

SH5 - Post-Contest Log Analysis Software

With the main part of the contest season behind us, I suspect many contesters are looking at their logs and wondering how they can learn from them, to improve their scores next year, or else just for the fun of it.

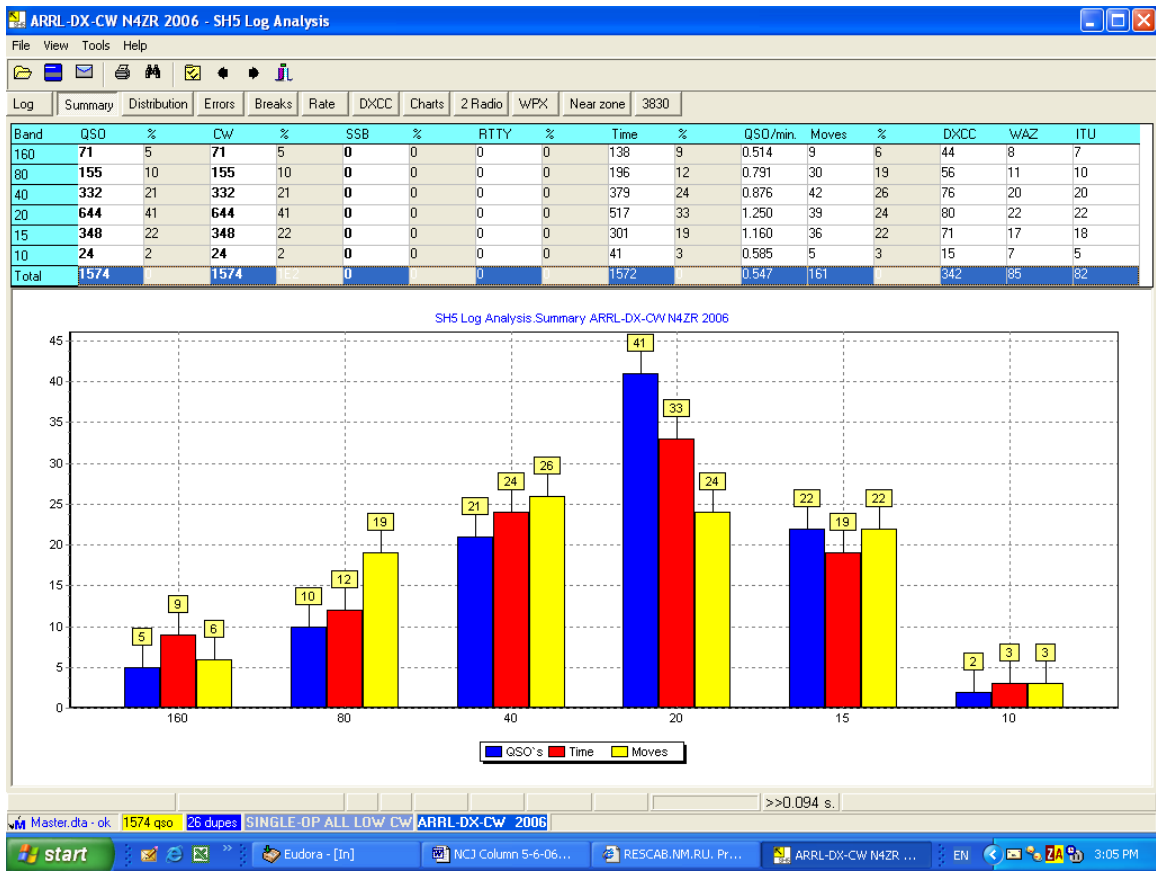
For many of us, our first exposure to this post-contest log analysis was probably through the rate sheets and other analytical tables produced by CT and TR Log. Later, there were Writelog's built-in functions, which added some capability for graphical analysis, as well as the statistical functions built into N1MM Logger. But what if you want more?

A few weeks ago, I asked that question on the CQ-Contest reflector, and I was frankly surprised by the paucity of answers I received. A couple of people suggested CBS, a DOS utility written by K5KA; you can read a description at <http://www.kkn.net/~k5tr/software/cbs-readme.txt> or download it from <http://www.kkn.net/~k5tr/software/cbs.exe>.

CBS produces a fairly standard set of post-contest reports, for most of the major US-based contests, starting with the Cabrillo file produced by your logging software, including rate sheets, country distributions, and the like. Somewhat contrary to the caveat in the "readme" file, it will run in a DOS box under Windows XP, so long as you have the executable program, a cty.dat file, and the Cabrillo file all in the same directory (on your Desktop, for example).

I find that graphical representations of data do more to stimulate my brain cells, so I was really interested in finding out what Windows resources might be available. Several references on CQ-Contest led me to SH5, a new freeware log analysis tool written by Dmitriy Gulyaev, UA4WLI, which is obtainable free from the author at <http://rescab.nm.ru/>. As this is written, the most current version is 1.15beta, released February 24, 2006. By necessity, this review can only be a quick snapshot of a program that is evolving quickly.

SH5 can work with Cabrillo, ADIF, and TR Log files; support for CT 10 binary files is apparently planned. When it opens a log, the first two screens that you are offered are an annotated copy of the log and a graphical summary of the log's contents.

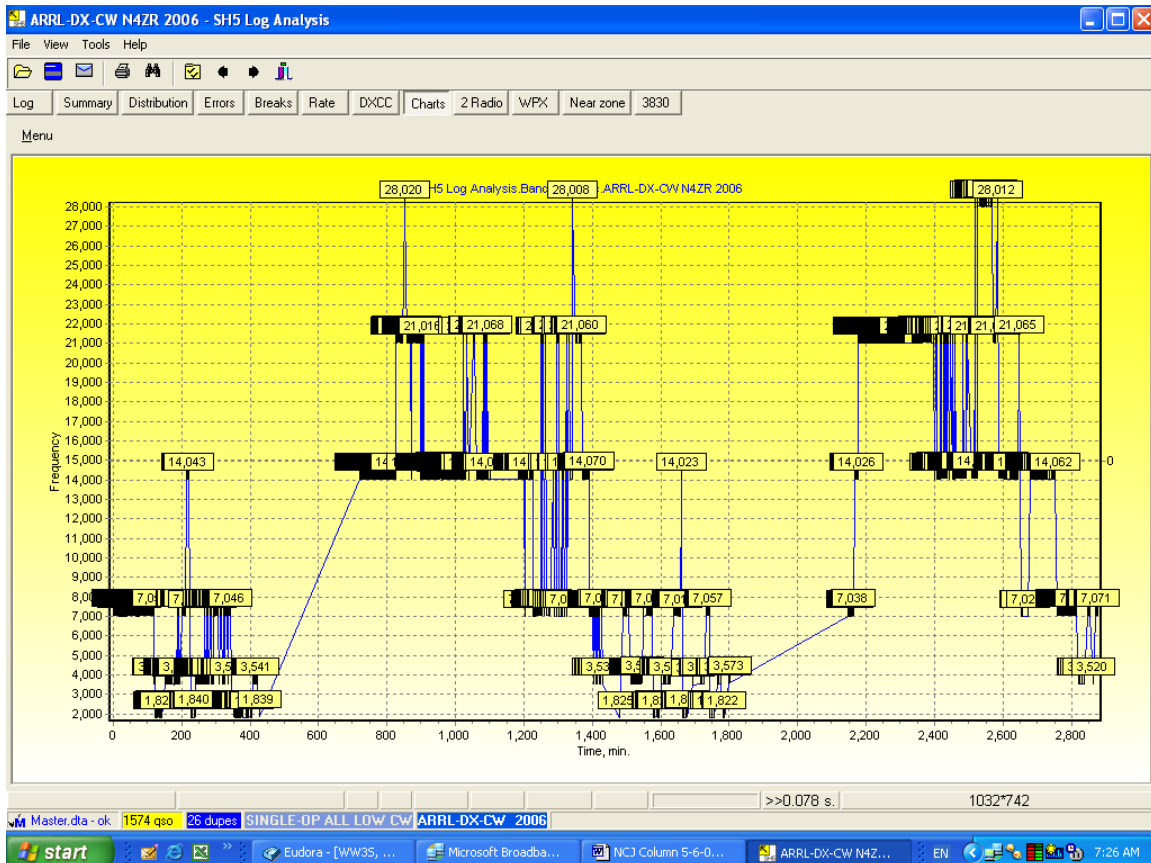


This “Summary” screen presents several key statistics visually and numerically, showing you how many QSOs you made on each band, how much time you spent on each one, and a third variable, “Moves.” The latter demonstrates an important gap in SH5 – currently, there is no user manual or published documentation, so the user has no idea what this represents. Right at deadline, Dmitriy sent me a draft help file that fills some of this gap; I will be helping him edit and supplement it before it is published.

Many of the screens in SH5 are less cryptic – for example, the Log Screen simply shows you the log of the contest, derived from Cabrillo or the other formats, with color coding to denote new multipliers, band changes, and so on.

SH5 really emphasizes graphical representation of data. Click the “Charts” button and you can select from among over a dozen 2 and 3-dimensional charts that display various aspects of your log, including your QSO rates in various forms, the aggregate growth of your QSO total over the contest, when you were changing bands rapidly, and so on. Other charting buttons display your second radio QSOs, the number of QSOs with various DXCC entities, and a variety of other variables. For example, in the chart that follows [Fig. 2] you can clearly see the times when you were QSYing rapidly between bands (in SO2R for example). Charts can either be labeled (as they are below) or not, and you can zoom in for closer examination of a shorter time period. I would prefer to see actual clock

times during the contest on the horizontal axis, frequency bands rather than kilohertz on the vertical one, and no chart line during off periods, but these are easily correctable nitpicks.



One of the things that SH5 already excels at is in pointing out errors in your log. I don't want to get off on the subject of how much and which kinds of post-contest log "clean-up" are ethically permissible. Whatever your personal standards, SH5 provides excellent tools. One table, for example, calls out all the callsigns that are in your log but not in the master.dta file. Another identifies callsigns in the log that are almost the same (only one character different) from other callsigns that are in also your log, ranked in order of how many times the "almost the same" calls appear, and also tells you whether the call you logged is in the master.dta file. These would be high-probability "busts", of course.

When I finished looking at my ARRL DX CW log in SH5, I was impressed, but somehow also a little disappointed at the amount of tactical and strategic insights I had gained. Fortunately, the software is early in its evolution, and the author seems very open to input from users, so we can hope for significant evolution. .

As an example, I would like to see more charts in which multiple variables are displayed – for example, the chart that shows your QSO rate over time would be much more useful if it also showed (perhaps through color coding) the bands you

were on. I would like to be able to graphically compare the results from two runnings of a contest, to see where I gained or lost ground. Currently SH5 is limited to just one. SH5 already does rather elegant 3-dimensional charts, so perhaps this capability could be used to display two logs at once. Linking from areas of a chart to the corresponding area in the log would also be useful; this is already done with many of the statistical tables.

There's one important consideration that is both a limitation and an opportunity. Right now, SH5 can read any Cabrillo file and do its various analyses. However, some analyses I would like to be able to do would require the software to "know" the rules for particular contests. For example, I would like to see charts of complex values such as points per minute, computed from multipliers x QSOs and displayed across the entire 48-hour expanse of a contest, so that you could see when you gained ground and when you lost it. Perhaps in a future version, SH5 could read the Cabrillo header and apply the rules for a particular contest if it "knows" them.

And that's my bottom line – add a good user manual and the next level of analytical capabilities, and SH5 will become a required tool in every contesters' software toolbox.