

# SNØHQ in the 2004 IARU HF World Championship

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This year's SNØHQ operation was a great success, with many new changes this year since our first operation in 1994 as 3ZØHQ.

The most significant improvement was that for the first time in the SNØHQ operation all operating positions were networked together. This was made possible primarily by the tremendous effort of the SP3KEY club: SQ3JPM, SP3RBR, SP3DWQ and SP3HRN. It was their initiative and execution, with software written by Marek, SQ3JPM.

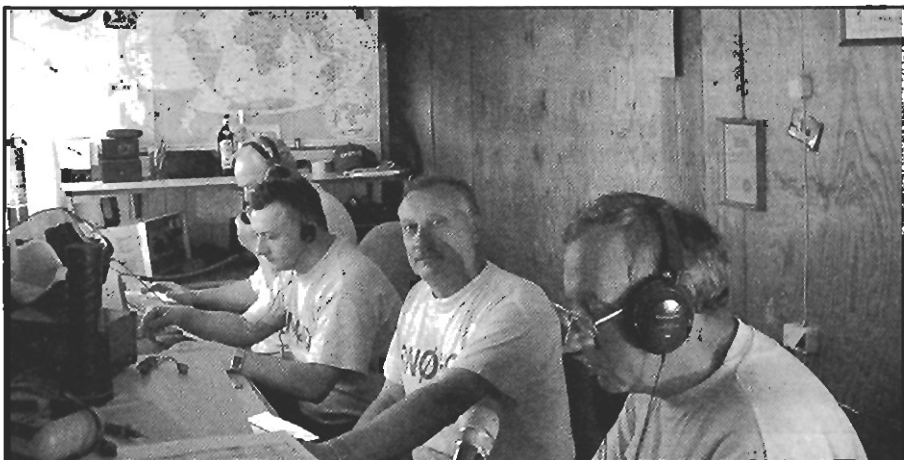
In March 2004, we had our first technical gathering for all those involved in making this project possible. Shortly after, we began software testing that lasted right up until the start of the contest. Although testing was done with SNØHQ operators for several months, it was not until the contest that we actually had every one of the operating positions on the network simultaneously.

In June of this year, we had the first of several pre-contest gatherings of all SNØHQ operators, this one at the home of Janusz, SP6IXF. As usual, we dedicated our time to discussing operating strategy and assigning bands/modes to individual stations. The deciding factor was, of course, the antennas available at each station, followed by the geographical location (Poland is a big country!) and the operating teams.

The software we developed allowed connecting CT in a network at each of the individual locations throughout Poland. We made continuous improvements and changes to the network over a period of several months, thanks to the intensive effort of Marek, SQ3JPM. We used the TCP/IP protocol and client-server software to connect all operating positions. Each operating position had the client software installed in the computer with CT. Prior to starting CT it was necessary to run the client software and establish a connection with the server. Next, CT was run and configured and was in fact connected to the client software. All data entered in CT (QSOs, messages, passes, etc.) were transferred to the server via the client. The server software was processing all received data batches and distributing them to other networked clients. There, on each computer, the client software was transferring them to CT and we could see them as QSOs, Alt-G messages, passes, etc.

## The Moment of Truth

When the start of the contest finally came, it was our moment of truth. If all



The 40-meter SSB team: (from the front) SP6DNS, SP6IXF, SP9P, SP6A.



The 20-meter SSB team: (l to r in back) SQ2BZW, SP2BZW (father of SQ2BZW), SO0WDX (US5WDX), SP4ZO; (l to r in front): SQ2CFB, DJØIF (SP8RX), SP2FAX.

else failed, we'd go back to individual logs like we had done in previous years.

It worked! We did have stations that would lose their local network connections, and upon reconnecting, they would not have QSOs logged by other stations during the interruption. Unlike *WriteLog*, CT does not update other logs during such an interruption. But despite this flaw, everything else worked flawlessly and was stable throughout the contest period. Our efforts paid off!

Operating in a network during the

contest was an emotional experience—we had the opportunity to immediately see the results on all bands. For the first time we had a feeling of operating "live," that this was really a group operation—the result of the combined efforts of the whole team.

The first hour saw 1300 QSOs flash by on our screens, the next few hours were not much worse. In addition, spots from the DX Cluster, the band maps, "Alt-G" (intra-station talk) and "Alt=" (show pass window) appeared on our

screens like a kaleidoscope. For many of us that had never operated multi with CT, it was quite an experience. Did you see the movie *The Matrix*? At the start of the movie, there are millions of numbers that scroll on the screen. The same thing was appearing on our CT screens.

Despite our extensive preparations, during the contest we discovered some weaknesses in our programming that we will certainly fix before our next operation. Nevertheless, it was a big improvement in our score from SN0HQ. We ended up with a claimed score of 19,861,240 points (18,788 Qs for 44,632 points with a zone multiplier of 210 and an HQ multiplier of 235).

This is the best score ever from our HQ station in the IARU. But we realize that we haven't reached our potential yet. We still have a ways to go, primarily in improving the skills of our operators and taking more advantage of what a networked log has to offer. We're satisfied, but at the same time, we know we can do better!

This year's effort was record-breaking in the number of people who participated in the operation at all the various stations. We had a total of 70 operators involved: SP-0404-JG; SP2BZW; SP2FAX; SP3DOI; SP3DWQ; SP3GEM; SP3HRN; SP3HUU; SP3J; SP3RBR; SP3VT; SP4-17-001; SP4DZT; SP4GFG; SP4JCO; SP4R; SP4Z; SP4ZO; SP5HNC; SP5UAF; SP5XVY; SP6A; SP6BBE; SP6CZ; SP6DNS; SP6EKS; SP6GCU; SP6HEQ; SP6IXF; SP6M; SP6ML; SP6RZ; SP6T; SP6TGD; SP7GIQ; SP7MTF; SP7NJX; SP7SP; SP7VC; SP8ATI; SP8BRQ; SP8FHK; SP8FUX; SP8GQU; SP8GWI; SP8GXA; SP8LBK; SP8NFE; SP8NR; SP8QED; SP8RX (DJ0IF); SP8SRZ; SP8TJU; SP9ENV (DL1EKO); SP9H; SP9HVV; SP9P; SP9XCN; SQ2BZW; SQ2CFB; SQ3A; SQ3JPM; SQ3TQM; SQ6ELV; SQ6MS; SQ8J; SQ8JLA; SQ8JX; SQ9IET; SQ9UM and US5WDX (SO0WDX).

To this list we need to add those who provided logistical support—mostly family and friends. On an optimistic note, we have to report that this year we had many young hams involved in our operation, mostly members of the WWYC (World Wide Young Contesters). The opportunity to operate under the watchful eyes of experienced contesters is one we hope will bring us further rewards in the future.

Our stations this year were located at the QTH of the following individuals:

1.8 CW SP6EKS  
1.8 SSB SP6CZ  
3.5 CW SP3GEM  
3.5 SSB SP8BRQ  
7 CW SP4Z  
7 SSB SP6IXF  
14 CW SP7GIQ  
14 SSB SP2FAX

21 CW SP8YMM  
21 SSB SP3GEM  
28 CW SP3KEY  
28 SSB SP6CZ (antennas, equipment, etc. prepared by SP7VC)

Over the past few years of operation in IARU, we've created a strong and integrated team. It was not an easy task. Every operator has his own approach and strategy in the contest. Those who offered their stations for the SN0HQ are individualists – you have to be an individualist to build and maintain a big station. As part of Team SN0HQ, we learned to put priority on the results of the multi instead of on individual results. There is always much discussion on our mailing list and during our periodic meetings on how to accomplish this.

### Sharing Knowledge

The efforts of Team SN0HQ have extended beyond the IARU contest. We recently published our first "contest handbook" for Polish hams. The first edition of the handbook became available a few weeks before the IARU contest. It is on the Web as a PDF file and is constantly being updated and revised.

One of the chapters is a translation (with NCJ permission) of "How Much Is A dB?" by Jürgen, OE5CWL, from the September/October 2003 NCJ. It is our contribution to introduce contesting to the large number of hams who are entering the HF bands, which is happening in Poland as well as elsewhere.

Following the contest this year, for the second year in a row, we've been exchanging logs with HQ stations in other countries. For years we have been doing it with DA0HQ, which has helped both stations in improving scores. Last year we exchanged logs with DA0HQ, OH2HQ and R7HQ. For us it has been very instructive. We have published some comparative analysis of these logs, which is available at [www.sn0hq.org/files/hq\\_logs.zip](http://www.sn0hq.org/files/hq_logs.zip) (it is a zipped MS Excel file).

At the time of this writing, we will be having a post-contest meeting of Team SN0HQ at the annual SPDX Club gathering in October. We will summarize our SN0HQ operation to the SPDX Club and the PZK leaders.

We hope to work you in the 2005 IARU HF World Championship! **NCJ**

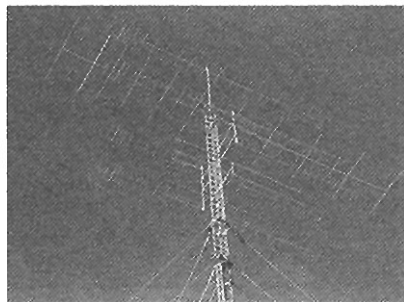
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