

Sweepstakes 2017 – Where art thou sunspots?

(Houston: SMC could be a problem)

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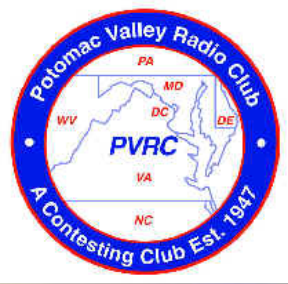
PVRC Club Challenge Set the Club Record

- This year: SMC has proven, by their VICTORY in the NAQP Challenge, they can WIN Sweepstakes!
- We can achieve maximum participation this year; however we need traditional 'Phone Only' ops to get on for CW, and vice versa
- We will also need to arrange Guest Ops to take advantage of all capable stations with the best antennas, in cases where station owners are traveling
- **PVRC Chapter Leaders are they Key to this successful mission**



Sweepstakes Scores Historical Perspective

- Prior winning formula: Operate BOTH modes and maintain our MASSIVE SSB turnout
 - SSB is our traditional strength...however...this year:
 - We need SSB operators to operate CW
 - We also need CW operators to operate SSB!
- SMC could end our winning streak, and they have the SSB operators to do it.
- Competitors from both the mid-west group SMC and NCCC have distinct propagation ADVANTAGES over PVRC!



Our Tactical Plan

- PVRC Club Strategy Outlined
- Individual Operating Strategies
- Station Strategies



PVRC: Club Strategy

- Encourage Individuals to set High Goals for themselves
- Promote Single-Op High Power Operations
- Discourage Multi/Single operations unless there is a good reason to operate in this category
- Individual operators contribute far more to the score than multi-ops, per operator.
- Parallel single-ops at a super-station are the exception.



PVRC: Club Strategy

- If you run (U)nlimited or Multi – SPOT EVERYONE, especially other PVRC members.
- Consider setting N1MM+ to “spot all S&P QSOs”
- **Make SURE you turn your log in by the deadline...which is now...5 days after the contest(!)**



N1MM+ Setting Spot all S&P QSOs

The screenshot shows the N1MM+ software window titled "14200.00 USB Manual - VFO A". The "Config" menu is open, displaying the following options:

- Configure Ports, Mode Control, Audio, Other...
- Change Your Station Data...
- Use Logger+ Audio
- Enter Sends Message (ESM mode) Ctrl+M
- Spot All S&P QSO's** (highlighted)
- QSYing Wipes the Call & Spots QSO in Bandmap (S&P)
- Grab Focus From Other Apps When Radio is Tuned
- Do Not Automatically Switch to Run on CQ Frequency
- Show Non-Workable Spots and Dupes in Bandmap
- Reset RX Freq to TX when QSO is Logged (Run & Split)
- Sub Receiver Always On
- CQ Repeat Alt+R
- Set CQ Repeat Time... Ctrl+R
- CW / PH AutoSend Threshold...
- Enable Call History Lookup

The background interface shows a frequency display of 14200.00, a "CQ-Frequency" field, and a "Run" button. The status bar at the bottom displays the date and time: "11/21/2016 13:14:13Z ARRL" and "11-16 22:08".



Individual Operating Strategies

- Get Started at the BEGINNING of the contest – Saturday afternoon
- Listen to the bands for 30 – 60 minutes BEFORE the contest starts to get an idea of the way propagation is running on each band.
- Plan to operate until 2:00 – 3:00am Sunday morning on the first day – don't give up too early!
- Save your off time(s) for Sunday afternoon
- Limited time? Low Power? Show UP on Sunday for a good time running stations.



Individual Operating Strategies

- Make SURE all your equipment works BEFORE the contest: Yes, ALL your equipment.
- Double-check voice keyer, antennas, computers
- SS is all about RATE! Keep your rate up and keep your eye on that rate-meter.
- DO NOT CHASE MULTIPLIERS. They will come to you.
- Always call CQ on At Least 1 radio while S&Ping on your second (SO2R operators) on SSB;
- if you are assisted in CW, GRAB and pounce (G&P) with both radios can be very productive.
- Be Accurate – do NOT bust the **call sign!** Don't be afraid to ask for repeats to get everything correct.



Individual Operating Strategies

- Do **NOT** answer weak stations when rates are good.
- Get to the next HOT (lower) band FAST, mark your spot for 75m SSB!
- Watch 40m: It may be a BIG band this year.
- Play to your Station's Strengths. You only get to contact each station once. If you have a good 75m antenna – spend a lot of time on 75 meters!
- Do NOT get psyched out by others with high numbers. They will be seeking YOU out by the end of the contest
- Work the shortest skip band that supports high rate. This is normally the lowest band, and it keeps the QSO potential in densely populated areas.
- If you use spots and/or the Reverse Beacon Network (RBN), do not waste time in pileups; call later if you can't get right through.



Station Strategies

For expected 2017 Conditions

- Use Low, Efficient antennas. Dipoles and Inverted Vees at 35 – 50 feet make EXCELLENT SS antennas.
- 10 & 15 are likely to be dying out with decreased sunspots. Operators should target the LOWEST possible band for CA coverage (usually 20).
- **BEWARE OF 10 and 15 meters!** Sure, you may hear some loud stations, but it is very doubtful you will maintain a sustained run for long.
- Use a EWE, Beverage or other RX antenna for 75/80 meters. NE/SW/NW are all important directions
- Be comfortable. Have snacks, drinks at easy reach. Keep aspirin handy.



BEWARE of 10 and 15 meters

- If you have only one radio, just say no to these bands unless you are part time and pouncing.
- If you are SO2R, by all means pounce on 10 & 15 meters
- SMC and NCCC may have better luck than us running on these bands...but don't get fooled.
- 20 meters is likely to be the best “high” band that supports a good diversity of skip this year.



Go Low EARLY Old Man/Young Lady

- With falling Solar flux, it is important to get on low bands ASAP this year.
- 80m should sparkle with short skip. 80m keeps signals in the most dense ham population: the EAST coast.
- This has a favorable effect on YOUR RATE
- Don't forget to check 160 if 80 goes long



How Skimmers and the Reverse Beacon Network Change the CW Game

- SO2R operators can achieve a higher rate than running!
- It is more fun than CQing up 60 QSOs an hour
- Allows pouncers to do almost as well as runners, even with one radio.
- Cure for the Sunday blues
- Relatively high quality of spots compared to packet



For less experienced CW Operators

- Operate in the Assisted (“U”) Class
- Grab and pounce by clicking spots
- If you are very new: Verify the call sign...and exchange... before you call. If you do this successfully, only the serial # changes for you.
- Use of history file is optional and can pre-fill some of your exchange
- Be accurate and do not be afraid to ask for repeats until you are confident you are correct.



Using Reverse Beacon Network (RBN) for Sweepstakes CW

- Add the Reverse beacon Network (RBN) to your logging software
 - VE7CC is an excellent ‘retail’ node (telnet ve7cc.net)
 - w3lpl.net port 7373 (telnet w3lpl.net 7373)
 - w9pa.net port 7373 (telnet w9pa.net 7373)
 - www.ng3k.com: good resource for RBN ‘retail’ nodes that have AR Cluster Version 6 software.
- Consider adding some filters
 - Limit spotting to USA sources only
 - Time out your spots for 10 minutes or sooner
 - EVERYBODY gets skimmed/posted to the RBN when they call CQ



Station Strategies

- Consider operating SO2R for more fun on Sunday!
- 75 meters is important – particularly for SSB!
- An inverted Vee at 50 feet with 500 watts will generate hundreds of QSOs on 75m SSB.
- 40 may be more important for CW than SSB



What is a an HMO?

- Highly Motivated Operator, out to improve PVRC's club score by operating from two locations, with two call signs, during the contest.
- Advantage: You have good runs both days!
Drawback: You sacrifice your own individual score, since you use two call signs.
- PVRC Club Advantage: You generate a larger score for PVRC.
- Interested? Contact Jim Nitzberg, WX3B for details. Only one call sign can be used for a "transmitter" in SS.
- Example: WX3B operates as KF3P Saturday from N3HBX and makes 1,000 QSOs x 75 sections. Sunday, WX3B goes back to his own house, makes another 1,000 QSOs by 75 sections. More fun, more activity, and more PVRC Points – all by CQing and running stations. No hunting for stations Sunday!



What is a PARALLEL Operation?

- Multiple, simultaneous operator efforts with multiple call signs from ONE station.
- W3LPL is our best example – HUGE club benefit, fun, multi-operator environment keeps things fresh.
- 2 or more competitive scores come out of ONE station
- If your station can run M/2, you can support a parallel effort



PVRC' s historical ramblings

- The raw number of SSB logs and SSB effort have propelled our club to victory in the past.
- This means the casual operator has a MAJOR influence on our team result.
- BIG GUNS are important (2009 - 2016 lesson) and we need repeat performances from them.
- This year we face new competition from our friends in the Society of Midwest Contesters (SMC)



Sweepstakes History File

- Can help / Can also hurt
- Does NOT replace listening!
- Can make your QSOs easier
- Use as a cross check / double check tool
- If you like the idea: **TEST IT OUT, LONG BEFORE** the contest.
- {Place new web link here if we have a file}



Getting the word out

- PVRC Reflector and regional meetings.
- Chapter leaders getting the word out to their members
- Selected volunteers emailing members
- All hands on deck approach/attitude



Not Operating? You can STILL HELP!

- How about lending out your station to a guest operator?
- Assist other PVRCers with antenna and equipment “parties”
- Be a dedicated spotter and...get on the air and SPOT EVERYONE. This makes the game better for all of us.
- A surprising number of folks STILL do NOT use the reverse beacon network (RBN) yet! Spotting on CW still helps.



Send In Your Log

- You laugh, but individuals forget to do this!
- Make SURE you mark your log for **Potomac Valley Radio Club**.
 - You laugh, but people submit for the WRONG club, too!!
- Log submission is on-line and due 5 days after the contest!!
 - <http://contest-log-submission.arrl.org/>
- Save a copy of the ARRL's robot receipt
- Make sure your LOG was received CORRECTLY!



Fall, 2017 Propagation

What we can expect

- 20m & 40m to be your daylight money bands
- 40m & 80m to be your evening/late night money bands: remember 40 has no broadcast stations below 7.200. 7.178+ is the cutoff for the General allocation.
- Consider operating between 7.178 and 7.200 if possible.
- Be aware that 80m has a history of going long at times, however it usually shortens up after midnight.
- 10 & 15 meters will be of limited use
- 160 might actually have some activity this year, particularly if 80 goes long



Operating Schedule Full Timers

- Start on 20, move to 40, or just move right to 80 when the rate drops
- Stay on 80 and/or 40 all night long, and check 160 once in awhile if your rate is slow
- If the rate drops, take a break at about 3:00am, but be ready to resume by 6:00am – 7:00am Sunday
- If you think your rate will improve Sunday, you might be in for an unpleasant surprise. Stay awake as long as possible if you have a rate anywhere near 30+/hour.



Operating Schedule for part time operators

- Sunday is likely to be your most interesting day. People will flock to YOU for QSOs
- 40m & 75m will be great evening bands.
- Any time you get on is better than NOT getting on
- 40m is also a FUN Sunday morning band for part-timers.
- Low dipoles and 500+ watts = BIG SCORES!



Additional Tips for low power/limited antenna operations

- Late Saturday, all day Sunday is your most productive times.
- The “second” hottest band may actually be easier to make QSOs on
- Make sure your SSB audio is optimized – have someone else check it out with you
- Avoid large pileups – move on if you can't work someone in several calls
- Pouncing? Listen and pre-fill the parts of the exchange so you copy the entire exchange before you call...



2017 Sweepstakes Dates

- CW: 2100Z, Nov 4 to 0259Z, Nov 6
- SSB: 2100Z, Nov 18 to 0259Z, Nov 20
- Operate no more than 24 of the 30 hours
- Off periods may not be less than 30 minutes in length.
- Listening time counts as operating time.
- 5 day log submission DEADLINE!!
- Log submission is now ON-LINE:
 - <http://contest-log-submission.arrl.org/>



Go PVRC!



October 20, 2017



Elecraft K3 TX Audio Settings

- **TX EQ (SSB)**

- 0.05 -10
- 0.10 -10
- 0.20 -10
- 0.40 -11
- 0.80 -9
- 1.60 -6
- 2.40 +2
- 3.20 -3



- MIC Gain: 45

- CMP: 28



- ** Microphone: Heil HC-5 Element



Yaesu FT-1000mp TX Audio Settings

- Transmit bandwidth 6khz
- EDSP ON
- NO EDSP equalization
- Menu 8-9 Proc/LSB, Proc USB between 0.050 and 0.100
- Liberal use of speech processor and Heil HC4 Microphone
- DSP settings at 100-3100



Yaesu FTDX-5000 TX Audio Settings

- Heil HC5 Microphone (HC4 works too) Mic gain and Processor at about 12 o' clock.
- Note that these numbers may be off by one due to firmware updates....however the menu descriptions are correct
- 101 A3J (SSB) High Cutoff = 4000
- 104 A3J (SSB) TX BPF = 50 - 3000
- 160 PE1 FRQ: 100
- 161 PE1 LVL: 0
- 162 PE1 BW: 1
- 163 PE2 FRQ: 800
- 164 PE2 LVL: 0
- 165 PE2 BW: 1
- 166 PE3 FREQ 3200
- 167 PE3 LVL 10
- 168 PE3 BW 1