ARRL Sweepstakes

By John Pescatore K3TN

Ahh, Sweepstakes – it's either the perfect contest or perfectly awful:

<u>Perfect</u>	Perfectly awful
----------------	-----------------

Doesn't require a killer station Doesn't reward a killer station

Challenging exchange Annoying exchange

Short – 24 hours operating Long – Sunday lasts forever

Clean Sweep Limited Multipliers

Everyone can run Once per contest rule – see "Sunday lasts forever"

Either way, the ARRL Sweepstakes is a November institution for US and Canadian hams. The complex exchange puts a premium on accuracy to challenge experienced operators, while the low barrier to entry makes SS a common entry path into contesting.

History

The ARRL Sweepstakes has its roots in "The January Contest" announced in December 1929 QST. It was originally structured as a message handling contest for hams in Canada and the US (which at the time included Cuba, the Philippines and "Porto Rico") and ran for two solid weeks in January. A successful two-way exchange of a minimum ten word message would result in two points for each station. The number of message points would be multiplied by the number of ARRL sections (at the time 68) for the final score. A key rule was "Participating stations will be limited for the purposes of the contest to sending but one test message to each station worked; that is, further messages can be transmitted but will not add to the contest score of either station." Thus was born the dreaded "work stations once per contest" rule.

While a lot about the contest has stayed the same over the years, much has also changed. Sweepstakes was moved to November in 1932; a separate phone contest was added in 1941; and operating time was limited to 24 hours along the way. However, for the past half-century not much has changed, other than the ARRL section list gradually expanding to its current level of 85.



Description and Rules Summary

The ARRL Sweepstakes consists of two contests, one for phone and one for CW, which are open to US

and Canadian hams only. A summary of the important rules:

Contest Period:

CW: First full weekend in November

Phone: Third full weekend in November

Operating Period – 24 of the 30 hours from 2100Z Saturday to 0300Z Sunday

Exchange - Serial Number; Precedence; Your Call; Check; Section

Where: Precedence = Q (5 watts output or less), A (under 150w), B (above 150w), U (Single Op

Unlimited), M (Multiop), or S (school station)

Check = last two digits of the first year of license of the operator or station

Section - ARRL/RAC section location of the station. List of standard section abbreviations

is here

Duplicate Contacts – stations can only be worked once during the contest.

The full rules can be found here.

Strategies

Like any contest, selecting the best strategy for Sweepstakes depends on your goals. You can play to win

in one of many categories or in your section, get on just to help out your local club's score, try to fill in the

states you need for 5BWAS or just try to see how quickly you can make a Clean Sweep. As long as your

strategy matches your goal, you are bound to have fun.

Whatever your goal is, scoring more points is always more fun. Maximizing score per hour means the

most fun per unit time invested. Look here for some great operating tips on maximizing your SS score.

Equipment

Station design is always an important starting point. Sweepstakes is a very "little gun" friendly contest and

doesn't require huge antenna farms Since SS is a domestic contest, low antennas in many cases are

preferable. N6BV has some excellent pointers on optimizing your antenna choices for SS - click here. In

low sunspot years, forty and eighty meters are the "money bands" in Sweepstakes for east coasters, with

20 meters being the usual workhorse. Near sunspot peaks, 15 and 10 meters provide wide open spaces for more QSOs.

Sweepstakes doesn't have any unique demands on other aspects of station design, though the "work once per contest" rule does give a lot of benefit to having a second radio. Run rates on Sunday often slow down to glacial speed (especially CW SS), and having a second radio to search and pounce between automated CQs brings in a lot of extra QSOs.

If you aren't planning an extensive effort, you can still get paper forms here and log by hand. However, logging contests real time on a computer is just so much more efficient – and green. Just about every popular contest logging program supports SS – you can find a list of popular logging programs at Contest logging software. If you aren't going to use a computer to send CW, the long exchange in SS means at least using a memory keyer with an incrementing serial number capability to maintain your sanity. On SSB, most contesting software supports voice memory files or you can dust off that old DVK.

Operating Time

There are all kinds of theories on strategies for selecting the optimal operating time periods for SS, but like all contests more hours in the chair will always translate to more points. In general, if you are going to put more than 12 hours or so into SS, being on from the start for the first 8-10 hours is key to getting that QSO total up. If you can only put in a few hours, calling CQ on Sunday afternoon will bring some nice high run rates since you will be fresh meat to all the stations putting in full-time efforts. Save some operating time for the last two hours on Sunday - a lot of Sunday drivers get on at the very end. Remember - off time has to be in 30 minute increments. What your logging software shows as "off time" might not meet that definition.

If your goal is to maximize points for your club, a common strategy is to operate from one station on Saturday and then from another station (with that station's call) on Sunday – basically combining both of the above strategies. Do the first 8-10 hours from your own station, then on Sunday am activate someone else's unused station, repeat. Now known as a "Highly Motivated Operator (HMO)" K8MR has elevated this to an art form.

Maximizing Score

Common wisdom in Sweepstakes is to let the multipliers come to you – unless your goal is to just get a Clean Sweep, the best strategy is to maximize QSOs. For a 100,000 point SS effort, a multiplier is worth about 8 QSOs - spending more than 10 or 15 minutes to get that elusive section will basically lower your score. But if you just want that Clean Sweep mug, knowing propagation paths from your location is the

secret sauce: what times/bands will give you the short hops to nearby sections and which will provide

openings to the Pacific or quasi-polar distant sections. Barring entering the unlimited category and using

cluster/Reverse Beacon Network spotting, working the rare sections that don't have a lot of operators is

pretty much just luck of the draw.

As in any contest, maximizing score means running (calling CQ) as much as possible, and SS is one of

the easier contests for the average station to find and hold a CQ frequency. However, if you did a lot of

running on Saturday, searching and pouncing on Sunday to find those "Sunday drivers" will be important.

Sweepstakes Etiquette

Sweepstakes is a contest that attracts the full spectrum of hams: top operators at big stations looking to

win, serious contesters looking to beat last year's score or come in ahead of their buddies, club members

just looking to help the club score, and first time contesters just trying this thing out. Just like in a

marathon running race, that means there are competitors at a wide level of capabilities. To deal with that

there are some norms of "etiquette" that have evolved to let everyone have the most possible amount of

fun. These are not hard and fast rules, just common norms that have evolved over the years. You won't

be disqualified by going against any of these norms, but by following them you will definitely save a lot of

whining on CQ-CONTEST after SS is over.

There many areas where standard contest etiquette applies, but there are also some specific norms for

SS:

The exchange in Sweepstakes is complicated on purpose – Sweepstakes tradition

comes from traffic handling - this is what makes SS fun and different. Learn the exchange

before the contest and get comfortable sending and receiving it in the expected order. There

are basically three scenarios to be comfortable with:

1. The CQ Scenario: You will either be calling CQ or answering CQs and following a

standard protocol will make everything go faster and more smoothly:

K3TN: CQ SS K3TN K3TN SS

W8ABC: W8ABC

K3TN: W8ABC 123 B K3TN 69 MDC

W8ABC: 55 A W8ABC 74 OH

K3TN: TU K3TN

Remember, SS is one of those contests where you do not have to send RS(T). But you

do have to send your own call in the exchange. When you send the exchange the

first time, no need to send anything twice - send it once and let the other station ask for

a fill if needed. Also, there is no need to send "NR" at the start of your exchange when

replying to a CQ, though some feel it helps the receiving station get ready to copy the

exchange.

Note: Sweepstakes does not require that the station answering the CQ send back the

CQers call. It is not a bad idea to do so if you think there is any doubt who you (W8ABC

above) are responding to, such as on a crowded band where multiple CQers are

"sharing" a frequency. In that case, W8ABC would reply "K3TN 55 A W8ABC 74 OH"

2. The Fill scenario: Contests are about speed and accuracy, so before you hit enter in

the log you want to make sure you have the info right. Good operators will always ask for

a repeat or "fill" if they missed part of the exchange or aren't 100% certain they copied it

right. The generally accepted ways to ask for fills are:

CK? - Please send the Check (last two digits of the first year you were licensed) again

NR? - Please send the serial number again.

PREC? - Please send the Precedence (A, B, M, U, S, Q) again.

SEC? - Please send your Section again.

CL? - Please repeat your call?

AGN or ? - Please resend the entire exchange again.

It is only really necessary to send the entire exchange if the station sends AGN or ? but

many operators aren't familiar with the abbreviations for Check and Precedence and so

on.

K3TN: CQ SS K3TN K3TN SS

W8ABC: W8ABC

K3TN: W8ABC 1%& B K3TN 69 MDC

W8ABC: NR?

K3TN: 123

W8ABC: 55 A W8ABC 74 OH

K3TN: TU K3TN

If there appears to be any confusion, just resend the entire exchange.

- 3. The Dupe Scenario: This is a tricky one. When you are calling CQ and a station calls you that you have already worked, in most contests it is just faster to work them a second time. However, the long exchange in SS changes that equation a bit many stations choose to not work dupes and will send "K3TN B4" or "K3TN QSO B4" or "K3TN DUPE." This may or may not be the right thing to do, depending on circumstances. N6TR (who has managed the log-checking for SS) has made it clear that a repeat QSO in one log that is a first QSO in another will not result in a penalty to either op. On the other hand, a NIL (not-in-log) QSO, where a QSO shown in one log is not even loosely matched in another log, will result in a fairly significant penalty. On Saturday evening, when rates are high, it may make sense to say "QSO B4" and go on to the next station, because if you are not in his log, chances are good that the station will call you again on Sunday. On Sunday, when rates are low and "fresh meat" is scarce, it makes sense to insist that the previous QSO is "not in my log" and say "pse work agn". You're really doing the other station a favor, and not costing either of you much precious time.
- Send the entire exchange! don't forget, you <u>must</u> send your callsign as part of the exchange.
- Eschew cut numbers and leading zeroes. In contests where RST is required, sending 5NN is universally recognized to mean 599 just as CW is universally recognized as an abbreviation for Continuous Wave. However, in SS using cut numbers in the CK field (6N instead of 69) or even in the serial number field leads to confusion because of the mix of numbers and letters in the exchange. Just avoid cut numbers. Similarly, there is no reason to send leading zeroes they just increase the chance for confusion.
- Use the standard abbreviations for sections on CW and standard phonetics on SSB. In Sweepstakes, you are not in "Maryland" or "Massachusetts," you are in "Maryland DC (MDC on CW)" or "Eastern Mass (EMA on CW)" or wherever. You can find the list of standard ARRL sections here. Similarly, leave the fun phonetics on the shelf for contests stick with the ICAO standard phonetics found here.
- Send (or say) the exchange in the standard order: number, precedence, your call, your check and your section. There's no need to say "precedence", "check" or "section" if they are in sequence, making it faster and clearer both for you and for the other station. In general, the fewer words the better.
- Don't repeat what you copied back to the CQer. Especially on SSB, it is tempting to say "Thanks for number 123 B in MDC, you are number ..." Just stick to sending your information and everything will move along more quickly.

- Break the "Please copy" habit on SSB Nothing wrong with being polite, but think of making a Sweepstakes QSO like standing in a long morning commute line at a crowded Starbucks: everyone just wants to get in, get their coffee and get out. Comment on the barista's attire when things aren't so busy just say "large vanilla latte with oat milk" and get out your credit card.
- Send "QRL?" or "?" twice to check if a frequency is in use. The long SS exchange also means that there will be longer than usual gaps while a CQer is listening to someone reply. Just sending "dit dit" and then hitting that CQ key is just rude do the right thing and check twice. If you are running stations and don't respond to QRL? checks, the frequency is assumed to be up for grabs. A corollary to this principle is...
- Just because you own two radios doesn't mean you own two frequencies. If you are
 operating SO2R and don't respond to a legitimate "double QRL?" because you were off on
 the other radio trying to break the VY1 pileup, that frequency is up for grabs.
- Send CW at the code speed of the other operator, or the fastest you are comfortable copying whichever is lower. If you answer someone CQing at 35 wpm, but are only able to copy 20 wpm, reply at 20 wpm. If you are sending CQ at 35 wpm and someone responds at 20 wpm, slooow down to something near the other station's code speed. Hitting Page Down or twisting the K1EL knob a bit isn't that hard. Exceptions: on Sunday, everyone slows down their CQ code speed to attract casual operators. Also, if you hear a buddy calling CQ at 20 wpm and you know they can copy 35 wpm, call them at the higher speed. Even more fun: call him or her at 45 wpm and throw in some cut numbers: "ATN B K3TN 6N MDC" Remember: only do this out of love.
- When you are running, make it easier for stations to work you. A short CQ message, such as "SS W3ABC SS is generally the way to go, and the message you send after copying the other station's info should be simple, too something like "TU W3ABC" Don't put "SS" after your call on your TU message, as many will jump the gun after they hear your call.
- **Take the time to make your .wav or DVK files match your mike audio and natural timing** the ability to used recorded voice for sending that looong SS exchange is a great convenience, but sounding like a robotic talking elevator is just not attractive. It takes a lot of time to get those individual number and letter files sounding natural. If you don't have the time, just stick with recording the CQ and Thanks, QRZ messages, and the unchanging parts of the exchange and even on those take the time to have the levels and sound quality match your MIC audio. See the Contesting Wiki write-up on Transmitter Audio Adjustment.

- Avoid begging for those last sections on the Packetcluster if you need VE8, do a sh/dx/10 ve8 vs ANN Please spot NT for my sweeeep!!! Not a big deal, but keeping the Cluster clutter down during a contest is always a good thing.
- Take time to explain things to operators who are confused. In sailing races, if one ship is sinking the other ships stop racing to help them out. Sweepstakes is often the first contest many US operators try out a bad experience in SS may sour them on contesting. If you run across a station that doesn't understand these rules of SS "etiquette," take the time to give them some tips.

Specialty Strategies

Multi-Op SS

MO2R: A Sweepstakes Perspective by KG5VK

Links

Mad River Radio Club Sweepstakes Handbook - [1]

PVRC Sweepstakes Guides - [2]

Sources

QST, December 1929