Why Do Hams Contest? – and Why You Should Too

Jim Edmondson, N5JGE

Background

Contesting or "radiosport" is a competitive activity where amateur radio operators try to contact as many other stations as possible in the contest period. Contest are sponsored by various amateur radio societies such as the ARRL, radio enthusiast magazines such as CQ Magazine and radio clubs such as Deutscher Amateur Radio Club (DARC). CQ Magazine claims that their World Wide SSB and CW contests are the largest in the world with 35,000 participants each.

Since there is no one organization that sets contest rules, contests can be quite different from the one another. However, there are some common factors. Competitors can operate individually or as a club. There is a specific information exchange that must be made both ways for a valid contact in a contest. Scoring is based on the number of contacts and "multipliers" – more on those later. Each operator must keep and submit a detailed log to get credit in the contest standings. Operators can also submit their log as a "checklog" which will not be scored for the contest. Rather, this allows the operators that they worked to get credit for the QSOs. (It is a good practice to submit a checklog if you make any contacts with contest participants, even accidentally.)

Contest are available for almost every amateur band and mode. CW, SSB and RTTY are the most popular modes and 80M, 40M, 20M, 15M and 10M are the most common HF bands. Contests are available for other modes, including PSK-31, FT8 and FT4, and other bands, including 160M, 6M, VHF and UHF.

Why Contest?

So, why do amateurs participate in contests? The most obvious reason is for the challenge of competing against other top operators for high score. While this takes good operating skills, it also takes stamina and dedication to stay on the air as long as possible up to the maximum time allowed by contest rules.

Some amateurs compete against their prior scores to track improvements in operating skill. Participating in contests can increase operator skills: by learning to efficiently use the capabilities of your station (rig, antenna, amplifier, software, etc.), learning how your signal propagates under different conditions, exchanging information quickly and accurately over the

air and developing the stamina and focus to keep operating over hours of intense activity. Your scores over the years help track your progress.

Other amateurs use contests to make many contacts in a short time period. Think about it – there are literally hundreds or thousands of ham radio operators that want to complete a QSO with you and they are on the air at the same time, on the same sub-bands and using the same mode! This is a great way to collect DXCC, grids, counties, etc. on new bands. These operators are called "casual contesters" because they are not competing for top score in the contest, but selectively making QSOs based on other criteria. State QSO parties are a great way to collect counties, while world-wide contests can yield that rare DX or grid.

While this might be considered sacrilegious among old school CW operators, contesting can help you make CW contacts without being proficient at CW. Many contesters rely on PC software to send the required exchange information via CW. Skilled CW operators can decode the replies by ear. Those less skilled at CW can use software to help decode gaps in their ear decoding. This works mostly because the exchanges are short and specified bits of information. Relying on software, however, might lead to more "busted" QSOs due to incorrect decoding – use with caution.

One possible benefit of contesting for high-level competitors is that it is an activity that can provide a way to experience "brain flow". In brain flow, you "are focused so intently on getting to the next level that you don't know what is going on around you. You have no sense of time passing. You feel great. You are 'in the zone'. [Brain] flow is a state of peak enjoyment that occurs when you are doing something that is difficult and you are highly skilled at …" according to Richard Huskey, Assistant Professor of Communication and Cognitive Science at University of California. Routinely experiencing brain flow can be good for your well-being – networking areas of the brain, warding off depression, preventing burnout and increasing resilience. All great reasons to put together that contesting station and improve your contesting skills!

Operating in a Contest

You can find a handy contest calendar at WA7BNM Contest Calendar: Home. You can also find upcoming contests in the Contest Corral column in ***QST*** each month, the ***National Contest Journal*** (NCJ) and ARRL's ***Contest Update Newsletter***.

I'll use the next major SSB contest to illustrate how to operate in a contest. This is the NCJ North American QSO Party (NAQP). It is a good contest for beginners because it is only 12-hours long and is limited to 100W. The contest takes place 1800 UTC January 21 – 0559 UTC January 22, 2023. This gives you well over a month to get ready and try this contest.

Since the NAQP is SSB, the primary thing that you need to do is decide on logging software, learn to use it and to study the rules at the link below, I'll just hit the highlights here. I am most

familiar with AC Log (N3FJP) and N1MM+, both of which support this contest. N1MM+ has a lot more capabilities, however, I found the learning curve to be quite steep. For casual contesting using SSB, I find that AC Log works very well.

The figure below is the NAQP contest summary from the WA7BNM Contest Calendar. The basic rules are shown here such as the mode, bands, operator classes, maximum operating hours, maximum power levels, exchange and scoring details. Most of this is self-explanatory. Contest standings and awards are determined for each operator class, for example Single Op QRP, Single Op Low, Single Op QRP Assisted, etc. Multi-Two means that for stations with multiple operators, only two transmissions can be made simultaneously on different bands. Single Ops can only operate for 10 of the 12 hours with breaks of at least 31 minutes between the previous and next QSOs. The exchange for North American stations is your name and state for US stations, name and DC for Washington, DC, name and province for Canadian stations and country for other NA countries (eg: Mexico) and country for non-NA entities.

North American QSO Party, SSB

Status:	**Active**
Geographic Focus:	North America
Participation:	Worldwide
Awards:	North America
Mode:	SSB
Bands:	160, 80, 40, 20, 15, 10m
Classes:	Single Op (QRP/Low) Single Op Assisted (QRP/Low) (starting in 2022) Single Op Overlay: Youth Multi-Two (Low)
Max operating hours:	Single Op: 10 hours Multi-Two: 12 hours
Max power:	LP: 100 watts QRP: 5 watts
Exchange:	NA: Name + (state/DC/province/country) non-NA: Name
Work stations:	Once per band
QSO Points:	NA station: 1 point per QSO non-NA station: 1 point per QSO with an NA station
Multipliers:	Each US state/DC (including KH6/KL7) once per band Each VE province/territory once per band Each North American country (except W/VE) once per band
Score Calculation:	Total score = total QSO points x total mults
E-mail logs to:	(none)
Upload log at:	http://www.ncjweb.com/naqplogsubmit/
Mail logs to:	(none)
Find rules at:	http://www.ncjweb.com/NAQP-Rules.pdf
Cabrillo name:	NAQP-SSB
Cabrillo name aliases:	

Future Dates	
1800Z, Jan 21 to 0559Z, Jan 22, 2023	Logs due: 0559Z, Jan 29
1800Z, Aug 19 to 0600Z, Aug 20, 2023	
1800Z, Jan 20 to 0600Z, Jan 21, 2024	
1800Z, Aug 17 to 0600Z, Aug 18, 2024	
1800Z, Jan 18 to 0600Z, Jan 19, 2025	
1800Z, Aug 16 to 0600Z, Aug 17, 2025	
1800Z, Jan 17 to 0600Z, Jan 18, 2026	
1800Z, Aug 15 to 0600Z, Aug 16, 2026	
1800Z, Jan 16 to 0600Z, Jan 17, 2027	
1800Z, Aug 21 to 0600Z, Aug 22, 2027	

Stations can only be worked once per band and each non-duplicate QSO counts 1 point. Logging software typically warns the operator when they try to enter a callsign that has already been worked, known as a "Dupe". Multipliers are given for each US state, DC, Canadian province and North American country (excluding US and Canada).

As a scoring example, let's say that you have worked 10 stations in 7 different states. This gives you a score of 10 times 7 or 70 points. Now, let's say that another operator worked 20 stations, but they were all in 3 states. That operator would only get 60 points, so the power of multipliers can be quite dramatic and different strategies can be used to maximize points if that is your goal. Some logging software will report the value of a new multiplier in terms of how many non-multiplier QSOs would be needed to increase your score by the same amount as one multiplier QSO.

To actually work the contest, you can pick a frequency and call CQ. This is called "Running". As in all aspects of ham radio, listen, listen, listen to other operators calling CQ and learn the cadence. The CQ call will typically include "Test" (for contest) or, in our example, "NAQP". If there are multiple contests ongoing it is better to be more specific and call CQ NAQP. An exchange might go like this:

CQ'ing Station: CQ NAQP XX5XXX
Answering Station: YY6YYY
CQ'ing Station: YY6YY this is Tom from Texas
Answering Station: XX5XXX this is Bob from California
CQ'ing Station: TU Bob CQ NAQP XX5XXX.

The other way to operate is to find stations that are calling CQ and answer them. This is called "Search and Pounce". The exchange is the same in both cases.

After the contest, you should import your log into your main logging software and export your log in the format required by the contest. This is usually "Cabrillo" format which the logging software will generate for you. Cabrillo files are usually uploaded to the contest log website or emailed to the sponsor.

That's it for the basics of contesting. It is kind of like football – once you make that first contact, you will be over your nervousness and get "in the zone". Give it a try!

Reference

Study Looks at Brain Flow, and How People Achieve It | UC Davis

Resources

NCJ NAQP Rules