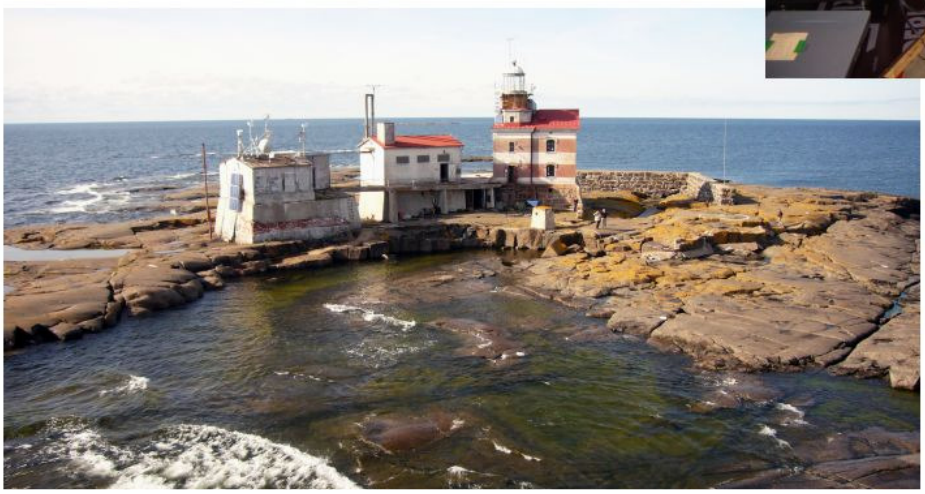
PileUP!

Volume 11(3) 2007



PileUp! is the newsletter of Contest Club Finland published in Finnish and bad English. You are welcome to contribute via **o h 1 w z @ s r a l . f i**.

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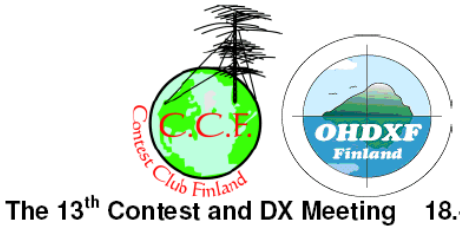
PileUP! 11(3)

TU: DL8MBS, OH1JT, -2BH, -2BP, -2PM, -2PQ, -5LF. -6UM, -7KUD, -9MM & -9GIT.

OH2BP CQWW RTTY team 2007.
Karkka OH2PQ, Väiski OH9GIT, Kari OH2BP and Ari-Pekka OH7KUD

Editorial



Only a couple of days ago I received the information from Pasi, OH6UM that CCF and OHDXF will again be cruising from Helsinki to Stockholm in January 2008. The agenda looks good again - thanks to the scouting of Pasi's team. Bon voyage!

SAC 2007

The activity was good. The information on the web-site shows a total of 710 CW-logs and 635 SSB-logs received by the organizers in Finland (SRAL/CCF)[1]. In 2006, OZ5WQ processed 809 CW and 465 SSB-logs. SAC seems to be well breathing. Thanks to all participating.

The logs for 2007 are now being processed by OH6RX & co. Knowing the attitude of this platoon and the log-tools provided by SM2EZT - we should see the results, trophies and diplomas very soon (for SAC 2007 at least!).

CQWW RTTY 2007

The ionosphere's reflectivity wasn't at its best (see OH2BP's report in this issue) this year. The RTTY activity in Scandinavia was elevated by the fact that the SAC SSB part did not collide with the event this year. In 2008, NRAU has its triennial meeting, where SAC rule-changes can be made. I hope that SRAL has money to send someone to the meeting this time (!) and that SRAL's contest manager (actually SRAL) makes a proposal to move the SAC's SSB-leg to another date. It does not even have to be in the autumn. PileUP! 10(3) has the contest managers' interview.

CQWW CW 2007

Callsigns such as 3DA0ZO, 6W1RW, 6Y1V, CU2A, D4C, OH1VR/VP9, OG0Z, OH0M, OH0Z, S2ZJO, T88WV, VP9/OH3SR, ZB2X and ZS4TX will be keeping us busy in this year's CQWW DX CW[2]. There's been some unfortunate coronal hole activity that's has its 27-day period matching with CQWW DX SSB and CW parts - but let's all hope that the forecasters are wrong. The 10.7-cm flux will remain at about 67, which supports a 15-20 MHz MUF. Making OH-JA or W4-OH contacts on 21 MHz will be utterly difficult. On the other hand, 7 MHz will be a DX band in OH for 48 hours and 3.5 MHz only shuts down for a couple of hours. OH0Z is your beacon on 21 MHz and OG0Z on 28 MHz. Also, OH5Z has announced M/S activity. That's one good station in OH to make skeds with or to try odd openings. Let's all enjoy CW, DXing and meeting of old friends on the bands.

PileUP! in 2008

The last two issues have been downloaded for more than 3000 times each. There are potential readers and happily we have had a few writers again. More is needed on that front to keep the newsletter active. PileUP! can't pay for articles. I've even said no to advertisers to keep a certain profile - hoping that it would have attracted writers. How the 12th volume of PileUP! in 2008 will look like remains currently open. If you have ideas or inspiration - do contact CCF.

73 OH1WZ

[1] http://www.contestclubfinland.com/CCF/

[2] http://www.ng3k.com/Misc/cqc2007.html

Where is the competitive foundation for our Formula One?
Chris, DL8MBS

In the last issue Ilkka asked for opinions about contesting being a sport or not. Well, here is one. I don't think contesting is a sport. Sorry to say that the main problem is the missing control about sticking to the rules. In sports depending primarily on skill like soccer or running referees can control it mainly by watching the actions (including fouls) of the competitors. But with technology playing a paramount role contesting is more like car racing or bob sledge. Those sports don't freeze technical development or prevent innovations but nevertheless have a wealth of detailed rules defining a lot of crucial parameters. To enforce these rules they have on-site inspections leading to a rich and (in) famous history of cheating and discussions about technical tricks (and everyone preferring Häkkinen over Schumacher will remember them...).

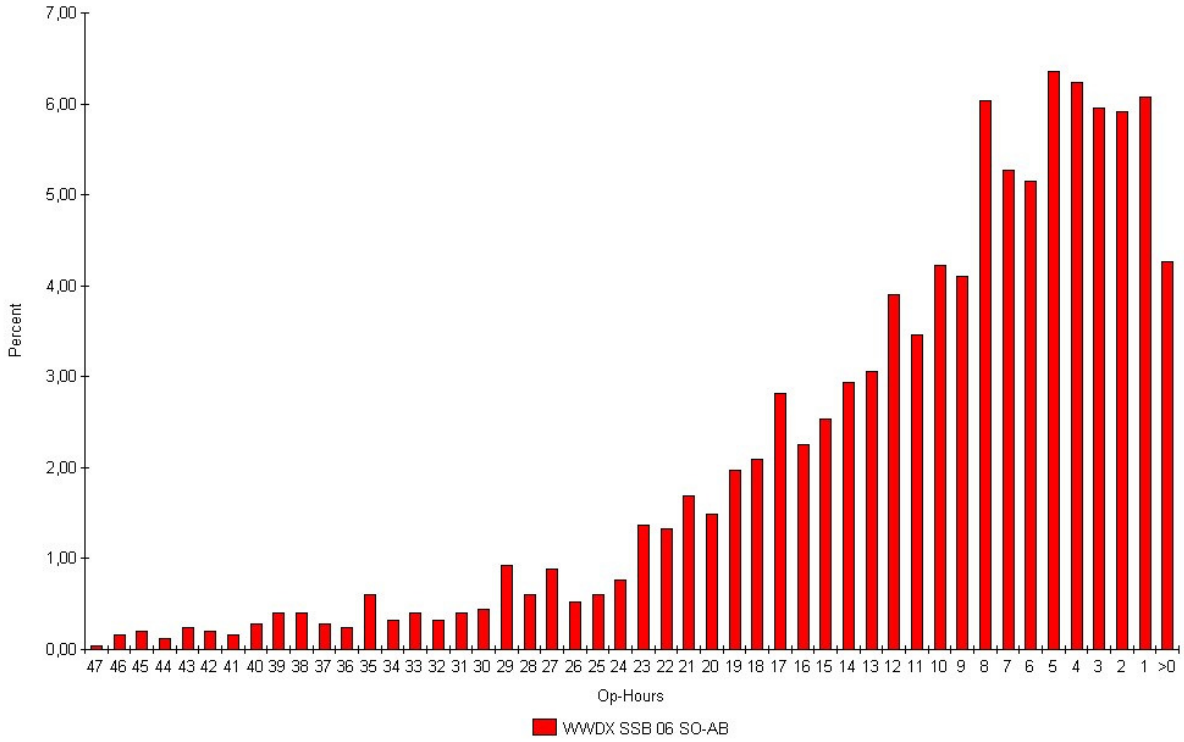
Such enforcement is not possible in our competitions or who can control for example a TX-lockout in SO2R-setups to prevent violation of the "only one-signal at a time"-rule? Realistic speaking not too many will really believe that our honorable system leaving it up to the honor of the participants prevents cheating. I think even most organizers feel that humble - or why do so many omit the numbers for the ranks in the printed score lists?

Having done a lot of sports I feel another difference. It's hidden in the often used expression "true contesters" - meaning those with very big stations and those in the award ranks equal to medal ranks in sports. But: Imagine a marathon-runner with a time of 3h 15 min for 42 km, which is so far away from medal ranks as is a 100W&Dipole-score from a WWDX-SOAB-award but nevertheless a big personal achievement. Then tell this guy he were no "true runner". I'll bet you will do it only once.

But the ham-view at the majority of not so "true contesters" is not an arrogant attitude of Formula One Contesters - much worse: it seems to be shared by the majority. Most or at least too many submitters of scores below the award ranks don't feel and operate as competitors but as participants. For a difference look at runners: they sprint even between rank 82 and 83. They feel as real and "true" competitors - on their level. Even "medium gun" runners look for and discuss training patterns, learn about physiological mechanisms and and and. In our group I don't feel much of such a broad interest to learn about propagation and equipment or to improve skills - which for me is the much better definition of "serious contesting" instead of judging by ranks or size of antenna farm. But for example the wealth of websites with elaborated high-end SO2R-switching schemes compared to the absence of simple experiences and tips about basic SO2R-listening skills for a "Joe-Vertical"-setup shows the situation of demand and supply.

It is nice that so many "participants" are (more or less) happy with "handing out a few QSOs" - but how much more overall QSOs would be possible if more of them/us took it more as a contest than as an activity weekend. But why should they work again on another Saturday afternoon all those big gun beacons worked already a zillion times before? Why should they invest any effort into working some lowband mults at unhealthy local times under difficult condx if it is only to pass along points in a relaxed fashion?

In my opinion most know and feel how much their outcome is less a function of skill than a function of investment in hardware (in most cases relatively strict limited by money and real estate) and time. At least the latter seems avoidable because we could offer realistic distances allowing most participants to "finish" as does every runner (he has a choice in a given running event between marathon, half-marathon and 10 km - being a "true runner" on every distance). After proposing to have more "halftime-categories" (like i.e. in IOTA-contest) or at least adding the op-time to the score-tables (to make results comparable for the majority) I received quite a few mails stating that "true contesters" operate full-time. Well - they were 4 out of 2651 SOAB-entrants in WWDX SSB 2006. At least that is what the open logs of WWDX revealed when run through a time-calculating software (more at http://www.dl8mbs.de/40984/45289.html) .



Would halftime-categories reduce the overall activity because participants reduce their op-time to halftime? Already now 90 percent of WWDX-SSB-participants had operated halftime or shorter with two thirds operating 12 hours or shorter. Not much activity to be lost but perhaps some more competitive operating to be gained when more participants can "finish". The reputation of the "Formula One"-title in the full-distance won't suffer - or does the reputation of the marathon-winner suffer when there is someone winning a gold medal over 5000 meters? And it is also in the own interest of the big guns to stimulate more competition in the "lower" ranks - if it were not for contesting as a whole. But of course this time topic is only one piece in a puzzle and as everything else written here only a personal opinion not be shared. Shared is hopefully at least the addiction to the incurable but very satisfying mental disorder contesting and the wish to give it more competitive feeling for more - being a sport or not.

An attempt to analyze DX-contests

Ilkka, OH1WZ

This article was originally written in Finnish for PileUP! 6(2) in 2002.

The aim of this piece of writing was to construct a qualitative, expert score-model, a self-coaching tool that can be used for analyzing, understanding and improving one's performance in a DX radio contest. It is a compilation of thoughts that sprout from my personal experience and stuff learned from others over the years. It tries to focus on issues that are relevant when preparing for a contest. The model is somewhat general and thereby it may be helpful to others as well. The expert-model applies to DX contests[3] (SOAB) and has a strong OH-viewpoint, but surely many of the factors are valid in other types of contests too.

General thoughts about score-optimization

In most DX-contests the score is computed by multiplying a sum of QSO-points with a sum of multipliers:

$$Score = \sum\left(N_{QSO(i)} \cdot Pts_i \right) \cdot \sum Mult$$

The absolute value of a single QSO *i* can vary. For example, in the IARU-contest an OH-station can work 0-, 1-, 3- or 5-point QSOs. All "multiplier-QSOs" are usually of the same absolute value, although some weighting is sometimes applied to promote low-band (or geographical area) activity. The multipliers are erroneously thought to have some "DXing type of additional value". For example a KH9 is nice to have in the log, but the score computation is heartless and insensitive to the rarity of the multiplier. It's just one more multiplier. For score optimization, it is worthwhile to study the basics of the score-equation and how rules affect it.

The ratio between the sum of multipliers and the sum of QSO-points varies between contests and categories. That explains why the relative value of a multiplier-QSO is higher for the SOSB entrant in comparison to the M/M station. One multiplier increases the score by 0.5% in SOSB, while the added value is roughly 0.1% for an M/M-station. There's very little room left for optimization maneuvers in SOSB in comparison to SOAB. Here. I had SOAB mostly in mind when writing this.

Much of the score optimization measures take place before the contest, but some of it happens during the contest. There are also some post-contest actions that may improve the score or future scores. All of these aspects are looked into here.

The score to be optimized is the one that is shown on the computer screen at the end of the contest. Trophies are not handed based on intermediate scores, the best per-hour rates or the most error-free log. This was recalled in writing this.

A DX-contest can last up to 48 hours. The operator does not necessarily last for that long. Optimization of the contest score is a dynamic task as many of the factors change with time. This also makes it ill-posed - we can't really reach any sort of (definite) optimum, but we can try our best. That's what was tried here. Also, as it turns out, and many of us know by experience, there are so many factors in the game that we can't have the necessary information to carry out comprehensive optimization. Here, much can be done by those who have access to logs and other on-line data. In the old days you studied your own old

[3] Contests like the CQWW, CQ160, WPX, IARU, IOTA or ARRL 10 m. But also SAC, ARRL HF.

logs, now the available data is overwhelming.

This conceptual, all-around score-model tries to list factors that are relevant to the score. It is speculative, guessing, and wrong in places - just an attempt to gain control over our "sport".

An analysis of the participants - What's in the buckets?

A contest consists of a population of stations. It would be good to know the basic characteristics (scorecards) of this population.

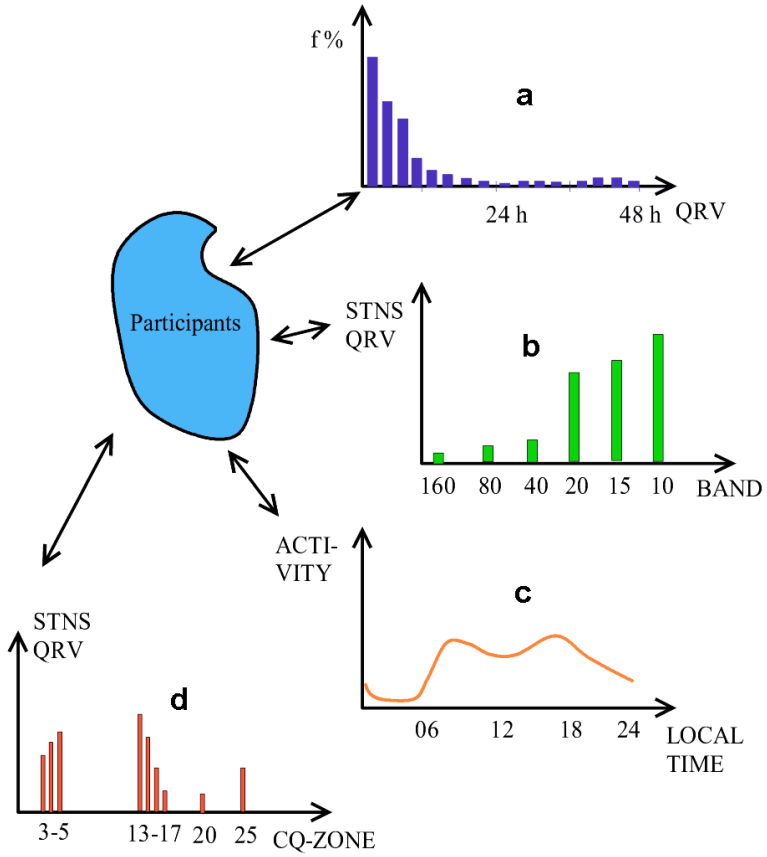


Fig. 1. The participants have a varying amount of time to be active (a); most stations are equipped with 20-10 m antennas (b); the participants favor daytime (c) and the population has an uneven geographic distribution (d).

Most people enter a contest for only a few of hours (Figure 1) (see real data by DL8MBS in this issue). My guess is that 50% of the stations use less than 10 hours. Among the participants i.e. those who make contest QSOs, there is a minority of serious contesters and a vast majority of non-serious contesters, DXers and award- or QSL-hunters. You are probably identified by many who not necessarily give you a call if it is not tempting enough.

The distribution of behavior (motivation) could be: Serious participants 1-2%, Half-serious 5-10%, Collectors 10-20%, Sunday drivers 70-80%. The activity on the bands in a given area depends on local time. At 5 a.m. local time, all Sunday drivers and most Collectors are sleeping and you are left with small number of stations. This causes unbalance on the bands and an example of this is sometimes seen around 00-03Z, when 14 MHz is open between NA and EU. It is difficult to get a run to EU from W/VE, while it works nicely the other way. Sometimes the same happens around at 08-11Z but it is then in the favor of the W/VE stations.

The stations with a 14-28 MHz beam (any antenna) outnumber those that are equipped with a 7-MHz (rotatable) antenna (Figure 1). Uneven distribution of available bands was also caused by the licensing limitations, which have largely disappeared today. Many of us remember the JA-licensing system of the 1980s and the SSB-activity on 21 and 28 MHz of those 10-W stations. That bucket is now a completely gone and lost. Lack of space limits antenna installations on the 40-160-m bands. It would be nice to know what sort of antenna a potential multiplier has on each band - and some are known to posses such data and they are successfully using it in moving the right stations from band to band.

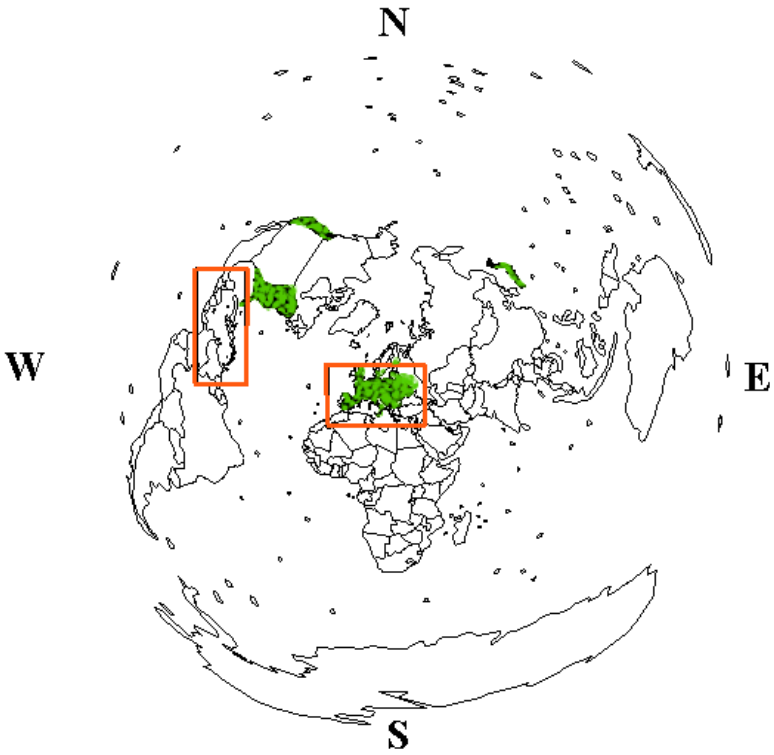


Fig 2. Areas of high density of participants (green) and areas of high density of multipliers (CQWW, rectangles) as seen from OH2. 70-80% of the multipliers and over 95% of the QSOs are worked from the outlined areas.

There are over 1.1 billion people in VU but it is easy to miss the zone 22 multiplier in CQWW DX CW. A while back it was VU2WAP and now VU2BGN is active. Radio contesting is busyness in W/VE and EU only (Figure 1, 2). It is an uneven distribution. If CW alone is considered, it is focusing in W/VE and EU even more. JAs had a major role, but the activity there has collapsed in the last 10 years. Note that contest rules further divide the population: in WPX almost everyone is a multiplier; use of IARU and CQ zones result in an uneven distribution just like the use of WAS, DXCC or WAE partitioning. Rules thus affect the "oddity-value" of a multiplier. The uneven distribution of the participants and the rule-effects have lead to peculiarities: QTH-optimization is dominating and some contests are always won from a small geographical area. Study the rules!

If you have fixed directional antennas it is easy to determine where it is optimal to have them directed in OH2 by looking at Figure 2. You need a strong signal and good receiving to and from azimuth sectors 270-345 and 40-45 degrees. "To keep the frequency clear" - yes that is

the wording by many in OH - it is necessary to have a signal towards EU as well. They continue, po-faced: "Well I can use a couple of GU84s since we should not be considering the power that I run to the EU TX-only-antenna. Also, when I measure the power coming to the radiating element of each antenna, I'm not exceeding the license constraints." Output power is off topic here and dull anyway.

Analysis of the playground

There is (used to be) two models or modes of making two-way contest QSOs. On any band there always exists a balance between those doing S&P[4] and those calling CQ. You can try to do both simultaneously within the limits of your station automation, the contest rules and your skills. There is limited spectrum that we are given for the contest activity. I don't know if it makes sense, but I feel that it is possible to determine an optimal occupation of a band - optimal in the sense that the speed (number) of 2-way QSOs is maximal for that spectrum (given skips). If the number of participants is too high, interference increases and the per-band QSO-rate goes down. Everyone who has listened to 3.7 or 7 MHz in EU during CQWW DX SSB knows this. On the other hand, not everyone can (or wants to) call CQ or stay in the S&P mode. Most likely you can't win a contest by doing only the other mode. If a contest lacks activity, the CQ–S&P -balance breaks, it is no longer fun and people switch off their radios.

The total spectrum on SSB is approximately 1.8 MHz and 50% of it is on 28 MHz. Lack of space is evident on phone, except when 10 meters is open. That's why 10-meter rates go high - the S/N ratios are good and there is lots of room. I remember listening to EA8BH in 1999, when N5TJ made 10000 QSOs. It was the solar maximum and EA8BH could always find a clear frequency near the MUF that stayed high all the time. In 2001 HC8A (N6KT) made an amazing 6957 QSOs on 10 m. During the solar minimum, the nighttime MUF drops below 14 MHz and everyone has to fit in the 400 KHz spectrum on 1.8 - 7 MHz. About 200 stations can call CQ in that space and still keep the QRM-level tolerable. That is no place for a low power station and even the big guns feel uncomfortable. On CW, the density of stations can be as high as 2 kHz^{-1} without major interference[5]. There's room for 1000-1400 stations to call CQ on CW if the communication takes place in the CW-only-segments. The EU-records on 160 m reflect this; 1264 QSOs on SSB against 1843 made on CW by GM3POI.

Lack of space and the high noise levels on the low bands are seen in the per band QSO distributions of stations such as ZD8Z, PY0FF or S9A. The distance to the masses (Figure 2) from CQ-zones 11 and 36 is too much and it is difficult to manage the pileups. These guys surf with the MUF, where the S/N ratios are better. Places like EA8, CN2 and P4 are at least one skip closer and it means +6-10 dB in signals to and from EU and W/VE.

[4] S&P = "Search and pounce". One tunes a RX-VFO and identifies stations calling CQ in order to call and work them. There are variations nowadays: A computer may identify the station and tune the VFO automatically if programmed to do so - consider DX Cluster-infos. In Finnish we have a verb for this: "plokata" that comes from the swedish verb "plocka" = "to pick".

[5] What you can hear depends on the bandwidth and strength of the signals on the band near the RX frequency and the receiver's dynamic range. In a contest, amplifiers are easily operated in their non-linear mode, band is full of signals with keying clicks, malfunctioning transceivers etc. Listening to very weak signals that you normally could copy well outside a contest can be impossible in all the noise. Strive for good S/N.

The ionosphere is not fair to all sides and it is more reliable to predict the ionospheric conditions near the equator. The polar paths are insecure. The settings of the aurora-attenuator change temporally and spatially. For example in OH, a distance of 300 km can make a significant difference in the way the polar path (high MUF) is accessible and in the way the aurora attenuation affects the signals. The multiplier pools are normally not affected by the aurora in OH, but aurora can easily spoil the W/VE and JA paths. Sudden changes take place and it just adds one element to the score optimization task.

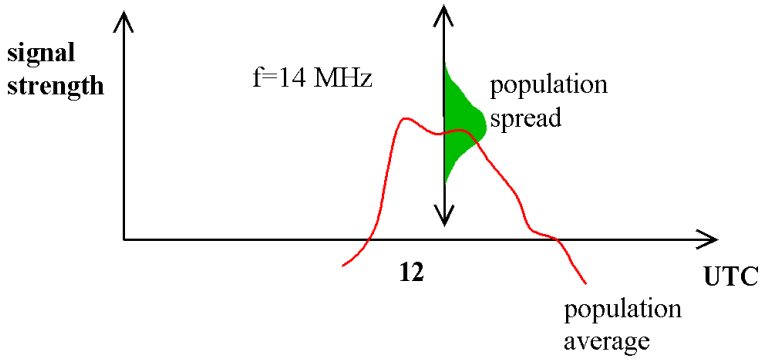


Fig. 3. It is good to have an idea of the propagation to a given area. The graph illustrates how the signals from W2 could be in OH. A good RX-antenna is essential in keeping the masses (the green distribution) available and above the noise.

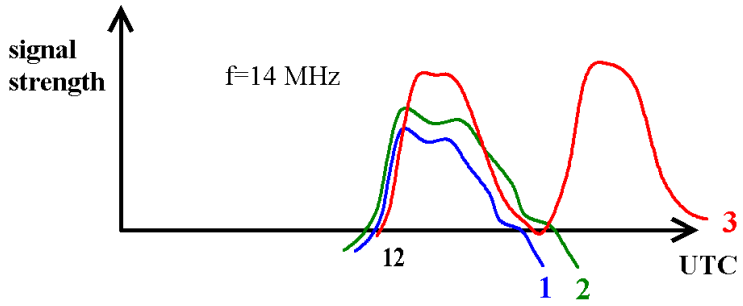


Fig 4. Selection of the QTH is a part of score optimization. The graph illustrates how a signal from a W8-beacon is heard at 3 different QTHs in Finland. QTH-3 could be somewhere near the 64N latitude, from where the polar high-MUF ionosphere is reachable in the late evening.

Hearing well is everything (Figure 3, 4). You need to be heard well too. Calling CQ on a frequency on which the noise level is low helps always (move with the MUF!). Directional antennas, preferably with options to alternate the take-off angle (ability to prolong a band opening) and the directional patterns are optimal. The audience is listening and the idea is to maximize (at each moment) the number of stations (not really so simple, maximize the QSO-point and the multiplier fluxes) potentially being able to identify the CQ call. Having a lot of ERP in many directions is of course beneficial, but it is always a compromise.

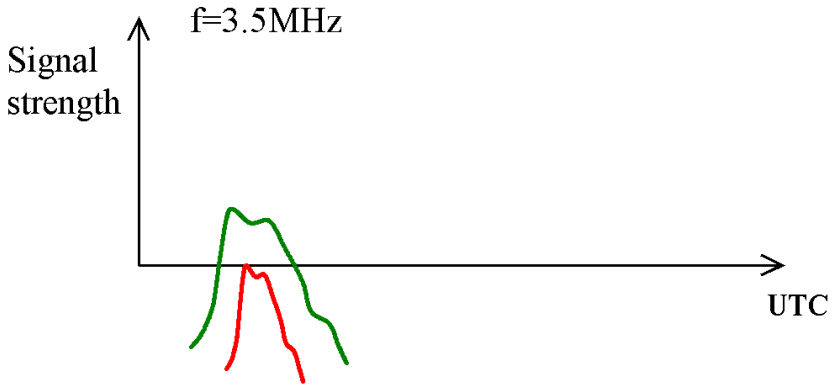


Fig 5. It is important to be aware of factors that cannot be overridden. The graph could illustrate W2-beacon signals on 3.5 MHz in OH8 (64°N) and SP (55°N). A natural 20-30 dB auroral attenuation is a tough opponent. The winning strategy (optimization) in OH needs to be based on something else than a 700-W/VE -station 3.5-MHz-bucket. The graph also could illustrate the difference between a 100-W and a 2-kW station. If one wants to log the small-pistols, the timing has to be right.

Understanding the ionosphere towards the QSO-buckets and multiplier-pools (Figure 2, 5) is essential for score optimization. The rhythms are 24 hours, 27 days and 11 years. On-line data is nowadays available as well as software for online calculations of QSO-probabilities on a given path and frequency. When you enter a call the "logging-software[6]" can automatically call the propagation-predicting software and suggest the bands where the odds are highest for a QSO. Real exposure to the band conditions and experience gained may still help, but when the operator is tired the guesses by the software are probably better.
Here, it would be interesting to try some sort of computer-assisted real-time ionospheric modeling by having RXs monitoring BC-signals or maybe even CQ-signals. This would replace the type of reasoning I learned at OH5NQ some 15 years ago: "When W7WA is S9+5 (on 14 MHz), we'll ask him to move to 21 MHz.

The signals on the low bands are often poor and we find the big-gun stations working each other. The peak of the propagation may be needed for a successful QSO with low power station (Figure 5). If you make the QSY with someone it helps as you know who's on the frequency. Alternatively there's the DX-cluster and the features of the contest software that help you tune the VFO and log the QSO. It is cool, but where's the fun and effort?

It seems that the effect of the output power is more relevant, when the propagation is marginal. Also, on SSB big signals are needed for a necessary S/N ratio. Maybe this is why CW-contests are so popular. CW compensates for the shortfall in the equipment and power. It is an everyman's mode.

On the operator-requirements

I use here the attributes that Eki, OH8RC (SK) introduced. Let's call them "Operator data communications settings". A lot has happened in computer assisted contesting since Eki listed his thesis. Operating skills that require optimization are:

[6] What is the correct term nowadays? At wintest.com terms contest software and logging software are used. Contest software seems more appropriate.

1. Speed and reliability of identification[7]

When the propagation peaks it may be optimal (!) to start calling CQ. It seems reasonable to think that there are operating styles, which attract other participants to give you a call. It is something simple, smooth, rhythmical, predictable, comfortable and confident. The contrast is something that makes the potential station to turn the VFO-knob. On phone your expression contains the relevant information and nothing redundant. You may have to change the settings; "Domo arigato" once in a while may keep the JAs queued for a pleasant QSO with you. Giving out your call as often as possible has the same effect and helps in keeping the UBN-rates low. You can have 150 more UAs in your log on 1.8 MHz if you know some Russian.

In the S&P mode and especially on CW, you are better off with a skill of approximately 40-50 WPM. It gives marginal. Also, the ability to use a 2 kHz wide filter and simultaneously identify several signals across a 1 kHz spectrum is beneficial. It is all about the speed of identifying and finding stations (or multipliers) that haven't been worked. With a wide filter it is quick to sweep the band.

On phone it is good to remember that English is not the first language of many entrants. ITU recommendations of phonetic alphabets may be a better choice. Similarly, on CW there is an optimal (but varying) speed, weighting, and use of pauses - the rhythm.

The pileups are never too dense for an OH that calls CQ. However, it seems that the best rates are achieved when there's always one station returning to each CQ. And that is not all. He knows your call and copies everything in one over without the need of repeating anything. Similarly, your operation is so confident that the station (accommodates to your style) sends nothing but the relevant information, which you copy at once. It is sometimes sad to listen to a station that has towers with stacked yagis and radio equipment worth of 10000€ not being able to copy a 5-letter (loud) call correct but on the third over. CW operating is different from phone. Also, the main factors (operator-stn-strategy) need to be in balance.

It seems plausible that each operator has a certain QSO-rate (optimal level) after which things slow down if too many stations start to call. A good operator just enjoys the situation and uses a bit of energy to "collect the fruits" i.e. to copy the 3-pointers or weak multipliers. He has an option to optimize and uses it. QRM-level, clarity of the stations calling, thickness of the pileup and the operator's keyboard skills all affect the maximal rate (of points in the final score).

Reliability of identification is linked with the errors in the log. Still some 20 years ago experience was everything. If you heard the suffix APK giving CQ-zone "30", then the operator's own error-correction algorithm would fix the call as VP2APK, or if you did not remember, you would wait for another CQ by him. The database was not stored on the PCs hard disk and skilled and experienced operators had a considerable advantage. Now, with the availability of electronic logs, it is possible to tailor a callsign database that has 90% of the calls entering the contest and maybe only a couple of thousand existing calls that just did not enter the contest that time. Getting 50% of the call correct usually suffices; you are left with one or two options and good odds of guessing right between the few. This has lead to funny situations. Still a couple of years ago OH1WZ wasn't in any database, or it was OH1WZ/3. Oh

[7] I'm excluding this type of skills here: You need to be quick in reacting to the cluster-info. Pressing the wrong F-button can be critical.

boy, did some W/VE-operators have difficulties in believing that I'm not OH2WZ or OH1LWZ. I have to say that these stations were not in the top-score listings. Think if the database would contain information on the antennas, power and type of activity (it is 4 a.m. his local time and this call has never been on but between 4 p.m. and 11 p.m., cannot be that call, or, he's got a good antenna on 80 + kW, I'll move him there). Reliability of identification is no longer subject to optimization during the contest but it has to do with pre- and post contest activities, unfortunately. Access to a lot of logs helps in reducing Bs in the UBN-analysis.

2. Tactical skills

These skills reflect the operator's ability to optimize (master a relevant score-model) his actions before, during and after the contest.

Well planned is almost done. Some are known to optimize the contest minute by minute. 90% of the calls that make the multipliers are known in advance. The actual contest is just an implementation of the plan or a couple of alternative scenarios. The score is ± known a priori. The buckets (populations per area per band) are known etc.

3. Endurance

It takes some effort to optimize the actions for 24 or 48 hours. Sleep deprivation is an old form of torture. In SOR2, the operator identifies callsigns continuously. That's really exhausting. In SO2R operation, it may be optimal to do real SO2R only intermittently. Calling CQ only is simple, comfortable and easy. If there is no access to a DX-cluster, it takes plenty of effort to get (earn) new mults. Towards the end of the contest the probabilities go down and more and more sweat is needed. That means S&P. Automation helps the operator to last longer. Use manually tunable PAs or antenna switches consume energy. Also, don't enter a 48-hour contest unless you are healthy and freed from the saltmine or for a couple of extra days.

Marketing and attraction

In an OH phone contest you would not want to use the call OH1YUY. It takes quite some "tongue-acrobatics" to phonetically give that call. Similarly, on CW I'd prefer OF6F over OH1YUY. Now, in Finland at least, the authorities supplying calls are no longer flying in the economy class and thus sell short calls. Go for one. Many well known contesters send out nice-looking (varying) QSLs to please the audience. The QSLs promote their activity and attract the Collectors to come and work them again. That's maybe 15-20% of the population. Contest stations are visible in the WWW. Some our known to brag about their achievements in newsletters such as the PileUP! "OH-to-you" was the slogan of OH2U, M/M Eu-winner. Attractiveness is affected by tourism. Many (for the delight of us rest) travel to exotic places and optimize their contest scores that way.

Final words and conclusions

Optimization of the contest score seems to be a never-ending job. It is done under budget-constraints and our interpretation of the rules sets some limits to it as well.

Market Reef - From an Outcast to a Pearl - Pekka Väisänen

Märket Reef is known throughout the world since amateurs radio operators elevated its special status to a new level at the very core of their global DXCC activity in the late 1960s, and have visited the rock almost every year ever since. Outside the realm of radiowaves, Market remained an unknown, doomed lighthouse until the turn of the millennium. With its construction completed in 1885, the lighthouse was automated thirty years ago, and the building has since then stood as a forgotten, rapidly dilapidating monument to the majesty of the sea.

In 2006, a trip to Aland Islands came to fruition, together with lighthouse activists from the island province. Luckily, traveling to Market were also two former Market lighthouse keepers including Kee Eriksson (OH0NA/OJ0MA).

The Project Takes Shape

The *Save Market* campaign was launched, and the Market postage stamp together with Market postcards and T-shirts went on sale along with an attractive 2008 Lighthouse Calendar. Several events were organized. On December 21, the Lighthouse Society carried the first shipment of mail to Market and a distinctive Market postmark was introduced much to the delight of philatelic enthusiasts.

A New Lease of Life

The Society also initiated a project to man Market Reef with “new lighthouse keepers”. While on duty, each team member was obliged to undertake designated renovation work. Good swimming and rowing skills were also required since guests had to be picked up by a rowboat as per the prevailing wind conditions. The visiting tourists represented many nationalities so the on-duty lighthouse keepers had to be conversant

in several languages in order to be able to tell the visitors about the magic of Market lighthouse.

In the course of the Summer of 2007, Market Reef was manned by some 50 “lighthouse keepers” for a period of 141 days. You can read about those 141 days and also spot 2007 amateur radio expeditions along the way; http://www.majakkaseura.fi/eng/market/market_diary/

Dawn of Recovery

It is from those memories that Market Book of 2007 is written and it tells you about those exciting activities and sends greetings to all friends of Market Reef.

A grant gratefully received by the FLS from the Northern California DX Foundation of California, USA and the OH-DX-Foundation has helped and encouraged us in our work. You can pre-order the book and many other Market Shop products to help us save the Market Reef. http://www.majakkaseura.fi/eng/

It is our hope that in the years ahead we will be able to exhibit this renovated, historically valuable Pearl of the Sea – the Market Light.

Pekka Väisänen, President,
The Finnish Lighthouse Association.

Martti, OH2BH, keeping the spare radio warm @ OJ0B in SAC 2007.

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Scandinavian Activity Contest SSB 2007 from Market Reef, OJ0B
Pertti Simovaara, OH2PM

The original plan was that Lars, OH0RJ, Antti, OH7EA, Martti, OH2BH and I would go to Market early on Saturday morning September 15 and activate the OJ0-multiplier already for the CW-part of SAC. However Mother Nature did not agree, the sea was too stormy for landing on the rocky island. We stayed at home and were looking forward to next trial early the following week.

OH2BH, OH0RJ, OH2MM, OH8NC, OH2PM, OH7EA Market reef, September 2007.

On Tuesday morning, September 18, antennas, radios, food for one week and huge amount of fuel for the Market Power Company's (OH0RJ) diesel generator were carried over the slippery rock to the lighthouse.

We were very pleased to find out that the 2-el SteppIR beam that was erected during the August trip was still up and had no damages. Very soon Lars got the generator running and power distribution cables spread to kitchen and operating positions. During the following days we got also dipoles for 160, 40 and 30 meters tuned up and erected a HF2-V with elevated radials for 40 and 80.

On Thursday the reinforcement of the team, Juha, OH8NC and Ville, OH2MM arrived with a helicopter, but the dedicated CW-operator, Antti left us and went back to his daily work in OH9.

We were even considering a multi-two operation but due to the close vicinity of all our antennas we had to forget that approach and go to multi-single, with no DX-cluster or multiplier rig.

Ville preferred to activate 160 and 30 on CW during the contest and Lars was focusing on securing the power supply and well-being of the three other operators who run the contest in two hour shifts. We gave up any multiplier moves and fast bandswitching ideas since our antenna-switching and amplifier tuning systems were very primitive.

To our great surprise we finally logged almost 2200 QSOs with a multiplier of 258. The most exciting phenomena were the openings on 10 meter band at distances from 1000 to 2000 km with a deep and fairly fast QSP from S0 to S9.
Soon after the contest was over we began to dismantle the antennas and pack the radios and Lars prepared the generator for winter rest. On the way back home we felt proud of being able to activate OJ0 during the SAC and at the same time regretting that we could not do the same in the CW-part. One could, however, not avoid feeling a bit guilty for those few million points that were left out of the OH-basket because we were not contesting as individuals from our home stations. So, dear SM-fellow contesters, if Sweden won in 2007, we have at least one excuse. Hopefully the awareness of a potential appearance of a semi-rare multiplier in SAC will attract contesters and DXers to participate again.
OJ0B band by band break down

Band	QSOs	Mults
80	351	45
40	353	57
20	716	75
15	353	46
10	418	35

Aftermath of SAC SSB 2007

Marko, OH4JFN (OH4R), provided me with the statistics of logs from OH2BH (OH2JA), OF4R (OH4JFN), OF8X (OH2UA) and OJ0B (OH2BH, OH2PM, OH8NC as operators, OH0RJ, well being and OH2MM as cheer leader). It may not be relevant to compare scores of one MS station with Single-op stations in general but there are some interesting findings that may be useful in planning the of the next SAC operating tactics. I disregard all the differences in locations and antennas but try to find some possible explanations caused by tactical choices that the operators have done during the contest.

Everybody had a good start as to the QSO-rate. After the first two hours OJ0B was leading in number of QSOs with 263 Qs, 43 Qs ahead of OH2BH who had the lowest number. OH8X and OH2BH had the best DX/EU ratios and OF8X had a few multipliers more than the others. Toni's score at OF8X was in clear lead, about 10% ahead of the others.
After the 4th hour the lead position had changed, Mika at drivers seat @ OH2BH had gained over 60k points and OJ0B had got almost the same, OF8X was 5% behind the leading duo, but Marko at OF4R, had made a crucial tactical mistake. He scored during those two hours only half of that the others did and he never could recover from that loss.
During the 5th and 6th hour Mika managed to maintain his leading position with Toni being only 1.5% behind him. The gap to OJ0B and OF4R was 10 % and 20%, respectively. In the number of QSOs, OJ0B was 25 Qs ahead of OF8X and 42 Qs ahead of OH2BH. Nome of the top three had yet lost anything.
The critical moves took place during the 8th hour. During the 7th and 8th hour OJ0B rushed to the lead by logging from 10 to 20% more QSOs than the others and by working 54 multipliers against 25-

32 by the others. From that moment onwards OJ0B was in clearl lead by any measure - the score, number of QSOs or the multiplier total. The competition between the single-operators was not yet over. OH2BH had only 3% higher score than OF8X, Mika had 14 multipliers more than Toni. Even Marko was only one multiplier behind Toni. Both OH8X and OH2BH had 840 QSOs in total. Toni had the highest accumulated number of QSO-points from the first hour, thanks to the best DX/EU ratio. By that time, Toni had gathered over 300 DX QSOs against about 200 by Mika and some 125 by both OF4R and OJ0B.

The change in accumulated scores was so dramatic that it needed further study. One had to figure out what is happening in the battle-field during those hours. Some facts: during those late evening hours many European operators switch off their radios and go to bed. I went back to my old SAC logs and found that typically those hours produce the best rates on 40 and 80 with high number of multipliers who are active only occasionally. On the other hand, those hours may also offer openings to North America, especially on 20.

My more or less intelligent guess, based on hourly DX QSO data, is that during those critical hours Toni was gormandizing with W-pile-ups (not very ample) and OJ0B was running high-rate EU-pileups mainly on 40 and 80. This year, the 20 meter W-pileup was too thin to compete with the high-rate low-band EU-pileups.

In the 10th hour, Toni was able to catch a few multipliers and DX-QSOs more than Mika and he was now in the lead with 0.7% score marginal to Mika. OJ0B had gone its way. OJ0B's score was +15% above the pair OH2BH-OF8X. Marko at OF4R had the same multiplier count with OF8X but Marko was more than 100 QSOs behind.

The next change in the order happened on the 19th hour when OH2BH passed OH8X's score by a marginal of 0.15%. At the end of the hour 21, the difference was only 200 points to Toni's favor in turn. At the end, OH8X had grown the gap against OH2BH to 28.000 points, which is only 3%, and corresponding to 6 multipliers or 40 DX-QSOs. During the second half of the contest OF4R was doing much better than the first half. His multiplier developed well but he lost to both OH2BH and OF8X because of too low DX/EU ratio. Six hours before the end of the contest OF4R was over 100k points behind OH2BH but was able to squeeze the gap to 30k points. OJ0B's final claimed score was about 20% higher than those of the single-operators.

Summary: OF8X was the best of the three single-ops because of by far higher number of DX-QSOs despite of the lowest multiplier. Without the loss during the first hours OF4R could be in the same level with the others.

I found this kind of contest commentator role as interesting as the contesting itself. In order to be able to understand or guess what actually happened in between the ears of the operator, access to the actual log sheets is necessary.

Cu in contest, Pertti, OH2PM

Pictures in the cover: 1) It's time to give Antti, OH7EA, a lift to Maarianhamina. Pilot, Juha, OH8NC, on the right. 2) Juha, OH8NC, serving his first two hour shift. 3) Ville, OH2MM, at his lowband desk.

Tarinaa SAC 2007 CW-kilpailusta
Juha, OH1JT

OH0Z asemaa alettiin fixata kisa kuntoon kaksi viikkoa ennen sacin cw-osaa, tavoitteena korjata edellisen talven ja kuluneen kesän aiheuttamat luonnon tuhot, ja samalla saattaa loppuun viime vuonna aloitettu antennien uudelleen asemointi mm kympin maston roottorin asennus, 15M ja 10M stakkaus muutokset jne. (ennen oli vain 3 antennia stakissa).

Stakkausten muutoksesta johtuen jouduttiin tekemään uudet 1:4 muuntajat (tehonjaot) joilla hoidetaan sovitus neljälle antennille. Tällä kertaa tehonjako tehtiin koaksiaalilinjoilla tyyliin. Jos jostain syystä halutaan muuttaa stakki esim. kolmelle antennille, on muutos helppo tehdä vaihtamalla vain sovituslinjan 50 ohminen koksi 75 ohmiseen sähköiseen varttiaaltoon.

Yleensä olemme käyttäneet ferriiteillä tehtyjä sovittimia, mutta nyt, kun kyseessä on monobandereiden sovitus, ei ollut tarvetta laajakaistaratkaisuun. Pieni ongelma tuli 15M ylemmän antennin kytkemisessä stakkiin, koska alemman kolmen antennin syöttöjohdot oli asennettu paikoilleen, eikä niitä haluttu taas uusia (ne oli edellisellä reissulla uusittu kun ajettiin CQWW 2006 M/M). Jouduimme tekemään ylimmän 15M antenniin sähköisesti puolen aallon jatkopalan, jolla saatiin kaapelin fyysinen mitta riittäväksi. Tästä johtuen on ylemmän antennin vaihe teoriassa 180 astetta väärin, joten ylimmän antennin vaihe piti kääntää vastaavasti 180 astetta. Jos vaihetta ei olisi korjattu antennilla, lämmitettäs yläpuolista ionosfääriä (pitkä selostus pienestä teknisestä yksityiskohdasta..)

15M ja 10M antennien fiksaus meni kohtuullisesti ja kaikkien hämmästykseksi SWR-arvotkin olivat kunnossa. Näihin pieniin, mutta niin tärkeisiin johtotehtäviin meni käytännössä koko lauantaipäivä.

Lauantain yllättävä takaiskumaali tuli Mr. Mööreltä. Innokas ryttyilijä OH9MM oli aseman sisällä ryttyyttämässä sielunsa kyllyydestä, ja innoissaan meni ja käänsi toista tornia. Ikävä yhteensattuma oli että 80M dipoli oli laskettu alas samaisesta mastosta mastotöiden takia sillä seurauksella, että masto kääntyessään otti mukaansa piirileikkiin dipolin naruineen vääntäen onnekkaasti vain yhden tribanderin 20M elementin nykytaiteen uusimpiin muotoihin.. Oli muutes aika herkkä hetki kun kaksi väsynyttä keski-ikäistä antenniasentajaa huomaa tilanteen... Ari OH5DX, jolla yleensä on tunnetusti hyvä huumorintaju, kyseli minulta että oisko saaressa pukuvuokraamoa josta sais pikatoimituksena judoasun lainaan?? Noh, onneksi asiasta selvittiin puhumisella. Keskustelut olivat nopeasti ohi ja eipä auttanut muu kuin ruveta keräilemään varaosia ja alkaa paikata vahingot eli käytännössä vaihtoon meni koko 20M heijastaja. Helppo homma: noin 1,5 tuntia mastossa ja kaupan päälle lähitienoon pikkulapsille ilmainen ja luonnonläheinen ”opi kiroilemaan tunteella suomeksi”- kurssi[8].

Sunnuntaiaamulle oli varattu sitten pieni mastojumppa nimeltään ”viritä 40M piimi mastossa”. Viritimme alemman 40M piimin resonanssikohdan hiukan alemmaksi eli käytännössä asensimme syöttöellun kumpaankin päähän pienet jatkot. Jatkopalojen asennus meni lopulta kohtuudella ja 40M antenni saatiin hyvin vireeseen.

Toinen sunnuntaille varattu ohjelmanumero oli kasata ja asentaa uusi 10M maston moottori. Onneksi Harry, OH0AZZ tuli auttamaan ja muutaman tunnin aherruksen jälkeen masto kääntyi. Moottorin asennus oli hiukan normaalista poikkeava, sillä tämä masto on tehty niin

[8] Tätä alun perin pohjoissavolaista, Varsinais-suomessa ja läntisellä Uudellamaalla hioutunutta perinnekiroilua osataan nykyään mm. Sysmän Onkiniemen ala-asteella, toim. huom.

että kääntömoottori on asennettava maston sisälle vaikka kyseessä on kokonaan pyörivä torni mallia OH8LQ. Onneksi moottori mahtui kohtuullisen hyvin eikä tarvinnut katkaista kuin yksi askelmadiakonaali.

Sunnuntaipäivän ohjelmassa oli lisäksi yleistä kaapelien parsimista ja siivousta. Vaihdoin aseman sisällä oleviin kaapeleihin uusia liittimiä yms. Kasailin aseman ja kokeilin antenneja ja virittelin kummankin asemalla olevan linkun päälle. Onneksi tuli linkut testattua, sillä kävi ilmi että molemmat linkut oli saanut siipeensä, kummastakaan ei saanut tehoa ulos. Eli eipä muuta kuin kannet auki ja ruuvaamaan. Kummankin linkun säätökonkkien akselit olivat irronneet kierroslaskureistaan ja näin ollen nupit vaan pyöri tyhjää. Helppo vika korjata, joten sain kummankin pääteasteen toiminaan ja merkattua bandikohtaiset viritysmerkit. Sunnuntaipäivä oli tällä kertaa niin lyhyt, ettei enempään jäänyt aikaa. Piti lähteä kotiin. Eli jäipä vielä runsaasti tekemistä ennen kisaa.

Kisareissu

Menin saarelle perjantai-ilta lautalla Turusta kohti Långäsiä. Valitettavasti kovan merenkäynnin takia laiva ei päässyt Långnäsiin vaan Il Capitaano päätti kokeilla Maarianhaminan satamaa, jonne sitten onneksi päästiin. Tosin aikaa meni ylimääräiset pari tuntia ja se oli kaikki pois minun yöunistani.

Aloitin aamutoimet kantamalla radiot ja muun rekvisiitan hamshäkkiin. Kytkin kaikki radiot, tehonjaot, antennirelepurnukat jne. Pieniä takaiskuja satoi niskaan tasaista tahtia. WX0B-sixpackin antennireleistä oli taas yksi jymähtänyt siten että 20M asennossa ei toiselle asemalle tullut mitään signaalia. Kyseinen vika on ollut samassa laitteessa aiemminkin, joten tiesin miten se korjataan - eikun toimeksi. Sain purkin vihdoin pelittämään, mutta en enää huomannut testata uudestaan muita bandeja, vaan luotin sen nyt toimivan. Myöhemmin havaitsin olleeni väärässä, sillä a-radion 10M oli myös sökö samasta purkista. Täytyy sanoa, että tuon wx0b:n kanssa on ollut aina hankalaa - se ei ole koskaan toiminut luotettavasti. Lienee aika vakavasti harkita sen vaihtoa johonkin toiseen. Noh, kymppi oli onneksi aika marginaalinen bandi ja saatoin kuitenkin jotenkin nilkuttaa kympillä viasta huolimatta... Tosin voi olla että kymppi ois ollut voittoon tarvittava bandi - kuka tietää?? Olishan siellä ehkä saanut muutaman kertoimen lisää.

Hankaluus, jonka Mr Mööre oli seuraavaksi kekannut, olikin sitten huomattavasti rajumpi. Nimittäin B-tornin kääntölaitteen näyttöindikaatio puuttui. Et semmoista. Tutkailin hiukan tilannetta ja totesin, että B-tornin kääntäjällä oleva potikka on ehjä, joten vika on elektroniikassa. Tein rajun ratkaisun ja avasin purnukan todetakseni, että ei ole mitään järkeä ruveta sitä siinä hässäkästä parsimaan, vaan on helpompi rakentaa uusi. Kävin naapurin Surplus Sales of Harrylta lainaamassa pari potikkaa, pussillisen mielikuvitusta sekä hiukan ohmin lakia. Kasasin uuden näyttöelektroniikan mallia ”omasta päästä”. Ihme kyllä, parin tunnin nysväyksellä sain kasattua toimivan näyttölaitteen. Kalibrointiin paloi vaan yllättävän paljon aikaa, koskei ollut Apu-Erkkiä huutamassa mittarisuuntia, kun asetuksia muutti.

Virittelin radiot tietokoneen perään ja aloin testaamaan kahden radion setuppia. Olin esikonfannut microhamin mk2 keyerin ja uuden pc:n jo kotona. Kaikki ei kuitenkaan toiminut, vaan toisen radion CI-V-liitäntä ei toiminut kuin ajoittain. A-radion band-data -tieto releille, bandpass-suotimelle ja antenninvaihtoreleille oli pois pelistä, kuten myös taajuustieto pc:llekin. Aikani tutkailtua vaihdoin koko a-radion kaapelisetin. (Onneksi asemalla

oli Juhan OH9MM jäljiltä jäänyt yksi ylimääräinen kaapelisetti). Kaapelinvaihto auttoi ja A-radio alkoi totella PC:tä ja päinvastoin.

Temppuillessani microhamin kanssa huomasin, että se meni omia aikojaan pois päältä. Tutkaillessani tilannetta huomasin, että virtajohdossa oleva liitin oli rikki. Kolvi käteen ja vaihtamaan. Liittimen vaihdon jälkeen kaikki alkoi toimia luotettavasti. Kisan aikana microham tai PC eivät kaatuneet tai sekoilleet kertaakaan. Asensin kaikkiin so2r-purkin johtoihin hirmu kasan ferriittejä, koska aiemmin olen huomannut, että laite on suhteellisen herkkä RF:lle. Tällä kertaa vältyin RF-ongelmilta. Näyttäs olevan niin että aiempi käytäntö ferriittien käytöstä on ollut hiukan väärä.

Kun lukee noita häiriönpoistoon tarkoitettujen ferriittien speksiä, huomaa oitis, että yhdellä ferriitillä saavutettu Z on noin 25-ohmia/ferriitti. Näyttäisi olevan niin että todellisia tuloksia saadaan vain luokkaa 500-ohmia ja siitä yli olevilla Z-arvoilla. Siinä sinänsä on järkeä kun ajattelee noita antenneissa käytettäviä virtabaluneja, onhan niissäkin oltava vähintään 500 ohmia Zetaa, että ne alkaa toimia kunnolla.

Kisa

Kisaa ennen kerkesin haukkaamaan hätäisesti pienen lounasherkun mikrosta. Ja palan painikkeeksi sain noin vartin tirsat ennen kuin kisailu skandaalinhajuisesta vormula pokaalista saattoi alkaa. Kisa alkoi perinteisesti 20M EU-Shilavashortsi pailuupilla, jota kesti melko tasaisesti koko ekan tunnin. Tein muutaman epätoivoisen spurtin 15M bandille toisella radiolla, mutta laihoin tuloksin. Ainoastaan yksi QSO (RA0AA). Ei hyvältä näyttänyt, kun ekan tunnin vauhti oli vain 143 kusoa. Kesäharjoittelu rakennustyömaalla malliin Jere Karalahti ei oikeen näyttänyt tepsivän, Hi.. Toisella tunnilla unohdin 15M:n hulluttelun ja aloin vaan takoa ainutta mahdollisuutta eli jauhaa 20M bandilla ja toivoa parasta. Toisen tunnin vauhti hiukan laski pudottaen kusovauhdin jo tasolle 130 q/h. Kolmannen tunnin alussa aloin taas epätoivoisesti pommittamaan viittätoista. Toivoin, että joskohan sieltä repeis Euroopan kusoja/kertoimia jo varuiksi seuraavan päivän varalle, sillä voihan käydä niinkin, että sunnuntaina koko 15M on sitkeesti kiinni, eikä saa mitään, jos huonosti käy. Ei auennut 15M lauantaina, vaan saldoksi jäi yksi tukeva teutooni (DJ5MW) ja pari sinkkoa (CE4/VE7SV, ja LU1DZ). Jatkoin jauhamista 20M:llä aina klo 1443 asti, jolloin päätin käväistä kokeilemassa 40M ja yrittää workkia idän ihmeet ennen kuin Euroopan QRM yltyy pahaksi ja ilta-aurora katkaisee idän kelin. Yritys onnistui aika hyvin. Sain heti muutamia muhkeita DX:iä lokiin aivan puhtaalta bandilta - mm. YC1KAF, japseja, 4X4WF ja 9M6XRO. Palasin takaisin 20M:lle ja jatkoin rummutusta. Pääasiassa jenkkejä ja Eurooppaa sekaisin aina 1637Z asti, jolloin palasin 40M:lle ja aloin uudestaan idän pommituksen biimaten kuitenkin koko ajan toisella antennilla kohden teutooneja, jotta jakso pysyy puhtaana ja saa samalla ajettua Euroopan kertoimia.

Klo 1707Z tein ekan spurtin 80M:lle laihoin tuloksin. Olin liian optimistinen, 80M ei ollut vielä auki, vaan oli syytä palata kipin kapin 40M:n kautta takas 20M:lle. 20M oli hyvin auki jenkkeihin, joten siellä kannatti olla. Tein muutamia Euroopan kerroinsiirtoja toiselle radiolle, joka oli 40M:llä: mm. GW ja GU, jotka kumpikin ovat ns. peruskertoimia jääden helposti ajamatta. Jatkoin kahdella radiolla ajoa 20M ja 40M vuorotellen, jotta kusovauhti ei tippuisi enää alemmaksi ja kävin yhden epätoivoisen spurtin myös 15M:llä tuloksena EA7TN eikä muuta.. Ilta jatkui pompotellen 20M-80M bandeilla yrittäen pitää qsovauhtia yllä ja siirrellen perusharvinaisia kertoimia vaihtelevalla

menestyksellä. Olin hiukan huolissani ennen kisaa siitä, kuinkahan meitin 80M signaali riittää, kun ison rahan tehdastalleilla on nykyään järjestään piimit jo 80M bandillakin. Perinteisesti esim. japsin workkiminen on onnenkauppaa 80m:llä etenkin SACissa. Tällä kertaa minua onnisti sillä 1934Z tuli JA9PPC lokiin. Vaihtelin bandia koko ajan ajaen vuoroin 80M ja 40M ja yllättäen Paksalon Etelä-Afrikan vahvistus ZS6/OH7BX kutsui minua butternutti sojossa,,, Kiitos Paulin sain ylen harvinaisen kertoimen, jota yritin myös siirtää 80M, mutta siellä kuso ei mennyt vielä alkuillasta läpi. Onneksi Pauli tuli myöhemmin uudestaan tyrkyttämään kerroinsiirtoa 80M ja sain kuin sainkin Paulin lokiin myös siellä.

Ilta kului tasaisessa alabandien nakutuksessa, kunnes 21Z sain ekan NA aseman lokiin 40M:llä. Jenkkikeli aukes yllättävän aikaisin, tosin läpi tuli vaan ns. big gunit eli ei mitään mainittavaa pileuppia. Ekan jenkin 80M:llä workin klo 2215Z, tosin se oli VE9DX joka ei tarkoita sitä että keli aukeaa, Hi..Mutta kuitenkin kourallinen shilavashortseja tuli workituksi joukossa moninkertainen SAC-voittaja K3ZO hyvällä signaalilla. Nyt alkoi todellinen kiirastuli, kun bandit alkoivat kuolla ja 20M ei auennut jenkkeihin ei sitten millään, vaan alabandien Eurooppa oli ainut workittavissa oleva maanosa.

Noin 0000Z aloin ihmetellä luonnonääniä. Nimittäin tuuli oli yltynyt melkoiseksi myrskyksi sillä seurauksella, että menetin kontrollin toiseen mastoon. Pahinta oli, että masto mukamas kääntyi ja suuntanäyttö toimi, mutta signaalit tuli huonosti. Oli aika käydä ulkona pissalla taskulampun kanssa. Oli todella masentava yllätys huomata, että masto pyöri vapaana tuulessa aivan luonnon valitsemiin suuntiin. Mietin että mitähän tekis? Vaihtoehtoina oli keskeytys tai sitten piti jossain vaiheessa yrittää korjata mastoa..

No menin takaisin workkimaan ja kävin pienen kehityskeskustelun itseni kanssa. Samaan aikaan alkoi kusovauhti hiipua alle 10 Q/h, joten ajattelin että tuskin paljoa menetän, jos yritän rimpuilla maston kuntoon. Klo 0220 vedin sadetakin niskaan ja fikkarin hampaisiin. Maatalous-sorvi (lue jakari) taskussa läksin aamulenkille. On muuten aika turhauttavaa yrittää vääntää mastoa tuulta vasten ja samalla kokeilla toisella kädellä ujuttaa ketjua paikoilleen. Aamuyön painiottelu päättyi luonnon selätysvoittoon. En saanut ketjua kunnolla kiristettyä paikalleen, mutta todennäkösesti masto ei enää pyöris vapaana vaan pysyi etelän suunnassa. Hyvä niin, sillä pelkäsin että koksit menee rullalle ja menetän edes pienen mahdollisuuden toisen suunnan/radion käyttöön. Reilun puolen tunnin nujakointi oli kaikki pois workkimisesta, mutta tuskin menetin siinä paljoakaan.

Loppu aamuyö kului tasaisesti hyppien 80M ja 40M välillä. Siirtelin aikani kuluksi kaikki mahdolliset shilavashortsit myös 80M:lle mitä ikinä mulle vastas 40M:llä. Aamun ainut piristävä kunnon DX oli KH6, jonka sain siirrettyä myös 20M:lle. 20M aukes Eurooppaan vasta noin klo 0600Z. Pääasiassa itäeurooppalaisia joukossa TK, jonka siirsin myös alabandeille. Kuulostelin aamulla myös 15M bandia, ja yllättäen klo 0700 sain ekan kerroinsiirron menemään läpi VU2BGS:n kanssa, joka tuli hyvällä signaalilla. Siirtelin idän ihmeitä 20M:ltä viidelletoista vaihtelevalla menestyksellä. 15M aukes nirkoisesti noin klo 0800Z Itä-Eurooppaan tuottaen muutamia kipeästi kaipaamiani kertoimia. 10M pysyi sitkeästi kiinni, vain pari hassua siirtoa onnistui, mm. ES2DJ ja RK3IM tuli läpi klo 0805Z. Yritin koko aamupäivän siirrellä asemia viideltätoista kympille, mutta aika laihoin tuloksin. Kympin kerroin jäi huonoksi - vain 18 maata ja noin 30 kusoa. Viidentoista kerroin oli myös laiha - vain 40 kerrointa eikä yhtään jenkkiä - yksi japsi tuli läpi. Viimeiset pari tuntia jauhoin pääsääntöisesti 20M:llä jossa sain hiukan nostettua kokonaiskusomäärää.

Viimeisten tuntien kuluessa huomasin että WX0B:n purkista oli 10M pimeänä, joten en voinut hyödyntää uutta 4L*4 stakkia.. Eli kaikki kympin kusot on ajettu vanhalla Tribanderi stakilla.
Loppujen lopuksi ajoin 936kb, 1750q ja 231 kerrointa. Valitettavasti se ei riitä Pasin (OH6UM) scoren lyömiseen, joten reilusti onnittelut Pasille hienosta scoresta. Pääasia että muut tehdastallit kallispalkkaisine kuljettajineen jäivät pienen Spyker-tallin jalkoihin, Hi..
Mukavaa oli ja olen erittäin iloinen siitä että kahden radion workkiminen sujui vaikka kesäharjoittelu oli jäänyt HIFK:n tasolle.

Radiot toimivat hienosti ja radioiden välillä oli erittäin pieni keskinäishäiriö, ei perinteistä aiemmasta radiomerkistä tuttua kaiken peittävää suhinaa. Oli aika villi tunne kun väsyneenä katseli LED showta, radiot koolas CQ:ta itsekseen ja asemia tuli lokiin vuorotellen molemmilta bandeilta. Itse en aina tiennyt kummalta bandilta asema vastas vaan piti muutaman kerran skarpata, ettei siirtänyt asemaa jo samalle bandille Hi..

Että semmoinen kisa tällä kertaa, jos kiteyttäs tarinan opetuksia niin päällimmäiseksi nousee jälleen testaamisen merkitys, kaikki asiat täytyy varmistaa!

Juha, syyskuun 17:ntenä 2007

VUOSI ALKAA RYTYLLÄ!

Uuden vuoden voi aloittaa kilpailutoiminnan osalta myös RTTY –modella. Hyvän mahdollisuuden tarjoaa OH-RTTY 2008 kilpailu 1.1.2008. Kolmannen kerran järjestettävä kilpailu käydään SARTG New Year RTTY -kilpailun osana.

Skandinavian asemat muodostavat kilpailussa erityisen kohderyhmän piirikertoimien vuoksi. Tarkat säännöt tässä lehdessä tai http://www.sral.fi/oh3i -sivuilta. Kisa antaa myös oivan tilaisuuden kyseisen moden harjoitteluun sanomien pituuden ja käytettävien bandien (40m ja 80m) vuoksi. Vuodesta 1972 pidetyn kisan alkuperäisenä tarkoituksena on ollut uuden vuoden tervehdysten lähettäminen SARTG –jäsenien kesken. Tämä selittää myös käytössä olevan sanoman pituutta.
Lyhyen kolmen tunnin kilpailun aikana on erityisesti 40m:llä ollut mahdollista talviajan vuoksi ajaa mukavia DX – yhteyksiä. Esimerkiksi vuoden 2007 saapuneissa lokeissa oli jo 20 japanilaista asemaa. Muita dx-asemia mm. KH6GMP, UK7F ja ZC4LI. Vastaanotettujen lokien määrä on kasvanut viime vuosina 10-15% tahtia.
Varsinaisessa OH-RTTY-kilpailussa lokien määrä on ollut erittäin hyvä. Aloitusvuonna 2006 vastaanotettuja lokeja oli 27 ja viime vuonna 30. Tänä vuonna lienee aika laittaa paremmaksi. Nykyisellään digimodejen aloittamiskynnys on matala. Monella asemalla on jopa tietämättään valmiudet aloittaa digityöskentely. Samalla on hyvä mahdollisuus saada isoille asemille lisää aktiviteettiä.
SARTG -kilpailun johtajan, Ewe, SM7BHM, mukaan myös Ruotsissa on ollut suunnitteilla vastaava maansisäinen kilpailu. Toivottavasti myös SM-kilpailu toteutuu lähivuosina, jolloin kilpailuun saada oiva lisä maaotteluhengessä! OH-RTTY:stä huolimatta Ewe toivoi lyhyen haastattelutuokion aikana kaikkien OH-asemien workkivan myös SARTG –kisaan osallistuvia asemia.
Vuoden 2008 OH-RTTY –kilpailun sponsoroi JKR Radioclub ry, OH0I/OH3I. Luokkavoittajille on tarjolla kunniakirjan lisäksi myös pieniä tavarapalkintoja. Kunniakirjat jaetaan tämän lisäksi 2. ja 3. sijalle yltäneille. Toivottavasti uuden vuoden vietto ei tänäkään vuonna rajoita aktiviteettiä vaan OH-asemia on äänessä runsain mitoin.

SARTG New Year RTTY Contest 2008
OH-RTTY-kilpailu 2008

Järjestäjä: Scandinavian Amateur Radio Teleprinter Group (SARTG)

OH-RTTY-kilpailun sponsori: JKR Radioclub ry (OH0I/OH3I)

Kohde: Kaikki työskentelevät kaikkia, mutta Skandinavian asemat muodostavat erityisen kohderyhmän.

Aika: 1.1.2008 klo 0800 - 1100 UTC.

Lähetelaji: RTTY - Baudot

Työskentelyalueet: 40 ja 80 m.

Kilpailuluokat- SARTG:

A: Single Operator/All Band
B: Multi Operator/Single TX/All Band
C: SWL/All Band

Kilpailuluokat-OH-RTTY:

1. Single Operator/All Band/Low Power (max. 100W)
2. Single Operator/All Band/High Power
3. SWL/All Band

OH-RTTY-kilpailussa ei ole monen työskentelijän luokkaa. Kerhoasemat voivat osallistua yhden työskentelijän luokkaan.

Huom.: DX-vihjejärjestelmien käyttö on sallittu kaikissa luokissa.

Sanoma: RST + QSO-numero + nimi + ”Hyvää uutta vuotta”-tervehdys omalla kielellä. OH-asemat lähettävät HYVAA UUTTA VUOTTA. Lyhenteet, esim. HUV, HNY jne. eivät kelpaa.

Yhteyspisteet: 1 piste/QSO. Saman aseman saa työskennellä molemmilla alueilla.

Kertoimet: Kertoimia saa DXCC-maista työskentelyalueittain Skandinaviaa lukuun ottamatta sekä Skandinavian kutsumerkkialueista (piireistä), esim. LA1, LA2, OH1, OH2, SM1, SM2 jne. myös työskentelyalueittain. Skandinavian maita ovat: JW, JX, LA, OH, OH0, OJ0, OX, OY, OZ, SM ja TF. Suomessa operoivien ulkomaalaisten asemien (OH/omakutsu/P) piiri määräytyy osallistujan SARTG:ille ilmoittamasta työskentely-QTH:sta.

Tulos: Kertoimet x yhteyspisteet.

Lokit: Yhteydet kirjataan työskentelyalueittain lokiin ja lähetetään yhteenvedolla täydennettynä joko sähköpostiviestin liitteenä osoitteeseen:

contest@sartg.com

tai kirjeitse osoitteeseen:
SARTG Contest Manager, Ewe Håkansson, SM7BHM, Pilspetsvägen 4
SE-291 66 KRISTIANSTAD, SWEDEN.

Lokien on oltava perillä viimeistään 31.01.2008.

Perinteisestä lokista tulee ilmetä seuraavat seikat: työskentelyalue, pvm/aika (UTC), vastaaseman kutsu, lähetetty viesti, vastaanotettu viesti, kerroin ja yhteyspisteet. Poikkeus: Vastaanotettua uuden vuoden toivotusta ei tarvitse kirjata lokiin, mutta oma lähetetty toivotus tulee näkyä jossakin kohtaa lokia.

Yhteenveto sisältää tavanomaiset asiat: pistelaskennan, työskentelyluokan, käytetyn kutsun, nimen ja osoitteen, työskentely-QTH:n sekä OH-asemilta myös maininnan teholuokasta (LP = korkeintaan 100 W, HP = yli 100 W). Multi-asemat kirjaavat lisäksi työskentelijöiden nimet ja kutsumerkit.

Palkinnot: SARTG palkitsee kunniakirjoilla kunkin luokan viisi parasta ja maavoittajat, mikäli saatu yhteysmäärä on kohtuullinen.
OH-RTTY-kilpailun luokkavoittajat saavat sponsorien erityispalkinnon ja kunniakirjan. Lisäksi 2. ja 3. sijalle yltäneet saavat kunniakirjan. Kunniakirjoja voidaan jakaa useammallekin perusteena erityisen hyvä suoritus ja/tai runsas osanotto. Kaikki lokinsa lähettäneet saavat osallistumistodistuksen.

Lisätiedot:
SARTG-verkkosivut : www.sartg.com
JKR Radioclub ry –sivut: www.sral.fi/oh3i

*SARTG, Scandinavian Amateur Radio Teleprinter Group, on vuonna 1970 perustettu, pohjoismainen RTTY-lähetelajista kiinnostuneiden radioamatöörien ryhmä. Aikaa myöten kiinnostusalue on laajentunut käsittämään kaikki digilähetelajit. SARTG järjestää vuosittain kaksi kilpailua: SARTG WW RTTY Contest (v. 1970 lähtien) ja SARTG New Year RTTY Contest (v. 1971 lähtien). SARTG ylläpitää sivustoa osoitteessa www.sartg.com. SARTG:in yhdysmies on Kari Hirvonen, OH2BP.

CQWW RTTY 2007 Multi/2 - OH2BP raportti

Ari-Pekka OH7KUD, Karkka OH2PQ, Väiski OH9GIT, Kari OH2BP

Ari-Pekan OH7KUD kanssa rakennettiin asemaa iskuun viikko ennen kontestia. Kerroinasema- yagin SWR siirrettiin RTTY bandille ja uusi 80M DX dipoli nostettiin ylös mastoon.

Väiski OH9GIT saapui pohjolasta junalla perjantaiaamuna ja päivän kuluessa fiilattiin asema huippukuntoon mm. asentamalla oskilloskoopit molemmille radioille RTTY aseman jaksolleviritystä varten. Kaikki oli kunnossa iltapäivällä, operaattorien palaveriin saapui vielä Karkka OH2PQ ja koko teami oli paikalla. Strategia sovittiin, tavoitteet asetettiin ja työvuorolistaan kirjattiin päivystyshugit.

Kello kolme Suomen aikaa sitten pamahti paitsi, että Qsorate ei oikein räjähtänytkään hyvään vauhtiin, kun A-indeksi oli yöllä noussut 27'ään ja K-indxeksi makoili jossain neljän-viiden tienoilla.

Yritys oli kuitenkin valitun strategian mukainen ja alkuvauhti asematarjonnasta johtuen kova. Totuus vallitsevista keleistä valkeni, kun toivottua jenkkiavausta ei tullutkaan 40M bandilla, pian aaamun jo valjettua tuli lisää löylyä, kun 15M vakiojapsit loistivat poissaolollaan.

La-su välien yö on edellisen toisinto, korjausta ei saatu, vaikka keliprognoosi olikin optimistisesti luvannut sunnuntaille jo A=8 indeksiä. Aamun koitteessa siinä klo 05.30 SA käytiin sitten ns. Galapagoksen taistelu 80M bandilla. Jenkkejä ei kuulunut, mutta sen sijaan HC8N superasema alkoi nousta Euroopassa. Tämä keräsi 3580.7 Khz aamujaksolle useita vahvoja Eu-tykkisignaaleja ja meidän lähiseudultamme ainakin OG0Z, OF2AG ja OF8X'n .

Juha OG0Z'lla sai ensimmäisenä pohjoismaalaisena kutsun lokiinsa, mistä pile-up vai kasvoi ja kasvoi, kutsuvaiheet venyivät aivan mahdottoman tiuhoiksi peittäen kuuntelun pitkiksi toveiksi.Tähän kuria saadakseen HC8N operaattori antoikin yllättäen pile-upissaan QSY QSY breikin. OH2BP kuuli tämän siinä bandimelskeen keskeltä ja siirsi säkällä VFO-ta 700 Hz alaspäin ensimmäiselle vapaalle "reijälle". Kuinkas sattuikaan, HC8N oli valinnut myös saman QSY'n, asema vastasi heti meille ja aivan puhtaalla QRG'llä - FB Qso lokiin, ja siinäpä tuplakerroin.

Kilpakumppanimme OF2AG ja OF8X jäivät jonottamaan omaa vuoroaan. Päivä kului W/VE-ja JA-avauksia odotellessa, huonojen kelien latistama saalis oli lähinnä Eurooppaa kaikilla mahdollislla bandeilla 40-20-15M, 10M vain sporadisia avauksia hetkittäin, nämä saatiin lokiin jatkuvalla bandisweepillä. 40M oli auki koko päivän ja nousi ratkaisevaan osaan qso-kertymässä.

Kelit hiipuivat lopullisesti siinä 22 SA aikaan, mutta 'paapaamaan meno' ei kontestimiehiä houkuta, siispä sitkeä yritys loppuun saakka. Kelit alkoivat uudelleen kohentua siinä klo 01 SA aikoihin, 40M avautui hiljalleen USA suuntaan. Viimeisellä tunnilla ajettiin muutama uusi 40M state ja jopa TF4M tuplakertoimena lokiin, ZF2DF Cayman Island Zonesta 8 tuli vielä viime minuuteilla workituksi.

Kiva kontesti, kiitos kusoista kaikille.

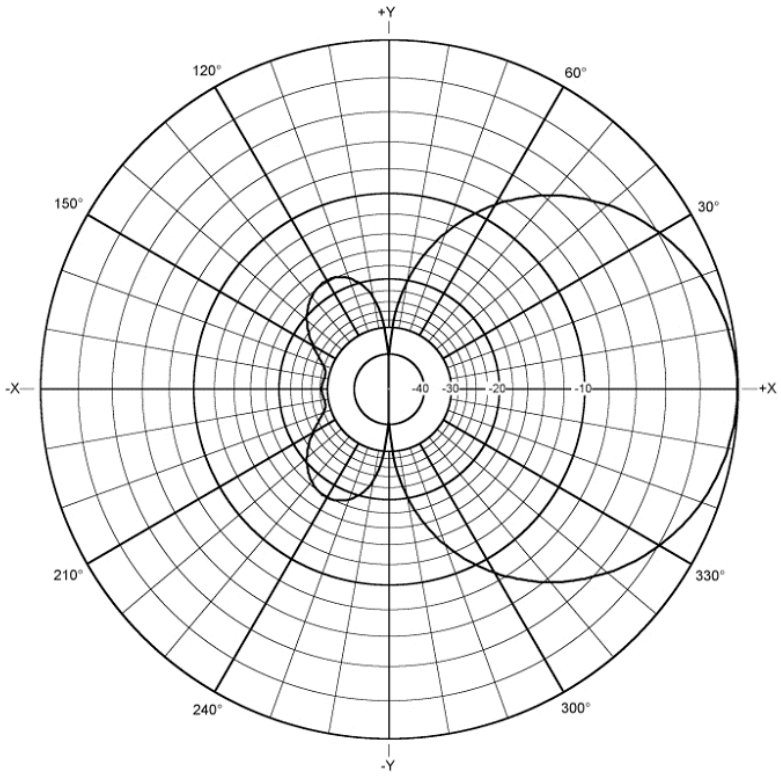
Laitteet
A-radio JST-245, JRL-2000FH (1 kW)
B-radio IC-7000, THP-KFX1.5 (600 W)
Cushcraft X9 + XM240, Fritzel FB-53
Pakratt/DSP dekooderit, oskilloskoopit
WF1B ohjelma

Claimed Score

Band	QSOs	Pts	State/Prov	DX	Zones
80:	401	0		49	9
40:	675	7		77	22
20:	505	14		73	24
15:	47	0		27	10
10:	37	0		16	6
Tot:	**1665**	**3493**	**21**	**242**	**71**

Total Score = **1,166,662**

Antennas @ OH5LF. Stacked KT34XAs, 2-el KLMs (40) and a 2-el on 80.



Pattern of the 2-el yagi that tunes across the 3.5-MHz band. Modeling by OH1JT.

The 13th Contest and DX Meeting 18.-20.1.2008

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Cruise schedule (local times) :

Fri 18-Jan-2008	15:30: Check-in starts
	17:30: Ferry leaves Helsinki (OH)
	18:00: Get-together, Presentations (part I)
	20:30: Contest/DX Buffet
Sat 19-Jan-2008	09:40: Arrival to Stockholm (SM)
	11:00: Presentations (part II)
	16:45: Ferry leaves Stockholm (SM)
	17:00: Contest & DX Dinner, A'la carte
Sun 20-Jan-2008	10:00: Arrival to Helsinki (OH)

On preliminary agenda (Friday-Saturday) :

* CN2R station design and evolution (by W7EJ / CN2R)
* 4O3A station automation (by 4O3A)
* From D4B to D4C – Contesting from Cape Verde (by IK2NCJ, I4UFH, YL2KL, YL3DW)
* A troublesome DXpedition 3B6SP → 3B7SP, plus VP6DX Ducie DXpedition update (by SP5XVY)
* FO/M Marquesas Islands DXpedition – Direct report from the Pacific (by OH Pacific Team)
* RTTY Competing on high level
* CW and SSB pileup contests (by CCF)
* World Wide Young Contesters – WWYC
* Arcala Xtremes OH8X update

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73's and CU " / MM "

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06830 Kulloonkylä

-humour

F1-accident.


Post-Contest trauma faced by Pasi, OH6UM