Note: The following was published in the *National Contest Journal*, May/June, 2003, p.29-31, Kevin Kaufhold, W9GKA.

## Summary of Jan VHF SS 2003

As to the 6 Meter ESkip. The opening into the 1's and 2's lasted around 2 ½ hours, between 2052 and 2220 UTC. One of the locals told me that it started about 15 minutes before my first contact. I was busy getting ready for a local schedule at 2100 Zulu when I heard some QRM on 6 farther down the band. So, I moved down to the calling frequency and, boy were there stations calling from the NE. I quickly made a few contacts, then made my schedule, and then returned to the opening. I completed a contact with one station in FN31, and another station in FN41 asked me to move higher to an open frequency so he could work me. Imagine, stations hearing me through all the QRM, with all of 10 watts. What a band opening this was turning out to be.

After that, I pretty much held onto the frequency for an hour. Most of the stations were giving me strong signal reports in spite of my QRP output. Around 2204 UTC, the skip started to go in and out, and I could not hold onto the freq any more. I was having a hard time working into the upper NE by that point, and I then searched and pounced. The skip shortened up, and I then worked FN12 and FN13. Signals were up and down for the next few minutes. I managed a few contacts back into the upper NE again in FN44 and FN54, but they were telling me they could barely hear me at that point. Then, the band went completely dead for a few minutes. I then searched around and only heard (and worked) FM 16 at 2224. I then heard that same station in and out for another hour, but I heard little else. I then worked some locals on several bands. My last E skip contact was at 2337 with N3DB into FM18. We were open to the mid-Atlantic coastal region off and on for that whole hour, but there was just no one out there on the other end of the pipe.

All in all, it was a rather amazing experience, having a strong E-skip in the middle of January. After the contest, I received E-mail notes from WB9Z who indicated that he worked over 100 stations on 6 meters during the same time that I was experiencing the opening. He is in EN60, around 150 miles to my north past Champaign, Illinois. He has a large antenna system and was running a good amount of power as a single op high power entry, I believe.

I counted everything up, and it appears that I worked 30 contacts via skip – that was 23% of all contacts I made during the contest. I worked 16 rew grids in the skip, and this was 36% of all grids worked on all bands during the test.

I estimate that the mid-points during the strong part of the opening was over central to eastern Ohio. The midpoint of the contacts into FM16 and FM18 later in the opening was farther south, somewhere around the border between Kentucky and West Virginia. It thus appears that the E-cloud was initially concentrated over Ohio but then drifted south, allowing a few contacts into FM16 and FM18.

As to QRP Portable. This is one tough class. I normally do not run the Jan VHF SS due to the bad weather conditions. There were three separate rovers based near Chicago that were planning trips into my area however, so I checked the weather reports, and it looked like decent temperatures were in store for the St. Louis area on Saturday and Sunday with no rain or snow forecasted, other than what was already on the ground (about an inch hear locally). I made the decision to operate in the last few days before the contest, and actually set up the antennas the day before the contest. I got up early on Saturday, and made sure the generator was working. I was off and running!

QRP Portable is a lot like FD. In fact, I approach the event as if it were a FD operation. The planning, set-up, and actual contest operation is much easier to pull off if the Portable entry is viewed as a Field Day run inside a VHF contest. I heartedly recommend that a QRP portable enthusiast get some solid FD experience before he or she sets off on a full blown, serious run as a portable entry. I have run in over 25 Field Days with four separate clubs, and one of those clubs continually finished in the top 10 of its FD class. Even with that FD experience as a background, I still make mistakes on VHF. The knowledge gained from the FD's provides great learning experiences that can be used in the portable class of the VHF contests. I simply do not know of a better way to prepare for a portable entry than running some Field Days.

In terms of the set-up, I like to go to the same site year after year, and I want the site to be close to home, for my own convenience. I can then return home at night to sleep before returning the next day, nice and refreshed. It also helps that local hardware stores and Radio Shacks are in the immediate area. Obtaining on-going permission from the landowner of a nearby hill is perfect for a portable entry.

I try to keep everything simple. There is less to go wrong that way. I use a straight key, instead of a keyer. I have receive-only pre-amps for 6 and 2, but a lot of times I don't even use them, as signals can be so strong that the pre-amps are simply swamped out. I usually put them into the coax line, but switch them off when I have to. The pre-amp relays are prone to failure however, especially if they are RF sensed. I use PTT control lines, but the transmit output is not sequenced. I have lost the pre-amps in the middle of a contest on two occasions in this manner. I do use a computer running NA, but it only keeps the log. It does not control the rotor or act as a keyer. It is not hooked up to packet spotting clusters or internet sites, either. There would be too many wires for all of the jazz associated with a full blown computer controlled station. That is for the permanent set-ups. I even use a microphone that comes with the radio. The headset/mic combos are great, put there is too much that can go wrong in the portable entry. So I use the original mics, and I have a good headset to maximize my receive side.

I also like to do most things the same for every contest, and then only improve one or two new things for the next contest. This repetitive process makes the run much easier to pull off, and there are fewer mistakes. I always try to be aware of the marginal safety conditions I am operating under, so I do the good things over and over again, and attempt to minimize the bad things. I then have time to concentrate on one or two improvements

for the next contest. In this way, I can make a gradual but persistent improvement in my contest capabilities.

As to the equipment and radios, being a QRP run, I emphasize the antenna system. But being basically cheap, I try to keep the same radios in operation year after year. It is not the latest and best radios that's important. It is the antenna height and gain that is so critical to the success of a VHF operation. I do like the new JT44 mode – it may just have the ability to really expand both transmit and receive capabilities in an astounding and revolutionary way. However, that is for the permanent stations. It is far too complicated for portables.

It never ceases to amaze me that QRP Portable entries can experience bitterly cold, freezing, and windy conditions in winter, but then have to put up with boiling hot temperatures in summer. I have come close to calling it quits during winter just from the cold weather, let alone the wind, rain, sleet and snow. In the summer, I will easily go through an entire gallon of water per day that I truck in to the portable site along with everything else. It is common for me to lose 5 or more pounds over the course of a very hot contest week-end, just from the loss of water weight. I sweat bullets in the summer and freeze my back-side off in the winter. That is the QRP portable class in a nutshell. It is a bit of a dichotomy to experience 100 degree swings from winter to summer using the same antennas, radio equipment, and physical location.

The one thing the VHF contests lack in the St. Louis area is local support. Several local hams have approached the local radio clubs over the years to encourage the use of FM simplex frequencies in the contests. Efforts have also been made to run local club competitions, all to no avail. Either everyone is in an FM repeater club, or they are interested in a county type of radio club. There are about 50 or so hams that regularly check through the VHF calling freqs, but there may be only 2 to 5 locals actually running the VHF contests at any one time. I may count 25 or so locals in my contest log during the June VHF when everyone is around. Lack of critical mass in the St. Louis VHF community is a major impediment to high scores on VHF tests however. I feel that I could have won several of the VHF portable contests if I had local VHF activity that the East coast experiences (or the FM simplex activity of Chicago. I am envious of K9PW's abilities to cultivate FM simplex contacts out of Chicago in the VHF tests). With the local scene the shape that it is in however, I am happy to score as high as I have in the class. Recently, a SWOT net on Monday evening has started in Mid-Missouri (run by N0PB and KB0PE). Maybe that will help out.

(Author's Note: After this article was published in NCJ, I received an E-mail from Pete Walter, K9PW, who had read my reference about him. He indicated that he currently runs very few FM contacts in the VHF contestsy. I picked up the note about Pete and FM usage from an old 1980's era QST. I should have put the reference in the past tense, instead of present tense terms. My mistake!).

**Contest Scores.** The following are my scores in the QRP portable division class. These scores do not include my SO entries from my home QTH in the early to mid 1990's.

Contest	Score	Ill. Sec.	Central Div.	Nation
1998 June VHF QSO Party	22,515 points	1	1*	5
1999 January VHF SS	518 points	1	2	12
1999 June VHF QSO Party	8,320 points	1	1	7
2000 June VHF QSO Party	7,190 points	1	2	10
2001 June VHF QSO Party	3,072 points	4	6	14
2002 June VHF QSO Party	7,853 points	2	2	7
2003 January VHF SS	7.065 points		pending	

<sup>\*</sup> Please note that the 1998 score set a record for the Central Division, QRP Portable class, June VHF QSO Party. It was has subsequently been broken by K9AKS in 2000, who then had that score broken by K9PW, with a #1 score in the nation for the June VHF QSO Party 2001.

W9GKA Log of 6 Meter Opening, Jan 2003

UTC	Grid	New Grid	
2052	FN31	FN31	
2055	FN42	FN42	
2058-2110	2 & 6 meter sked	ls	8 locals worked on 6 & 2
2114	FN31		
2119	FN41	FN41	
2120	FN31		
2121	FN41		
2122	FN43	FN43	
2123	FN43		
2123	FN31		
2125	FN42		
2126	FN42		
2129	FN42		
2136	FN54	FN54	
2137	FN22	FN22	
2139	FN34	FN34	
2146	FN32	FN32	
2147	FN24	FN24	
2148	FN32		
2155	FN23	FN23	
2155	FN43		
2156	FN23		
2158	FN12	FN12	
2204	FN13	FN13	
2211	FN44	FN44	
2215	FN35	FN35	
2220	FN54		
2220	FN44		
2224	FM16	FM16	
	locals on 6, 2, 432	2	
2258	FM16		
2337	FM18	FM18	
6 Mtr Skip	30 K	16 grids	
Totals	128 K	45 grids	

Skip accounted for 23% of all contacts and for 36% of all grids worked



(Author's Note: The article also included an old picture of my portable set-up, shot in the summer of 1998. I included it to the VHF editor of the NCJ for reference purposes. I did not realize that it would also be used in the article about a January contest, when there was snow on the ground! It is as follows).