilometers.

Further evidence supporting the cosmological model comes from looking backwards through time. The Hubble Space Telescope was used to produce the deepest image of the universe ever taken, the Hubble Ultra Deep Field (HUDF). It consists of a detailed view of a tiny angle of space that is devoid of local stars and galaxies, and thus allows us to look deep into space which, because of the fixed speed of light, also means looking back in time to the early state of the universe. It shows thousands of galaxies in various stages of development (determined by their redshift).

As for the observed cosmic background radiation (ca. 160 GHz.), it is consistent with a hot gas that has expanded to the current size of the universe, and exhibits small irregularities which would be expected if small thermal variations, generated by quantum fluctuations of matter, had expanded to the size of the observable universe. Additionally, data

gathered by the NASA Wilkinson Microwave Anisotropy Probe (WMAP) provides a stunning match to a model of the universe that includes two exotic entities: dark matter and dark energy.

"Dark matter" emits no photons, nor does it interact with the electromagnetic field in any way. Yet it exerts and responds to attractive gravitational force, like ordinary matter. Evidence of dark matter includes calculations showing that galaxies would not form as they are without it. Measured "gravitational lensing" (bending of light due to gravity) of distant galaxies further supports the existence of dark matter. In fact, there is believed to be five times as much dark matter as normal matter.

"Dark energy" is even stranger. Extremely pervasive, it constitutes the vast majority of the mass-energy in the universe. The first observational evidence for its existence came from supernova measurements, which showed that the universe is not only expanding (as Hubble discovered in 1925), but at an ever-increasing rate. This acceleration is due to dark energy's "repulsive gravity," an opposite form of familiar gravity. Remarkably, as the universe expands, the density of dark energy stays the same. Expansion creates more dark energy, which causes more expansion.

The implications of dark energy and the accelerating universe are dramatic. Consider a galaxy moving away from us now at 10,000 km/second. In 69 billion years, it will appear to be moving away at 320,000 kms/s, faster than the speed of light and will no longer be observable. Thus, we are now entering the era of a "second inflation". We will eventually find ourselves and our close neighbors (galaxies such as Andromeda) all alone in the cosmos.

This second inflationary period differs from the first in several important ways. It occurs at lower energy density, and may not be temporary. In addition, it has no known physical explanation, requiring a seemingly-arbitrary constant. In fact, there are a number of constants which seem to be "just right" for the existence of the universe as we know it, and ultimately for our existence. This has been posited as proof of a deity.

Alternatively, Dr. Faber proposed a "multiverse," in which a "cosmic machine" churns out various universes that have different values for the constants, producing different laws of physics. Thus, the reason our planet, solar system, galaxy and universe seems to be "just right," is because if they weren't, we wouldn't be here asking the question. This logic is known as "anthropic reasoning."

What kind of a system could produce all of these universes? Supersymmetric String Theory provides one answer. It posits an 11-dimensional space with many "curled up" tiny dimensions. It solves several key problems in cosmology: It has a natural candidate particle to be the dark matter. It can produce the appropriate cosmological constant. It has a nearly infinite number of possible solutions, each of which could be a universe with different physical laws, and it can generate these universes through a process called "eternal inflation," where universes erupt out of a substrate of dark energy.

To summarize, a number of seemingly-ridiculous notions are assumed to be true: We can talk meaningfully about processes at 10^{-35} seconds and 10^{27} degrees...an empty vacuum can have an intense energy density, the universe can expand faster than light, matter-energy can spontaneously appear, quantum fluctuations smaller than the smallest elementary particle can become a galaxy, and all the famous puzzles of quantum mechanics apply to it and to us. "Inflation" is generic and is responsible for the multiverse and everything in our universe. Inflation plus quantum noise are the "creative duo" of our universe.

Dr. Faber then shifted the focus to Earth's and humanity's future. How unique is intelligent life in this universe? In Dr. Faber's opinion, it is extremely rare. How long do we have? While there are major cosmic threats, including supernovae, asteroid impact, ice ages and volcanoes, it is highly probable that we have a few hundred million good years. How will we manage our planet? Will we use our time well or squander it? How much "growth" can we sustain? If we allow for a modest 3.5% growth every year for 100 million years. . . we will have grown to $10^{1500000}$. This is not sustainable.

On a cosmic scale, sustainable growth means no growth, with no net increase in resource use, and waste reduced to levels that can be completely naturally recycled. Cosmology tells us that we got here according to the laws of physics and are subject to those laws. There were no miracles and there will be no miracles. While cosmology can be viewed as showing us how insignificant we are, it can also inspire us to save the Earth. It is up to us.

She then opened the topic up for discussion: What are our moral obligations for future human generations? Do we have custodial responsibility for Earth? Is there intrinsic value in the future activities of humankind? Does humanity have a "destiny"? What should we be working toward? Will the human moral code adjust to deal with these new questions? A spirited discussion ensued.

Greg DesBrisay, N6GD

14 July 1959 – 13 July 2020



Greg, enjoying one of his many favorite activities, Field Day.

Greg was born in Ventura, CA and died at age 60 of heart failure and a subsequent car accident in Redwood City, CA. Greg was the eldest son of Lilyane M. and Charles L. DesBrisay of Bakersfield, CA, both of whom predeceased him. Greg is survived by his three sons; Jasper of Belmont, CA, Bryce of San Carlos, CA, and McKinley of Vancouver, WA; his partner Cheryl Yee of San Mateo, CA; former wife Sonya Sigler of Vancouver, WA; brothers Christopher A. and wife Cindy of St. Pete Beach, FL, Lloyd L. and husband Gaston Alonso of New York; and cousins Armelle Adrian, Frederic Adrian, and Yvan Lauradour Desfraises, all of France.

Greg graduated from Bakersfield's Highland High School in 1977 and worked at the Buck Owens-owned KUZZ radio station throughout high school because he held the required ham radio license (call sign N6GD). He attended UC Berkeley and earned a degree in Electrical Engineering Computer Science while also playing saxophone in the Cal Band, where he met many of his lifelong friends. He loved attending Cal football games regardless of their win/loss records.

Professionally, Greg began his career at SRI working on many types of defense related projects including the RELEDOP. He left SRI for several other wireless related startups, including Cellular Data, CellNet Data Systems, and Clarity Wireless (which was sold to Cisco Systems). Through his work at Clarity Wireless and Cisco Systems, Greg was able to leave a philanthropic legacy with the founding of the [DesBrisay Sigler Family Foundation](#) in 1999. He spent a brief period of time at Intel before working on the PG&E Smart Meter roll out. He held patent number 9,282,001 issued March 8, 2016 for his work at Grid Net, a company he co-founded. Most recently, he consulted as an expert witness for lawsuits involving wireless patents.

Greg was married to Sonya Sigler from 1993 - 2017 and they had three sons. He was so proud of their sons and doted on them. He left them with a legacy of knowing how to use almost any tool in existence. Greg had a love of learning and teaching others what he knew. He was infinitely patient for things, like his sons' three cats, cooking

desserts, teaching math to 7th and 8th graders, and teaching countless skills to Boy Scouts. Greg was an outstanding scout leader for his sons' Cub Scout dens and Boy Scout troops and a long-time volunteer at the San Carlos Charter, where his sons attended school, fixing computers and serving as an active member of the Tech Team.

Greg loved camping and adventuring and even named his sons after National Parks. He loved tennis and sailing. He made many lifelong friends through his sailing adventures, competing in the Pacific Cup Race to Hawaii in 2002.

In recent years, Greg spent many hours on the sideline of his sons' athletic events taking video and photos. He continued his photography service to the coach and team even after his sons graduated. He was a ham radio enthusiast since his teen years and relished spending time at Field Day contacting as many other operators as possible around the world in a 24-hour period. He served the Northern California Contest Club as Secretary and Board member. Greg spent the last few years restoring his beloved vintage cars, a 1962 Austin Healey Sprite and a 1967 Porsche 912.

He was a lifelong tinkerer, experimenter, and inventor. He loved to take things apart and understand how they worked. He was a perfectionist who believed in leaving things better than he found them even if it took more time and money to do so.

Greg will be remembered for his wide smile, patience, easy-going nature, and love of learning. the family suggests that donations be made to the [Golden Gate National Parks Conservancy](#) , the [Cal Band](#) , the Sequoia High School [Boosters Club](#) , the [Miller Institute for Technology Learning](#) , or the [Peninsula Humane Society](#) .

To Donate to the Golden Gate National Parks Conservatory in memory of Greg visit

https://secure3.convio.net/ggnpc/site/SPageNavigator/2018_YE_December_Match_Campaign_NM.html&autologin=true&s_src=2018_YE&s_subsrc=Main_Button&utm_source=Web&utm

See text for other donation suggestions from Greg's family. You may contact the family through his brother, Lloyd L. DesBrisay, ldesbrisay@gmail.com



Editor's Column

Bill, N6ZFO 415 209-3084

WX5S. This month we highlight a dedicated and talented NCCC contester and volunteer, Matt, WX5S. Although frequently seen contesting from Radio Nevada (W7RN), NW6P or N6RO, or in these COVID-19 days actually just heard, Matt continually performs ongoing service to NCCC with his typically low-key enthusiasm and high-level talent.

Working with Gary, NA6O, Matt handles the complex scripting-software that drives the KB competition, innovated by W1RH and placed in service four years ago. Close interaction with CQ-Contest Hall-of-Fame member Bruce Horn, WA7BNM, owner of the 3830scores.com site, is vital. Recently, for example, a large group of scores from the WPX RTTY failed to transfer to the KB pages on nccc.cc. Retrieving these scores was challenging. Matt handled the problem with typical professional competence.



As an aside, we note that Bruce himself is well qualified as the 3830scores.com leader. He is a former Clinical Diagnostics computer expert with Kaiser Permanente: See, for example, Bruce's 2006 publication "Implementation of a Teleradiology System to Improve After-hours Radiology Services in Kaiser Permanente Southern California," <http://europepmc.org/article/PMC/3076984>

Thanks, Matt, for your continuing first-rate service to NCCC. You're honoring that well-deserved SSB Operating Excellence Award given two years ago.

NCCC 50th Anniversary is Rapidly Approaching. The history section of nccc.cc, written, with recent up-dating, by co-founder Jim Neiger, N6TJ, notes that "Within a couple of weeks [of the August 1970 meeting of the NCDXC] the Charter Meeting of NCCC was held in my town house in Santa Clara."

The first issue of the newsletter followed in November under the able editorship of Jim, W6CUF, later as "Chicken Feathers," W6CF. Jim noted in the first issue: "The title for this issue (THE CONTEST JUG) seemed to be in the spirit (pun intended) of last Friday's meeting. Any suggestions for a better title?"

Well, there were no suggestions, but we are still waiting. For now it's still the JUG. Was the original NCCC a drinking club with a contesting problem? 807's are mentioned in the early history..

73, Bill N6ZFO
Editor, NCCC JUG

CQP Corner

Dean, N6DE

cqden6de@gmail.com

Contest Feedback

It seems to be uncommon for contest organizers to ask their participants directly for feedback about their contest and its rules. It is even rarer to see the organizers act on those suggestions. This year, Glen W6GJB and I gave a presentation about the California QSO Party at the June 9 NCCC meeting. We received feedback from many of you, hearing your suggestions for CQP 2020. Last month, I also sent a survey to over 300 participants in CQP 2018 who skipped CQP 2019, asking them why, and seeking their suggestions on what would motivate them to return for CQP 2020.

This month's article covers what that feedback was, and what the CQP organizers are doing about it.

NCCC—June 9 Meeting

Thank you for all the feedback you provided during the meeting. We recorded eight different suggestions. CQP organizers Glen W6GJB, John K6MM, Tom [NS6T](#) and I reviewed and discussed each suggestion seriously. Below is our decision for each:

1. Wildcard multipliers

K7GK suggested wildcard stations which can be added as extra county multipliers, still giving stations the possibility of reaching a 58 county multiplier sweep without having 58 counties on the air. KD6WKY suggested the wildcard stations be K6CQP, N6CQP and W6CQP. K6XX suggested that a bonus multiplier could be awarded if a station makes x number of QSOs with any other common mult such as SCLA.

CQP organizing team response:

The spirit of this request is for participants outside CA to have a goal to chase if we are not able to activate all 58 CA counties this year due to COVID-19. Considering wildcard multipliers for counties, we believe that it is better to maintain the meaning of a county sweep. Activating and contacting all 58 CA counties is supposed to be hard. This year, there likely won't be any county sweeps. But that is not the end of the world. We don't believe that the meaning of a county sweep should change to 55 counties + 3 wildcard multipliers. In order to implement wildcard multipliers, additional complexity would have to be added in our log scoring system behind the scenes. This added work and software code to rescore every station's score outside of CA is not something we are able to add to our task list. Finally, we already know that few stations in CQP are really trying hard to achieve a county sweep (see my CQP multiplier analysis article from a past JUG issue).

We fully agree with the spirit to give participants something else motivating to chase in CQP 2020. As such, we have decided to implement an exciting SEQUOIA 1x1 challenge.

In 2015, we put on a GOLDRUSH 1x1 challenge for the 50th anniversary of CQP. Stations that spelled out GOLDRUSH by contacting at least one 1x1 station for each letter, and made at least 150 QSOs, received a challenge coin.

Here is what we're doing for the CQP 2020 SEQUOIA Challenge:

- Any station that makes at least 100 QSOs, and spells out SEQUOIA by contacting 1x1 SEQUOIA stations, will be awarded a colorful commemorative certificate.
- We intend for there to be an endorsement on this certificate for stations that spell out SEQUOIA twice or all three times. (K6, N6, W6 SEQUOIA)
- To inspire the more serious participants, we will have a competition to contact SEQUOIA stations on as many bands and modes as possible. We will have Top 10 boxes on the CQP results page, listing the stations with the highest number of total SEQUOIA QSOs for each of the 12 Single-operator classes: HP, LP, QRP, for inside CA and outside CA, and for S/O unassisted and S/O assisted. The station with the top SEQUOIA QSO count in each of the 12 classes will be awarded a U.S. National Park calendar with Sequoia National Park shown in one of the months.
- This is a WRTC-like challenge, with different levels of goals achievable for both casual and serious participants.
- The effect is that stations will be on the air longer, giving more QSOs to everyone else in the contest too.

The CQP 2020 SEQUOIA 1x1 stations were invited based on objective criteria. The top 21 scoring stations of CQP 2019, regardless of category, were automatically invited to participate as one of the 21 SEQUOIA stations in CQP 2020. Most accepted. The remaining invitations were extended with thorough consideration. Similar to WRTC inviting past winners, we extended invitations to a recent CQP winner not in last year's top 21 (N6MJ), and the 2015 GOLDRUSH winning S/O (N6ED @ K6NA). We also had a need for serious SSB representation with some letters, since we expect most of the casual stations chasing a SEQUOIA certificate will be on Phone. K6SZQ and N6JS will fulfill that need nicely. We had the ability to invite an exciting M/M club effort for a club not already represented by any other SEQUOIA invitation. NZ6Q and N6TCE will lead the Stockton Delta ARC effort. Finally, two callsigns had already been reserved before we had the chance to register them. We worked with these two stations, who have made plans to put on serious efforts as SEQUOIA stations.

The 21 stations part of the SEQUOIA team comprise an extremely impressive group that will represent CQP very well. Please take a look at the group and learn more about them with pictures of them and their stations at: <http://www.cqp.org/sequoia.html>

2. Boost 160meter Phone activity

AE6Y suggested we state encouragement in the CQP rules for stations to stay on the same 160m frequency and make two QSOs: one on CW and one on PH. N6RO mentioned the encouragement should be for stations on 160m to move to a different frequency for the different mode in their respective areas of the band where those QSOs normally take place.

CQP organizing team response:

CQP rules in the past have suggested to check 160m at 05Z. Mode wasn't mentioned. The result was that most stations gravitated to start on CW, then ended up changing bands.

In the CQP 2020 rules, we now have different rally times for 160CW and 160PH.

- 0500Z: Try 160CW at 1815 kHz
- 0530Z: Try 160PH at 1845 kHz

The SEQUOIA challenge will also likely attract more activity to 160m Phone for the stations who will try to chase SEQUOIA stations on all bands and modes.

Finally, the sentence that we already had in the CQP rules will remain in the 2020 rules: “All CW contacts must be made outside the Phone sub-bands except for 160 meters.” This lets participants know that CW QSOs can be made in the Phone band of 160 for QSO credit in CQP if so desired. We do not believe there is a need to specifically state in the CQP rules for participants to try to make QSOs on 160 PH and CW, either on same frequency or by changing frequencies. Stations will make their own decisions. We are simply providing some added motivation through different rally times and with the SEQUOIA program.

3. Limited time category

AE6Y suggested that we consider adding a limited hour category in CQP, such as a 6- or 8-hour category. This would address the operating time data presented of stations that operated 3 hours or less in CQP 2019.

CQP organizing team response:

We discussed this topic thoroughly, whether it could be a category or an overlay like other contests provide. Increasing the amount of operating time spent by participants in CQP is an important initiative. We evaluated the amount of organizer work it would create to implement. A significant amount of work would be needed with documenting new records by county, state and provinces, 10+ new plaques needed to support each limited time category/overlay for S/O, S/O-Assisted, High Power, Low Power, etc. We would also have to work with logging software authors to support the new category or overlay. Finally, we wondered if some stations would operate less time than they ordinarily would have, just to win a limited time plaque.

Instead, we are approaching the spirit of this request in three new ways for CQP 2020:

- We will offer two new plaques for CQP 2020 called “improvement” plaques: one for inside CA and one for outside CA. These are eligible to the S/O and S/O-Assisted stations that submitted a log in CQP 2019. Improvement is measured by operating time increase in CQP 2020 compared with CQP 2019. We already have the CQP 2019 operating time statistics for every station. These will be calculated in the same way for CQP 2020. We simply need to compare the numbers between years to determine the winners. No new records, no new overlays, no new categories, no logging software changes.
- We will offer two new plaques for CQP 2020 called “comeback” plaques: one for inside CA and one for outside CA. These are eligible to S/O and S/O-Assisted stations that submitted a log in CQP 2018 but not in CQP 2019. Comeback is measured by highest score of station in CQP 2020 that didn’t submit a log in CQP 2019. Again, no impact here to new records, overlays, categories and logging software.
- SEQUOIA initiative will itself offer stations motivation to spend more time in CQP.

4. Early email campaign

AD6E recommended that we send invitation emails early to past CQP participants. Go back further than just the prior year.

CQP organizing team response:

We agree. I have started working on an email publicity campaign for CQP this year. As of August 10, we have already emailed over 200 past participants. More than 100 more emails will go out in the next few weeks, followed by a September campaign.

5. Tutorials

W9KKN suggested that we provide tutorials that show CA stations how to run in CQP.

CQP organizing team response:

We agree. We think that the best way to accomplish this is for stations to record their CQP audio, take screen shots of their operating screens, and take videos of themselves operating. That would have ideally already been

done in CQP 2019 for us to post this year. We got a few links to Youtube videos from the past, but there sadly has not been anything that was suitable to advertise as a tutorial on cqp.org. Unfortunately, we are unaware of any station that did this in CQP 2019. We would love to hear from you if you did.

We request NCCC members to record themselves running on CW and on Phone in CQP 2020 so that we can use this audio and video for CQP 2021. In 2019, I emailed a couple of new testers the step-by-step operating procedure on how to call CQ and make QSOs in CQP. This much easier to absorb when one can listen or watch it in action.

We do have an operating strategy PDF on cqp.org which we'll review and see if any modifications are needed for CQP 2020.

We also would like to publish a set of instructions by logging software on how county line stations should be logged.

6. Distributed Multi-op

N6WM asked whether we were going to explore instituting a "distributed Multi-op" like 7QP did.

CQP organizing team response:

We believe a distributed Multi-op does not make sense for CQP. Stations operating Single-op provide more callsigns active in CQP. Stations that want to safely participate in a Multi-op should either implement remote operating capability, or implement socially distant operating plans for in-person Multi-ops. A distributed Multi-op makes a key assumption that operators of the Multi-op have fixed stations in the same county. Upon review of the Multi-op stations in CQP 2019, this applied to very few Multi-ops. Either Multi-ops were expeditions away from the home county of all operators, or operators traveled to a host station which was different than their home QTH county. A W1AW/6 IARU type of concept is counterproductive in CQP.

7. Challenge coin

N6WM remarked on Zoom chat that the challenge coin was a good incentive when we offered it years ago for GOLDRUSH.

CQP organizing team response:

We agree. See item #1 in this list for what we're offering this year for SEQUOIA.

8. Meetings about remote station options

NA6O remarked on Zoom chat that one or more future NCCC meetings should be devoted to remote station options.

CQP organizing team response:

We agree. We see that the first step in this direction by the NCCC is the August meeting presentation, given by Mark K6UFO. Thank you!

Survey Results

In July, I conducted two surveys:

1. Sent to 319 CQP 2018 participants that submitted a log in 2018, but did not make a QSO in CQP 2019.
2. Sent to 49 CQP 2018 participants that submitted a log in 2018, made fewer QSOs in CQP 2019 compared with CQP 2018, and didn't submit a 2019 log.

I wanted to understand from participants themselves why this happened, and what we as CQP organizers do to help motivate them in CQP 2020.

We received 90 responses to survey #1. Results for survey #1 follow:

1. “Please let us know why you decided to skip CQP 2019. (check all that apply)”

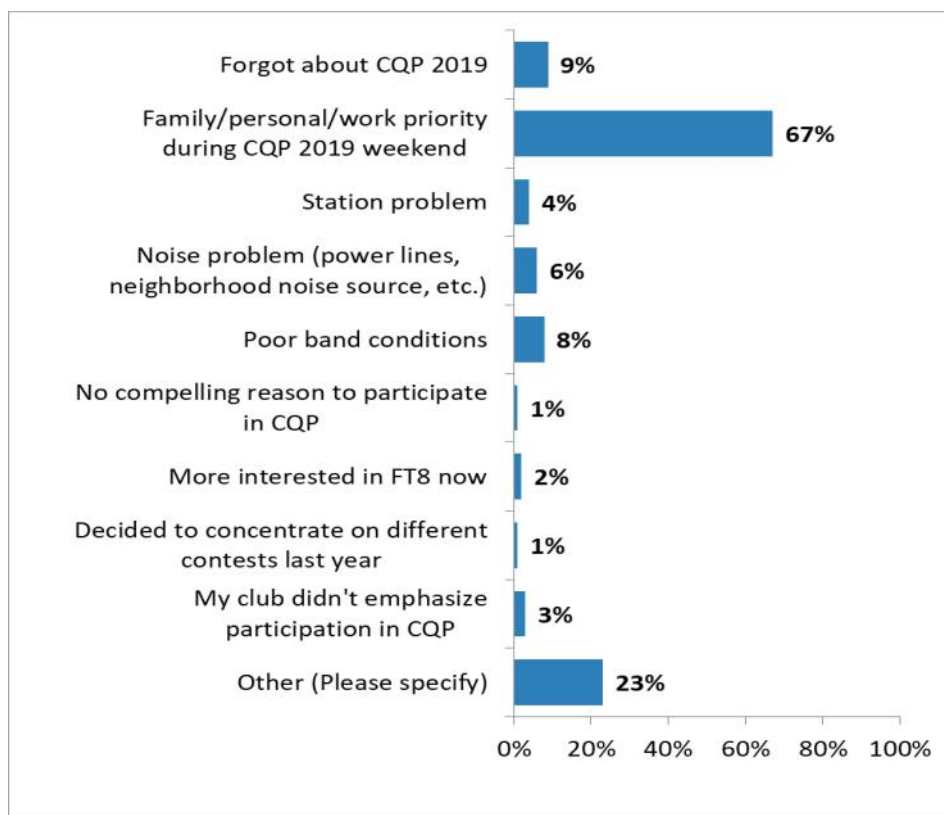


Figure 1. Question #1 Survey Results

2. “What would motivate you to participate in CQP 2020 on October 3-4, 2020? (check all that apply)”

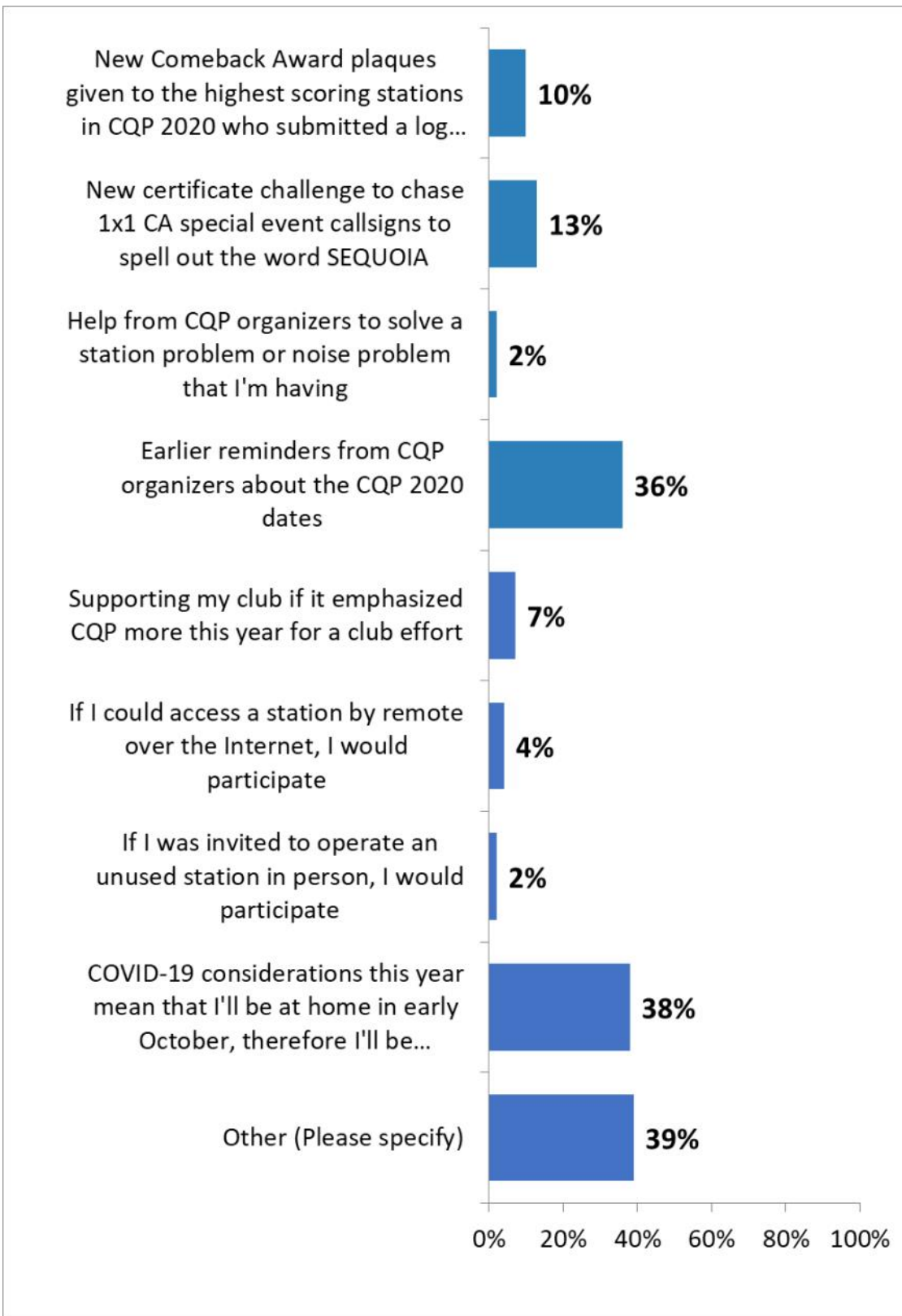


Figure 2. Question #2 Survey Results

3. “Are you planning to participate in the 2020 CQP on October 3-4, 2020?”

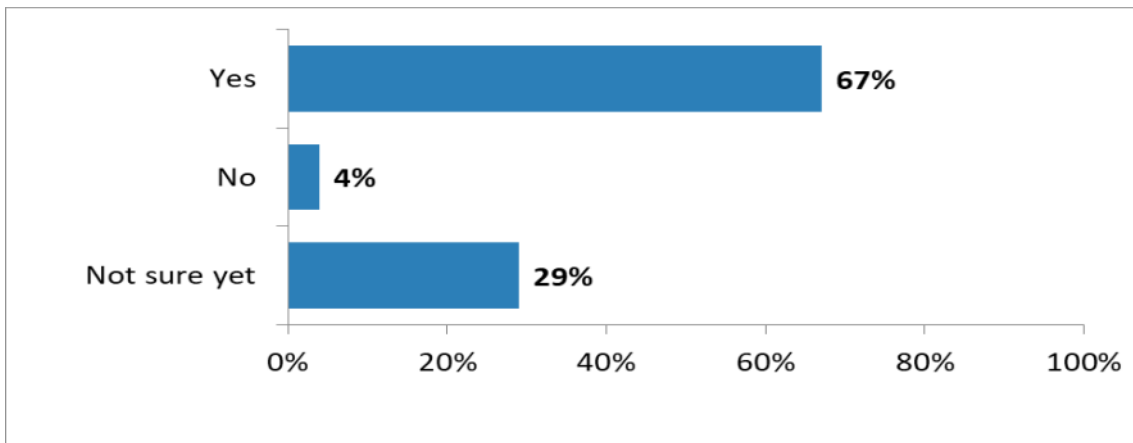


Figure 3. Question #3 Survey Results

Observations:

- Note that responses in questions #1 and #2 do not add up to 100%. This is on purpose, as people were able to select more than one answer in both questions.
- “Other” responses often were not another reason. They were often comments based on the response already indicated. ARRL State QSO Party Challenge emerged as an “Other” reason that folks are motivated to participate in CQP 2020.
- It is clear that available time between family, work and travel obligations is the dominant reason why stations struggled to participate in CQP 2019. It is also clear that COVID-19 is going to shut down some of these family/work/travel conflicts in CQP 2020, freeing up time for people to participate in CQP 2020.
- Publicity, publicity, publicity. Overwhelmingly, people told us that the #1 thing that CQP organizers can do to motivate them to participate in CQP 2020 is to send them early reminders about CQP 2020 dates. We received the following comment from a big callsign out of state:
 - “I think the key is promotion - mostly the CQP has done the best job at this over everyone else but you have to keep doing it every year - promote promote promote - this survey is likely a good thing. The contest is fun - but you have to push it - that is how you keep it growing - get as many CA stations on as possible and promote promote promote - did I say that enough?”

This was refreshing to see! The CQP organizers already had publicity on our minds for CQP 2020 before the survey; it was good to see that this will be valuable time spent. I have already sent over 200 personalized emails so far; many more in progress this month for our first wave of CQP publicity. In addition to past participants over the years, we also need to publicize CQP to clubs as well as stations in the ARRL State QSO Party leaderboard. We will continue the publicity effort in September.

- Our new comeback plaques and SEQUOIA challenge also will help motivate stations to participate in CQP 2020.
- A majority of the stations that missed CQP 2019 plan to participate in CQP 2020.
- We followed up with every station that replied in the survey, addressing “Other” comments individually.
- **CQP 2020 looks to be an especially exciting contest. Please mark your calendars for October 3-4, 2020.**

73, Dean, N6DE

Tube of the Month

Norm, N6JV

HK-357

I don't look at eBay very often, but when a friend, who is a retired EIMAC guy, said there were some Heintz and Kaufman HK-357s for sale there, I had to take a look. I thought I knew all about H&K products. WRONG. I thought that a HK-357 shouldn't exist. An H&K tube ending in "4" is a triode, ending in "3" is a rectifier and in a "7" is a pentode. A 300 series tube is a 50-watt size and no one seemed to have ever seen one, but there they were. They were priced too high, but when you find a unicorn, you better rope it now and build the stable later. What interested me was that it added some information that filled a gap in the history of transmitting tube development in the South Bay area. There had to be an interesting story. I found that another tube collector had found a pair of these tubes some years before. His tubes may be older as they didn't have the flat ceramic insulator the held the grids in alignment. We also found descriptions of transmitters built with the HK-357 in a copy of RADIO from June, 1934.

The HK-357 used the same plate and filament as the HK-354. The plate voltage was rated at 2000 volts at 180 ma. When you have three grids, how do you use a base with four pins? The suppressor grid needs to be at the same potential as the cathode or filament. H&K ran a wire from the suppressor grid to a rivet on the inside of the base shell. A strap on the socket ran between the shell and one side of the filament. The circuit was completed when the filament transformer center tap was grounded. The tube had adequate power to drive a high-powered amplifier when used as a crystal oscillator. The tube could also be used with grid modulation for low cost AM. This two-stage transmitter concept had been a goal for other tube makers including Raytheon with their RK-20 and RCA with their 803. The transmitter featured in RADIO was built by Bill Eitel, W6UF, with push pull HK-354s being driven by a single HK-357. This transmitter was built while he was still at H&K. Also shown was a single HK-357 crystal oscillator/transmitter. I have been unable to find any users for this tube although all the tubes are marked: Manufactured for Westinghouse Electric and MFG Co. Chicopee Falls, Mass. I assume that Westinghouse built an AM transmitter that used the HK-357 before 1939, but I can't yet identify it.

Visit the museum at <http://n6jv.com>.





NCCC Membership Information

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

To join, you must reside within [club territory](#) which is defined as 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 of age have and been a NCCC Member for 20 years are eligible for Honorary life membership. Contact secretary.nccc@gmail.com

JUG Articles Wanted!

Your help allows us to produce a quality newsletter. Please consider submitting an article!

The editor welcomes any and all relevant articles for inclusion in the JUG.

The preferred format is MS Word (.doc or .docx), Arial 11 point. Pictures should be full resolution. Avoid PDF files *if possible*. Include pictures or charts in-line with the text, or identify them by file name at the insertion point.

Send material to Bill, N6ZFO at n6zfo@arrl.net 415 209-3084

Northern California Contest Club Reflector—Guidelines

The NCCC reflector is devoted to the discussion of contesting.

Topics include, for example, contests, station building, dx-peditions, technical questions, contesting questions, amateur radio equipment wants/sales, score posting, amateur radio meetings/conventions, and membership achievements.

Postings may not include personal attacks, politics, or off-subject posts. Such postings will be considered a violation of the Guidelines.



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