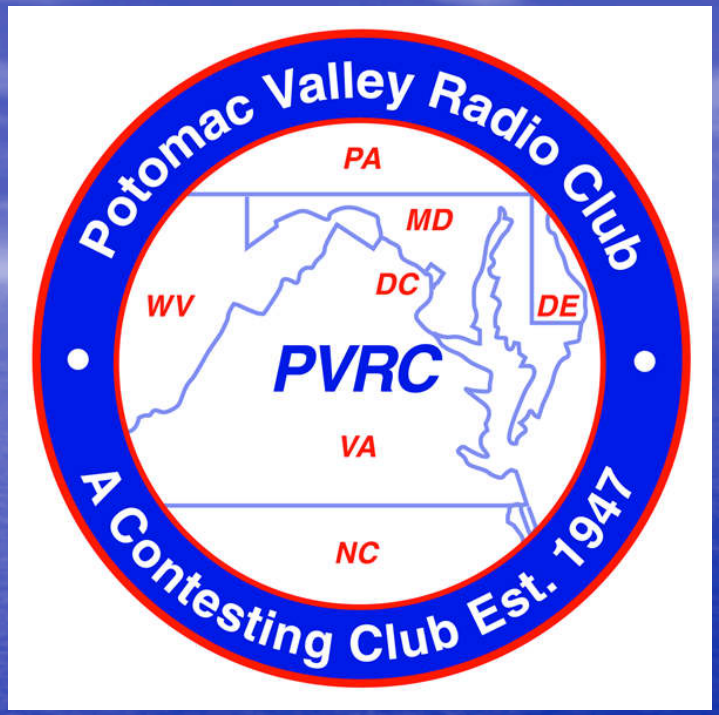


ARRL Sweepstakes 2019:
PVRC Won the NAQP Challenge, but why???

By Ty Stewart, K3MM and Jim Nitzberg, WX3B

October 29, 2019

PVRC Club Challenge
Set the Club Record

- This year: SMC took a punishing LOSS in NAQP SSB, and it cost them the NAQP challenge (PVRC won)
- Is it possible, they are saving their energy for SWEEPSTAKES this year???
- Craig, K9CT is their very capable President…
- 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

- 2018 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 this year
- Competitors from both the mid-west group SMC has distinct propagation ADVANTAGES over PVRC!

PVRC: Club Strategy

- Encourage Individuals to set HIGHER 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.

Individual Operating Strategies – High Achievers

- 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

- Test out ALL your equipment FAR in advance of the contest dates.
- Sweepstakes 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!
- Play to your Station's Strengths. You only get to contact each station once. If you have a good 75m antenna – spend lots 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 packet/skimmer, do not waste time in pileups; call later if you can't get right through.

Station Strategies
For expected 2019 Conditions

- Use Low, Efficient antennas. Dipoles and Inverted Vees at 35 – 50 feet make EXCELLENT SS antennas.
- 10 & 15 are likely to be dead 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.

GO (to) LOW (bands) EARLY

- With low 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
- If you are using wire antennas and low power, 40 is a good place to START.

How Skimmers and the Reverse Beacon Network Change the CW Game

- SO2R operators using dual pounce can achieve higher rates than RUNNING!
- Pouncers with one radio can do almost as well as runners.
- 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 Skimmer for Sweepstakes CW

- Add the reverse beacon network to your packet nodes, if they're not already there.
  - VE7CC is an excellent 'retail' node
- Consider adding some filters
  - Limit skimmers to USA reports only
- Time out your packet spots for 10 minutes or sooner
- EVERYBODY gets skimmed when they call CQ

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

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}

Increasing our participation this year

- PVRC Reflector and regional meetings.
- Chapter leaders as motivators
- Selected volunteers emailing members
- All hands on deck approach/attitude

Not Operating?
You can STILL HELP!

- Make your station available if you are not using it
- 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 do NOT use skimmer yet! Spotting still matters, particularly in SSB!

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, 2019 Propagation
What to 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.
- 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 good activity this year, particularly of 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!

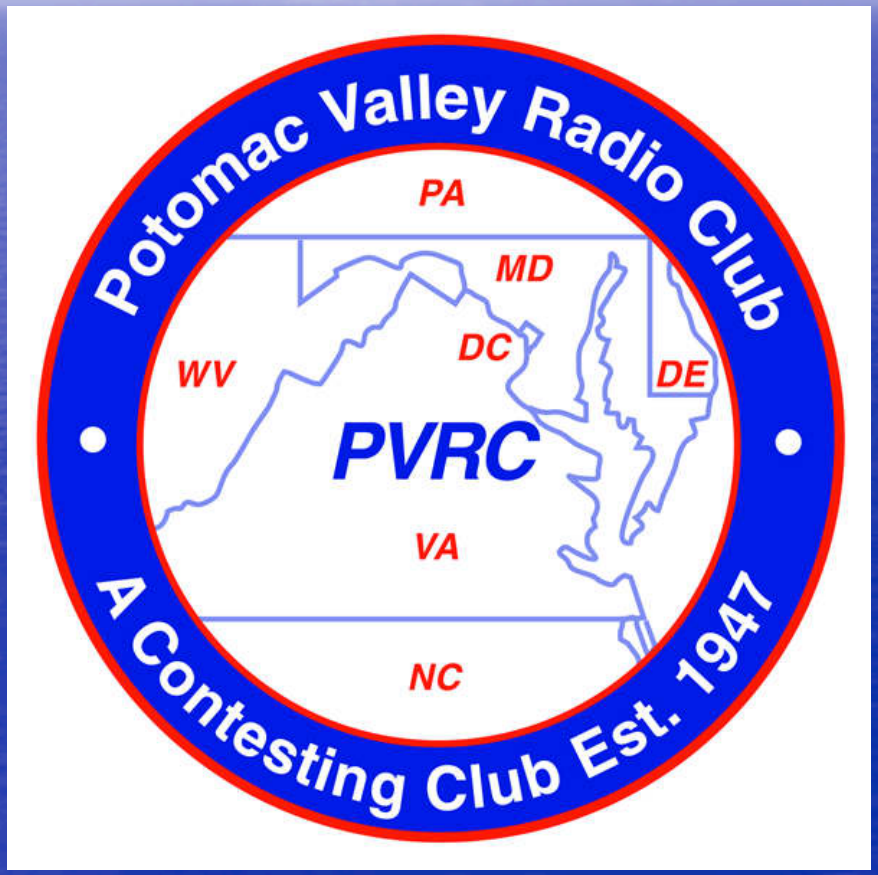
Tips for low power/limited antenna operations

- Late Saturday, all day Sunday is your most productive times.
- The "second" hottest band may actually be easier to make QSOs on
- Mark 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…

2019 Sweepstakes Dates

- CW: 2100Z, Nov 2 to 0259Z, Nov 4
- SSB: 2100Z, Nov 16 to 0259Z, Nov 18
- 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 29, 2019

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