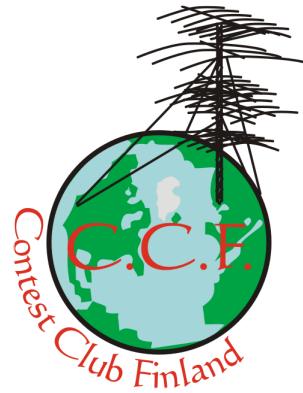


# PileUP!

Volume 15(3) 2011



## Scandinavian Activity Contest

**53rd Scandinavian Activity Contest**

**CW:** 17.9.–18.9.2011, 1200 UTC–1200 UTC  
**SSB:** 8.10.–9.10.2011, 1200 UTC–1200 UTC

**Heat up**  
the Polar Battle and break your national record!



For the updated rules, propagation forecasts from your area, and more details, see [www.sactest.net](http://www.sactest.net)

Improve your life by participating SAC! (Page 37)

 **DRUNKEN®  
RADIONUTS**

**KONTESTI**

Se nyt vaan on tyhmää olla workkimatta

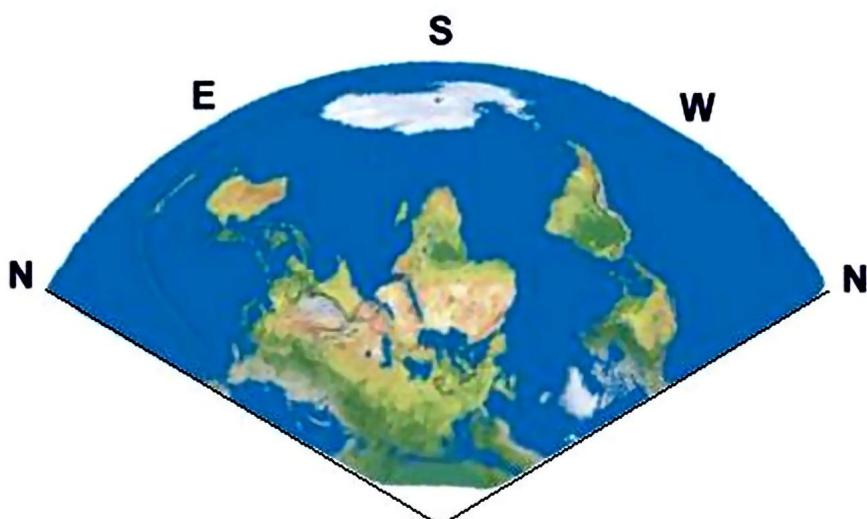
**PileUp!** is a newsletter of Contest Club Finland (CCF). Contribute!

**Talkoo - PileUP! 15(3)** – Eds. Ilkka, OH1WZ; Esa OH7WV; Kim, OH6KZP;  
Best viewed if printed in A5-size booklet. Instructions: Don't read too seriously.

## Contents

3. From the Talkoo Editors.....	OH1WZ, -6KZP, -7WV
4. CCF Humor and stuff.....	Talkoo Folks
8. Spelling out those solar terms.....	Andy, OH2DDT
9. SETI-HAM searching intelligent communication.....	W. Bitstream, OH1ZÜS
11. Radiosport – Comparable over time?.....	Ilkka, OH1WZ
11. Tough propagation due to auroral oval.....	Carl, K9LA
13. Where do we go next?.....	Zik, DK8ZZ
14. WPX SSB 2011 - Battle of the northern Big Boys.....	Ilkka, OH1WZ
20. Electronics for dummies – Sähkötermit pölkypäille.....	Andy, OH2DDT
21. More humor .....	
24. Kannattaako Suomesta osallistua?.....	Seppo, OH1VR
25. Progress is slow.....	Jari, OH3BU
27. A word from Down Under – VK contest scene.....	Trent, VK4TI
30. My view of SOSBA.....	Mike, W7DRA
31. Contesting with a Cat.....	Carl, K9LA
33. PileUP! GOES image processing.....	
34. Toukopähkinä – readers' contest.....	Janne, OH6LBW
35. HowStuffWorks – SDR.....	Dr. Z. Fet & Dr. Bit E. Ratio
36. TO2FH – 2011 Mayotte DX-pedition.....	Ricardo, PY2PT
<b>37. SAC 2011 – The polar battle heats up again.....</b>	<b>Kim, OH6KZP</b>
<b>40. SAC 2011 – RULES.....</b>	<b>SAC CC</b>
<b>43. PileUP! Vad är bättre an sex? – sida.....</b>	<b>Mats Sundin</b>
43. Automatisoitu kilpailulokien tarkastus.....	Esa, OH6KVU
48. Photo album & stuff. Bonus humor & Stuffia.....	
55. CCF-tavarapörssi – Flea market.....	

**TNX:** DK8ZZ, ES5TV, K9LA, OH1VR, -1WZ, -2BH, -2UA, -2RF, -2XX, -3BU, -4JFN, -4KA, -6EI, -6KVU, -6KZP, -6LBW (SAC promo card, front cover), -6UM, -7WV, PY2PT, SJ2W, VK4TI, W7DRA



The world is upside down, also in this antenna control display from an OH8-station. The white near-by area is mostly OH6-land. We apologize to those readers, whose QTH is whitened.

**From the talkoo editors:** PileUP! 15(3),  
Humor and Scandinavian Activity Contest

You are reading the first ever double-the-me issue of PileUP!. The first topic is humor, and it was selected for the purpose of reminding the readers, in particular those in Finland (OH), that “*Hey, it’s only a hobby!*” Only by means of humor, do we think that we can cope with the ongoing absurdities amongst a few OH-amateurs. We also think that humor can be therapeutic. For example, it helps when you don’t win a contest and feel low. If any of the humor here should make you laugh, don’t be afraid. We do not think that this issue can kill you (death from laughter). Instead, reading bad humor can be a real torture. So, either way, we think that the stuff found in PileUP! 15(3) will make a difference. Thanks to the many contributors (haa, we mainly thank ourselves).



Our second theme, SAC, is not humorous at all. But it’s not dead serious either. Co-talkoo-editor Kim, OH6KZP, is the person-in-charge of SAC in 2011. He was found at the very end of a line-of-delegation. That is, the rotating organizatorial responsibility (four-year-cycle) struck Finland/SRAL in 2011. Last year it was in OZ with the EDR. Well, SRAL has a communal arrangement such that CCF takes care of the responsibilities of the SRAL’s HF Contest Manager, who together with managers in SM, OH, LA, and OZ comprises the SAC Contest committee. And Kim is a responsible CCF member.

SAC contest is one of the many in which the rest of the world communicates with amateurs in one country or a geographical area. It is also one of those contests that cannot show off with a history of fast result-delivery and prize-giving. It is not ARRL DX, which can bring you thousands of Qs from the target area. No indeed not, all-time best scores saturate somewhere near the 600–700-Q-mark. And that is how much you can log in 24 hours. Sounds pretty boring, doesn’t it? What’s in it for me?

These regional activity contests follow the principle of reciprocity – **participate in mine and I will do the same for you**. The great fun of being able to call CQ and be the wanted station circulates from contest to contest. SAC has managed to deliver those 250–300 participating SM-OH-LA-OZ-TF-OX-OY-JW stations, which keep the non-Scands at least a bit busy. And you can work everything from OH8X to little pistols and casual contestants. A built-in contest within SAC is the OH-SM country-duel, which brings activity on the bands, although it is not an official SAC category. Swedes are like big brothers to us Finns, and we like to wrestle also on the 80–10M bands.

Make notes in your calenders for

**Sept 17–18, 2011, 12–12 UTC, CW  
Oct 8–9, 2011, 12–12 UTC, SSB**

You will find more last minute information about SAC in PileUP! 15(4), which is sch-eduled for early September. This issue has the article by the manager of SAC 2011 Kim, OH6KZP starting on page 37.

73 Kokovartalokontesterit  
“Contesters with the entire body and soul”  
OH1WZ, OH6KZP & OH7WV



Huumoria



**Jos et worki, et voi voittaa**



**Linkkumahti.fi**  
KERTOIMIA JOKA MINUUTTI

Mistä näitä kusoja oikein tulee?



Aloittaa syksyllä uuden tosi-TV sarjan.



Sarja on suunnattu radioamatööreille.  
Sarjassa ostetaan laitteita ja tehdään  
DX-peditioita velaksi.  
Suurimman velan kerännyt voittaa  
kisan.  
Voittaja saa pitää kaikki laitteensa.  
(velka jää)

Ilmoittaudu mukaan nettisivullamme  
[www.wtf3.fi/velka\\_kerroin](http://www.wtf3.fi/velka_kerroin)

#### **VANHA KONTESTERI KORHONEN**

Vanha Kontesteri Korhonen  
Takaa linukkansa katsoo murheineen  
Maston teki QD-Jaska  
Jumissa talvet sekin paska  
Murhemietteet täyttää miehen sydämen

Aika entinen ei bandeille enää palaa  
Enää kukaan ei muista dx-valaa  
Kilpailut ei hältä luista  
Kukaan Korhosta ei muista  
Aika entinen ei koskaan enää palaa

Vanha kontesteri Korhonen  
Hyvin muistaa vielä sen ajan mennehen  
Kuinka ennen kanssa Laineen  
Kesti kisan kovan paineen  
Ison putken posket hehkuen

Aika entinen ei koskaan enää palaa  
Vanhan varmaan täytyy kohta vaihtaa alaa  
Mies ei taivu lokinpitoon  
Tietokone ottaa aivoon  
Aika Korhosen ei koskaan enää palaa

Vanha kontesteri Korhonen  
Taakse radioiden laittaa nyyhkien  
CQ:n viimeisen hän heittää  
Datapurinat sinkut peittää  
Lokilehteen jää vain jälki kyyneleen

Eikö sanat taivu tyttöystävälle?



Hanki ShiPhone.

Se muuttaa ankarankin änkytyksen  
vastustamattomaksi leperrykseksi.

Vain nettikaupasta [shiphone.com](http://shiphone.com)

Difficulties to talk sweet to ladies?

Get yourself a ShiPhone.

It converts even the worst stutter to the  
sweetest honey-talk.

Available only in the web [shiphone.com](http://shiphone.com)

Special model ShiPhone HF coming soon.

#### KW Vainio: "Taas ysiysiin"

Järjestelmä tarpeeksi on mua lypsänyt,  
luulen että aika alkaa olla kypsä nyt.  
Tulkaa, viekää sitten vaikka putket linkusta,  
mut minä nautin sinkusta.

Taas ysiysiin, radioni rassaan,  
ei estää kukaan, kun splatraan taas.  
Arkalan luulen, minä kutsun kuulen,  
sitä turhaan kutsun, taas uudelleen.

Ficora saa mua ihan turhaan etsiä,  
vielä riittää sentään jonkin verran metsiä  
Enkä välitä mä kuulla yhtään DX-uutista,  
Taulukoista RA:sta.

Taas ysiysiin, radioni rassaan,  
ei estää kukaan, kun splatraan taas.  
Arkalan luulen, minä kutsun kuulen,  
Sitä turhaan kutsun taas uudelleen.

Hiljaa vaeltaen, tahdon sinne ehtiä,  
missä ei oo riitoja, on peli rehtiä.  
Hoitakaa ne pinnat vaikka etänä,  
minä heilun setänä.

#### AR1LYN/M

I wanna be worked by you,  
Yes, worked by all of you,  
I wanna be worked by you, oh yeah  
Dit-dit-dit-dit dah-dit dah-dit

I wanna be your double mult,  
Oh yes, for everyone a double mult,  
I wanna be a double mult, alone!  
Dit-dit-dit-dit dah-dit dah-dit

I couldn't aspire,  
To anything higher,  
Than, to hear the pileup,  
To make that my own!

I wanna be worked by you,  
Yes, worked by all of you,  
I wanna be worked by you, oh yeah  
Dit-dit-dit-dit dah-dit dah-dit

I couldn't aspire,  
To anything higher,  
Than, to hear the pileup,  
To make that my own!  
Dit-dit-dit dah-dit-dah!

## Wise-Logger 1.0

**Folks!** It is time to say good bye to your existing logging software and download Wise-Logger 1.0. With money-back guarantee we promise you all this (and more on our web site):

- **WL runs on any computer**, operating system and keyboard or language setting. This includes all past, current and future computer systems.
- **24/7 on-line support**. On-site-24-hour support, add 200\$
- **Smart-CW™** functionality allures all SDRs to place your call on top of the priority queues. Instead you can transmit virus code sequences that kill the SDRs receiving you.
- **Let-Andy-Work -mode**. Our sophisticated CW, RTTY, and SSB coding/decoding algorithms learn your behavior and voice pattern during the first 15 minutes of the contest. After that you can rest and let "Andy" perspire.



Our main programmer Jack, CT9WT is the inventor of Andy.  
Jack says "WL 2.0 will have even OH-contests implemented!"

Licenses	
1	99 \$
10	1999 \$
RTTY	3999 \$
We accept bank-payments or cash only	



Con Man Ltd. P.O.B 66, Reynosa, Mexico.

# Ongelmia §-asioissa?

## Lakiasiantoimisto CQ auttaa

Etkö saa mastolupaa?  
Kohtelevatko muut amatöörit sinua epäreilusti?  
Hotsiiko riidellä muuten vaan?  
Uhkaako XYL viedä radiotkin mennessään?

**LAT CQ, PL 11912, 07656 Pylkönmäki**  
A member of the **whocanisue.com** attorneys

### P. J. Carjalainen: "Olli"

Olli, Olli, missä on se Olli?  
Olli, Olli, missä on se Olli?  
Jo kuuluu pailappi juu  
Ei voi olla kukaan muu  
Siellä, siellä se Olli on  
  
Siellä, siellä se Olli on  
Vierellä missien  
Isojen tissien  
Siellä, siellä se Olli on

### M/S by absent-minded brothers

Three buddies, aged 82, 83 and 85, decided to go for m/s in this year's CQ WW. The first night the 85-year-old makes a band change. As he grabs the microphone to call CQ, he pauses and yells to his friend next to him: "Was I going start working on 40 or was I getting out of that band?"

The 83-year-old shouts loudly, "I don't know Tom. Let me get up there and see." He begins to get up from the chair, but then pauses. He yells to his mate "Was I going to the toilet or what?"

The 82-year-old is sitting by the ICOM, enjoying some mult-chasing. He listens to his friends, shakes his head and mutters to himself, "I sure hope I never get that forgetful. Knock on wood." He then turns and shouts, "I'll be back to help you as soon as I see who's knocking at the door."p

## Spelling out those solar terms –

### Aurinkotermit tutuksi!

Andy ζ. Huuhkaja, OH2DDT

**Coronal hole.** Korona-aukot ovat pahasta. Niihin voi pieni päivänsäde pudota, ja silloin maan päällä ei ole enää yhtä mukavaa. Ja sama koskee radioukkujen puuhastelun hauskuutta.



**Radio blackout.** Radioiden mustuminen. Jos tällä kelillä kannat rigin tai linukan ulos, mustuu se lähes täysin. Öiseen aikaan tästä tieteenkin on vaikeampi nähdä, ja siksi kaikki väittävät radioiden mustumisen olevan vakavampaa sillä puolella maapalloa, jossa kulloinkin on päivä (ei vaikuta LED-näytöihin, kts. kuva).

**Radio Flux.** RadioSäkä. Jos on flaksia niin kuso kyllä kulkee. Ei koske kuin radiokelejä, joten turha uneksi muusta.

**Solar Radio Burst Event, SRBE.** Auringon pakahtuminen. Auringon sisäisen paineen noustessa liian korkeaksi tapahtuu SRBE. Aurinko pakahtuu, ja syöksyttää terveisensä sinne minne kulloinkin huvittaa. Useimmiten Suomen suuntaan erityisesti lokaattoriin KP42CJ.

**Proton Channel.** Protoni-TV. Coloradolaisen yksityisen kaapeliTV-aseman erikoislähetys, josta voi seurata sekunnin välein kehosi lävistävien positiivisten hiukkasten nopeus- ja tiheysjakaumaa. Beta-nauhoille taltoituja 2h lähetystä voi tilata postimyyynnistä, mutta niitä ei saa lähetää omissa nimissään Parhaat Kotivideon ohjelmaan.



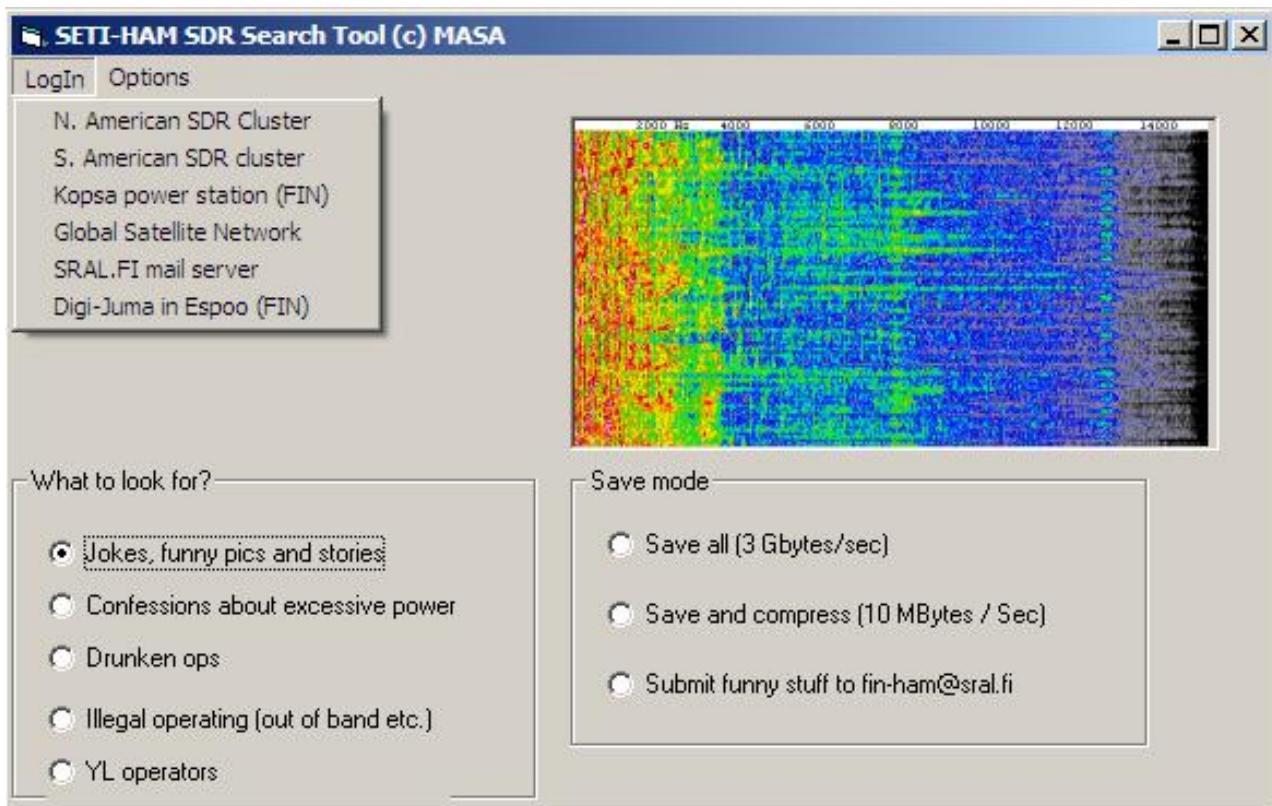
**POES** Energetic Particle Belt. POES yhtiön laihdutuskäyttöön tarkoitettama hoikentava vyö. Vaikutus perustuu korkeaenergiisiin hiukkasannoksiin, jotka vievät käyttäjältä nälän useaksi päiväksi ohentaa vatsan D-kerrosta, siis vatsaontelon rasvaa. Lisälaittein voidaan vaikuttaa F-kerrokseen, joka on suoraan vasanahan alla, mutta tällöin otetaan usein ns. Es-riski. Es eli "ei-seksiä" viittaa potilaiden hiukkasannoksen aiheuttamiin sivuoireisiin, josta potilas voi kärsiä pitkäänkin. Tässäkin on siis valittava kahdesta pahasta pienempi.

**SETIHAM - In search for intelligent amateur radio communication**  
Wolfgang Bitstream, OHIZÜß

The SETI-HAM project is proud to present the first results of our mission to help hams hear and store all meaningful radio communication on the ham bands, globally, anytime – anywhere. SETI-HAM is an out-reaching non-profit, non-scientific, and non-educative amateur radio coalition with truly profound goals. But we need your help. We need you and your hard-disk. We have just started but let's hear testimonies from our users:

**Tim, N4ØØ:** "The Masa search tool is great. I get to hear all local communication in Mudville at the end of the day in any particular order that I want. And skipping the weather reports is just one mouse click away. What a tool, what a system."

**Mr. Lee** (governmental organization): "This self-regulatory system of ham radio has helped us immensely in license amputation. We receive automatic weekly reports of misuse and violations. Reissuing the licenses and callsigns is bringing in such amounts of income that we have been able to start flying in Business class." **Crop Devilish, CLØWN** (MenCU): "This machine is outstanding, it includes hard core search engine software for any stupidous jammers including out of turn callers. It remains seated on remote base while you are standing in front of your DXCC map. It kills the remote base delays very efficient way, alarms when you are listening simultaneously at home and remote station without knowing it yourself. It calibrates your 4\_D clock to any sunset or sunrise communication without any juridical consequences. Extra option: QSLOTW feature without any substance. I have used the preliminary version for 5 years and still holding the line".



Our start has been successfull apart from a few issues with the signal processing algorithms, basically none of them work. Accordingly we are considering help by the local university of "Kleine Mastii".

**Chabong Tart, Kleine Mastii:** "We feel that there is a lot of research to be done in this field. Just imagine being able to distinguish a cursing drunk Finn from just an angry Finn, something we will need to do lots of work on so that we don't overload the processors and consume all bandwidth. Simply visualize how it is

during the IIHF hockey championships<sup>1</sup>; the amount of needed processing power is enormous, so this is very important and will require a tremendous amount of work.

We at SETI-HAM feel that we are really on to something big; this SDR-concept is also planned to be introduced to normal people i.e. non-hams. Such things as automatic gossip filtering, automated billing systems for public profanity and maybe even during oral English exams in school, making teachers useless and can save the goverment a lot of money.

<sup>1</sup> Reminder: Finland won 2011! (See p. 43)

## Radiosport – Comparable over time?

ilkka, OH1WZ

World record on men's 100 m sprint was 10.3 secs in the 1930s and has since then improved to 9.8 secs. In pole vault, the records have advanced from 4 to 6 m. That is a 50% enhancement! In cross-country skiing<sup>2</sup>, Veikko Hakulinen won the Olympic gold in 1952 (Oslo) on 50 km with the time 3:33:33. Nowadays, the best skiers do 50 km in less than two hours. Who remembers the many world records in pole vault? We might remember some, but these are likely in sports where the gear has less to do. But some of us appreciate and remember the title holders of the past.

Does radiosport compare over time (thru records)? I have experience over the last 25 years only, so I'll constrain myself to the last 30, or so, years. Peeking even further back in time - I could imagine that there was a drastic change in our sport, when commercial tranceivers became available, and one did not have to tune the RX- and TX-V#Os separately. This must have been sometime in the 1970s in Finland, and probably earlier in "economically better-off" countries. Elbugs set aside Vibroplex's, and the first memory keyers (you pressed a button to send "CQ TEST" in CW) must have been fantastic tools. Some chaps learned to use the Vibro/iambic keyer and the pencil simultaneously - a skill probably vanished these days. Some 25 years ago came the first keyers that would automatically give the serial-# report "RST + #". I remember seeing pictures, where Ville OH2MM had such a tool with him as he won CQWW SOABHP World several times. I guess those devices already could be programmed to alter the speed in the middst of the msg.

---

<sup>2</sup> A rare sport by Finns, Swedes and Norwegians.

It is obvious that in all fairness, the records made in 1948, 1960, 1980, 2000 or 2011 cannot be compared. We cannot conclude being a better contestor than OH5SE (1969), or OH6JW (1980), if we just happened to score 100% more points in 2011. Historic scores and records can however be informative of the changes over time. Looking closely, you see the effects from the solar cycle. Actually, one does not need to be so prudent to see it in the 21/28 MHz SOSB-scores. In addition, really bad conditions may manifest themselves in the form of poor activity and results in areas such as W7, VE6, SM, and UA0, who all gain from calm auroral activity. In 1985, there were less than 320 DXCC entities. Now, we are at almost 340, and there are more multipliers around (e.g. ex YU, PJ). The communications officers responsible for issuing callsigns had not yet thought of the option of selling prefixes and callsigns. Now you can buy a 2×1 call in Finland for some 200€. I call them the Viagra calls. And I guess the same is happening in many countries, resulting in boosted scores in WPX contests.

My understanding is that both OH5SE and OH6JW, when winning SOAB Eu in CQWW from Finland, they primarily used their hearing sense in making the Qs. Their hands were busy with the log sheets, analogue phone-CQ-machine / elbug / Vibro / knobs / manual antenna switches etc. They could not see who they should be calling or on what frequency that station is. It was about hearing, making sense of something through the noise and hustle. This is the sport that I grew up, and it is highly endangered nowadays. That scenario is just a few mouse clicks away.

73 ilkka

## Tough Propagation Due to the Auroral Oval and the Dark Polar Cap

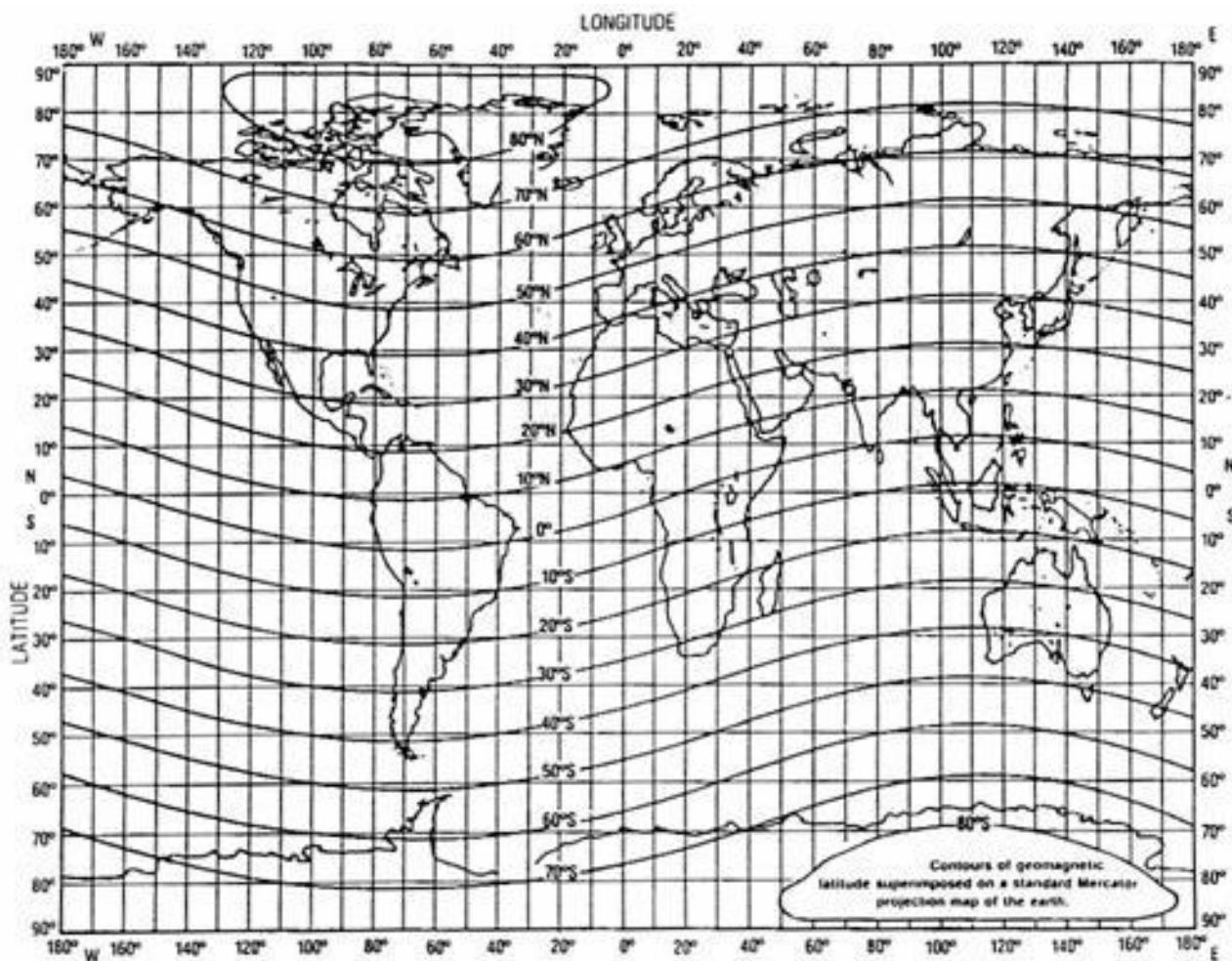
Carl Luetzelschwab, K9LA

Sometimes those of us in the Midwest states of North America (the states in call areas W9 and WØ) think we live in a black hole of propagation. In fact, the newsletter of the Society of Midwest Contesters (SMC) is aptly named The Black Hole:

<http://www.w9smc.com/newsletters.htm>.

We moan and groan about the East Coast working Europe when we can't hear a thing (this is especially true of the northern tier of Midwest states – Wisconsin, Minnesota, North Dakota, and South Dakota).

But we shouldn't complain – we could be in OH (or in any of the more northern Scandinavian countries). What makes these countries a bit worse than the Midwest of the US? Figure 1 tells the story.



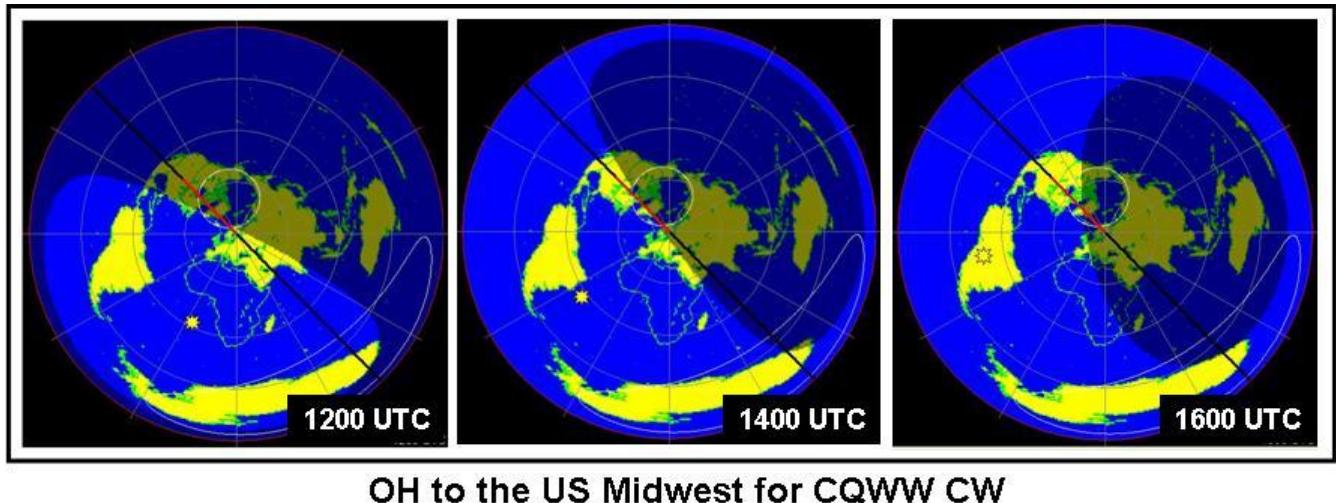
### Figure 1 – Geomagnetic Latitudes

The more northern Scandinavian countries (along with KL7 and most of the Canadian provinces) are around 60 degrees and higher in terms of geomagnetic latitude. This means they are closer to (or even under!) the auroral oval, which

generally results in detrimental effects to HF propagation.

Figure 2 shows how close the more northern Scandinavian countries are to the auroral oval. The maps in Figure 2 are great circle maps with OH at the center for three different UTC times during the end of November (the CW

weekend of the CQ World Wide DX Contest).



**OH to the US Midwest for CQWW CW**

The short red lines in Figure 2 are the short paths from OH to the Midwest of North America. The white circular line depicts the auroral oval for quiet geomagnetic field conditions, and of course it is centered on the north magnetic pole. Note that its equatorward edge is near OH, and it would extend south of OH under disturbed conditions. For the record, the southern auroral oval is elongated due to the distortion of great circle maps at their outer perimeters of 20,000 km (halfway around the world) – land masses at the outer perimeter are also distorted.

In addition to auroral oval considerations, the Sun is in the southern hemisphere at the end of November (as it is during all the winter months), and the northern polar cap (that area inside the northern auroral oval) is for the most part in darkness all day. The three times (1200 UTC around East Coast sunrise, 1400 UTC around Midwest sunrise, and 1600 UTC around West Coast sunrise) confirm this. It's also important to note that the first hop out of OH encounters the  $F_2$

region around the east coast of Greenland, which is in darkness regardless of the time. Thus the MUF (maximum useable frequency) in the polar cap will be quite low compared to more southern latitudes.

In summary, these are two good reasons why those of us in the US don't hear many Scandinavian countries on the higher bands in the northern winter months – the detrimental effects of the auroral oval and the low MUFs in the dark polar cap. It's not that they aren't trying – it's a fact that Nature is stacked against them.

But there's always a silver lining in every dark cloud if you look hard enough. For those at the higher magnetic latitudes, there are two interesting modes of propagation to help – but unfortunately they do not occur on a regular basis. One mode is patches of  $F_2$  region ionization that drift across the polar cap and the other mode is auroral-E. We'll look at auroral-E in a future issue of PileUp!

As for drifting patches of F<sub>2</sub> region ionization, observations at Sondrestrom-fjord, Qaanaaq, and Thule (all in Greenland) indicate the following morphology of these patches in the northern hemisphere polar cap:

- 1) a patch is a limited region of increased plasma density with a horizontal dimension on the order of 100-1000 km,
- 2) the ionization of a patch is significantly higher than the background F<sub>2</sub> region ionization – up to 10 times higher,
- 3) the average patch duration is around one hour,
- 4) the patches occur mostly in the winter months,
- 5) the patches occur in the daytime hours,

- 6) the patches occur throughout an entire solar cycle with solar maximum having the most occurrences, and
- 7) the patches occur most often when the interplanetary magnetic field turns southward.

So if you're contesting from one of the Scandinavian countries in the late fall, winter, and early spring, be sure to check out the higher bands in the daytime to the US when the interplanetary magnetic field is southward (which usually means quiet geomagnetic field conditions –check for a negative Bz component of the interplanetary magnetic field at

<http://www.swpc.noaa.gov/SWN/index.html>).

These bands may provide a welcome surprise to your HF contesting endeavors.

## Where do we go next...?

After amazing activity from Mars & Mercury and new Intergalactic record we decided to be QRV from the planet Jupiter. Why Jupiter? Well, there are several reasons. First one, Jupiter is new one on DXCC intergalactic list, no activity till now from there, we are expecting great pile-ups and of course, a great score!

Our spaceship “Braveheart” with one of the best crew ever took us to the Planet. No Sun storms; our trip was perfect and we landed on the north part of Jupiter, with a great view to Saturn and his rings. We worked with a special callsign **JUP1TER**.

Pileups were amazing; Ionosphere around Earth left enough short wave signals to Jupiter. All bands were good, including 160m, and Sun Eclipse in the middle of the contest brought us some extra new multipliers on lower bands. Our Skimmer satellite net around the globe, RBN station on the Moon gave us enough information about new stations on the air, so we worked 96.37895% from all station who called CQ. Our robot team on multiply station were amazing, had only some problem with battery.

Our ODX was /MM station out of our galaxy, hope he'll send his log because the new Contest robot version 7.3 works so good, it is almost impossible to cheat.

At the end, our score was 345,901,678,091,233<sup>322</sup>, which is 20% more than 2034 Intergalactic Record.

See you in 2036! ☺

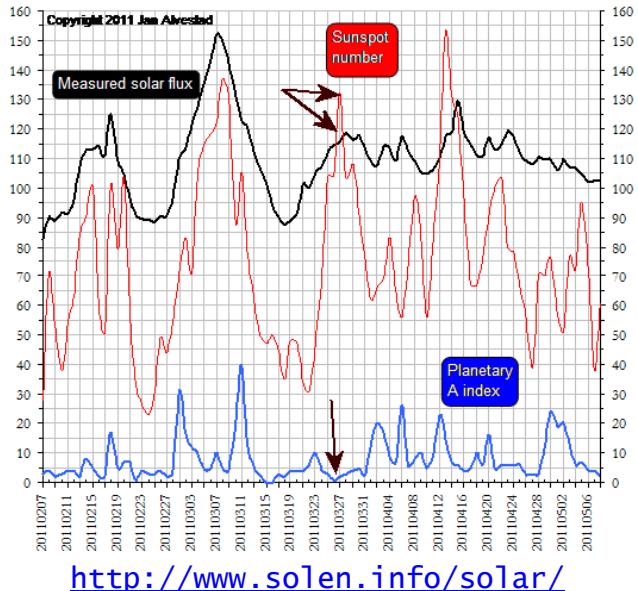
73, Zik DK8ZZ, VE3ZIK, YT3ZZ

## CW WPX SSB 2011 – Battle of the northern Big Boys

Ilkka, OH1WZ



This was a great year to participate CQ WPX from Fennoscandia and the whole of Baltic shield. Cycle 24 had finally started to show some signs and March 26, there were 104 SWO sunspots, the 10.7-cm flux was 115, and the College high-latitude three-hour K-indeces stayed at zero! Sunday March 27 was not any worse. Only the last 6 hours showed weak geomagnetic activity at College, K = 1. Sunspots had emerged as the SWO count was 132, and flux was at 117. To anyone who has followed there indicators, it should be clear that the aurora was away, and the flux would support decent 15M communication even up here in the north. The author was working into W/VE late on the Sunday evening on 15M with a modest 3-el 15 m agl. I heard the four stations on the band, and was surprised to learn that their QSO-numbers were high. Well, later that week we saw the great scores on 3830.

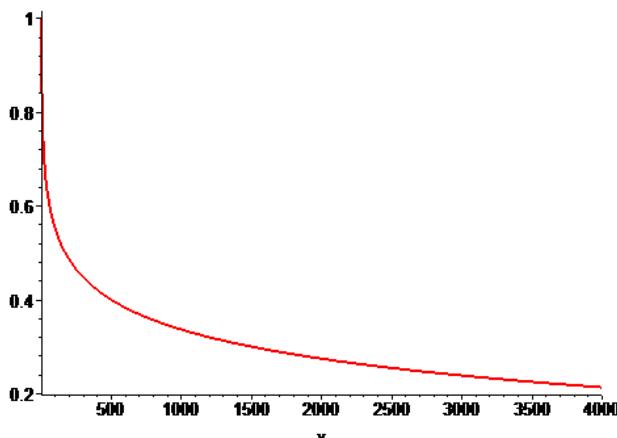


WPX contest is a nice event owing to the simple rules. It is possible to just call CQ, if you are a big gun. Multipliers accumulate on all bands – no worries there. The only harder thing to remember is the point-math, which says that low band QSOs are worth two high-band QSOs. The last WPX that I participated was SSB of 2009 at OH8X. I was the coach of our M/2 team, which comprised of eight operators having different background. I started my pre-contest session by introducing the contest wine that perfectly matched the theme. It was Italian **Tollo**. Well, the word tollo in Finnish implies two things; we have the verb (to gape) and the substantive (soft-headed). Well, Tollo gave us wings and we ended up #2 EU. “QRZ from happy radio OH8X?”

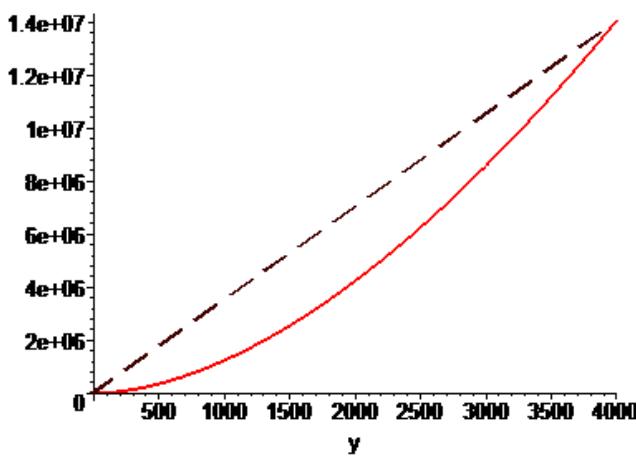
## The score model in WPX is

$$\text{Score} = \sum \text{mults} \cdot \sum \text{Qpoints}$$

Valid EU QSOs give 1 or 2 points and DX QSOs are worth 3 or 6 points. In WPX SSB, 40M is the potential money band, because there is nowadays more room, and DX QSOs are worth 6 points each. The biggest bucket is W/VE, while there are poorer “pileup-opportunities” in the other directions. 40M to W/VE is, however, prone to aurora (the usual Nordic moaning), and it takes a lot of struggle to race with stations from further south. The multipliers in WPX do not require lots of effort. They are like bonus products. Of course the odds for new mults decrease with the number of QSOs in the log, but they don't saturate in the way they do in CQ WW, for example.



Probability (0.2–1) of multi-QSOs for the first 4000 contacts. This pattern gives a total mult count of 1212.



Score development for the first 4000 Qs assuming an average 2.9 p/Q, and an even QSO-probability distribution (constant Q-rate). Mult-probability as in previous figure.

The score model is non-linear (quadratic), and making 4000 Qs instead of 3000, can increase your score from 8.5M to 14 M. This means that

“linear interpretation of supremacy” of op A over op B is not doable.

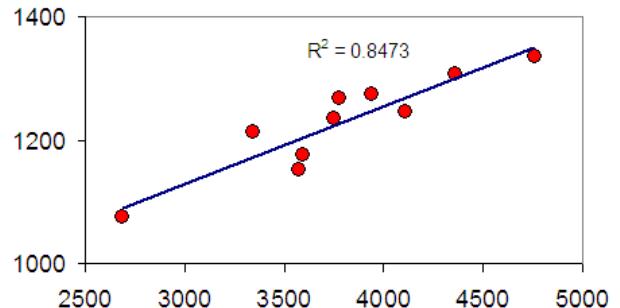
This article considers the performance of four ops in WPX SSB, SOAB HP:

- Tõnno **ES5TV**,
- Pasi (OH6UM @OH2BH) **OH10X**,
- Marko (OH4JFN) **OH8X**, and
- Micke (SM2WMV) **SJ2W** (PileUP! 15/1).

The four ops were sent a request for the log, basic log-statistics and some comments. Toni, OH2UA (CR2X) kindly cooked the logs with the SH5 cabrillo log analysis software (<http://www.tr4w.com/sh5/>).

3830 SOAB HP non-assisted EU:

<b>ES5TV</b>	<b>4755</b>	<b>1336</b>	<b>17,850,296</b>
403A	4105	1246	15,188,740
<b>OH10X(OH6UM)</b>	<b>3938</b>	<b>1274</b>	<b>14,815,346</b>
GM5X(GM4YXI)	4358	1307	14,676,303
<b>SJ2W(SM2WMV)</b>	<b>3777</b>	<b>1267</b>	<b>13,841,975</b>
OM2VL(@OM8A)	3573	1152	12,501,504
GW9T(MW0ZZK)	3591	1177	11,708,796
M6T(G4BUO)	3343	1213	11,278,474
EO4M(UR5MW)	3753	1235	11,148,345
<b>OH8X(OH4JFN)</b>	<b>3633</b>		<b>10,603,762</b>
....(17)			
OH1F(OH1NOA)	2690	1077	6,995,115



Eu top ten, Qsos × Mults.

The 3830 listings have ES5TV at #2 in EU with a score that would have pleased M/2 stations (48 hours, two stations) a few years ago. 4755 Qs is on average 132/h. With the serial-# exchange, it is really a fine number. And the high Q total gave the highest mult total at 1336. Of these, 410 were W/VE, followed by DL (74), JA (66), Eu-UA (49), and Italy (47). The statistics from the four logs were first averaged to represent mean performance:

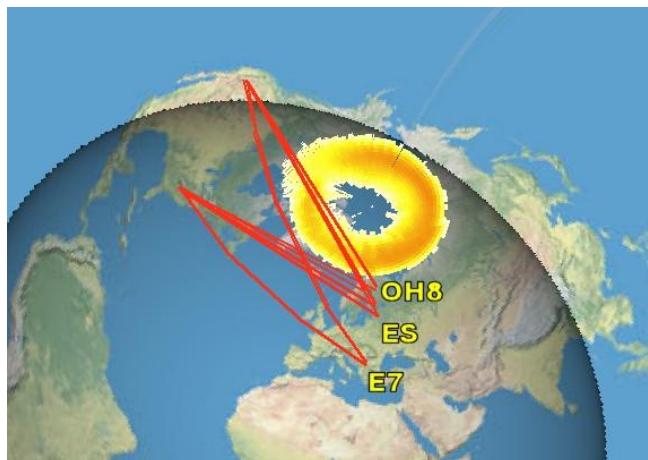
Average continental distribution of QSOs of the four stations.

	<b>160</b>	<b>80</b>	<b>40</b>	<b>20</b>	<b>15</b>	<b>10</b>	All
NA		20	345	809	618		1792
SA	1	9	30	33	16	6	95
EU	32	173	578	575	219	4	1580
AF	1	2	9	10	7	4	32
AS	1	13	67	95	287	7	470
OC		2	17	30	31	1	80

The mean numbers by bands show that it was a contest on 40M, 20M, and 15M. NA dominated in the DX-sector with 1800 QSOs. Some 700 DX QSOs from the other continents. Average DX-% was thus well over 50%, which is a clear indicator of good propagation. It was >80% on 15M. Owing to the point-math, it is sufficient to analyze and compare the six highlighted cells in the table. The relative values of ES5TV are above average in all important band-continent combinations except for Asia on 40M. Tönno did best towards NA on all bands. His 506 NA Qs on 40M are a lot, and in total there were 2500 NA Qs by ES5TV. OH10X had 1770, while SJ2W logged 1670 and OH8X "just" 1250.

QSO-numbers on the key bands and continents. Values are normalized (100%) to the average log.

Call	Area	40	20	15
ES5TV	NA	147	134	134
	AS	23	104	92
OH10X	NA	139	96	83
	AS	105	96	110
SJ2W	NA	100	87	100
	AS	161	68	135
OH8X	NA	14	83	83
	AS	111	132	63



Azimuth map from OH10X's perspective (23 GMT, March 25). Paths to W4 and W6 are drawn for the four northern stations and E7DX (Bosnia). Auroral oval is from May 10, 2011, when K = 3. (NOAA POES, SWPC).

ES5TV was running a pair of 3-o-3 on 40M, while Pasi used a 4-el @44 m and a 2-o-2-el. ES5TV (58°N, 26°E) has three stacked antenna arrays for 20–10M. In terms of antenna size and redundancy, OH8X was perhaps best equipped (7 towers). SJ2W (64°N, 20°E) and OH8X (65°N, 26°E) are both "northern" stations, 300 km apart. Then there was E7DX, #1 in EU, who claimed an amazing 5004 Qs and 21M points from (44°N, 18°E<sup>3</sup>).

### Comments by operators

To finalize, let's read the comments by the operators. I asked:

1. Thoughts on propagation?
2. Thoughts on general activity?
3. Can these scores be improved?
4. Why are your scores 50-100% higher than those made 10-12 years ago?
5. Your plans for SAC CW and SSB? Invite people to work you!

### ES5TV:

1. Propagation was fantastic. I don't remember so good US propagation on 40m for many, many years. 20 and 15 were great as well staying open till local midnight. Working KQ2M at my midnight on 15m was a thrill.
2. Activity in US seems to have gone up after K5ZD has started to put in a lot of fresh effort into the contest. Working over 200 JA was also very pleasant.
3. The scores can always be improved I guess. When 10 meters will open up to states another 10-20% should be possible with good propagation like this time. I hope we can challenge the southern EU then.
4. Big rise in scores is due to risen activity in contests in general, growth of WPX's popularity, tremendous growth in available prefixes and development of super stations.
5. Plans are not yet fixed for SAC 2011. Maybe I will come over and stir the pot on the Scandinavian side...

### SJ2W:

1. CondX were excellent, nothing at all to complain about except the last two hours when we got some aurora which didn't boost the

<sup>3</sup> These coordinates became expensive, as "Bosnia latitude" -Google search took me to a web site that loaded the system disk with a herd of trojans that endangered the production of this issue....(OH1WZ).

20/15m propagations but just make them worse. But except for those last two hours I don't think we could have asked for better propagations considering the SFI count. 40M was just amazing; I worked a lot of US which boosted the score for sure.

2. I think that overall the activity was very good. US and EU is as always very high activity but also JA had great activity considering the latest events which I thought would make us work a lot less guys from Japan. But I think that since 15M was open the way it was that increased the activity a lot since that is a very high activity band from Japan. BY not nearly as much as activity as in CQWW.

3. Sure can these scores be improved, I don't know though how easy it will be. Next year we will probably not have as good propagations on 40M which will hurt the score, because making up for that amount of points on 20/15/10M will be hard. Maybe during the solar peak if 10M really comes to life these scores could be beaten, or if we are lucky to have great 40M propagations next year as well.

4. I think that there are a few reasons to the score boost compared to last cycle. First, which maybe is the main reason is that you work 400–500 more prefixes now compared to 10 years ago. Also there is a lot more big stations now compared to earlier and activity in contests overall has increased. 10-12 years ago was about when I started with contesting though, so my experience of the "early days" is very limited.

5. We will probably be M/S in both SAC CW and SSB 2011. Rumors say that at least HA1AG will come and work SAC CW with us, maybe also some help from DL land by CW guru DJ1YFK.

#### My thoughts of the contest compared to OH8X:

The station I compare scores with most and think is most relevant is OH8X. The propagation at SJ2W is quite similar to Arkala since they are just located a bit further north than us but not by that much. In CQ WW SSB last year I got beaten bad by Marko (OH4JFN) and I was hoping that I could make some smart choices and get closer to him this time, since WPX is a contest with off times, which makes it a lot more strategic. Also 80M is not a factor in this contest, and this is the band I feel way, way behind them. I was looking in Marko's last year log and noticed that he worked quite a lot of 1-point Qs during the day on 20M and decided that I would not do this. Instead my strategy was to work these EU mults on 40M during the evening, try to have a couple of hours each evening with very high rate beaming south.

This worked and paid off big, even though it was during "prime time" US runs on 15/20M.

Another very vital strategy I had was not to try to run NA so much on 40M during the night when all of EU were struggling to work them. Instead I decided to take advantage of the northern propagation and take my offtime during the middle of the night and get up just before sunrise and work US until well after it. This made it easy to have a clear frequency and I worked a decent amount of NA on 40M because of this, I doubt I could have done this with all of EU still on the band. I also worked a very low amount of EU on 20/15M, which was on purpose. I pretty much never beamed south and I kept running 3-point qsos instead. Whenever I stopped running 3-pointers and EU I took off time, even if the rate was at 150/h. I also stayed on 15M as long as I could in the morning/day since I knew that activity from Asia would be a lot higher compared to on 20M.

I won the battle over OH8X this time and I'm very happy about that. A fun fact is that me and SM2XJP traveled to OH8X on Tuesday before the contest and bought an FT1000MP MKV from them, it was a great visit and Veijo (OH6KN) is a great host. Now I expect another great battle in CQWW DX SSB this autumn.

Check my website for information about the station and lots of news of what happens, <http://www.sj2w.se/contest/>

**OH10X:** Under the "last minute" circumstances the radio setup was left kind of "wrong-handed" for me (left = right and vice versa), which made operating a bit "funny". Ever tried this for 36 hours? :)

1. The first half of the contest did not produce quite as many qsos and prefixes that I had predicted, but thanks to 40M and 15M DX condx my score kept improving as scheduled anyway. The 2nd night on 40M was even better for me than the 1st. I can't even recall when I'd have had such a nice NA run from OH on 40M SSB as I had on the 2nd night. Suddenly I found myself reaching my target, OH record, already on Sunday morning! Being used to that "the good condx can't last long" I had decided to leave most of my rest hours to Sunday, but still had quite a few operating hours to make the best out of it.

I probably got a bit carried away with the unexpected 40M condx - but hey - it's my favourite band! :) I should have spent some more time on 20M and 15M, and just forgot about 160M and 10M, except maybe some 10 minutes on 10M on Sunday morning with some nice Asian, Austral-

ian, and African mults in a row (+ a few very weak Europeans), and another 10 minutes on Sunday afternoon with some more African mults and half a dozen of PY's & LU's . Next time I'm (hopefully) wiser.

2. More JA's than expected, especially on 15M. Only a few stations from AF and OC, and not that many from SA either.

3. Of course they can be improved. For example, by OH6UM next year. Still more focus on 40M and high band DX openings.

4. Especially due to good 40m DX condx. Also a lot more prefixes available now e.g. in Europe. OH10 -prefix helped too.

5. I hope I am able to take part in both SAC CW and SSB somehow, from somewhere.

**OH8X:** (Marko sent me his post-contest report in Finnish): Kiirokset kaikille supportista ja mahdollisuudesta. Asema pelasi tekniikaltaan erinomaisen hienosti!

Kova pala...On tullut aika istahtaa hetkeksi alas ja tutkia mitä on tullut tehdyksi ja miten tästä eteenpäin ja mihin suuntaan. Voi olla, että pitää kaivaa postimerkkikansiot naftasta...Pienessä usvassa tehty ensimmäisen vaiheen analyysi pääkohdaltaan on sen kaltainen, että mikäli tästä valoa vielä tunnelin päähän tulee,... Täytyy pohjata tarkemmin, kunhan juuri käynnistyvä OK-taloprojekti, joka kohta työllistää sen vähänkin vapaan ajan on toivottavasti loppuvuodesta päätökseen.

Pieni haaste oli tottuminen FT5K:n (1. kisa ko. radiolla) filsuihin. Olisi varmaan pitänyt pitää filsuja vähän levempänä: aika usein vasta-asema osui vähän sivuun. Syynä usein oli se, että olin pyörittänyt "RX-CLARia" +- joitain vastannutta asemaa etsiessäni ja qson jälkeen rx-clar jäi omalta jaksolta himpun sivuun. Huono-filsuisilla rigeillä tämä ei ole ollut isokaan ongelma, mutta nyt ainakin tuntui sille, että tämän asian kanssa sai tehdä ihan jatkuvasti töitä.

Se miten tämä 5 miljoonan kupru käytännössä syntyi on melkoisen usvan peitossa, toivottavasti selviää joskus. Teoriassa syytä ei tarvitse hakea kovin kaukaa -> DX % 80m:llä 28,4% ja 40m:llä 20%!!! Alabandien DX-qsojen tärkeys oli tiedostettu ennen kisaa varsin hyvin ja niiden kimpussa töitä yrityttiin tehdä.

Ehkäpä myöhemmässä vaiheessa selviää se, miksi niitä ei vain tullut (1) aika/paikka väärä? 2) joku muu syy? ). Lokivertailulla täytynee tutkia miten 8X:n alabandit menevät vs SJ2W / ES5TV / OH10X ja millainen ero qso-kertymässä / suunnassa on ollut. WPX:ssä ei voi alabandien pisteen

painotuksen vuoksi pärjätä jos alabandeja ei saa jotenkin balanssiin.

Aloitin kisan 40/20M. Biimasin 40m:llä W ja EU suuntiin -> DX qsoja tuona aikana tuli 40m:llä äärettömän vähän. 160–40m:n NA Qso: 00z 0, 01z 0, 02z 4, 03z 22 ja 04z 6. Sunnuntai-aamuna tilanne oli ihan sama 03-04z -> ajoin yhteensä 28 jenkiä alabandeilla.

Ei vain tullut vaikka millaista sadetanssia tanssi, siinä oli aika vähän keinoja kun oli millä tahansa bandilla, niin cq ei tuottanut oikein meininkiä. Huonoa ratea piti paikata plokkailemalla. 04:30z menin paussille, koska alabandeilla ei saanut pyörimään ja laskin 20/15M yökelien varaan.

Jälkeen päin voisi jossitella, olisiko ensimmäinen tauko pitänyt siirtää 30-60min myöhäisempään aikaan, olisiko se tuottanut 20 jenkiä lisää (=120 yläbandin EU Qson pisteet ) lisää vaikko ei...??

160–40M maanosittain: NA 63, AS 99, EU 716, SA 14, AF 8, OC 15. 40M:llä kyllä kuului jenkejä välillä hyvin, mutta kun ei niitää vaan saanut omalle jaksolle. Vertailun vuoksi 2010 WPX SSB:ssä ajoin: NA 32, AS 80, EU 633, SA 22, AF 13, OC 9.

Tuntuma oli se, että 40M:llä ei saanut mitään aikaan silloin kun bandi alkoi täytyä. Parhaat hetket olivat niitä, kun valta-osa asemista oli jossain muualla...(vrt. esim 1.päivä 17z aasian suunta) 80m:llä efekti oli vielä voimakkaampi. En tiedä mitä 40M:llä olisi pitänyt tehdä W-suunnan kanssa toisin. 80M:llä olisi voinut vähän enemmän rummuttaa W-suuntaa, siinä stiblasin.

En muuten muistanut miten voisi tehokkaasti käyttää splitti-workkimesse microhamia niin, että A-radiolla kuulen molemmat vfo:t RX:n aikaan, mutta TX-modessa kuuntelen B-radiota. Quick and dirty oli manuaalisesti muuttaa audio A radion A-volle ja toinen korva B-volle -> tuona aikana 2. radion käyttö oli tehotonta.

Kelit ylipäänsä tuntuivat sellaiselle, että tuntui sille, että itään paremmin kuin länteen. 15m:llä tuli jenkkisuunnasta S7–S9 kohina. Se oli läsnä molempina päivinä sen jälkeen kun keli avautui. Parhaiten kuulin 15m:llä iltapäivällä jenkejä kun biimasin etelään. Tehoa ajoin W ja EU-suuntiin ja kuuntelin EU:sta, silloin kun workin alkuillan jenkejä. Myöhemmin yöllä kohinaa ei enää tullut ja jenkit tuntuivat kuuluvan "oikeasta suunnasta". Kohina oli pahempi monostakkilla (S7–S9) kuin 6×tribander stakkilla (1s pienempi), mutta molemmilla se oli aika raju.

20M oli kyllä pitkään auki, mutta minun mielesti bandi ei missään nimessä ollut Arkalasta katsottuna sellainen kuin se on ollut. Jenkejä tuli lokiin "äksämäisesti" vasta 23z. Koko illan oli

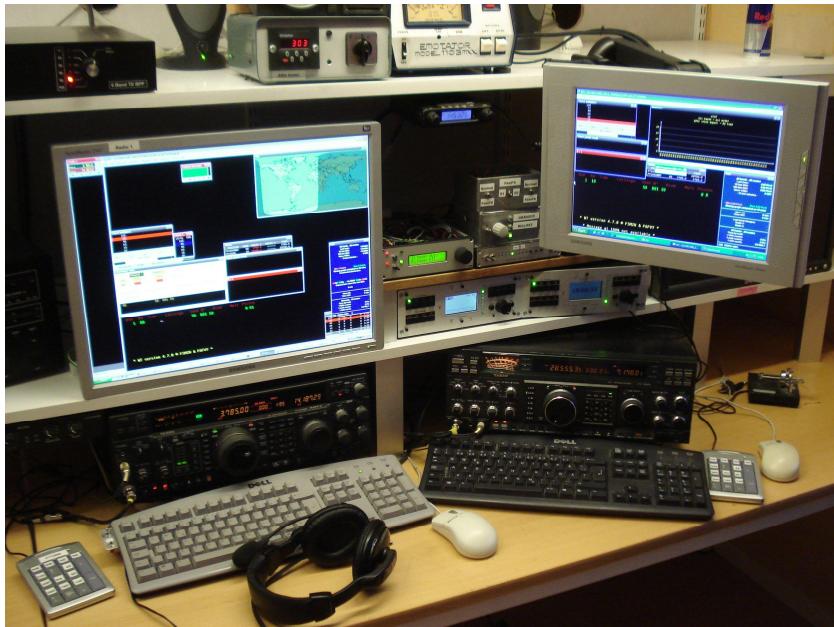
kyttäillyt 20m:n putken aukeamista, mutta se tapahtui aikaisempiin kokemuksiin peilaten todella myöhään. Yksittäisiä jenkkejä tuli alkuillalla vastaamaan mutta massa puuttui...

Tuntui että yläbandien keli pyöri (tai sitten operaattorin korvien välissä pyöri ja surisi) jotenkin kummallisesti. Asemat tulivat jotekin sykliseksi, saattoi olla 5-10min sloti jossa tuli Eurooppaa..sitten meno pysähtyi kuin seinään ja sitten hetken päästä alkoi tulla jenkkejä..kunnes sitten niiden tulo loppui. Kun katsoo noita muiden claimed tietoja, niin pts/q suhteessa:

SJ2W	2.89 pts/q
ES5TV	2.81 pts/q
OH8X	2.37 pts/q
4O3A	2.97 pts/q
E7DX	3.19 pts/q



60-m-high tower at SJ2W.



SO2R @ SJ2W

## Conclusions (OH1WZ)

It seems that despite largest antenna arrays and a first-class operator, OH8X could not compete this time against the other northern big guns. In E-W direction, the impact by the auroral ovat can change drastically (ask anyone of the OH7AB boys, stns in mid-west U.S., or UA1N). OH8X was on the wrong side of the propagation on 40M, and could not utilize night-time 20M and 15M W/VE openings, which are needed in order

to do well from Arkala. Aluminium does not make ionosphere.

Fine scores were made by SJ2W, OH10X and especially ES5TV. They reflect fine choices of QRV hours and bands. Well done from the north! CU in SAC in the autumn!  
br OH1WZ

The SH5-data of the four stations are available:  
<http://www.helsinki.fi/~korpela/jako/PU/>

# **Electronics for dummies – Sähkötermit tutuiksi pölkypäille!**

Andy ζ. Huuhkaja, OH2DDT

Toimitukseen ei tullut määräaikaan materiaalia – eiku tulikin.

**IC piiri.** Useimmiten oikutteleva komponentti VR:n IC-junissa.

**ASIC piiri.** Insinööri Teuvo Asikaisen v. 1974 keksimä älypiiri jonka lyhenne tulee sanoista Alipaineisella Savulla täytetty IC-piiri

**Impitanssi.** Naisten haku. Sitä vastustelee, muttei voi resistiivisisti kieltyytyä, vaan loisvirta vie mkanaan.

**Aaltoputki.** Stadionilla oleva yleisö ei voi lopettaa aaltojen tekemistä. Myös lyhenne aaltopahviputkesta. Email-sukupolvelle tiedoksi että aaltopahviputkessa kuljetettiin ennen suurikokoisia piirustuksia.

**Konverterti.** Muuntaa kätevästi kympit satasiksi. Tästä kannattaa olla ihan hissukseen.

**Invertteri.** Kääntää kaiken toisinpäin. Invertterillä voidaan esim. tehdä valosta pimeää ja pimeästä valoa.

**Multiplekseri.** Korvaan asetettava laite joka erottelee yhtä aikaa äänessä olevan vaimon ja anopin puheet ymmärrettävään muotoon.

**A-luokan vahvistin.** Parasta A-luokkaa oleva laite joka vahvistaa minkä tahansa signaalina.

**B-luokan vahvistin.** Ei yleensä kannata ostaa.

**AB-luokan vahvistin.** Hinta-laatu-suhteeltaan paras ostos vahvistimissa.

**C-luokan vahvistin.** No huh huh.

**Varistori.** Paikka keskellä kaupunkia jossa helppoheikit kauppaavat lentäviä tuhoeläimiä.

**Tyristori.** Paikka johon kaiken maailman tumpulat kokoontuvat.

**BEER.** Bidirectional Ergonomically Enhanced Radio. Kaksisuuntainen erityisen ergonominen radio.

**Irtokomponentti.** Arvasin mitä heti ajattelet! Hyi! Kyseessä on kuitenkin mikä tahansa irrallinen osa joita yhdistelemällä saadaan aikaan toimiva kytkentä.

**Välitaajuus.** Kahden eri taajuuden väli. Esimerkiksi 3698 kHz:n ja 3700 kHz:n välitaajuus on 3699 kHz.

**Vaihtovirta.** Tilanne jossa Olavi Virran LP vaihtaa omistajaa.

**Seisova aalto.** Oskilloskoopin näytöllä näkyvä muuttumaton siniaaltokuvio.

**Pyörivä polarisaatio.** Tekninen termi kärrynpyörien heittämiselle.

**Magneettikenttä.** Iso alue täynnä magneetteja. Vrt. miinakenttä.

**Desibeli.** Mittayksikkö senttibelin ja belin välissä. Kuriositeettina koko asteikko savoksi kuuluu: pikopelj', nanopelj', mikropelj', millipelj', senttipelj', tesipelj', pelj', tekapelj', hektopelj', kilopelj', megapelj', helevetin iso pelj'.

**SASHIMI.** Specially Applied Software for Ham's Integrated Miniature Intelligent circuits. Todella pienikokoisiin hamssien kytkentöihin tarkoitettu softa.

**Waterfall display.** Taulu Niagaran putouksista. Erityisen suosittu niinsanottuja näppismodeja harrastavien hamssien seinillä.

**Gain.** Useimmiten väärin käytetty ilmaisu. Kyseessä on rahallinen hyöty kun myy jotain kalliimmalla kuin ostaa. Hamssien keskuudessa toki mitataan desibeleissä. Jos ostat radion tonnilla ja myyt kahdella niin kaupan gain on 3dB. Sähkön kyseessä ollessa sovelletaan eri asteikkoa ja kilowattitunnin ostaminen euroilla ja myyminen kahdella vastaa 6dB.

### **Letter from reader.**

Howdy, it's Bill again.

Wife told me the other day that I need some muscle. I asked how about a six-pack. She replied she would love to see me having a six-pack. I told her it would cost some to get one but it wouldn't take very long. She did not mind the cost for me to get the muscle. So I went on and started working on it. A few weeks later she asks "honey, I have not seen any progress on your six-pack project?" I told her that is not true and motioned her to take a closer look. I took her to the shack and showed her the blue box.

PS. I will be fine. The doc says they can release me from the ICU next week.

### **Pienten hamssien lauluja**

Titta Po, BOØBS

Pikku-hamssin linkusta on putki haljennut,  
Pikku-hamssin linkusta on putki haljennut,  
Pikku-hamssin linkusta on putki haljennut,  
Eimacilla me korjaamme sen!

Isot pailapit, isot pailapit, ne lystikkäitä on,  
Isot pailapit, isot pailapit, ne lystikkäitä on,  
Ei loppua, ei loppua, ei loppua ollenkaan

Isot linukat, isot linukat, ne lystikkäitä on,  
Isot linukat, isot linukat, ne lystikkäitä on,  
Ei kuuärpee, ei kuuärpee, ei kuuärpee  
ollenkaan

Piippolan vaarilla oli linkku, hiiala hiiala hei!  
Vaari se viritteli linkkuansa, hiiala hiiala hei!  
Pailappi siellä ja pailappi täällä, hiiala hiiala  
hei!

GU-putki, GU-putki,  
lämpee jo, lämpee jo,  
kertoimet ei oota, kertoimet ei oota,  
lämpee jo, lämpee jo.

### **KAKSI VANHAA TESTIJÄTKÄÄ**

Kaksi vanhaa testijätkää istuu tummetessa illan  
Paksalo hiljaa on ja tuntuu tuoksu herkkä teflonvillan  
Toinen polttaa sikaria, jolla hintaa paljon lienee  
Toinen puree huuliansa. Muistot nuoruutehen vienee  
Muistatkos - CQ:t ne hurjimmat ennen, voitettiin taidolla vaan  
Toinen on hiljaa niin kauan ja vastaa: nyt ei ne nuoret  
nyt ei ne nuoret, pärjää skimmereilläkään

Kaksi vanhaa testijätkää, jätkää vain, ei mitään muuta  
Jostain CW soi - se WiskiWiski on ja marraskuuta  
Tikku siinä leimahdellen loistaa hetken - sammuu hankeen  
Into sammuu joskus myösken. Muisto jää vain elon pirtaan  
Muistatkos - pailupit paksuimmat ennen, ajettiin bugilla vaan  
Toinen on hiljaa niin kauan ja vastaa: nyt ei ne nuoret  
Nyt ei ne nuoret, nyt ei ne nuoret, pysty WinTestilläkään

Kaksi vanhaa testijätkää. Lyyssin päällä violetti lätkä  
Workittu on - ja paljon. Vaik' on kuso lyhyt pätä  
Kusot karttui, polkka kulki. Scoret siitä kyllä hankki  
Bugit heilui, mikit heilui. Jätkän suu on jätkän pankki  
Muistatkos - scoret ne suurimmat ennen, hanskattiin polkalla vaan  
Toinen on hiljaa niin kauan ja vastaa: nyt ei ne nuoret  
nyt ei ne nuoret, pärjää skimmereilläkään

Tämä viisu OH6El:n kynästä OH2U:nn suuruudenpäiviä muistellessa.  
Paksalon polkka tarkoittaa kertoimien siirtelvä bandilta toiselle.

# **Hamssit Huomio!**

## **Juhlaan tai arkeen**

### **DX ilotulitteet nyt meiltä**



#### **Uutuudet 2011:**

**\$RAT-raketti:** Tällä ammut rahasi ilmaan kovaa ja korkealle. Kiemurtelee ja suhisee mennessään, eikä tahdo millään sammua. €12<sup>95</sup> kpl. Ei jälleenmyyjille.

**Jussilan Tyrä:** Tällä pommilla karkotat juhlaväen vaaraetäisyydeltä ja voit turvallisesti ampua loput raketit kenenkään tulematta liian lähelle. €6<sup>95</sup> kpl, €129<sup>95</sup> pkt (sis. 10 kpl). Kaupanpäälle liput ilotulittamisen SM-kisoihin Tuusulaan ja yksi Pussinen äkäisiä suutareita.

**Turusen DX-pata:** Tämä todella raju pommi laukaistaan 100 m päästä sähköisesti. Kosta naapurillesi etänä. €105.99 kpl. Kuluttajavastuulin 5§ mukaisesti ostaja ei voi ryhtyä oikeustoimiin tuotteen myyjää tai valmistajaa vastaan.

**Kiertävä myymäläautomme on pian paikkakunnallasi. Seuraa ilmoitteluumme. Martsun Paukku ky. Tukesin lupa 572B.**

## Kannattaako Suomesta osallistua?

Seppo Sisättö OH1VR

Suomessa PJ2T:n, EA8AH:n, P40L:n, CN2R:n jne. voittamisesta voi unelmoida, mutta realistisia mahdollisuusia kyseisten asemien voittamiseen täältä ei ole. Se on kiistaton ongelma, vaikka siitä ei ongelmana puhuta. Seuraavassa ajatuksiani kilpailutodellisuudestamme.

Vauhdikas pile up ja uudet kertoimet sekä niiden tuloksena mukavasti kasvava pistekertymä. Siinä radioamatöörkilpailu pähkinänkuoressa. Tähtämessä on tietysti kisan voitto etukäteen laaditun käskirjoituksen (strategia) ja loppuun saakka huippukuntaan viritetyn radioaseman avulla.

Kuvaus on johdonmukainen, uskottavalta kuulostava, mutta täysin väärä. Voitto tai 'vain' hyvä sijoitus ovat Suomesta kansainväliseen kilpailuun osallistuttaessa pieniä poikkeuksia lukuun ottamatta harhakuvitelma. Yhden auringonpilkkujakson aikana radiokelit voivat parina vuotena olla niin hyvät, että voiton mahdollisuusia on olemassa mutta siinä kaikki. Suomen maantieteellinen sijainti on yksinkertaisesti voitto/sijoitusmahdollisuksia vastaan. Miksi siis kilpailemme? Miksi rakennamme korkeita mastoja, isoja antennijärjestelmiä, hienoja laiteautomatiikkoja, ostamme kalliita radioita jne.?

Kuten tiedämme, voiton tai ainakin hyvän sijoituksen edellytykset ovat toiset, jos pystytää asemansa esimerkiksi Kanarialle, Madeiralle, Curacaoon, Aruballe tai Bonairille eli paikkaan, josta joka bandilla voi pitää pääsääntöisesti pelkkiä DX-kusoja. Ja noissa paikoissa tuloksen tekoon riittää vaativattonkin asema: 100W ja 3-4 elementtinen suunta-antenni alle kymmenessä metrissä. Kusoja on noissa paikoissa tarjolla monasti enemmän kuin niitä kykenee pitämään.

Esimerkki: matkasin Bonairille lokakuussa 2002 mukanani IC-736, AR-22 roottori ja 3-el Radixin kympin biimi. Se nostettiin noin seitsemän metrin korkeuteen hotellista vuokrattuihin alumiinitikkaisiin kiinnitettynä. Lomailun ohessa oli tavoitteenani pitää 1 500 kusoa CQ WW:n Phonessa. Niitä kertyi kuitenkin yli 3 000 noin 24 tuntia kestäneen operointini aikana. Bandi oli vielä auki, kun lauantai-ilta lähdin kavereiden kanssa illalliselle. Tyhmä päätös, joka harmittaa vieläkin. Lopputulokseni oli muutaman kymmenen kuson päässä kympin low power -luokan maailmanennätyksestä. Kotiläksyt olisi pitänyt tehdä.

Suomesta osallistuin kymmenen vuotta aikaisemmin (1992) kilowatilla ja 2x6-el antennein 42 metriä korkeassa mastossa myös kympin singleen ja kusoja kertyi liki tuhat vähemmän. OH:ta ja PJ4:ää ei ole järkevää verrata.

Olemme siis Suomessa tilanteessa, jossa teemme monasti kuukausia vapaa-aikanamme valmisteluja tulevaan kilpailukauteen ja sitten saamme sanamukaisesti turpiimme tunnissa pystyyn laitetulta asemaviritelmältä. Onko siinä järkeä?

Hyvä keskitasoa oleva operaattori pystyy siis sijoittumaan kilpailuissamme matkaamalla radionsa ja antenninsa kanssa edellä kuvatun kaltaiseen kohteeseen. Mitä osallistumisen motiiveja jää jäljelle täällä Suomessa: pisteiden antaminen kavereille, harvinaisten yhteyksien saaminen, pieni piristävä pile up silloin tällöin, erilaiset tekniset kokeilut, joiden tulosten hyödyntäminen tuottaisi em. DX-QTH:ssa moninkertaisen hyödyn, ajankulu viikonloppuna jne.

Tilanne näyttää masentavalta, jota se ei onneksi ehkä ole muille kuin todellisille kisafanaatikolle. Kirjoitin pari vuotta sitten Pile Up'iin tarinan siitä kuinka OH6NV:n ulkomainen tiimi hakkasi OG1M:nä ope-roineen kotimaisen tiimin. Asemat olivat muutaman kilometrin etäisyydellä toisiaan Ikaalisissa. Kokemus oli mukava ja jotain samankaltaista tapahtunee 2012 heinäkuussa IARU:n kisassa suunnilleen samoin tiimein.

Eli: voimme kasvattaa kilpailuintoa ja motiivia muodostamalla paikallisia keskenään kisailevia asemia. Silloin tulokset ovat paremmin vertailukelpoisia ja niiden analysointi on mielekästä. Saman idean pohjalta on äskettäin tehty kilpailuoperaatioita myös San Francisco Baylla, jossa kahdeksan tiimiä otteli keskenään. Sikäläinen lähtötilanne on Suomeen verrattavissa: Sieltäkään ei voi voittaa mutta paikallistiimien ottelulla saadaan kilpailemiseen uutta sisältöä.

Contest Club Finland on suomalaisten radioamatöörjen kilpailuseura, joka on saanut koko joukon ulkomaisia jäseniä ja tekemistämme ollaan laajasti kiinnostuneita. Sitä osoittavat tämän lehden netti-version hyvät levikkiluvut. Upea juttu. Rohkenen kuitenkin ehdottaa, että CCF lisäisi kotimaahan suuntautuvaa aktivoitettiaan esimerkiksi aktivoimalla verkkosivunsa keräämään keskitetyt omalle sivulle isojen kisojen OH -tulokset. Ei riittää, että minä ja monet muut lähetämme keskustelusivuille tulostietomme – sinne ne hukkuvat monien muiden asioiden joukkoon. Tarvitaan selkeä sivu, jolle voi klikkautua etusivulta ja jolla tulokset ovat luettavissa luokiteltuina.

Saimme viime vuonna selkäämme SAC:ssa niin pahasti, että meillä on paljon töitä tehtävänä päästääksemme edes jollain tasolla ottelemaan Ruotsin kanssa. Mihin ovat kadonneet suomalaiset osanottajat? Meillä on huippuja mutta kaura puuttuu. Sen kasvattaminen ja mukaan saaminen on CCF:n tehtäviä. Jos joku

seuramme jäsenistä on eri mieltä, erotkoon tai sitten tulkoon erotetuksi, kuten maassa näyttää olevan tänään tapana. Nipan sanonta: - Mies talosta ja kaksi parhaasta – on unohdettu. Aloitetaan korjausliike vaikka sen kunniaan palauttamisella.

### Eli tiivistäen:

- Lisätään osallistumismotiiveja OH-asemia keskinäiseen kilpailuun kannustamalla,
- Annetaan arvo kaikille osanottajille – kilpailuminen ei ole erikoismiesten hommaa vaan kaikki ovat tervetulleita osallistumaan mahdollisuksiensa mukaan (kuten 'ennen vanhaan'),
- Otetaan syksyn SAC toissamme – tehdään projektti, joka palauttaa voitot Suomeen. Ruotsalaisten tapahtuneelle aktivoitumiselle kaikki pisteet – me olemme passivoituneet!
- Palautetaan CCF:n toiminnan ytimeksi OH-kilpailuaktiviteetin kehittäminen ja kasvattaminen,
- Suomesta on poikkeuksellista voitaa kansainvälinen kilpailu mutta niihin osallistumisen mielekkyyttä voidaan kuvatuin kotimaisin toimin kasvattaa. Kääritään hihat ja ryhdytään toimeen – ideoita ja paljon parempia kuin edellä esitettyt, löytyy varmasti, jos vain lähdemme liikkeelle. Ja lopuksi:
- Tämä ei ole kritiikkirjoitus CCF:n vetäjiä kohtaan vaan vuosikymmeniä rivimiestasolla kisailleen ajatuksia siitä, missä OH-kilpailijat menevät.

## Progress Is Slow

Jari Jokiniemi, OH3BU<sup>4</sup>

I have quite many years longed for contest rules that allow using alerting networks and systems alike in any category. For years, it seemed that the official contest rules did not have anything for those who want to use alerting networks and operate, for example, low instead of high power. Officially, only one choice existed, single operator assisted - always high power. I never quite understood that results were however published for the other non-existing assisted classes too, such as the low power. Well, the times have changed, and for the better. This year my pick for the WPX SSB was single-operator-assisted-low-power-single-band-10-meters-tribander/single-element-class. What a name! OH6LI won't be able to say "congratulations, you are the champion IF SUCH A CLASS EXISTS". In 1999 he was, and it was single-operator-high-power-single-band-160-meter-tribander/single-element, which did exist according to the rules of 1999. I simply read rules a bit more carefully than Jukka. In 2011, the new rules more clearly than ever state that SOALPSB10TS does exist (Section V, Parts Ab and Ca), and the records for that are published already, too. World record holder is PP5BZ, congratulations. Problem solved. Everyone is happy. Right?

Well, almost. First, we still cannot use alerting networks operating QRP. One might rightfully ask that why on Earth would anyone want that. Well, I can not speak for the others, but as my primary interest has usually been DXing, and lately especially the low bands, I might want to make some contest QSOs with five Watts on 10M and then switch on the amplifier for the night to chase some new ones on TB (not to count towards my QRPSB10 score). Or, I might want to

operate the contest seriously as QRP on 15M, while keeping my eyes open if some widely promoted rare DXCC entity actually comes on the bands during the contest. I doubt that no contest organizer would accept if I claim that yeah, I was watching the cluster all the time during the contest, but I did not use it for the contest. At least that might require some medical proof of dual personality.

These examples may look somewhat remote, I admit, but then comes the second issue. I operated SOALPSB10TS and I trust that I will be credited accordingly. I just wonder if there is anyone else in that particular class. If anyone from SA was there, I won't have any chance whatsoever, propagation up here in the North being not that good, you know. An observant reader may wonder what made me choose that class. I am not going to tell you. But let me tell you one thing, I did read the rules many times before switching on the radio, and it was no coincidence that I chose exactly SOALPSB10TS.

There are people who say that we already have too many contest classes. This is a matter of personal taste, and I am in no position to claim universal truth. Note, however, that if QSO alerting assistance had been allowed in all classes right from the beginning, i.e. 20 years ago, we would have far less classes now. I am not a real hardcore competitor, so it does not bother me personally that much if there are almost as many classes in a contest as there are contestants. However, I have been led to believe that the current state of affairs might upset some of the more serious participants. At least the exploding amount of classes has been the argument against adding the <insert-your-favourite-missing-class-here> to the rules.

So? We should allow using alerting networks everywhere, but that adds yet more classes on top of the existing ones, and I've heard we already have too

<sup>4</sup> The text was moderately shortened in places by the editors.

many. Moreover, we cannot do this in any of the pure single operator (SO) classes, as that has been the very thing that originally created the whole debate. Ah, what to do, what to do, what to do? Hey, I have an idea. What if we just name everything nicely, then it doesn't sound so bad. There has been some fierce work to guarantee that anyone who might have used packet is put to the assisted category. Let's make this really easy for everyone. Let us simply remove all pure SO classes altogether, and let us add SO assisted QRP class to the rules. Now everyone is allowed to use QSO alerting assistance, and we have far less classes than what we have currently. The WPX rule section V then becomes something like **A.** SO assisted categories: (a) SO assisted high (all band or single band), (b) SO assisted low (all band or single band), and (c) SO assisted QRP (all band or single band), **B.** SO overlay categories etc. The same idea can easily be extended to any contest. I just used WPX as an example. After some 10 or 15 years of bitter complaining we might finally introduce SO classic-high-power class, in which alerting assistance is not allowed. This small delay surely cannot be any problem, as the bashing of packeteers have been going on far longer.

The greatest benefit of this all comes to rule compliance. The very concept of packet cheating would go away with a single stroke of a keyboard. We would no longer see the old farts complaining about some perceived benefit someone might have got from using packet cluster. All the energy wasted for twenty years in catching those who might have used alerting assistance could be used to chasing down some much more serious cheaters. We could simplify log checking procedures, unless we for some peculiar reason want to start bashing those who did not use alerting networks (would that then be called packetless cheating). We would be shown in a little more modern light to those outside of the contesting

community. To those, who might see computers and computer networks as normal parts of a modern society rather than the great evil that is destroying our hobby permanently?

I understand that even as this idea is not exactly new, it might still be somewhat difficult to gain acceptance among the men who have been winning the current SOABHP contests the last 30 years. So as the first step I propose a little more modest change. As the articles in our magazines describing contest results have traditionally been very much in favor of the SO classes, and the assisted classes (especially the assisted classes!) have received little or no fame at all, let us reverse the focus for some years.

From now on, let's start all contesting articles by describing the results of the assisted classes. Who won the assisted HP all band class, who was the runner up, who came third,... Was the battle fierce or just ordinary? What kind of great stations did they have? Then we describe what happened in the assisted HP single band classes (all top three entrants, of course), then the same stories about the assisted low power classes etc. And then finally, if there is still more space in the pages, a small chapter about all the SO (non-assisted) classes. All of the pictures are naturally about assisted operators, except a picture or two about some great multi-multi that had travelled to a rare island. Of course, the fame tables would show only assisted results tabulated by continent and zone and what have you. Perhaps we could show a list of world level SO (non-assisted) all band entries at the very end of the fame table, but surely there is no need to show any list of SO (non-assisted) single band winners. As everyone likely concluded, 90% of the trophies would go to the assisted winners.

I am sure that after a few years the big boys would get the message.

## A word from Down Under – the Australian contest scene

Trent, VK4TI



VKCC'er Trent, VK4TI @ VK4KW.

The Australian Contest Scene is dominated by the VK Contest Club - this club is unique... VKCC was formed by Mirek VK6DXI, Nick VK2DX, Mike VK4DX, Bernd VK2IA and Sergey VK2IMM.

The club runs as an informal yahoo group <http://groups.yahoo.com/group/vkcc/>. There is no structure, committee, or dues, but is organised along the lines of the socialist principles. When funds are needed an email is forwarded to all members and

Andrew VK4HAM and Peter VK4LAT from St George western Queensland. The Antenna is a 2-element 40M made in Australia by Comantenna

they are donated - there is no pressure to contribute - likewise when a project is needed, input from the group as a whole is sort and a steering committee is formed.

The VKCC welcomes members from anywhere, but it is a very good way to contact Australian operators when you might like a chair at a VK station for a contest. The club has a website [www.vkcc.com](http://www.vkcc.com) and sponsors several awards in VK.

The club is actively working towards increased power for VK operators and late in 2010 the Wireless Institute of Australia (WIA) put forward a proposal to the authorities to increase the CW power level from 120 to 500W and the SSB level from 400 to 1000W. This is being viewed favourably and is thought it may be approved in the first half of 2011.

The club has also lobbied for shorter callsigns and in a similar manner to the power proposal a short callsign similar to the New Zealand model is being sought - this would see callsigns in the 2X1 format - Australia is not just VK - we also have AX, VH, VI, VJ, VL, VM, VN and VX. However these alternatives are rarely heard on the ham bands.



It may seem odd for a national organisation but the licensing authorities (ACMA) in VK will not allocate a callsign for competitive advantage. This means for example that even the WIA cannot compete in the IARU Radiosport under a special callsign -

#### ACMA rules for special event callsigns

The use of a special event callsign is subject to certain rules imposed by ACMA. In addition, the WIA is bound by the Business Rules in respect of callsign pursuant to the Deed between it and ACMA. Those Business Rules repeat what is published by ACMA on its website in relation to special event callsigns, namely:

Requests for special event callsigns will not be accepted for the purposes of:

- Gaining an advantage in on-air competitions
- For use during IOTA competitions, DX expeditions, or fox hunts and the like
- Annual events.

#### **Local Contests**

Australian Contests, due to the low numbers in VK most contests are very different to Europe or North America. Local contests usually allow multiple contacts during the contest - the most popular splits into three hour segments - so after three hours you can make a contact for the second time without dupe penalties and claim a second QSO - the most popular are:

**John Moyle**, is the principal field Day contest in Australia - it has activity from HF through to Microwave - most operators spend the evening portable and as it is usually in Early Autumn the weather tends to be very good. The Field Day will be held over the weekend of the 19 - 20 March, 2011 and run from 0100 UTC on Saturday till 0059 Sunday. The aim is to encourage and provide familiarisation with portable operation, and provide training for emergency situations. The rules are therefore designed to encourage field operation.



Located North of Toowoomba is the location for John Moyle Field Day for VK4TI and team.

**Remembrance Day** commemorates the amateurs who died during WW II and is designed to encourage friendly participation, to improve the operating skills of participants. It is held on the weekend closest to August 15, the date on which hostilities ceased in the SW Pacific.

Typical competitors setup for John Moyle Field Day



The contest is preceded by a short opening address by a guest speaker transmitted on various WIA frequencies during the minutes prior to the contest. During this ceremony, a roll call of amateurs who paid the supreme sacrifice during WWII is read. A perpetual trophy is awarded to the state or territory with the best performance. The name is inscribed on the trophy, and that State or Territory has the trophy for 12 months. Amateurs - in each VK call area will endeavour to contact amateurs in other call areas, ZL and P29 on all bands (exl. WARC). On 1.8, 28, and 50 MHz and above, intra-call area contacts are ok too.

### DX contests from VK

**Oceania** - The Oceania DX contest is Oceania's only international style contest where contacts with stations all over the globe are able to participate and enter a winning log. Oceania stations may contact any station for QSO points whilst non-oceania stations are required to contact any station in Oceania for QSO points.

The aim of the contest for stations outside the Oceania Region is to contact as

many amateur radio stations within Oceania as possible within the 24 hours of the contest on any of the 160–10m bands. Each prefix worked on each band is counted as a multiplier.

There is a separate contest for both CW and phone, each running for 24 hours.

**VK Shires** - ALL HF Bands available to Standard licencees: 80–10. Modes are SSB and CW and stations can be worked once on each mode.

ROVER stations as well as portable entries make up part of the character of the VK Shires as well as the timing to take place over an East Coast Long Weekend (Queen's Birthday) early June every year. The objectives of this contest are for amateurs around the world to contact as many VK shires as possible in the contest period, which is around 700 mults per band. VK amateurs are to work the world including VK, whilst the rest of the world can only work VK.

Reference:

<http://www.wia.org.au/members/contests/about/>

**My view of SOSBA**  
(Single Operator Single Band Assisted)  
Mike, W7DRA

For the past several months I have been working on simulating my original novice station, a Hallicrafters S40 and a crystal controlled 6AG7/6L6 MOPA. (OK, for the simulation I am using an 807 in place of the 6L6).



To properly give "assistance" to my 1955 novice station, I have included under the operating table a microwave transformer power supply and a single 810 final amplifier, which by the way, does a really good job of assisting.

You say, "where is the VFO, the computer logging (what computer?) roofing filters, and DSP processing? Things were different then. As I grow older and my contesting days per year grow fewer, the majority of operating occurs nightly between 0600Z and 0630Z on 80M CW.

Then whether I use a 1A5 regen and a 3Q5 transmitter or an FT1000 MK IV with 12 roofing filters and a sterba array, I make the same number of contacts as with the SOSBA novice station.....none.

Mike

## **Contesting With a Cat**

Carl Luetzelschwab, K9LA

I enjoy contesting, especially DX contesting. It's a great way to add new countries to your band totals, and it's a great way to sharpen your operating skills. Recently, though, I've encountered a problem with contesting. And it has to do with the fact that my wife Vicky and I have always been dog-people – up until now, that is. We've had dogs ranging from small (Miniature Schnauzers) to big (Siberian Huskies and Labs), and they never were a problem with my contesting activities.



**Never had a problem with these guys**

Being dog-people changed when we noticed a Calico cat in the backyard. She'd be there every-once-in-while at first, but slowly she started showing up more and more. At the time we were animal-less, as our last dog died in April 2010. One day Vicky put some tuna fish on a plate, went outside, and laid down in the grass with the plate of tuna fish to see if she could coax the cat to take some nourishment. Sure enough, the cat finally trusted Vicky enough to enjoy the meal. When the cat eventually came into the house, it was obvious to me that we were animal-less no more.

We didn't know much about cats, and people started telling us that "dogs have masters, cats have staff". It didn't take long for us to realize this was a true statement. One of our friends also told us that the cat showing up at our house wasn't just a coincidence – the cat picked us. I kind of believe that, but we also feed lots of animals in the backyard, so maybe the cat just found our backyard to be good hunting grounds. Regardless of how it happened, we now have a Calico cat. We named her Cali (original, huh?).

I never knew cats could be so affectionate. My vision of a cat was an aloof animal that you hardly ever saw. That may be true of some cats, but Cali is just the opposite. She really enjoys lying on our chest right

below our chin while we're reading or watching TV. And she likes to rub up against us every chance she gets. This affection is why my contesting efforts have run into a snag.



## Got a problem with this one

For example, in the ARRL DX CW contest in February, I was enjoying some runs to Europe on 15m in between search-and-pounce efforts. The cat decided it was time for affection, and easily jumped up on the operating desk to receive some attention. Soon she was walking all over my laptop, inadvertently hitting keys resulting in interesting calls showing up on the screen (is GKI986 a real call?). The laptop also gets toasty warm, so soon she just flopped down on the keyboard for a nap. Need I

say that a cat sprawled all over your keyboard adversely affects your run rate?

I'm sure I'm not the only one who has had this problem. And I'm equally sure this will get resolved in future contests. In the meantime, though, if you hear me in a phone contest and a meow is interspersed with the exchange, you can be assured it's my second op helping. Hmmm, does this put me in the Assisted CATegory?

## PileUP! GOES image processing

"Everyone is an artist" is a phrase that we strongly support here at PileUP! editorial office. Digital art is great. It is so easy to copy, alter, share, and take credit for. Here are some samples done by our devoted readers:

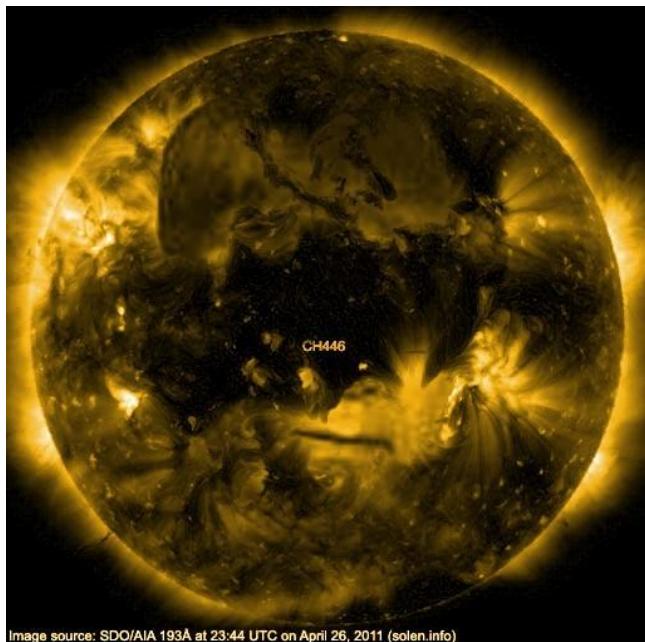
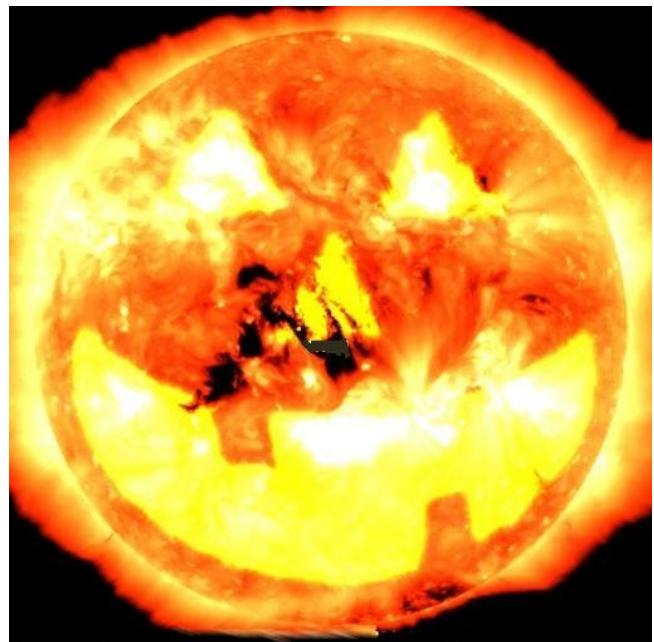


Image source: SDO/AIA 193Å at 23:44 UTC on April 26, 2011 (solen.info)

**Reader contest:** Who is the mathematically merged operator with the GOES X-ray image?



Sun in the end of October 1959 - during the all-time solar maximum. That's what is needed to get 70 MHz going.



Hey guys – get ready to lift the third tower! (Easy form of copyright violation)



« I need to pee »



« I peed »



« Look at this pee ! »



« I'm good at peeing »

Explaining what Social Media is and why it is killing Amateur Radio. (Simplest copy-paste-form-of-copyright-violation).

### READER CONTEST by OH6LBW

In the spirit of the car magazines: identify the radios hidden in figs. 1–6 on the next page. Here are Janne's hints translated in google-style.

**1:** It's a hybrid with a pair of 6146s in the final. Last items came out of the radio factory with shiny metal coating.

**2:** Of the tranceiver trademarks that are currently being sold in Finland (5), this was introduced last. But what model?

**3:** The production of this model began in 1999.

**4:** Easy, see the figure.

**5:** Well, it's a Yaesu, but what model?

**6:** Another Yeasu, but?

# Lukija kilpailu

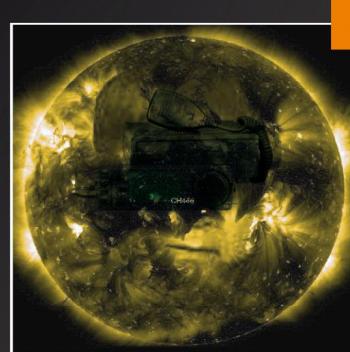
*Autolehtien sivuilta löytyvät autontunnistuskilpailut ovat haasteellisia pähkinöitä alan harrastajille. Niinpä PileUpissa päätimme myös tarjota moisen pähkinän lukijoiden purtavaksi sillä erolla, että vaihdooimme autot radioihin. Mukavia ja haastavia ratkomishetkiä.*



"Hybridti" ja pääteasteena 2x6146b. Viimeisimmät yksilöt rullasivat tehtaalta ulos "jalometallisina".



Tämän tehtaan radioiden maahanotto on alkanut viimeisimpänä niistä, jotka vielä ovat Suomessa markkinoilla. Mutta mikähän malli on kyseessä?



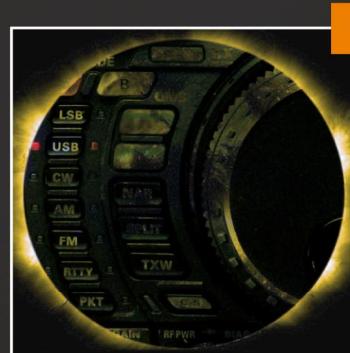
Tämän mallin tuotanto alkoi vuonna 1999.



Naamataulu sen jo kertoo.



Yaesuhan se on, mutta mikä?

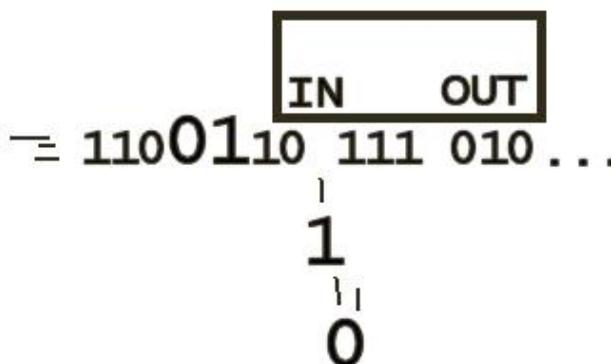


Yaesu myös, mutta mikä?

## Howstuffworks - SDR

Dr. Zener Fet & Dr. Bit E. Ratio

Digital radios treat the HF-signals as zeroes and ones. This greatly simplifies construction. Let's peek inside.



Low-pass filter in SDR-radio

`011000 1 00110 1 0001100010 1 0101`

QRN

`01 0 0001 011 10001 0 000 010101  
0 0 0 0 0 1`

BAD QRN

`0110001001101000110001010101`

ARCTIC FLUTTER.

`0110001001101000110001010101`

QSB.

**TO2FH – 2011 MAYOTTE ISLAND DX-PEDITION**  
**THE SOUTH EAST COAST OF AFRICA**  
(via Ricardo PY2PT)



Team and QTH, hotel Trevani by the ocean.



## The Polar Battle Heats Up Again

Kim Östman, OH6KZP ([oh6kzp@sral.fi](mailto:oh6kzp@sral.fi))

Once the annual midnight sun moves beyond the Arctic Circle and the summer with its other delights begins to slowly disappear, Scandinavian contestants gear up for battle. Mid-September and early October bring with them the CW and SSB legs of the Scandinavian Activity Contest (SAC). Scandinavians fill the HF bands to work non-Scandinavian stations, and vice versa.

SAC is administered by the Nordic Radio Amateur Union (NRAU), a confederation of national leagues, and is in for its 53rd run this year. The contest runs in two parts of 24h each (**12 UTC – 12 UTC**), with the **CW leg on 17–18 September** and the **SSB leg on 8–9 October**. For many Scandinavians it is this, not CQWW SSB, that marks the true beginning of the contest season.

Contesters from Copenhagen to Reykjavik and from Greenland to eastern Finland emerge from their various locations to fight for glory and nation.

Simultaneously, contestants from around the world congregate to contact this propagationally challenged polar region. Indeed, a major aim of the contest is "to encourage amateur radio communications between Scandinavian and non-Scandinavian amateur radio stations." Fig. 1 shows a rising trend in the number of SAC participants in recent years.<sup>5</sup> Especially the marketing efforts before the 50th jubilee contest in 2008 have increased activity to an entirely new level.

<sup>5</sup> Thanks to Ingemar, SM5AJV, and Mats, SM6LRR, for their earlier work in gathering the statistics for 2000–2009.

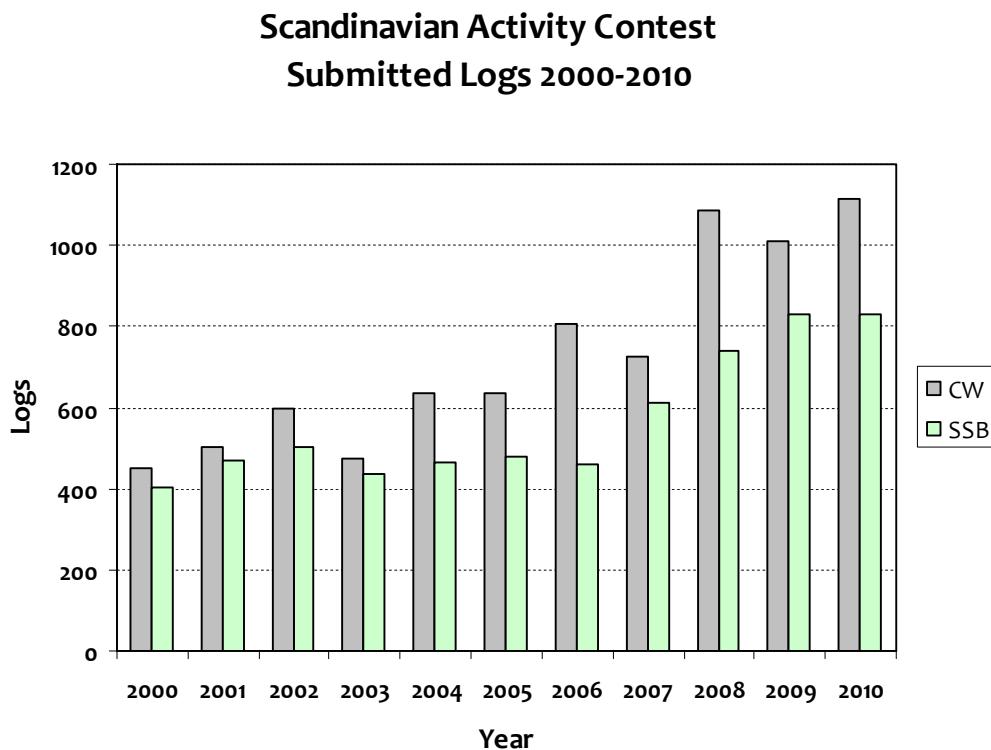


Fig. 1. Submitted SAC logs in the years 2000–2010.

### Marketing efforts

It is hoped that this year's marketing efforts will increase the total number of participants (CW + SSB) to far beyond 2000. Marketing will target both Scandinavian and non-Scandinavian

contesters. CQWW champion Ville, OH2MM, has taken one of the first steps by reminding Dayton Hamvention's Contest University participants of SAC as a good practical training ground, using the card designed by Janne, OH6LBW (see the

cover of this PileUP! issue). And if you're still reading, now you know about the contest, too!

The promotional card will also be used at many other events and will be mailed out together with DX pediton QSL cards by Martti, OH2BH, and Juha, OH8NC, among others. Other efforts will include mass mailing reminders to EU and DX stations by using a database gathered by SM contesters and similar large-scale reminders to Scandinavian stations to fill the bands with stations to work. If you wish to participate in the marketing effort in some manner, please contact the present author.

## Rule changes

A number of changes have been implemented in the SAC rules for 2011 after approval by the NRAU meeting on 21–22 May and by the national contest managers **Liv, LA4YW**, from Norway, **J-P, OH6RX**, from Finland, **Peter, OZ5WQ**, from Denmark, and **Jan-Eric, SM3CER**, from Sweden. The changes are aimed at modernizing the contest further, providing improved and faster service to participants, and making the adjudication process increasingly open and transparent.

A brief run-down of the most important changes is given here:

1. Logs and log checking reports will be public in order to increase transparency. A log checking report will be sent automatically to each station in order to enhance the learning experience.
2. A single-operator assisted (high power) category has been added for non-Scandinavian stations. It allows the use of DX clusters, Skimmers, and other Skimmer-like technology, but not that of receivers and antennas that are not located at the site of the transmitter.
3. A rookie (low power) category and a tri-bander/single-element (low power) category has been added for Scandinavian stations to increase interest among new operators and those with more modest stations.
4. The log submission deadline has been shortened to two weeks after each leg in order to speed up the results process. If we are lucky, we might be able to publish the CW results before the SSB leg.
5. The option to submit paper logs has been removed. Those operators who've kept a log on paper are provided with a possibility for manual entry at <http://www.sactest.net>.

6. Explicit and thus enforceable frequency limits have been added for Scandinavian stations on 80M.

7. The shortwave listener (SWL) category has been removed due to low interest.

## Log submission and results service

The SAC log submission process took a giant leap forward in 2009, when a contest website made by Lars, SM7LQV, and Jan-Eric, SM3CER, was opened at <http://www.sactest.net>. The robot accepts logs and updates the claimed scores standings in real-time during the post-contest submission interval. Logs are uploaded in Cabrillo format, and paper logs are manually entered at the website by the contestant.

For 2011, the log deadline has been shortened to two weeks. The aim is to provide an extremely quick results service never before seen in a major HF contest: the final results of the CW leg will hopefully be published before the SSB leg. A log checking report will be sent automatically to every station that provides an e-mail address when submitting the log, thanks to the continued development by Torvald, SM2EZT, of his log checking program. The logs and log checking reports of all stations will be publicly available on the contest website.

Plaques and awards will be sent out by mail to the winners as usual. In addition, every contestant can download and print out a participation certificate in PDF, designed by OH6LBW, to adorn his or her hamshack wall after the contest.



OH1XX tuning for SAC!

## Propagation info

How to know where to run and catch those Scandinavian stations with their fluttery signals? Scandinavia is a challenged propagational zone that often suffers from ionospheric signal absorption by aurora due to its location in the polar latitudinal regions. DX openings, with some exceptions, tend to be shorter than those from southern Europe, and it is of great importance to be on the right band beaming in the right direction at the right time.

Jari, OH6BG, is an expert in propagation prediction software, and will provide SAC participants with broad information and hints regarding the band to be. A graphical user interface will be available for you to see how the bands will look like from your location to Scandinavia.

Be sure to check out Jari's offerings (will linked through <http://www.sactest.net> as the contest comes closer) and look at <http://www.voacap.com/prediction.html> as a teaser!



SAC is full of happy ops! (here OH7BX & OH7JR)

## Break your national record

Results from 1999–2010 (contest duration was shortened to its present form in 1999) are now available at <http://www.sactest.net>. Through a search engine, you can easily see how you did in earlier years and what the national record for each category is for your country. Now is a good time to check that out and to prepare for breaking it.

## Turn on the heat!

If you remember only one thing, let that be <http://www.sactest.net>. All information, updates, logs, and results will be available through that hub.

Mark your calendars now, and see you at 12:00 UTC on 17 September!



Look for OH-stns DXing from OH0-land in SAC (here OH1WZ @ OH0BH).

## SAC 2011 Rules for all participants

**CW:** September 17, 2011, 1200 UTC to September 18, 2011, 1200 UTC

**SSB:** October 8, 2011, 1200 UTC to October 9, 2011, 1200 UTC

### 1. Aim of the contest

The aims of the contest are to promote amateur radio activity within Scandinavia as well as to encourage amateur radio communications between Scandinavian and non-Scandinavian amateur radio stations. Scandinavian stations will try to work as many non-Scandinavian stations as possible and vice versa.

Scandinavian stations are defined by prefixes as follows:

Svalbard and Bear Island	JW
Jan Mayen	JX
Norway	LA-LB-LG-LJ-LN
Finland	OF-OG-OH-OI
Aland Islands	OFØ-OGØ-OHØ
Market Reef	OJØ
Greenland	OX-XP
Faroe Islands	OW-OY
Denmark	5P-5Q-OU-OV-OZ
Sweden	7S-8S-SA-SB-SC-SD-SE-SF-SG-SH-SI-SJ-SK-SL-SM
Iceland	TF

All other legal prefixes according to the ITU definition of Scandinavian prefixes are good for the contest and multipliers as well.

### 2. Eligible entrants

Radio amateurs all over the world are invited to participate.

### 3. Periods

**CW:** 3rd full weekend of September each year.

**SSB:** 2nd full weekend of October each year.

Starts 12:00:00 UTC Saturday and ends 11:59:59 UTC Sunday.

### 4. Sections

Scandinavian stations, other European stations, and non-European stations are placed in separate categories.

#### 4.1 Single Op./Single TX

Single operator means that one person performs all operating, logging and spotting functions without any external assistance. The use of DX-Cluster, Skimmer or Skimmer-like technology (such as Reverse Beacon Network, RBN) is not allowed. The station must be located in one site, with the location determined by the physical location of the transmitters, receivers, and

antennas. Asking and begging stations to announce ones own call on the DX-Cluster is NOT allowed.

##### 4.1.1 For Scandinavian stations:

- \* **Multi Band - High Power** [SINGLE-OP ALL HIGH]
- \* **Multi Band - Low Power** (output 100 W or less) [SINGLE-OP ALL LOW]
- \* **Multi-Band - Low Power Rookie** (output 100 W or less) [SINGLE-OP ALL LOW] [CATEGORY-OVERLAY: ROOKIE]
- \* **Multi-Band - Low Power Tribander/Single-element** (output 100 W or less) [SINGLE-OP ALL LOW] [CATEGORY-OVERLAY: TB-WIRES]
- \* **Multi Band - QRP** (output 5 W or less) [SINGLE-OP ALL QRP]
- \* **Single Band** [SINGLE-OP 80M] [SINGLE-OP 40M] [SINGLE-OP 20M] [SINGLE-OP 15M] [SINGLE-OP 10M]

Multi-band entrants may participate in one of the "Tribander/Single Element" or "Rookie" categories by adding the line CATEGORY-OVERLAY: TB-WIRES or CATEGORY-OVERLAY: ROOKIE in their Cabrillo log file. Participants in the Tribander/Single Element category shall use only one triband antenna for 10, 15, and 20 meters, and single-element antennas for 40 and 80 meters. Participants in the Rookie category must be licensed less than 3 years before the CW contest starts.

##### 4.1.2 For non-Scandinavian stations:

- \* **Multi Band - High Power** [SINGLE-OP ALL HIGH]
- \* **Multi Band - High Power Assisted** [SINGLE-OP-ASSISTED ALL HIGH]
- \* **Multi Band - Low Power** (output 100 W or less) [SINGLE-OP ALL LOW]
- \* **Multi Band - QRP** (output 5 W or less) [SINGLE-OP ALL QRP]

The Multi Band - High Power Assisted category allows the use of DX-Cluster, Skimmer, and Skimmer-like technology (such as RBN). The station must be located in one site, with the location determined by the physical location of the transmitters, receivers, and antennas.

#### 4.2 Multi Op./Single TX/Multi Band [MULTI-ONE]

Only one signal may be transmitted on any band at any time (running station). When operation has started on one band, the station must remain on that band for at least 10 minutes. The 10-minute period starts with the first QSO worked on that band.

**Exception:** It is allowed to work a QSO on another band if it is a new multiplier (multiplier station). The multiplier station is allowed to be on the air at the same time as the running station. The multiplier

station must also stay on the "multiplier band" at least 10 minutes.

The use of DX-Cluster, Skimmer, and Skimmer-like technology (such as RBN) is allowed. The station must be located in one site, with the location determined by the physical location of the transmitters, receivers, and antennas. Asking and begging stations to announce ones own call on the DX-Cluster is NOT allowed.

#### **4.3 Multi Op./Multi TX/Multi Band [MULTI-MULTI]**

This category is only for Scandinavian stations. There are no restrictions on the number of transmitters. Only one signal per band is allowed at any time. All equipment, including receivers, transmitters, and antennas must be located within a circle with a maximum diameter of 500 meters. Separate serial numbers are used for each band.

The use of DX-Cluster, Skimmer, and Skimmer-like technology (such as RBN) is allowed. Asking and begging stations to announce ones own call on the DX-Cluster is NOT allowed.

#### **5. Frequency bands**

The **3.5 - 7 - 14 - 21 - 28 MHz** frequency bands may be used according to the IARU HF Band Plan. On 3.5 MHz, Region 1 stations must not transmit below 3510 kHz on CW or above 3790 kHz on SSB.

**Note:** On 7 MHz you may still want to work split on SSB between Scandinavia and Region 2 stations, since the Region 2 Band Plan upper frequency limit is 7300 kHz.

#### **6. Contest exchanges**

The contest exchange consists of RS(T) plus serial number starting with 001 (e.g. 59(9)001). (QSO's after 999 are numbered 1000, 1001 etc). The same station may be worked once on each band. Cross-mode and/or cross-band QSO's are not allowed. The minimum content of a valid contest QSO is a correct callsign and correct contest exchanges.

#### **7. Scoring**

##### **7.1 For Scandinavian stations:**

A two-way QSO with correct sent and received exchanges counts for QSO points.

- \* EUROPEAN stations give two (2) points for every complete QSO.
- \* NON-EUROPEAN stations give three (3) points for every complete QSO.

##### **7.2 For non-Scandinavian stations:**

A two-way QSO with correct sent and received exchanges counts for QSO points.

- \* EUROPEAN stations credit their logs with one (1) point for every complete Scandinavian QSO.

- \* NON-EUROPEAN stations credit their logs with one (1) point for every complete Scandinavian QSO on 14, 21, and 28 MHz and with three (3) points for every complete QSO on 3.5 and 7 MHz.

#### **8. Multipliers**

##### **8.1 For Scandinavian stations:**

Each worked non-Scandinavian DXCC country is valid for one multiplier for each band.

##### **8.2 For non-Scandinavian stations:**

Each worked prefix-number ( $\emptyset$ -9) in each Scandinavian country is valid for one multiplier for each band (e.g. SI3, SK3, SL3, SM3, 7S3 and 8S3 are all in ONE district and count for ONE (1) multiplier on each band).

Portable stations without a prefix number count for the 10th area (e.g. LA/G3XYZ counts for LA $\emptyset$ ).

OH $\emptyset$  (Aland Is.) and OJ $\emptyset$  (Market Reef) are separate call areas. SJ9 and SI9 counts for the 9th district in Sweden.

#### **9. Final score**

To calculate the final score, multiply the sum of QSO points on all bands with the sum of multipliers worked on all bands.

#### **10. Logs**

Logs must be submitted separately for CW and SSB, and the QSOs must be listed in chronological order.

By submitting a log, you agree that your log and the corresponding log checking report may be made open to the public.

Electronic submission of logs at <http://www.sactest.net> is required for all entrants. The website provides conversion tools and allows manual entry for those operators who have used a paper log while operating.

Use the CABRILLO format. Please ensure that you fill out all of the header information. [CLICK HERE](http://www.kkn.net/~trey/cabrillo/) (<http://www.kkn.net/~trey/cabrillo/>) for more information on the CABRILLO format.

Please check your log for typing errors and leave all your QSOs in the log, dups included. The log checking software will find the dups and mark them with zero points.

#### **11. Closing date for logs**

Cabrillo logs or typed-in paper logs shall be uploaded no later than **October 2, 2011, at 2359 UTC, for CW logs** and **October 23, 2011, at 2359 UTC, for SSB logs**.

## 12. Awards

The top scoring station in each country, in each category, on both CW and SSB, will receive a Contest Award, provided a reasonable score is made.

Scandinavian winner stations will receive a Contest Plaque in the High-power, Low-power, Low-power Rookie, and Low-power Tribander/Single-element multi band categories.

The non-Scandinavian continental winners will receive a Contest plaque in the High-power multi band category, provided a reasonable score is made.

Depending on the number of participants, the Contest Committee may consider additional awards.

## 13. Dispute

Violation of Amateur Radio Regulations in the country of the contestant or the rules of this contest, unsportsmanlike conduct and taking credit for unverifiable QSOs or multipliers may lead to disqualification.

The decisions by the Contest Committee are final and definite. The right to changes in these rules is reserved.

## 14. Organizer

The Nordic Radio Amateur Union (NRAU) is the organizer of the contest. Members of NRAU are EDR, FRA, IRA, NRRL, SRAL and SSA.

### CQ WPX CW 2011 – Active CCF contestants

#### Finland, OH

OG2B (OH7EA), All bands  
OG73DX (OH8LQ), All bands  
OG7X (OH4XX), All bands  
OG5A (OH5TS), SO20  
OH8X (OH6UM), All bands  
OG4T (OH4MFA), All bands  
OG1M (OH1VR), SO10  
OG9X (Timo), Donno yet.

#### Aland Islands, OH0

OG0Z (OH6EI), All bands  
OH0X (OH2TA), All bands

#### Azores, CU2

CR2X (OH2PM), All bands



OH2PM chose a warmer climate for WPX CW 2011: Remember to work OT Pertti (CR2X).

Jukka OH6LI  
(OH4A) & Merja.  
(1991-92).



## PileUP!:n epävirallinen Pro-SAC sivu



swimshop.fi myy uimalakkeja hintaan 10,00 €. Kehotamme kaikkia M/S ja M/M asemia varamaan näitä yhteiskuvia varten, joita sitten tämäkin lehti mielellään julkaisee (PileUP! 15(5), Post-SAC numero). Muu asu on vapaa, mutta uimahousuissakin saa workkia (ja tulla kuvatuksi). Myös single-opit saa toki pitää näitä, poislukien SAC RTTY osallistujat.

PileUP!:n lukijat ovat lähettiläet originaalia agitaatiomateriaalia kisaan. Tässä näytteitä:

*Tukholmassa oli huvipuisto nimeltä Gröna Lund. Nyt se on avattu nimellä Gran Lund ja siellä on uusi uskomaton laite, nimeltään Ilmaveivi. Kesäksi Gran Lundiin on palkattu uusi porttivahti: Fasth, joka päästää kaikki sisään!*

*Vad är bättre än sex?  
Sex - Ett!*

*Ruotsin hovissa on suoritettu pikaisesti nimenmuutoksia:  
Kuningas Kaarle 1-6 Kustaa (ent. XVI)  
Kuningatar Silver (ent. Silvia)  
Kruununprinsessa Vik (toria ei siis tarvittu)*



Takki auki jo ennen kisaa! SAC:n voitto on meidän.

**You're five nine six-one!**

### SAC 2011 kesäleiri-info

Tule SRAL:n kesäleirille kuulemaan lisää. Kun näet siellä SAC 2011 t-paidalla varustetun hemmon haahuilevan, tarttu t-paidan lyhyeen hihaan, ja liity tunnelmaan. Koska voittomme on jo etukäteen selvä, opettelemme yhdessä voitontansseja, korrekteja ilmaisuja bandilla käytettäväksi (yhteydenpito SM-kavereihin) ja luemme loitsut aurinkonpilkuille. Tarvittaessa voimme keskustella myös voittomarginaalista ja millä lokiohjelmalla siihen parhaiten pääsemme. Teemme ilmaveivejä keväisten Suomen mestareiden kunniaksi. Myös RTTY-sellaisten. Ad-hoc kisastudiokin saattaa järjestää leirille, ja CCF:n sinne sponsaamat Vichyt. Seuraa siis silmää kovana CCF-aktiiveja leirillä, tai ole yksi heistä ja ilmottaudu OH7WV:lle. Yhtään ei vielä oo ilmottautunut. Myös meilireflektoria kannattaa skannata, vaikka siten skimmerillä. SAC 2011 T-paidan saat pitää, jos tuut SAC 2011 leiri propagandakoneiston osaksi.

Ja sitten itse asiaan....

Esa Rauman, OH6KVU

*"Ohjelmiston suunnittelussa pidettiin tärkeänä, että ohjelmisto toimisi mahdollisimman monella käyttöjärjestelmääluulla, siten päädyttiin käyttämään Nokian Qt ohjelmistokirjastoja C++ ohjelointikielen kanssa."*



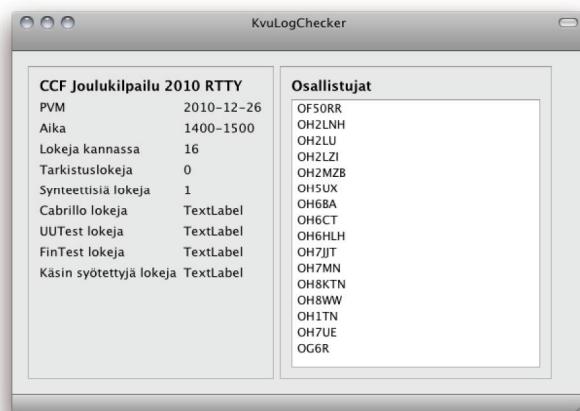
# Automatisoitu kilpailulokien tarkistus

## Taustaa

Syksyllä 2010 minulla oli tarve keksiä insinöörityölle aihe. Keskusteltuani asiasta Jannen (OH6LBW) kanssa, syntyi idea lokien tarkastusohjelmistosta, joka vaikutti sopivan insinöörityön laajuuteen. Asiaa hienman hauduteltuamme päädyimme siihen, että CCF voisi tilata kyseisen ohjelmiston insinöörityönä.

Sovimme, että ohjelmistosta valmistetaan ensin ns. "proof of concept"-versio, jolla tutkitaan, onko lokien tarkastus automatisoidusti mahdollista suomalaisissa kilpailuissa tai mitä asioita pitäisi tehdä sen mahdollistamiseksi. Ohjelmisto pääsi ensimmäiseen "tulikokeeseensa" CCF Joulukilpailu 2010 -tulosten laskennassa, johon monet tässä artikkelissa esitetyt huomiot perustuvat.

Tarve ohjelmistolle on ollut olemassa jo pitkään. Ohjelmisto tulee



Kuvassa tarkistusohjelman käyttöliittymän pääikkuna. Mac OS X-käyttöjärjestelmässä.

helpottamaan huomattavasti kilpailunjärjestäjien taakkaa sekä nopeuttamaan tulosten julkaisua. Julkaisu voisi tapahtua jo seuraavassa kilpailun jälkeisessä RA-lehdessä. Aiemin tulosten julkaisuun on saattanut kulua useita kuukausia.

Ohjelmiston nimessä päädyttiin KVULog-Checkeriin (KVULC lyhennettynä). KVULC on julkaistu Creative Commons "Nimeä-Epäkaupallinen-Tarttuva 3.0 Muokkaamaton" -

lisenssillä, josta lisätietoa löytyy <http://creativecommons.org/licenses/by-nc-sa/3.0/>-osoitteesta. Kaupallisuuden osalta CCF:lle myönnetään poikkeus. Näin CCF voi menetellä kaupallisuuden suhteen parhaaksi katsomallaan tavalla.

## Ohjelmiston toiminta ja teknikka

Ohjelmiston suunnittelussa pidettiin tärkeänä, että ohjelmisto toimisi mahdollisimman monella käyttöjärjestel-

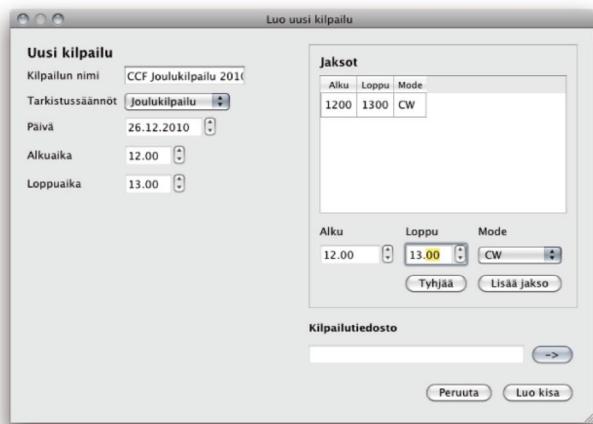
määlustalla, siksi päädyin käyttämään Nokian Qt-ohjelmistokirjastoja C++-ohjelointikielen kanssa. Tämä mahdollistaa ohjelman toiminnan kaikissa tärkeimmissä työase-makäyttöjärjestelmissä (Mac OSX, Linux, Windows) sekä periaatteessa myös Symbian, Maemo ja Mee-go matkapuhelimissa.

Tiedon tallentamiseen päätet-iin käyttää sulautettua tietokantaa (SQLite), jolloin lokien käsittely SQL-komennoilla on hyvin jouhevaa. Tämä tarkoittaa sitä, että lokitiedostot viedään tietokantaan, jossa ne myös säilytetään. Näin varsinaisia lokitiedostoja ei enää tietokantaan viennin jälkeen tarvita. Tietokantarakenteessa päädyttiin hieman normaalista tietokanta-suunnittelusta poikkeavaan ratkaisuun, jolloin lokit säilyvät itsenäis-nä tauluina tietokannassa.

## Lokien tarkistus

Lokien tarkistus tapahtuu tuomalla kaikki kilpailun lokit yhtenä "klimppinä" ohjelman käsiteltäväksi. Lokit käydään läpi muutamaan kertaan prosessin kuluessa. Ensimmäisenä työvaiheena lokien tarkastuksessa on muodostaa niin sanotut synteettiset lokit. Synteettiset lokit ovat ohjelmalla generoituja lokeja yhteyksistä, joiden vastapuolet ei-vät ole lähettäneet lokia ja kyseinen kutsu esiintyy riittävän monta kertaa muiden kilpailuun osallistuneiden lokeissa täytyy näkseen niin sanotun puoliqso-kilpailusäännön. Synteettiset lokit täytyy luoda, että tarkistusalgoritmi toimisi oikein puoliqso-tapaiksissa.

Synteettisten lokien luonnilla taroitetaan tosiaankin sitä, että vaik-



*Kuvassa uuden kilpailun luontidia-logi.*

ka et olisi lokiasi lähettänytkään, se kuitenkin luodaan vasta-asemiesi lokeista. Olisiko sittenkin kannatanut lähettää loki, jolloin olisit tuloksissa mukana?

Synteettisten lokien luonnon yhteydessä merkitään myös uniikit vasta-asemat eli vasta-asemat, jotka esiintyvät lokeissa vain kerran ja ovat siten suurella todennäköisyydellä virheellisiä.

Toisessa vaiheessa jokaisesta lokista lasketaan riveittäin ennakkotulokset (engl. claimed score) jotka ovat yhteydestä teoreettisesti saatavat maksimipisteet.

Kolmanneksi suoritetaan varsinainen ristiintarkistus eli käydään kaikki lokit ja niiden sisältämät yhteytsrivit läpi, ja verrataan niitä vasta-aseman vastaaviin riveihin. Var-sinisia tarkistettaviaasioita ovat:

- Yhteyden kellonaika, johon päättettiin soveltaa säännöissä määrittelämätöntä +/- 15 min aikaikkunaa, näin voidaan varmistua, että kyseessä on tosiaankin sama yhteys.

- Kutsu
- Sanoma (numero ja maakunta)

Tarkistuksesta muodostuu ns. UBN-raportti. U tarkoittaa uniikia eli yhteyttä, jossa vasta-asema esiintyy koko lokaineistossa vain

kerran. B tarkoittaa virhettä sano-massa ja N sitä, että kyseisellä koodilla tuomaroitua yhteyttä ei löydy vasta-aseman lokista tai vasta-ase-man lokia ei ole olemassa. Viimeksi mainittuun tapaukseen joudutaan, vaikka yhteys olisi ollut kilpailus-sa kaikin puolin moitteeton, mutta vasta-asema ei ole kuitenkaan pitänyt riittävän montaa yhteyttä, jolloin siitä ei ole luotu synteettistä lokia. Luonnollisestaan synteeti-siä- ja tarkistuslokeja ei pisteytä, koska ne eivät osallistu varsinaiseen kilpailuun.

Lopuksi tarkastetaan lokit vielä kerran läpi ja lisätään riveittäin kertoimista saatavat pisteet.

Kaikki edellä mainitut toimenpiteet tehdään jaksoittain, jolloin pistelaskenta menee oikein. Siksi jokaiselle kilpailulle on määriteltävä kilpailun asetuksiin vähintään yksi jakso, muuten tarkistusta ei suori-teta lainkaan.

## Raportit

Tällä hetkellä ohjelmasta saadaan luokittain jaoteltu tuloslistaushtml-ja ascii-muodossa. Tulevaisuudes-sa ohjelmistoon tullaan lisäämään kilpailijan UBN-raporttien luonti(nyt ne ovat vielä vain tietokannas-

sa, josta ne saadaan esille tarvittaessa), sekä mahdollisesti muita tilastoja.

Raportointiin lisätään toimintoja, jotka tuntuvat olevan oleellisia toiminnan ja tulosten raportoinnin kannalta. Ehdotuksia siitä, millaisia raportteja tahtoisitte saada, voi tuki lähettilä artikkeliin kirjoittajalle.

## Mitä minä voin tehdä helpottakseen lokien tarkastusta?

Tärkein asia johon voit itse vaikuttaa, on tarkastaa, että lokitedostosi on oikein muotoiltu. Lokitedoston sisältö ei sen sijaan missään nimessä saa itse muokata. Ei esimerkiksi "helpottaa kerrointen laskentaa" lisäämällä cabrillo-tiedostoon qso:-rivien loppuun merkintää siistä, mitkä kertoimet omasta miehestäsi sait työskenneltyä. Fintest- ja UUTest-lokeissa oli yleistä, että kilpailija oli lisännyt yhteenvetotaulukon tai muita kommentteja kilpailusta. Näitä ei saa kuitenkaan lisätä lokitedostoon, vaan nämä tiedot voi välittää kilpailunjärjestäjälle esimerkiksi sähköpostin tekstiosuudessa. Nämä ollen monet muutokset, jotka tuntuisivat järjestäjää helpottavilta, itse asiassa vaikeuttavat työtä, koska muutokset joudutaan poistamaan muokkaamalla lokitedosta käsin.

Säännöissä on määritelty, että lokitedostoksi kelpaisi jokseenkin geneerinen ASCII-tiedosto. Mutta ovatko Word- tai Excel-ohjelmilla luodut lokit mielestäsi ASCII-muotoisia? No eivät ne ole. Jos säätöjä tulkittaisiin tiukasti, nämä lokit tu-

lisi hylätä lukukelvottomina (mitä ne monasti muutoinkin ovat).

Paras ja suositeltavin lokimuoto on siis NRAU Baltic -muotoiltu cabrillo-tiedosto, jonka tarkemmasta rakenteesta voit lukea Jarin (OH6BG) kirjoittamasta erinomaisesta artikkeliista. Artikkeli löytyy internetistä osoitteesta <http://www.oh6aa.com/tr/cabrillo.html>.

Huomattavaa on myösse, että monien käyttämä TR-Log -ohjelma ei muodosta oikeanlaista cabrillo-tiedostoa, vaan omanlaisensa viritelmän. Nämä ollen TR-Log -ohjelman käyttäjän tulee joko muokata lokissa oikean formaatin mukaiseksi tai kirjoittaa se uudelleen offline cabrillo -editorilla (esim. SM2EZT <http://www.sk3bg.se/contest/nraucabr.htm>). Ehdottaisin myös, että lokit nimetäisiin siten, että nimestä ilmenisi kilpailijan kutsu, lähetelaji ja kilpailuluokka. Esimerkiksi cabrillon-tiedoston ollessa kyseessä, nimi voisi olla vaikka: OH6KVU\_SSB\_Yleisluku\_alle\_100W.LOG. Nämä kaikki tarkastajan kannalta oleellinen informaatio ilmenee jo tiedoston nimestä.

Kuten jo aiemmin mainitsin, lokin lähettäminen kannattaa aina. Jos et halua osallista kilpailuun, mutta olet jakanut pisteitä, lähetä edes tarkastusloki. Nämä kilpailuun osallistuvat saavat yhteyksistään täydet pisteet.

## Projektiin johtopäätökset

Tämän insinöörityön johtopäätöksinä esitänkin muutamia muutoksia kilpailujen sääntöihin, joita järjestäjät ja kilpailijat voisivat pohtia. Nämä

muutokset mahdollistaisivat automatisoidun lokien tarkastuksen.

1. Sallitaan vain NRAU Baltic -muotoiltujen cabrillo-lokien käytöö.
2. Säännöissä ei määritellä aikaikuna eli sitä, paljonko eri osapuolten kelloit voivat olla väärässä. Aikaikuna tulisi määritellä ohjelmistoon toteutetun ±15 min -mukaiseksi.
3. Sääntöihin tulisi määritellä selkeämmäin, että kilpailija vastaa itse toimittamansa lokin muotoilun ja sisällön oikeellisuudesta.

Kohdassa 1 esittämäni muutos on herättänyt melkoisesti keskustelua puolesta ja vastaan. Monella on vielä käytössä vanhentuneet, jo aikansa eläneet kilpailulokiohjelmat, joilla ei voi tuottaa cabrillo-muotoisia lokitedostoja. Joidenkin mielestä tämä ehdotus myös vähentäisi kilpailuun osallistuvien ammattörien määrää. Uskon kuitenkin, että kyseessä on lähinnä normaalilla muutosvastarinta, joka häviää, kun kilpailijat ja varsinkin kilpailuiden järjestäjät huomaavat uuden järjestelmän mukanaan tuomat edut perinteiseen, käsitönä tehtyn lokien tarkastukseen verrattuna. Kilpailijoiden ei tarvitse välttämättä edes luopua vanhoista tutuista ohjelmistaan, jos he käyttävät aiemmin mainittuja offline cabrillo editor -ohjelmia.

Kyseinen muutos on oikeastaan pakko tehdä jos tulevaisuudessa aiotaan siirtyä käyttämään tulospalveluportalia, kuten tällä hetkellä on suunnitelmissa. Tämä portaa li mahdollistaisi lokien palauttamisen ainoastaan cabrillo-muodossa tai käsin syötettynä [www.lomakkeella](http://www.lomakkeella).

Kohdan 2 muutos tulee määritel-

lä lähinnä asian virallistamiseksi ja selkeyttämiseksi.

Perinteisesti kilpailun tuumarit ovat korjanneet suuren osan kilpailijan virheistä. En ole missään muussa kilpailulajissa nähty, että tuumarit korjaisivat kilpailijoiden virheitä, joten tässäkin asiassa pitäisi mielestääni vastuu säilyttää kilpailulla itsellään. Näin ollen virheellinen loki olisi joko hylättävä tai palautettava kilpailijan itsensä korjattavaksi (muutosehdotus 3).

Joulukilpailun lokeissa, joita tämän ohjelmiston luonnissa käytettiin testiaineistona, oli nähtävissä huomattavan paljon kilpailijoiden lokitiedostoista aiheutuvia ongelmia (voisi melkein sanoa, että suurimmassa osassalokeja). Suurimpana ongelmana oli se, että kanssa-amatööreillä on ilmeisen suuri tarve

muokata muutoin oikein muotoiltua lokitiedostoaan, jolloin sitä ei voida tuoda automaattisesti ohelman käsittelyväksi. Tällä aiheutettiin lokien tarkastajalle runsaasti ylimääräistä työtä.

### Tulevaisuden näkymät

Koska kyseessä on vasta ohjelmiston ensimmäinen versio, jolla tutkittiin onko kyseinen lokien automaattinen tarkistus ylipäättää mahdollista ja mitä ongelmia se toisi mukaan, kehitystä jatketaan saatujen käyttäjäkokemusten ja toiveiden perusteella.

Ohjelmaan aiotaan lisätä tuki suurimmalle osalle kotimaisia kilpailuja sekä tuki myös SYLRA- ja SAC-kilpailuille.

Tulevaisuudessa järjestelmää täydennetään web-portaalilla, johon

kilpailun osallistujat voivat kilpailun jälkeen palauttaa omat lokinsa. Portaalilla saadaan estettyä suurin osa ongelmista, jotka johtuvat virheellisesti muotoillusta lokitiedostoista. Myös tarve offline-editoreiden käyttöön poistuu, koska portaali tulee sisältämään toiminnon, jolla kilpailija voi jättää järjestelmään muut kuin cabrillo-muotoiset lokitiedostot syöttämällä ne käsin www-lomakkeelle. Portaalilla etuna kilpailijoiden kannalta on myös se, että sen avulla voidaan seurata ennakkotulosten kehittymistä sitä mukaa, kun lokeja lähetetään portaaliin.

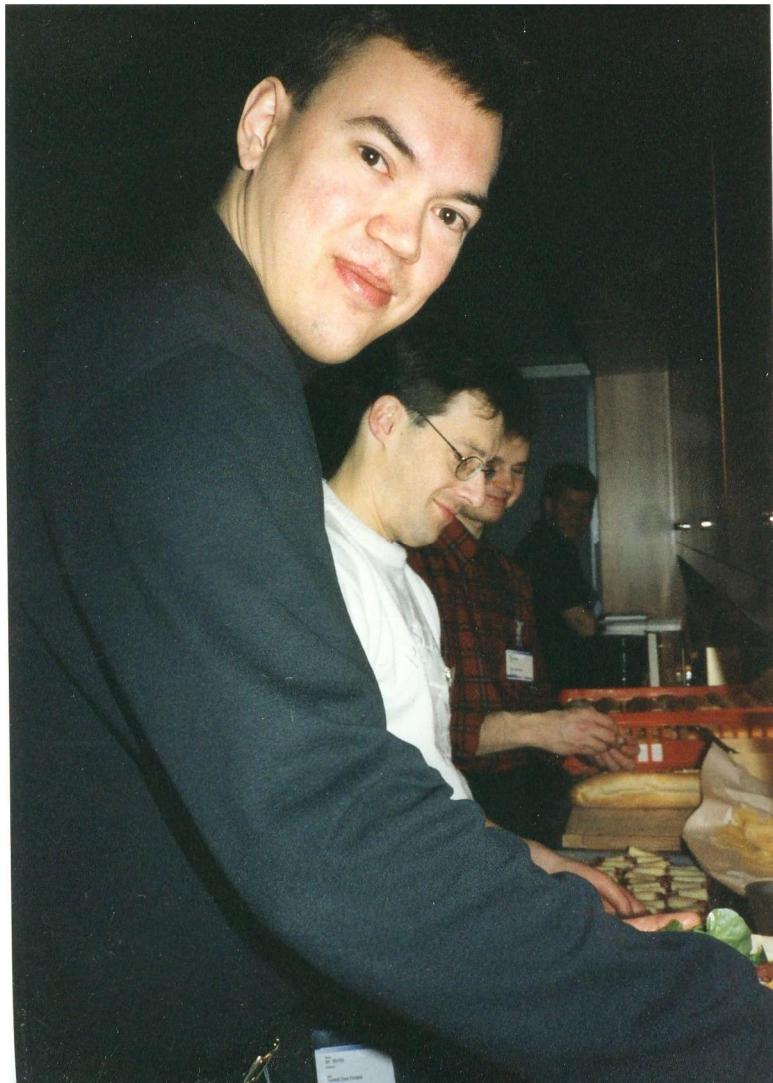
Jos ohjelmiston kehitystyö kiinnostaa, niin ota yhteyttä! Lisätietoja voit kysyä artikkelin kirjoittajalta tai Jannelta (OH6LBW).



CCF:n reflektorilla on ollut kevään aikana useastikin tapetilla IARU HQ-asia ja tiimikin on ehkä sen ansiosta jo melkein koossa. Kuitenkin pulaa on vielä esim. 80 operaattoreista. Mikäli asia kiinnostaa ota yhteyttä Janneen, OH6LBW ([janne.karresuo@gmail.com](mailto:janne.karresuo@gmail.com)). Myös muita bandeja tarjolla. KYSY!

#### OH2HQ-TEAM 2011

160 CW 0G4T (OH4MFA ja OH4KZM)	40 CW OH6M (opr. OH6LBW ja OH3LB) 15 CW OH5TS
160 SSB OH4KBC	15 SSB OH4KA ja <b>kuka muu?</b>
<b>80 CW</b>	10 CW OH1RX
<b>80 SSB</b>	10 SSB OH1RX tarvittaessa



In CCF-meeting of 1999 (early days), we did the catering ourselves to earn a few pennies for the club.  
Timo, OH1NOA; Ari, OH1EH; Pasi, OH1MM & Juho OH5JOC.



Those giving a presentation were given something to take home 2000–2002 (early days).  
Self-made stuff – tubes were donated by SRAT, which did well (?) those days.



In CQ WW SSB 2000, CCF manned the top 3 in EU (SOAB HP). OH0Z (OH1EH) won, OH0BH (OH1WZ) was #2 and OH2BH (OH1NOA) #3. The picture shows a 160/80M vertical at OH0BH which was built in the very same location, 200 m away from the shack, as the 1982 160-M-vertical for OH0W.



Pekka, OH7RM (see PileUP! 12(4)) using OH2AQ's drill for the 160/80M aluminium-mast, which had a total length of 30 M, and tuning for 160M was done with a linear loading.



CCF-meeting, 2001,? Getting to know each other through embarrassment. DX-pedition to HOLY.



Host of that CCF-meeting in Tampere was Seppo, OH1VR (OG1M) and his team.



CCF-meetings of the early days attracted interest also outside OH and we enjoyed the company of first -class contestants and DXers. Here DL6FBL, IK2NCJ and IV3TAN. Year is 1999? (In the bkgnd we have DL6LAU and SU9NC, and that's G3WGN's ear seen behind IV3TAN).



Only the true hardcore SM-contesters travelled to Helsinki or Tampere learn about big-time contesting (before the time of ferry-trips to Stockholm). Pilgrimage team included SM3EVR, SM3SGP & SM5IMO.

## Photo album – recent ones



Guilty as charged: "Burning the 230 VAC plug, OH4KA&AL1200". Mitigating circumstances: Wrongdoing took place in the Kalakukko contest., (OH4KA)



"Vom Dipol Zum Lautsprecher, UKW" – Pertti OH2PM inspecting his birthday gift. (OH1WZ)



Are we loosing Jouko OH1RX to geocaching? (OH1WZ).



PileUP! visited Timppa, OH1NX. A newly installed 48-m beauty salutes the visitors from a distance. Tower permissions #2 and #3 have been applied from the XYL.. New Big Gun in OH!



The base of the rotating 48-m-tall beauty. A side-mounted rotor? To me it looks as if the 230-VAC cable is been given the same opportunity to roll up and get cut off as the coax-cables. Photo OH1WZ@OH1NX.



LSB & USB 1<sup>st</sup> harmonics of OH1WZ pay respect to the device that would take them to a QTH tour @ OH1NX. Timppa is keeping watch. (cf. PileUP 3/06 p. 8). Photo OH1WZ.

### PileUP! Congratulations

#### KALAKUKKO 2011 – SUOMEN MESTARIT – OH-HF-Champions 2011

##### SSB

Yleislukka, yli 100 W Timo Pohjola, OH1TM/OH1MDR @OH1F, Pori  
Yleislukka, 100 W tai alle Ville Manninen, OH6QR, Ähtäri  
Perusluokka Heikki Leppäjärvi, OH3JKV, Juupajoki  
Single band 80 m Kari Matilainen, OH4KA, QTH Mikkeli  
Single band 40 m Kari Hirvonen, OH2BP, Tuusula  
QRP-luokka Raimo Laine, OH1FEB, Raisio  
Uusien amatöörien luokka Risto Pölkki, OH6FTR, Kyyjärvi  
Portable-sarja Jukka Tarvainen, OH4MFA @OG4T, Pieksämäki  
“Minun tuntini” Juhani Kaiturinmäki, OH2BCD, Helsinki

##### CW

Yleislukka, yli 100 W Jari Jussila, OH2BU, Kirkkonummi  
Yleislukka, 100 W tai alle Ville Manninen, OH6QR, Ähtäri  
Perusluokka Mikko Silvola, OH8FKU, Raahe  
Single band 80 m Terho Ikäheimonen, OH6VP, Lievestuore  
Single band 40 m Tapani Juhola, OH2LU, Kirkkonummi  
QRP-luokka Jari Hakala, OH8WW, Päijäjoki  
Portable.sarja Jukka Tarvainen, OH4MFA @OG4T, Pieksämäki  
“Minun tuntini” Olli Rissanen, OH2BBM/8, Kiiminki

##### RTTY

Yli 100 W voiton jakavat Jaakko Silanto, OH1MA @OG4T ja Kari Hirvonen, OH2BP.

### Mahtava Kalakukko!

BerttaUrhon biimi ilimoo jo viilsi, ilimoo jo viilsi.  
Kolmvaehepoveri pöyällä kiilsi, Mahtava Kalakukko!  
Kaekki sinne riensi, kuin mottimehtäään, kuin mottimehtäään.  
Bandilta poies jää ei kekkään, Mahtava Kalakukko!  
E-mailit kertoivat: "Bandille käy tie!"  
Jotkunnii kerskuivat: "Mestaruuden vien!"  
Tunnelma olj siellä lupsakka heti, lupsakka heti!  
Mestaruustaistoon immeiset veti Mahtava Kalakukko!

### OH0:Ilien Sota

1. Ja se Oolannin sota oli kauhia, hurraa, hurraa, hurraa !  
Kun Klemola stakatuilla biimeillä, teki RF:llä EU-ihmeitä.  
Sunfaraa, sunfaraa, sunfa-ralla-lalla-laa. Hurraa, hurraa, hurraa
2. Ja se oli NollaWiskin meininki, hurraa, hurraa, hurraa !  
Että tulkitaan säätöjä väljästi, kyllä komitea sen hyvin ymmärsi.  
Sunfaraa, sunfaraa, sunfa-ralla-lalla-laa. Hurraa, hurraa, hurraa.
3. Mutta NollaZetan pojat ne voittivat, hurraa, hurraa, hurraa !  
Alumiini kiilsi taivaalla, ja kotiin tultiin ruotsinlaivalla .  
Sunfaraa, sunfaraa, sunfa-ralla-lalla-laa. Hurraa, hurraa, hurraa .

### BREAKING NEWS

#### Ukrainian amateurs first to communicate via SunScatter

Dr. Tatjana J. Croftjovskaja has reported in Science Bulletin #3, 2011 that her team has successfully completed a series of experiments in using Sun as a reflector for 2-way amateur radio contacts. The scientific community has considered it an ill-posed, impossible task, but the team of Croftjovskaja have proven it possible. They transmitted on 3,699.00 kHz using the newly developed PASKA-modulation (Phase-Angle Shifted Ketterer Amplification). The signals were received not in Ukraine, but in Denver Colorado. Namely, Croftjovskaja's team is reading the backscattered PASKA by analyzing the signals from the sensitive magnetometers by NOAA, on-line. PASKA de-modulation from the one Hertz magnetometer data is achieved using the SRAL-filter (Series-Resonant Accurate Liner), which is sensitive to additive PASKA signatures at -30dB below noise. Some issues still remain with the SRAL-filter, due to extreme self-oscillation in the high-order filter stages. Dr. Croftjovskaja does not take the full merit for the invention, but acknowledges her companion, famous Dr. Hans E. CroftHill for the facts that lead to the breakthru. (FoxRat News, Kiev).

## Myydään – for Sale

Myyn kokelasluokan CW-valmennuskasetit (C-kasetti), kiteet taajuuksille 3511, 3517 ja 7010 kHz, AA-pelin, homebrew IAMBIC-keyerin sekä siihen 2 kpl AAA-paristoja. Myynti pito vaikeuksien vuoksi. Vaihdossa voin myös ottaa Tex Willer, EM, TM, tai VM lehtiä ja VIC-20 pelejä. Sepi. PL 6, 08666 Suolijärvi, Puolanka.

Maston, n. 24 m, riippuen palojen pituudesta. Kuumana kesäpäivänä saat tästä pyörivän projektin. Peruuta hakemaan. Tai tule vapaalla. Sinkitty perä kärry käy. Hinta korkea, mutta sopimuksen mukaan. Oma kutsu mainittava. Jere, OH1HOT.

## Ostetaan – Want to Buy

Alkaa tuo näkö mennä. Radion viritys onnistuu korvakuulolta mutta linukan ei. Olisiko sinulla näköviritysputkia? Voisin ostaa pari. [sØkea@lars.fi](mailto:sØkea@lars.fi)

## Vuokrataan – for Rent

### Työtä tarjolla – Job Offers

### Palveluja – Services

Single female? Want a man but wish he wouldn't bother your life too much? HamEscort is here! We will rent a man who will spend most of his time in the hamshack and on DX-peditions. Call now and book yours. There is more demand than available hams. +69-59959969

Sinkkunainen! Haluatko miehen joka ei liiemmälti elämääsi häiritse? Ratkaisu on Varahamipalvelu! Tarjoamme sinulle vuokralle miehen joka viettää valtaosan ajastaan hamshackissa ja DX-peditioilla. Soita ja varaa omasi nyt, kysyntää on yli tarjonnan. +69-59959969

## Muut lehdet

*VR:n yhteydet pelasivat viikonloppuna ongelmitta.* Ikaalisten Sanomat 1.4.2011.

*BR-lelut tukemaan leirikoulua.* Mäntsälän Aviisi. 1.4.2011.

## Tapahtumia – Events

### Sekalaista – Miscellaneous

### Kuluttajavalituslautakunnalle:

Forget monobanders and expensive motor-driven antennas:

### **Stuck-IR™** antennas are now here!

**Stuck-IR™** antennas provide mono-band performance on any band from 80 to 2 meters. They are fully adjustable, all elements adjust by turning a single handle, which can be freely located.

Band change speed is completely upon you, unlike motorized antennas that have constant speed motors.

Stuck-IR antennas are stackable and one control unit can adjust all stacked antennas.

Note! Single operators in unassisted category may not have other people to adjust Stuck-IR antennas during contests.

Note! Adjustment force increases in 2<sup>nd</sup> power for each stacked Stuck-IR antenna.



PileUP! congratulates Kim, OH6KZP for the job well done. See Flea Market announcement in PU! 15(1-2).

Palautusosoite / Returns to:  
CCF ry c/o  
Mikko Pöyhönen  
Niittymäentie 9  
77630 LEMPYY

VASTAANOTTAJA, Addressee



**AINAHAN  
SE ON  
MIELESSÄ.  
KISA**