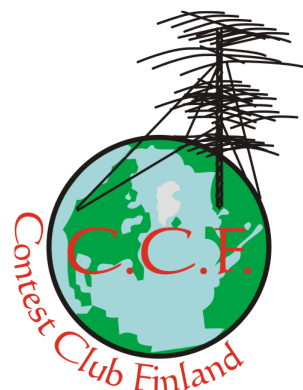


# PileUP!

Volume 15(5) 2011



TKS ES GB from editors of PileUP! 2011:  
Esa OH7WV, Ilkka OH1WZ and Kim OH6KZP (Photo OH2BH)

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## THE LAST BLAST

**PileUP!** is the newsletter of Contest Club Finland (CCF) with 2000–5000 readers. Contribute! Addresses for PileUP! 16(1) are [oh1noa@sral.fi](mailto:oh1noa@sral.fi) and [seppo.sisatto@uta.fi](mailto:seppo.sisatto@uta.fi).

## Talkoo - PileUP! 15(5) – The Last Blast

Eds. Ilkka, OH1WZ; Esa OH7WV; Kim, OH6KZP.

Best viewed if printed into A5-size booklet. Instructions: Don't read too seriously.

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In PileUP! 15(4), the reader contest was: Who are these blokes? Well, they were your editors.

Name	Call	Licensed	QTH	Professional activity
Esa Korhonen	OH7WV	1977	Shanghai	Electronics - wireless
Ilkka Korpela	OH1WZ	1984	Porvoo	Earth observing – optical; thru and below the F-layers
Kim Östman	OH6KZP	1994	Helsinki	Electronics – fast & densely packed semiconductors.

## Editorial: A look at the years gone by Ilkka, OH1WZ

This long editorial looks at the time spent with PileUP! magazine 1997-2011, and 2006-2011 in particular.

**'It all ends'** – said the old ram with his head on the block – and I'm saying it when writing the #20 editorial for a PileUP! issue. Forty-two PU!s were released in 960 pages before 2006, which was when I took over. PU! 5/2005 had been snail-mailed to some 120 'subscribers' and the first two issues compiled by me were printed and mailed as well. If those 120 were CCF members, I did not do very well 2006–2011, since the number now is somewhere below 60, halved that is. Well, PU! put no explicit effort to increase the numbers, and those who helped PU! with contributions should not get gloomy despairing thoughts. We had been over 200 in late 1990s.

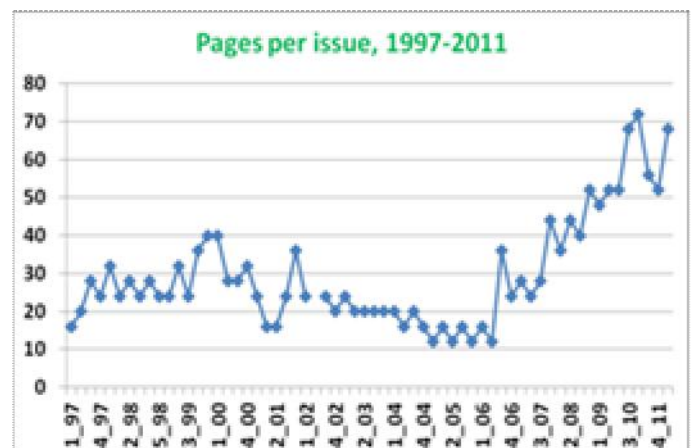
**'End is always a start'** – and there is always ammo left somewhere, although we are calling this issue the **Last Blast**. Volume 16 will see daylight in 2012 with the editor duo OH1NOA (43) and OH1VR (65). Timo is one of CCF's founding members and he was the editor of PU! 1997–2005, while Seppo has done a PhD in journalism. Seppo was the editor-in-charge of Radioamatööri in the 1970s, when I still peed in my trousers. The degrees in the current editorial board are from natural sciences. And we may add here that ours are not from any Balkan university, which we often have joked about – unfair – our apologies are due now to all doctors in that direction – and to all, who we have distressed by any means. We have been quite bad at times...

**SAC** and CCF-cruise were themes often covered in PU! in the last six years. Even this issue completes a triplet of PU!s, which were tailored for SAC 2011, organized by **Kim, OH6KZP** for NRAU and SRAL. Working with Kim is relaxed as he is the most altruistic radio sportsman that I've ever met. In spite of the 'SAC-rush', he has also lent a hand for PileUP!. We both work in the university circles, which may explain our similarly inclined judgment. The recent editorial board of PU! was international. The six-hour time difference did not prevent **Esa, OH7WV** in BY4 from lifting his fingers on PU! and on the humor section in particular. We even had non-virtual board meetings with Rane twice at the Helsinki-Vantaa airport. The first one was nicer, because Esa's XYL Bei attended that, while in the 2nd she was substituted by **Martti, OH2BH** (See cover photo). Martti played a critical role in the existence of PU! in 2006–2011 (and actually also in 2002–2005). Many times he turned the feelings of hopeless-

ness into manic enthusiasm – and PU! editors continued their journey head up high. And Martti is the 2nd editor of PU!. He was in charge of the WRTC-issue in 2002.

In 2006–2011, the editorial principles were:

- Original material if possible; no copy-paste or already published stories. With humor this was difficult in the beginning.
- No money involved; some ads were tried, but when money is involved, you cannot make fun of JAESU or ÎGOM. Low budget guaranteed a bit of freedom from CCF as well. I thought that this principle would bring in writers.
- PileUP! serves testers in OH & DX – CCF provides the framework for the cruise and the newsletter. Radioamatööri was for the OH masses (Recall that CCF board had the role of HF contest manager in OH, i.e. filling the monthly contest corner with text was their stress). CCF board basically gave PU! full freedom of expression (tnx OH6RX).
- Humor was seen crucial, and it was used as a smokescreen in many cases to express opinion on some sensitive matters.
- Quality. Almost everything that was submitted to us was published – sometimes after heavy editing. Good Q was thought to motivate editors, readers, and writers. Q correlates with hours invested, however.
- Less results, score rumors and copy-paste reflector stuff – more original stories and analytical articles. Results of OH-ops should appear in our precious Radioamatööri –magazine. This could have different in retrospect.



Number of pages per PileUP! issue 1997-2011.  
Total 960 + 852 = 1812.



Early in 2006 Martti OH2BH tried to convince the CCF board and me that we should go for open-access PDF publication. Despite some friction by OH1WZ, it was adopted soon as the second issue of 2006 was mailed to only five hams who desired a snail-mailed paper-version of PU!. The remaining 18 issues were PDFs, open-access in the web, and I haven't licked a single stamp since.

I used MS-Word to compile the issues. Work was kept simple. A4 page size, multitude of 4 pages (to enable printing of A5-sized booklet), one or two columns, Arial fonts, text-boxes (allows stuff a free placement across a page) and a free PDF-writer, which knew how to embed any strange fonts to the PDF-file. The writer could set the overall resolution in dpi and compression type and level of the graphics (adjusting the final size of the PDF in bytes). I used also freeware raster graphics software called GIMP to get the JPEGs, PNGs, TIFFs etc. right. The newly published pdf-files were first placed on the [www.helsinki.fi](http://www.helsinki.fi) server (my employer's), as it provided detailed information about the number and origin of downloads. The GCI-service on the Unix server was shut down in 2008, and Google analytics code was concealed in the download html-page. The older PDFs were stored on the CCF website. PDF-publication also enabled the use of electronic appendices – we even had 160M audio files for our 'readers'.

A year back we realized that CCF doesn't have the PDFs of the early days (from the paper era) – and seemingly the original computer files had been lost. Arvo, OH3CV had almost all of the paper PileUP!s, a scanner and ham spirit. It has since been cool to read the old PU!s, and these were helpful when compiling this presentation (and talk on Nov 19, 2011) about the history of our newsletter. Thank you OM Arvo!



I started as the editor in early 2006, and thereafter took my camera with me to many places. This picture from July 2006 has Martti, Jessica and Harri OH6YF, who is still being deeply missed by many CCF-friends, me included.

The way the word spread about each new issue was not well organized, as we relied on a few e-mail reflectors and key-persons. We kindly asked people to spread the word. The highest number of readers was above 5000, and it was the issue that had the Arkala mammoth featured. Well, you can have easily 5000 registered (IPs) downloads, but how do you know if these people really read the stuff, to call them your readers? Basically you can't. Normally, the editors got some 5-10 emails back after each issue and funny or what, these were from the same guys who seemingly had appreciated the stuff and realized the power of positive feedback (thanks W6SH, K5ZD, OH1VR, W4SO et al.). Although we sometimes thought that some critical material had been included, response was always very lame.

Each PU! (2006–) listed those who had in some way assisted in the making of that issue. These were approx. 90 in OH and 50 in DX.

A joint newsletter / contest journal can only exist if there are people willing to contribute. The role of the editors is to find these people and encourage them. It helps a lot if you are also a believer. I faltered in mine often and have since become a contest atheist. Soon (after some weeks from the start) I realized that it wasn't going to be a joyride – you had to work hard and be prepared for setbacks. And the choice that PU! would be 'bilingual' was perhaps not a relieving factor. Maybe the OH folks thought that "why should I contribute to an international journal" and DXs saw PU! as an "OH-thing". A journal that is dedicated to HF radio contesting cannot tempt ample crowds simply because serious contesters are in short supply – yes, we fanatics are actually very few (tens if hundreds, Worldwide). But PU! has been blessed with great contributors over the years. In the early days it was Ari, OH1EH whose role was central in arranging content. He is one of CCF's founding members and can still at times be heard on the bands (OH5DX, OH1F, OH0Z), although his activity is nowadays focused outside ham radio, e.g. in music according to rumors. PileUP! had regular RTTY, SOAPBOX, and OH-contesting editors in '97–'04. RTTY was kept alive '06–'11 by Kari, OH2BP. Jari, OH6BG took his articles to the scientific level and Jari also inspired the genesis of the pseudonym 'Dr. Crofthill', whose articles were almost breathtaking. Olli, OH0XX shared with us his adventures in the Hispanic World. We even made a song of Olli to merit his achievements. Olli also reminded us that there are other things to hold in your hand than the VFO knob. You might recall the photos with the ladies next to him?

At times it was fun to make the PU! issues. Par-



ticularly joyful moments were those, when you realized that Jari, OH3BU has sent in material. I just needed to get him a bit upset first, and then I would just wait for the e-mail. Sparring, that is. Jari's stories brought everyone to thinking – yes that unattractive activity.

At times thoughts of hopelessness fill editor's mind. This is when your regular contributors come handy. Another option is to try to spar people or even try to have them pity you. You need to be prepared to bow low. And the truth is that email reflector announcements (calls) are worth nothing – the editor has to attack the candidates and feel no mercy. Another good thing to remember is that there are degrees of "YES". Go for the definitive YES, that's my advice for the editor duo that continues.

## **UUSIA JÄSENIÄ: OH6GDX**

A title in PU! 2003. "New members: OH6GDX".

Things that made me lose my loyalty to contesting are many. As an editor of CCF's PileUP!, I became well aware of the fact that this hobby is on its way to a new equilibrium, at least in OH. By hobby I mean both amateur radio and contesting. Already in 2003 it was special news in PileUP! that a new young member had joined the club (OH6GDX). This seems like an unavoidable development – ham radio had its peak in Finland in 70s and 80s. I have three kids myself (7, 10 and 10 years) and they all see no point in doing the radio, when the internet is around. I feel like a freezer salesman at the Baffin Bay Home Electronics in Thule (OX).

Things progress in contesting, and have done so also during the time (1997–2011) I've contributed to PileUP!. Computer logging and control over the radios is the first thing that comes into my mind. The user interface to radio and log is great, and this development is still ok in the sense that PCs, cables and boxes are reasonably affordable. But this development has had its backsides as well. These we felt in SAC 2011, when the Zorro Goal –campaign (OH2BH, OG9X et al.) tried to increase the activity in OH. You no longer can just grab the mic, pencil and paper and work the contest. No, indeed not. You are faced with 500-page PDF manuals in foreign language, ports, settings, versions, etc. In our excitement, we have created a hinder for the casual contesteer.

DX-cluster came about in the late 1990s (OH2AQ by OH2BUA & OH5TB). Contesting or DXing has never since been the same. The term "assisted" appeared. You started to hear people say, 'please put me the packet cluster!'. All of a sudden

those of us who had learned quick decoding skills to enable fast ID of stations were confronted with a new situation. Should I continue the sports the way I did or go with the cluster-flow? Scores started to improve; CN8WW did 100M in multi-multi, which was 100% more than the PJ9-boys did in the early 90s in CQ WW. The question remains, how did the QSOs originate? In 1991, people had their fingers on the VFO and identified stations based on what they heard. Finding your favorite station from the band took quite an effort. Ten years later there was a battalion of listeners who shared information. The QSOs started to originate in a completely different manner. Identification became a visual thing. Of course a DX station scores more now, because casual DXers can just browse the available and interesting stuff from the screen and work it efficiently. The birth of a QSO was changed – you no longer needed a man and a VFO to seed it – inseminated QSOs saw daylight.

Even during the DX-cluster times, we want to see operators competing. This is why WRTC exists. And there, in WRTC, only the operator skills matter, as the influence of other factors is eliminated. The question remains, what skills are needed to get there?

I could still live with a DX-cluster, because my target in contests was always at the OH and EU-levels. You don't get much DX spots in here, so cluster does not ruin things. You just notice it from the multi and SO(A) stations who moon to the frequency (come to the frequency with the transmitter on). Being deaf is perhaps why they were 'assisted' to the freq. Old skills of identifying CW-stations using a 6 or 2.7 kHz filter while SP'ing were still beneficial during the early cluster days. But then came something that knocked me out of the operator's chair. I've always liked CW. Maybe the reason is that still in the early 1980s it was the only way to HF for a novice. And we were many anyway, I mean that there were lots of young people willing to get the ham-ticket. So you had friends to talk to on 3.5MHz on CW, where they had a 35 KHz segment for novice class hams. At ham fests we spotty-faced neophytes occupied the back rows – and dreamed together of an 811-amp. It is a bit different nowadays. But we were lucky – the standard of living was still low and clubs were much alive. You had access to first class contest station in almost every town in Finland. Rotary 42 meter tower with OH8QD's yagis was the standard. The radios were lousy, so you compensated it by learning to Morse code well. Now, you don't have to anymore.

In life it is rather normal to first refuse any issues that one might have to deal with. Or to joke about those uncomfortable things, you know, to avoid and evade. But you cannot combat the evident. With digital computing we first got the PCs to control the radios, send CW and keep the log. Without getting tired the PC monitors the DX-cluster and fills the band maps with goodies that are only one mouse-click-away. On-the-fly calculations with VOACAP engine tell you where to move that multiplier freeing your mind from the inconvenient task of learning the propagation. And you are no longer dependent on the Battalion of co-listeners feeding the DX-summit – there's an army of digital receivers plugged into powerful computers that feed your screen with callsigns and frequencies. You hear better by combining the sight into the game! And it is great that your receivers are so well spread on the planet, eh...?

The use of CW-decoders and SDRs that feed the operator with callsigns has changed the origin of QSOs even more than the DX-cluster did. Now the whole idea of a 2-way contest QSO is questionable. For me personally this means that the radiosport that I grew up with no longer is there and it is time to do something else.

PileUP! DX-contributors 1/2006-5/2011 by class.

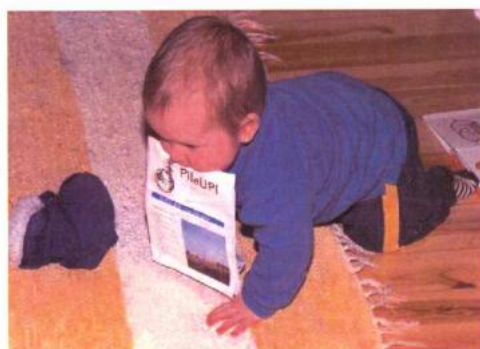
First	Business	Economy	Economy
K9LA	4O3A	CT1BOH	SM0CXU
Dr. Crofthill	5R8FU	DK8ZZ	SM0IMJ
SM6LRR	DL8MBS	EA8CAC	SM3CER
	ES5TV	EC1KR	SM3SGP
	G1VDP	ES2DW	SM5CSS
	K5ZD	G3PJT	SQ2GXO
	K6VVA	G3TXF	VK4TI
	LA6VM	G6GO	VK8AV
	LA9HW	IZ4AKS	VU2UR
	LB3HC	K3LR	W3LPL
	LY9Y	K9JKA	
	N5TJ	LA6FJA	
	NO5W	N2KW	
	RA3AUU	N5ZO	
	RA6LBS	NS3T	
	SM0W	PA2A	
	SM2WMV	PT7ZZ	
	SM5AJV	PY2PT	
	W6UM	SM0BYD	
	W7DRA		

Although I feel that contesting has come to a turning point, amateur radio will still continue to provide many pleasant experiences. I owe this hobby a lot and I'm glad that also thru CCF's PileUP! I got the chance to payback. I kindly thank all contributors who made joined the talkoo-work and shared their stories with many in OH and DX. I was there in 1996 to start CCF and now 15 years later, I'm very happy for the activity that we've had. More is to be seen – in February

2012 CCF hosts the first meeting of contest clubs. Without doubt, there is room for international co-operation in contesting. Basically you don't have to do much, because it is a jungle nowadays (calendar, software, rules etc.). But are we doing this too late? Go to the meeting and find out by yourself.

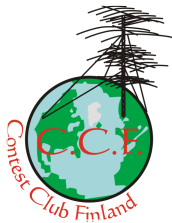
PileUP! OH-contributors 1/2006-5/2011.

First	Business	Economy	Economy
OH0XX	OH1JT	OG1J	OH5IJL
OH1VR	OH1RX	OG9X	OH5NZ
OH2BH	OH1RY	OH1EG	OH5SM
OH3BU	OH1ZAA	OH1EH	OH6CS
OH5XT	OH1ZE	OH1JD	OH6CT
OH6BG	OH2BJ	OH1NOA	OH6KW
OH6EI	OH2BP	OH1NX	OH6LI
OH6KZP	OH2BU	OH1VT	OH6OS
OH6LBW	OH2IW	OH1XX	OH7KUD
OH6MW	OH2JA	OH2BCI	OH8KVY
OH7WV	OH2KI	OH2BCP	OH8LQ
	OH2MM	OH2BCV	OH8MWD
	OH2PM	OH2BF	OH9GIT
	OH2RA	OH2BN	OH9MM
	OH2UA	OH2BO	OH2BC
	OH2XX	OH2BR	OH2NB
	OH3LB	OH2BX	OH2CX
	OH4XX	OH2FH	OH3VV
	OH5JOC	OH2GJL	OH4MFA
	OH5LF	OH2HSJ	
	OH5NQ	OH2KMG	
	OH5TS	OH2LU	
	OH6KN	OH2MZB	
	OH6KVU	OH2OT	
	OH6RX	OH2PQ	
	OH6XX	OH2RF	
	OH6XY	OH3BHL	
	OH7EA	OH3SR	
	OH7MA	OH3TM	
	OH7UE	OH4JFN	
	OH8JT	OH4KA	
	OH8NC	OH5BM	



OH1WZ's own PileUP!

Time flies. You see it from your kids. My oldest one Arttu appeared three times in PU! The photo above is from a front cover in 2002. Since then he often asked me: 'Daddy, are you again doing PileUP?' – 'one more' – I answered this time.

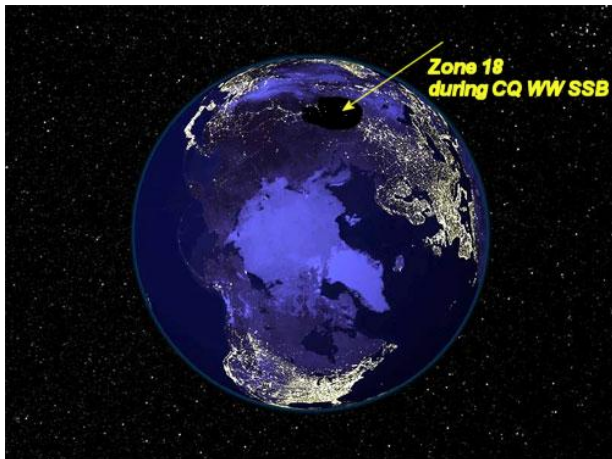


## Huumoria – Witz - Humor

Konkarikontesteri Erkki kuoli CQWW:n aattona, ja taivaan esikartanoissa vastaanottamassa oli Pietari itse. Itsekin kalastuskisoissa mainetta niittänyt pyhimys tiesi kontesterin luonteen ja sanoi murtuneelle Erkille, "Tulepa tänne, saat vielä seurata viimeistä kisaasi ennen kuin siirrytään tuonne taivaan puolelle."

Pietari vei Erkin erilliseen tarkkailuhuoneeseen, jonka seinillä oli eri maita edustavia kellotauluja muistuttavia ympyröitä isoine viisareineen. Erkki tiedusteli, mitä ne oikein ovat. "Seuraamme täällä, kuinka hyvin CQWW-kisaajat pelaavat sääntöjen mukaan, varsinkin ylittehojen osalta. Jokainen taulu edustaa yhtä DXCC-maata. Aina kun viisari liikaa, joku pidentää syntilistää."

Erkki innostui katselemaan ja huomasi mm. UA-, UR- ja 4L-maita edustavat taulut. Aina silloin tällöin viisarit liikkuvat askeleen ja Erkki myhäili, "tiesinhän minä, että siellä on jotakin hämärää aina tekeillä. Mitä lie isoja linukoita ja sen sellaista." Suomea ei kuitenkaan näkynyt taulujen meressä. "OH-maalle ei varmaan sitten ole tarvittu taulua?," Erkki virkkoi. Pietari naurahti. "Voi kuule, OH-miesten taulu siirrettiin keittiöön tuulettimeksi jo ajat sitten!"



This satellite photo was taken during CQ WW SSB. There is an odd dark spot in UA9O-land. Someone out there was a real QRO?



Instead of using the decoder in your K3 to reach the CW nirvana, PileUP! recommends the famous CW Shortcut service.

## MAST BREAKING NEWS FROM 26.12.2011

When do these people call you on the landline?

OH7RM: Myrskyn jäljiltä; When the storm has passed

OH8SR: Jo ennen myrskyä; When the storm is in the 10-day forecast

OH8QD: Ei kyllä soittale enää; Won't call you anymore

OH1JT: Kun muiden soitot soitettu; His calls follow the others'

OH2BH: Piiput pihalla; He'll call you when the chimneys are in the garden

OH5BM: Limput ilmassa; Tapani grabs the phone, when the mast counterweights do an overflight

OH2PM: Emäntä jo mastossa; The XYL supports the 5-EL's boom and needs a helping hand

OH1NX: M-Real ei vastaa; He can't get hold of the lumberjack

OH1WZ: Pyykkinarut poikki (Valkopyykki maassa); When the 'laundry-lines' are down with the bedsheets

OH8NC: Airbus löytynyt Arkalasta; The flying Ductman sits on the boom of the Arcala Mammoth

OH0XX: Kun Andeilla tuulee?; A blow of wind was observed in the Andes

## Heippa - Voittajien askel on kevyt - SAC 2011 kisatunnelmia tässä – Vexi OH3LB

Niin kaikki ovat voittajia, jotka osallistuivat kisaan ts. ainakin itsensä voittajia ainakin! Rannalle jääneet äänettömät, tulokoot mukaan seuraavana vuonna 2012. OI3V SAC 2011CW kontesti kuvia:

Kerhoasema OI3V oli siis suunnitelmien mukaan äänessä Mr. Presidentin Sepon asemalta Sisätöstä sarjassa HP SINGLE MULTIOP, kuvassa OH3KAV joka aloitti kisan ja ja hoiti ruuhka-ajot, elikkä rush houerit, allekirjoittaneen VEXI OH3LB hoitaessa workingintaa lähinnä yö- ja ilta-aikana. Kalusto ilmenee kuvasta IC 756Pro III, jota viritetty Inradin roofin filtereillä ja jälkipoltin Acom 1000 Svetlana tuubilla.



OH3KAV @ OI3V, SAC CW 2011



## A word from our sponsors



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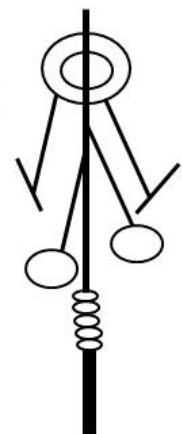


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## Managing the Polar Battle

Kim Östman, OH6KZP (oh6kzp@sral.fi)

### Background

I think many of you have experienced some frustration in trying to explain to your friends the peculiar nature of obtaining the results of a radio contest. You devote a full weekend (or two with preparation) to a contest, suffer from sleep deprivation, and put in your best effort to emerge victorious, but you don't really know how you did for a long time. Perhaps a year after the event at worst, when you've already forgotten the entire contest with its highs and lows, successes and setbacks. "What the heck is the point with that?", your friends ask, and you can't but agree that it sounds somewhat silly when you think about it from outside your own conditioned frame of reference.

Being tired of the status quo and experiencing such moments of frustration led to a public airing of my thoughts in December 2009, calling for a revolution in how the Scandinavian Activity Contest (SAC) is organized.<sup>1</sup> Because we Scandinavians have an active contesting community I was, from a larger perspective, merely one voice among many pointing out the need for some spicing up of our regional contest. The rotating organization scheme caused some differing practices and delays, and placed a heavy burden on the already loaded national contest managers who did their best amidst all their other duties. While everybody realizes that it is a regional contest of limited interest, it is nevertheless "our contest," one that we are proud of and that we want to continually improve.

Knowing that the organization responsibility would fall on the Finnish Radio Amateur League (SRAL) in 2011, I announced to SRAL and Contest Club Finland (CCF) my interest in taking a new SAC out for a test drive and was met with a positive response in late 2010. Who would be enough of a nutcase to take that job voluntarily anyway?!

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<sup>1</sup> See the posting "Revolutionizing SAC" on the CCF, TOEC, and OZ-CONTEST e-mail reflectors on December 14, 2009.



Fig. 1. SAC competitors give it their all in the battle for glory and nation. (<http://www.suomiruotsimaaottelu.fi>)

### Preparations

The infrastructure of SAC took a great leap forward in 2009 when SM7LQV and SM3CER launched a website for the contest at [www.sactest.net](http://www.sactest.net). One permanent address for the contest instead of annual websites here and there, popping up and dying with time. But there was a lot more: a robot for log uploading (instead of traditional e-mail submission) and immediate posting of the calculated claimed score on the leaderboard upon log reception. My experience was that this electrified post-contest discussions considerably. Questions of national pride and glory in the Scandinavian Cup (where all scores by stations in a given country are summed together) were enlivened as one uploaded log after another changed the national ranking and turned patriotic pride into national depression and vice versa in the days following the contest. The final results were still some time away, but so far so good.

One of the main principles for 2011 was to 'outsource' a number of responsibilities to interested volunteer testers. This would save the manager's energy for some of the most taxing tasks such as log checking, adjudication, and the general results process. A call for help with detailed tasks was broadcasted on the CCF e-mail reflector well in advance in February and renewed in April, happily leading to a small number of offers to help.

Importantly, OH1WZ as the editor of *PileUP!* came on board early, promising to devote the three (finishing with the present one, so don't worry!) final issues of his tenure to the worldwide distribution of the SAC gospel. World travellers such as OH0XX, OH1RX, and OH2MM would assist with marketing (later strengthened by OH1VR for the USA and SM6LRR for Russia), whereas OH2BU and OH6EI would be helping

those with log upload troubles via a support e-mail address. SM7LQV promised to be available with <http://www.sactest.net> (where historical results and a search function back to 1999 were added during the spring), and SM2EZT would provide support through his "SACCKr" log checking program, being developed and used for around ten years now.

Janne OH6LBW provided great help by designing the graphical brand of SAC 2011, including a promotional card (featured on the cover of *PileUP!* 15(3)) that was distributed for example at the Friedrichshafen Hamfest and SRAL's summer camp thanks to CCF sponsorship, and together with direct QSL cards of OH2BH and OH8NC around the world on their own initiative and sponsorship. Janne also designed the SAC 2011 diploma, using desktop publishing software that later enabled the semi-automated creation of the personalized diplomas, being shipped out by OH2HSJ at the SRAL office as you are reading this. A budget proposal, including the price of plaques and diplomas, was submitted to SRAL as the main sponsor in early 2011. Short mass e-mails were also sent out to prior SAC participants to remind them of the upcoming contest, with groundwork done earlier by SM6LRR.

The contest was branded as the "Polar Battle" in a deliberate decision both to capitalize on the images of exoticism conjured up by Scandinavia amongst those further away, and to provide a boost in national feeling amongst Scandinavians, hopefully leading to greater participation. OH6BG as a propagation software specialist came on board by providing propagation predictions to Scandinavia from various parts of the world. If we as Scandinavians often feel challenged by that all-too-familiar auroral flutter, it would be the same the other way around. Thus, while some with their "finnpinne" megatowers would be easy to find on the bands, guidance in choosing the best paths, frequencies, and times of day was provided to aid in locating the signal from the northern hut of Average Joe.

In OH land, internal marketing was done through SRAL's *Radioamatööri* magazine beginning early in the year. This included the revivalist "SAC is coming – Are you ready?" ads together with the contest dates and an article by the young OH2FHN in August and another one by this author in September. However, having been repeatedly defeated by Sweden in the Scandinavian Cup seemed to be calling for something more with greater resources. The national booster of a Finnish ice hockey world

championship title in May 2011 (after 16 years) provided the symbolic framework for a repeated sensation in radio, spearheaded by the self-organized group OG9X (SRAL's contest manager), OH2BH, OH2KI, OH2CX, and OH3UU. We are indebted to them for their magnificent work, leading to a tripled participation by OH stations in this year's SAC and a changed face for the contest for non-Scandinavians. Hopefully that story will be told by the perpetrators in detail also in English as a future inspiration for others.

As detailed in *PileUP!* 15(3), this year's contest brought with it renewed rules after many years of discussion. Some of the most noteworthy changes included an Assisted category for non-Scandinavians, Rookie and Tribander/Wires categories for Scandinavians, the introduction of open logs and log checking reports for increased transparency, and a requirement of electronic log submission. A draft revision was made by OH6-KZP based on the old rules, and a discussion ensued between him and the large-nation contest managers LA4YW, OH6RX, OZ5WQ, and SM3CER during the spring. Finally, the Nordic Radio Amateur Union (NRAU) as the owner of SAC gave the new rules its blessing at a general meeting in May 2011.

## Log Submission and Checking

During the CW part of SAC, it hit me that the serial numbers I was receiving from many non-Scandinavian stations were quite high. This was quite promising when it came to the number of Scandinavian participants. Conditions were not so good and the total QSO numbers of the Scandinavian winners were not extraordinary, but the best non-Scandinavians did very well and broke QSO records. On SSB, also the Scandinavian top stations worked a lot of QSOs, thanks in part to the improved conditions provided by an awakened solar cycle.

A goal was set for 2011 to bring the total number of submitted logs well above 2000. We landed at about 2290 logs, which is a very positive development and an increase of over 350 compared to the previous record from 2010. It also follows the general trend of increased interest in contesting. Most of the increase can be traced to the tripled participation by OH stations and a 50% increase in SSB DX logs. Even with all the marketing efforts abroad, a measure of brutal honesty thus dictates the conclusion that it didn't make as much difference as we would have liked. See Fig. 2 for a more historical view.



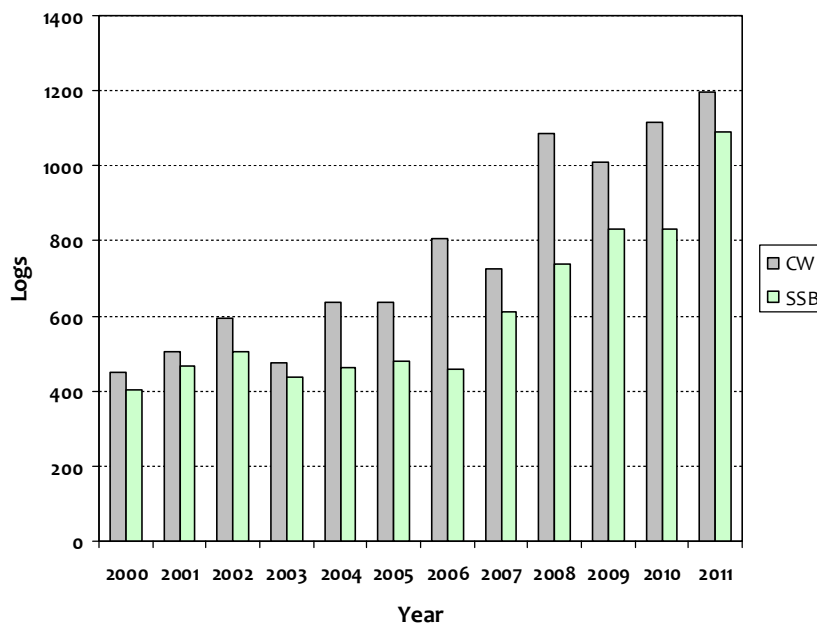


Fig. 2. Number of submitted SAC CW and SSB logs for the years 2000–2011.

Log submission was handled by an improved robot at <http://www.sactest.net>, webmastered by SM7LQV. A major change this year was the requirement for each contestant to re-declare the entry category so as to standardize the Cabrillo headers later processed in log checking. The robot also pointed out any irregularities on the log rows of the Cabrillo file, asking for corrections and resubmission when necessary. And although Cabrillo is a standard, the way it is interpreted and produced by the variety of logging programs used by the contesting community is bewildering (different kinds of headers, placement of columns on the QSO rows, etc.). To circumvent this problem, the log robot recreated the contestant's Cabrillo file to exactly conform to the standard, providing for smooth entry into the log checking program. This made log processing quite smooth.

As mentioned above, a support e-mail address was available for those who had problems with log submission through the robot. The number of contacts to this address was far too many, at least over 400, and requires examination of "what went wrong". It appears that some entrants were simply not used to working with the robot and preferred e-mailing the log (their log files were fine as such) while others had troubles where the robot got stuck and quit communicating due to bugs in the robot or other problems. In any case, much good work was done by OH6EI, OH2BU (CW) and OH1WZ (SSB) in corresponding with log submitters. On both CW and SSB, around 50% of the logs arrived during the first 24 hours after the contest, indicating that the shorte-

ned log submission time of two weeks should be quite sufficient (or even too long still?).

No paper logs were accepted beginning this year. Instead, those entrants who had logged on paper were provided with a website form for manual entry, or a separate executable program by SM2EZX for post-contest log entry on ones home computer. The program also worked live during the contest, but unfortunately a bug made it behave erratically after half of the SSB contest had passed. We are still debating in Finland whether this was a bug deliberately introduced by the SM brothers into an otherwise fabulous program in order to shake the OH ranks ☺. It also became rather clear that beginner-level assistance in producing Cabrillo files will be needed in the future; one of CCF's future projects may be to produce hands-on manuals for Cabrillo creation in the most common logging programs. To my chagrin I received at least one post-contest e-mail lamenting that participation in SAC is no longer an option because of the impossibility to create an electronic log or to sit in an internet cafe typing in hundreds of QSOs. I sincerely hope that such a problem could be solved by assistance from fellow local hams, such as was the case in Finland thanks to OH2EDA and the above-mentioned gang of five.

The logs themselves were checked very quickly once functional program versions were available. More time was consumed by ensuring that the top entrants were in the correct categories, and particularly in controlling for potential Cluster/Skimmer-cheating in the non-assisted categories. Thanks to special scripts and manual ins-

pection, potential violators (or persons who had simply accidentally declared themselves non-assisted when they were in fact assisted) were identified and contacted. Two entrants were moved to the assisted category as a result, including a potential winner. The issue of Region 1 stations operating CW under 3510 kHz (contrary to the rules) received a lot of attention, although almost exclusively in OH land. The public listing of such stations, with warnings against doing the same on SSB, resulted in a mostly silent window 3790–

3800 kHz during the SSB contest weekend. This episode will hopefully serve us all as a good reminder to read the contest rules and to ensure a more level playing ground by following them.<sup>2</sup> Finally, the results and public UBN-files were then posted on the SAC website for all to enjoy and learn from.

<sup>2</sup> See the Contester's Code of Ethics at <http://wwwrof.org/contester-code-of-ethics/>

Call	Freq	Mode	Power	Status
198405	14000	0941	SG0X	59
198406	14000	0941	SG0X	59
198407	14000	0942	SG0X	59
198408	14000	0945	SG0X	59
198409	14000	0945	SG0X	59
198410	14000	0946	SG0X	59
198411	14000	0947	SG0X	59
198412	14000	0948	SG0X	59
198413	21000	0952	SG0X	59
198414	7000	1004	SG0X	59
1274	F4DSK			59
1275	HG12R			59
1276	ER4LX			59
1277	UA9UAD			59
1278	WW1WW			59
1279	K3Z0			59
1280	RU9CC			59
1281	CT2GSN			59
1282	4K9W			59
1283	SP4GFG			59
183				2
7				2
352				2
72				0
114				3
232				3
15				3
181				2
21				3
103				2
22828				Conf
-3572				OK
20225				Conf
-1178				Busted
-1475				OK
38517				Conf
-4175				OK
-1867				OK
408				Conf
234422				Conf
395	21000	0929	4K9W	59
396	21000	0931	4K9W	59
397	21000	0932	4K9W	59
398	21000	0934	4K9W	59
399	21000	0935	4K9W	59
400	21000	0936	4K9W	59
401	21000	0937	4K9W	59
402	21000	0940	4K9W	59
403	21000	0940	4K9W	59
404	21000	0941	4K9W	59
405	21000	0943	4K9W	59
406	21000	0945	4K9W	59
407	21000	0947	4K9W	59
408	21000	0951	4K9W	59
409	21000	0952	4K9W	59
410	21000	0955	4K9W	59
8	7S5C			59
9	OH6RM			59
10	SK3W			59
11	SL0W			59
12	SA3D			59
13	OH2BP			59
14	LN50			59
15	OH6NUC			59
16	OH2T			59
17	OH1MA			59
18	OH1WZ			59
19	O13U			59
20	OH7RJ			59
21	SG0X			59
22	O27X			59
23	OH6GAZ			59
399				1
1152				1
602				1
989				1
1034				1
336				1
297				1
423				1
839				1
1321				1
800				1
254				1
599				1
1282				1
1773				1
123				1
3629				Conf
139764				Conf
211880				Conf
216335				Conf
187352				Conf
97199				Conf
51099				Conf
136073				Conf
108515				Conf
84937				Conf
92137				Conf
153594				Conf
143916				Conf
198413				Conf
168408				Conf
129835				Conf

Fig. 3. SAC logs are checked with a program made by SM2EZT.

## Future and Challenges

When approving the new rules of SAC in May, the NRAU also decided that a separate contest committee composed of one representative each from Denmark, Finland, Norway, and Sweden will henceforth take care of organizing SAC, relieving the national contest managers to take care of their other duties. The committee is headed by Ingemar SM5AJV, commences full operation in 2012, and will ensure that standardized and documented policies are henceforth used each year when organizing SAC.

SAC is really interesting to us Scandinavians because for two weekends per year we are on the "correct side" of the pileup. But it is clearly a regional contest of limited interest outside Scandinavia, requiring constant efforts from us all to attract participants. Case in point: how many of us know what regional contest took place last

weekend? You could ask the same question of most non-Scandinavians the weekend after SAC and they would draw a blank just like many of us just now did. Already in 1929, when a kind of proto-SAC was organized, a QST writer lamented how "[t]he one regrettable feature of the contest was the scarcity of signals from the vicinity of the 'land of the midnight sun'."<sup>3</sup>

One of the most crucial aspects of raising interest is in increasing the number of Scandinavian participants. Finland managed to do this to an unprecedented degree this year, and hopefully there will be a perpetual aftershock in the following years. Still, under 800 logs in total from both the CW and SSB legs is not enough. The contest may feel boring from outside Scandinavia, a feeling only partially remedied by this year's intro-

<sup>3</sup> "The Scandinavian Contest," QST 5/1929. Tnx SM5AJV.

duction of the Assisted category. The very best non-Scandinavian stations managed to work 800–900 QSOs, but that is not sufficient.

When crunching the numbers, OZ and LA emerge as the most obvious sources of potential new participants. Indeed, hopefully we can find ways of aiding the Danish and Norwegian contest communities in raising interest in SAC among their own compatriots. After all, it is not a problem of radio amateur population, but perhaps more a case of "the way it has always been" and disinterest in a battle traditionally waged between the Finns and the Swedes. This need not be so, and it may only take the determination and sustained action of a few individuals to change things to new levels, as shown by Team Finland this year.

Another approach to ponder is the introduction of additional prizes beyond plaques and diplomas. We may not admit it so easily, but many of us are materialists, and we like to win things, whether it be pieces of paper or other more useful or decorative items of interest. I'll admit to once participating in the RRTC (the national Russian version of WRTC) as a foreign station when promised a T-shirt for a given number of QSOs and for submitting the log quickly enough. Alas, the T-shirt has never arrived, although I complied with the stipulations. This year, PileUP! organized a sponsored trophy program for example to stimulate participation in certain geographical areas or to encourage accurate operating. Results of that experiment are reported elsewhere in this issue. Doing something like that (and like the sponsored plaques of CQWW) on a more permanent basis is good food for thought.

A third item to give serious thought to is the integration of real-time features into SAC. It is difficult to visualize at other times of the year, but when SAC comes around there is some real tangible excitement. This hype could be used to advantage in marketing our hobby through things such as newspaper articles, online scores, audio, and video, and small national teams for a contest-within-a-contest in a media-ready event. Watch the DVD from WRTC 2002 in Finland (also on Youtube) to get into the mood and start churning out your ideas. I think we have some real potential here as technologically advanced nations. Not only would this increase the hype in Scandinavia and hopefully among non-hams too, but also showcase and raise interest in SAC as a modern contest in the eyes of the rest of the world.

## **SAC 2011 is dead, long live SAC 2012!**

Managing SAC 2011 was a good learning experience. I can now see more clearly how feelings really do run high in this sport, in both positive and less positive ways. Being in the middle of multi-thronged pressure in different directions as a manager is not easy, and frankly, I could at times think of better things to worry about on my free time, but love for the sport is a good impetus for going forward. The importance of such ideals as being impartial in both information flow and adjudication, living by commonly agreed rules, and striving to implement the most humane long-term solutions to problems at hand, was impressed on me over and over. I'm happy that many of the goals for SAC 2011 were reached, and reasons for unreached goals were identified for future remedy to make SAC an even neater and more popular package.

I want to give my sincere thanks to all those listed above for their work related to SAC 2011. It was a great joint effort that brought out many of the best sides of our hobby. In particular I would like to thank two individuals more personally, namely OH1WZ and SM5AJV. Ilkka's unwavering support through PileUP! and in other ways was an important pillar that gave encouragement in rough seas. Ingemar was an irreplaceable confidential help in matters of adjudication and an excited discussion partner with whom to share ideas and thoughts. I'm convinced that SAC will be in good hands with him at the helm of the new contest committee. Thanks to all for participating and see you next year!



Kim, OH6KZP (OH8X) in CQ WW SSB 2011.



## THE BOY IS RETURNING HOME – ANOTHER STORY OF SAC 2011

*Martti, OH2BH*



The Boy is back home; SRAL President Rami, OH2BCI and the author, Martti, OH2BH.

It is sometimes difficult to understand out in the wider world why the Scandinavian Activity Contest (SAC), in one sense a domestic race between the Nordic countries, should stir up so much emotion in the Far North. There the frozen people get together to flex their muscles in a friendly but serious fight.

The reasons are actually many. SAC gives the Northern folks probably the only opportunity in their life to be the subject of a hunt with resulting pileups. They also feel motivated with an equal playing field in propagation. And it affords them a chance to be preoccupied for a moment with other things than their Arctic Circle darkness with snow and ice on the edge of all propagation zones. Moreover, it allows them to focus on pursuits other than moaning about the auroral oval that hangs above them much of the time. In SAC they are all in the same predicament.

Some people wonder about the Scandinavians' uncanny hardware, their tallest rotating towers, biggest antennas in the world. All this is designed to close a gap created by Mother Earth - or at least to get some compensation - while the world continues to be unfair, added to the mystique of the Sun's behavior and the blazing Northern Lights.

### Historical SAC Facts

It was Finns who launched SAC back in 1959 and it became their way of improving their skills and driving their Nordic brethren crazy. For many, it was the biggest contesting event of the year. And for those who wanted to get out of the mystical zone to the southern world which to many people looked like heaven, SAC provided a testing ground to make sure that their skills and gear would warrant a trip to a contesting paradise located somewhere on more southerly latitudes. SAC was simply part of their contesting calendar.

To me personally, as a 13-year old kid assisting a Finnish SAC team, the advent of the first SAC was an eye-opener which triggered an adrenalin rush ahead of a big battle. Following the inaugural SAC, I was sold to this great event - even though as a young boy I was pushed somewhat to the sidelines.

These more than 50 years with SAC have affected me personally in many ways. Our childhood team of OH2AM with Anssi, OH2QV as my Elmer in contesting, saw SAC as a platform and a coaching opportunity, allowing us to learn new things and grow up. I did not miss many of those opportunities, and now with a historical study underway, I am looking forward to a review with facts and figures about a timespan of more than 50 years.



Anssi, OH2QV, Chairman of OH2AM, has seen many roles from coaching to winning SAC Contests himself, but also serving as SRAL Contest Manager in the years of many SAC wins.

With the approach of my 50th year in Amateur Radio in 2011, I carefully considered various options as to how I would make that year a special and memorable one for the contesting folks here at home and elsewhere. I selected a few items that had meant a lot to me over the past 50 years. SAC was one of them. There again the challenge was to write a dynamite script that would delight the desired tag team and ultimately make things jell. In many contest and other efforts, I had always worked with those who had lived through the same or similar events and developed a tactical eye and a good track record.

The early OH2AM was a good example of doing things together - having a shared dream and the same principles – typically making even complex dreams come true. I see doing things together with a trustworthy group as so much more appealing. Besides, teamwork normally means that something is greater than the sum of its parts, something which comes from a pooling of shared efforts and a combination of many skills.

So, SAC has been high on my agenda even though, in more recent years, a wider OH hegemony had gone down the drain, something that was probably ticking in the back of my mind.

### **SAC 2011: A Happy Return - Country-wise**

While OH had dominated, for a good reason, the SAC scene for many decades, the country bumped into a brick wall some years ago and activity declined to the extent that the very core of the competition - a race between the neighboring countries or the so-called Polar Battle - was lost for many years in a row to our perennial arch-rival, Sweden. The reasons for repeated SM wins were numerous; among them a sense of Finnish self-complacency nourished by constant OH triumphs in the past - key to many lost games in all walks of life.

Also, it was due to the fact that the Finnish Amateur Radio League (SRAL) had outsourced SAC to a group caught in its death throes, so much so that 2011 saw SRAL resuming organizational duties under its own umbrella.

Furthermore, the formerly closed ranks of OH amateurs were over the previous ten years torn by division and strife, leaving historical wounds which separated people rather than brought them together. As a result, SAC suffered in OH and rebuilding the contest seemed a major but interesting challenge.

With all these drawbacks from the immediate past in mind, could SAC again become a matter of strong national unity in short order? Let's look at what happened and how it was done.

## A Happy Gathering of Five People Goes Down in SAC History



The airhook tag team hard at work at the command post (SRAL) where the strategy was drafted: Annika, OH2HSJ; Jorma, OH2KI; Martti, OH2BH and Risto, OH3UU with Kille, OH2CX - as always - behind the camera.

As has been customary over many years, Risto, OH3UU is called in to share ideas, compare notes and, in general, make things jell, if something needs to be done in the area of OH contesting. In view of this, Risto was predictably a powerhouse behind WRTC2002, for example. He is a guy who gets a job done, and as a former SRAL Contest Manager, he knows most of the folks.

Just prior to SAC 2011, Jorma, OH2KI was an acting, successful Chief Operating Officer of SRAL, a known master of playing fair with friends and foes alike.

Representing fresh blood, Timo, OG9X in his capacity as the newly appointed SRAL Contest Manager had SAC 2011 on his agenda to start with.

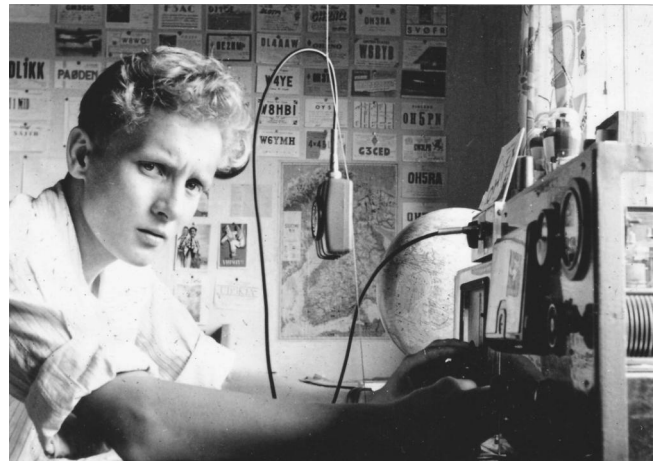
Kille, OH2CX together with Ritva, OH2CJ had conducted ham radio courses over several decades and had seen more than 500 licensees join the ranks of Amateur Radio operators. Kille's involvement aroused positive feelings among the OH's he had taught personally and also those who had read his course material used as a basis for some 2000 hams in OH over time.

And there was yours truly, OH2BH, who had a dream.

### Finally a Strategy Takes Shape

Our meeting set the course and split the duties for SAC 2011. We drafted a country-wide organization, following a historical, military regional structure of wartime Finland. Bearing in mind that Sweden's last war was fought in 1814 against Norway, our western neighbor's ammunition was expected to be...shall we say...somewhat of an ancient variety, their gunpowder just a little wet.

Military terminology was used as we looked for the best people to be in charge of twelve regions, allowing local "commanders" to approach their own people as Finland is heavily regionalized - from OH1 through OH9 - with each province proud of its individual identity and specific dialect. Out in the provinces, they often see OH2's as a blunt bunch who do little more than cause problems for others.



OH1 regional commander Jaakko, OH1TX made the best effort among all the provincial chiefs with a troop of pals fighting along with his team. This picture is from the very first SAC in 1959.

Our traditional battle organization built along regional lines was a total winner, and it also included representatives from various factional splinter groups - now playing together as they would ultimately do against an outside enemy - now found west of the border...our friends in SM.

As ice-hockey is a national sport in both SM and OH, obviously the 2011 Ice-Hockey World Championship results, with Finland beating Sweden 6-1 to win the world title, had to be incorporated into the emotional/motivational script.

The strategy was a double-edged sword; invoke memories of Finland's Winter War (1939) and the



2011 Ice-Hockey World Championship Trophy, touching the souls of young and old alike and leaving no one cold. What a combination!

The English translation - airhook - of the theme chosen for our campaign - "ilmaveivi" - does not do full justice to the amazing airhooking goal scored by Mikael Granlund, a young Finnish hockey player, but widely seen as one of the finest goals in the tournament and in the history of ice-hockey in general, it galvanized the Finnish team and ultimately cemented its bid for the 2011 world title. Just type "Finland ilmaveivi" in Google and you will see more YouTube videos about the Finnish ice-hockey victory than about the rest of Finland combined.

OH itself with various sub-groups sponsored their national prizes to encourage large-scale participation in SAC and at one point the 2011 contest looked like offering more trophies than it would attract contestants. Some of the prizes approached the value of modern radios and more. Smart incentive schemes were drawn up to target Sunday drivers and others not actually aiming for high scores.

### **SAC CW Over SAC SSB**

As the CW leg of SAC came first, registering a 234 % increase over the previous year with 185 OH logs participating, it was challenging to keep the motivation up for the SSB part, which followed several weeks later. Furthermore, only one participant was there for the rookie category representing new callsign blocks OHxFxx and OHxGxx. Even that single participating rookie (OH5FNI) turned out to be 72 years of age. It did not look like a very balanced effort, and the worries were high.



2010 CW rookie Timo, OH5FNI, at the good age of 72 was ready for battle from Finland's eastern frontier zone in Uukuniemi.

Additionally, as in all success stories, this one led to nitpicking, with some individuals trying to rock the boat and cause trouble where none was welcome. They came close to hurting the spirit, and they were more than just one.

The tactical script for the SSB part was that because of poor propagation during the CW weekend, the actual points total was low and the whole battle would in fact be fought on SSB. And there the folks raced even harder, with a 295 % increase in OH log submissions. What really tipped the scales were the more than fifty (50) young licensees who now joined the battle in a variety of categories. The war was won and SM's lost their position from the previous year – from winning with 292 logs against Finland's 139 logs in 2010 to losing with a disastrous 237 logs against Finland's 410 logs in 2011. The SM share had fallen dramatically against OH's skyrocketing triple participants. The case is under investigation and the boardroom lights are still on in SM. Final Scores are at <http://sactest.net/>

Now after the race and as part of the script, we have to be honest and credit our huge success with the OH language which is not spoken or understood elsewhere in Scandinavia. This single factor allowed us to proceed in the strictest confidence without waking the fat, happy bear sleeping in SM. Our observers in SM reported that efforts to launch a counter-offensive amounted to next to nothing during the entire battle.

### **Long Live SAC Contest**

The 2011 Scandinavian Activity Contest was the year's highlight in many corners of OH, an unbelievable event and a source of inspiration for young and old, all across the country from south to north, east to west. All OH districts saw action on a grand scale. One seasoned operator, Olli, OH0XX traveled to OH9R (OH9RI) way up north in Lapland to taste the local quality of life. Some veteran OH3's were heard wondering which sideband to use on a variety of bands after dusting off their vintage transceivers. The stories of youngsters joining in the fray were even more exciting, often partnering with older types. Many Field Day style operations were organized; the whole country was on the move.



Vili, OH3VV, 86, a war veteran and a 1959 SAC SSB winner, was ready again. To win the SAC! His dentures went down his throat when SM-MAN logging S/W collapsed at 0000Z and 800 QSOs!.

The SRAL journal carried stories revisiting the history of SAC down to the smallest detail, and all the original winners from 1959, such as SSB title-holder Vili, OH3VV (86), were still full of life and were encouraged to race again, decades later, for the common good. And how they raced!

As Kille, OH2CX is also the historian for SRAL, he has together with his XYL (OH2CJ) been collecting SAC data on the past 52 years and the outcome will be presented soon. In SAC it is also durability that counts since OH's are aging and the replacement rate may not maintain current participation levels. But we believe in the future of SAC... because SAC is!





The OH2CX & OH2CJ duo has directly and indirectly done their share of boosting the ham population in OH. No wonder they were inducted into Honorary Membership of SRAL.



Jaakko, OH6FQI set an example by operating outdoors in misty October with a random wire, contributing to the OH win and ensuring a bright future for SAC along with fifty other young operators

## Summary

The Boy - as the Scandinavian Cup is affectionately called - has now returned home big time! Many groups and individuals contributed their time and effort to make it happen. But in the final analysis, those more than 500 OH participants, 10 percent of Finland's amateur radio population, made all the difference.

Now all the sub-groups are in the process of conducting their own prize-giving ceremonies - sometimes more than one per week. The Boy is now home.

It is reasonable to thank SRAL, the Finnish Amateur Radio League, for putting in whole-hearted efforts in support of SAC 2011. In particular, we wish to acknowledge the contributions of SRAL President Rami, OH2BCI; Annika, OH2HSJ of the SRAL monthly journal and webmaster; Timo, OG9X, SRAL Contest Manager;

PileUP! Magazine's editorial staff; Ilkka, OH1WZ; Kim, OH6KZP and Esa, OH7WV in charge of efforts to promote SAC overseas. Kudos to Kim for overseeing SAC 2011 and his calm and systematic approach while this year's Polar Battle was in the making amid the heat and dust of the war effort.

We also hail the efforts of Ben, DL6FBL and Jorgen, DF6JC (DR6X) - SAC 2011 CW & SSB winners - who provided a connection to their logs while Bob, N6TV's software together with Radio Arcala's DX Summit offered an impartial, competitive view and added a real-time push for trying harder and staying at it. Thank you, guys!

And, sincere thanks to my buddies Risto, OH3UU; Jorma, OH2KI; Timo, OG9X; and Kille, OH2CX for making a dream come true. Sometimes it is good to have a dream.



## SAC phone 2011 from inside the aurora oval Erling, LA6VM

### Prelude

We are on Svalbard for the 11th consecutive year; LA9DL; Just, LA7XK; Halvard and LA6VM; Erling, of the LA5X; Ham Forum gang, to work SAC phone contest.

Some of you may remember 3Y5X, Bouvet in 1989/90 and E35X; Eritrea 1994, both originating from the LA5X gang (and license). Now, the -5X operations have been limited to the yearly participation in the SAC phone contests, from the JW5E club house and rental shack in Longyearbyen, Svalbard Islands, signing JW5X. Some of you may also have noted that the three of us also travel on small gone-wakies; as to East Malaysia, Spratly and Senegal last years; and an upcoming trip to Bhutan in November.

The travel to Svalbard is by plane from Oslo, with a short stop in Tromsø; a trip of about 4 hours total and the shack is just a 10 minute drive from the airport.



Fig. 3 Mathiasbu, JW5E

The shack is owned by Inger JW8KT, xyl of the late Mathias, JW5NM, and the shack is now named Mathiasbu (Mathias shack) in remembrance of this avid DX'er, and warm and hospitable person.

The shack sits at the beach of the Advent Fiord, a sidearm to the Ice Fiord at about 78 deg north. At high tide, it barely keeps its foundations dry! There is electric power, but no running water so a number of cans of water have been brought by Inger before our arrival. Lately an electric toilet has been added, so some of the urgent perils often experienced by operators (at night time) are now history (and good laughs!).



Fig. 2. Vertical on sand bank outside the shack

The hearth of the site is the 100 ft high sturdy lattice tower with a 5 element 3-band beam on the top, and which also support a number of wire antennas for the lower bands. In addition we set up a number of vertical antennas; one at a sand bank out in the fiord.

The shack has two rooms; a day-room and the operating room. This has space for three operating positions, which make it possible for the three of us to operate at the same time. The day room has a small kitchen, bunks, and sofa and table.



Fig. 1 5el beam and wire antennas on 100 ft tower; shack in the center

Arriving some days before the test, we have time to erect our antennas, and test our new equipment.

As we also enjoy home brewing, new equipment gets their fire tests at this remote location. Having a high level of confidence in our new-builds, we seldom bring spares. I have not yet understood why we always bring soldering irons though. Anyway, we learn how to cope with the results of smoke and no spares.

## Inspiration

The last years light-weight linears have been in our focus. The background was a SAC test maybe 3-4 years ago when the undersigned was at the night shift, and tirelessly shouted CQ into the Arctic night for several hours only to get one station in the log, and he was not even a multiplier. At the same time making some dozen SWL reports on strong OH and SM stations that speeded through their pile-ups with ease, handing out 4 digit serial numbers (when we were in the 350 range). They were all 59+ at our QTH, and posed an impenetrable wall against the rest of the world for us, from 20 m and down. And when there is too little to do, cunning plans are made (by Mice and Men); like having 5kW linears (will that suffice?...). My ideas were easily killed by the others, reminding me about the extra charge we had to pay for overweight for me bringing a length of TV coax on the plane. What would the cost in money and broken backs be for bringing 5 kW worth of transformer iron?



Fig. 5 Un-entangling more than one guywire requires two persons with MSc in electronics

Since I am just a mechanical engineer I replied that we should skip the iron and just rectify the AC mains and get some transistors that could run on 380 VDC; there would be plenty of cold air and even ice to keep the lily's cool. If we have 240V, 16 or 20 amp supply, we would be in the 5kW ballpark; we could even run 2 linears, as the service is intermitted. A check in the shack AC distribution panel confirmed the possibility for this! This could be a local "beat McCoy"; be louder than the OH's! And, maybe we could melt our way through the Aurora Oval also? Certainly

this could result in a SWL report from the local Prose (Trond, then), but it would be worth trying as a technical challenge?

We decided to start with smaller units, so we studied the good old Helge Granberg designs. Just, who is an electronic design and manufacturing engineer, found the kid-Granberg, with 4 x MPF150, to be tricky, so he moved to the big brother 2 x MPF154 design, and got it working very well. After burning about 20 MPF150's I also moved up to the MPF154 design, and got that working. I put that on the cost for learning; hard won glory is very rewarding!

Before the test, we are all operating as per our preferences; running three stations. Halvard will be on 30M RTTY, Just on 20M SSB and I on 40M CW. Obviously there are some interference issues; so Just has made a number of band pass filters to reduce white-noise spill-over. They work very fine; but it is a costly lesson (for me) to forget to change filter when I change band!

Halvard therefore has made an SWR protection board that seems to keep the cost of replacement transistors at an acceptable level for me. You must always choose your good friends with care!

We are still collecting parts for the dream linear; although the power ambition has been reduced to (roughly) fit the rules: Promise: We only do this as a technical challenge; no crossed fingers.

Working SAC from JW is a challenge and inspiration for us, both equipment and operation wise, and the technical aspect is as important as the results we may generate in the contest.

When we operate in the contest, the main station linear is a venerable IC2-KL, originally used at the 3Y5X Bouvetøya expedition in 1989-90; now serving at the JW5E club station!

The multiplier station is run with the home-brews. And, realizing our location, we have learnt to appreciate the perils and beauty of the Aurora. So this much for the dreams and ambitions, by Mice and Men...

## 2011 SAC Phone

Normally, the conditions are reasonable up to some hours before the test, allowing us to work endless pile-ups. However, when the test is imminent, Murphy arrives out of nowhere; the A-index surges, and the bands are as still as the surface of a guppy bowl. This year, the space weather has been disturbed in a long period before



the contest. The A-index has been flying up and down as a jo-jo, so our expectations were at reasonable level before the contest.

We closely follow the indices by the Ionoprobe software and NOAA Space WX homepage, and they roughly seem to reflect what we experience. As Northerners, we know too well that the Northern Hemisphere is divided into two important regions propagation wise; that is inside and outside the Aurora Oval; have a look at the NOAA page to acquaint your self with this. The Aurora Oval is an effective screen for the radio waves, acting as a reflector; hence being almost impenetrable for cross-oval signals. At 78°N, we are inside the oval, and in a way effectively cut off from the part of the world that we want to work, when there is aurora activity. I guess that we are the northernmost participant in the SAC; there are not many inhabited places in the world at this latitude, but for Alert (VE8) and Siorapaluk (OX).

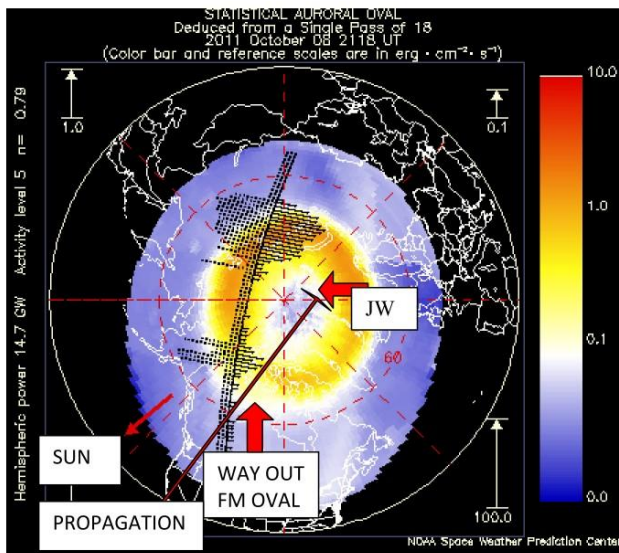


Fig. 5 Aurora Oval, and "Way Out" - from inside the oval

If you look closely at the Aurora Oval, you may see that the oval normally is weak in one direction; and this is roughly in the direction of the sun. This opening allows us to get out of our Arctic confinement! We also follow the movement of the grey line as the globe turns, but with strong aurora, grey line is beaten.

In the afternoon 20M is the band; OH's are plentiful, and there are some strong OZ's; but where are the DL's, SP's and OK's? Then some strong PA's are heard and worked; but where are the rest of Europe that is at same distance? The conditions are very selective; like pencil beams. A single true 59 I-stn is worked, and then some G's, but they are very weak. I hand out 59 reports, one has to be polite to the Gent's. I guess they felt pity for me for the QRM that I must have; having to ask so many times for their call signs. I

can't tell them the truth; they are so weak! Maybe they will stop calling me if they realise that I barely hear them. But there are nobody else calling me, so have to continue with this scam.

But as the globe turns, in the afternoon the narrow swat of opening through the aurora oval is sweeping over the US; normally the most important area for our QSO-points. It's just amazing to observe this very selective propagation; some stations are truly S9, but most are very weak. I wonder if they report truly; they say that we are very strong; can there be difference in the condx east/west? Well I have to look in the mirror; again I hand out S9 reports more as a token of a signal to noise ratio than a real reading on the S-meter. Most of the stations worked do not even move the S-meter needle; but they are still easily readable. Some are barely readable; they get 55 to 57 reports. Some are not readable; I ask them to hang around for a possible change in condx.

Later on, I check 40M; but there I only hear the "mainland" Scandinavians. I call LN9Z in South Norway just to compliment him on his (truly) strong signal; he returns the same report. But, there are almost no EU's to be heard; just a few ES's. So I just manage to work a couple of stations until I move up again; no reason to move down; 80M is dead for all purposes. Later I learn that our main 80M antenna has fallen down; but we still have the Butternut. Actually it is a "good old rule" to stay high as long as possible; the condx will soon bring you down to the lower bands as the night progresses. I am still on 15M when I am relieved by the next operator. He gets word that 10M is open; and yes; before midnight local time, 10M is open for the first time in SAC phone for many years. After an hour or so 10M died, and he moved down to 15M; also unheard of at this time of the day, uh, I mean night!

After some time 15M has become slow, so he moves to 20M. I continue to listen on the multiplier rig, and find 15M to blossom again! But I turn in, to let my compatriot battle the wee hours; we don't post double watch during the night hours.

I am called again at 0600 hrs (local) for my next watch; the previous 4 hours have resulted in a mere 3 QSO's in the log. I sit down and check the bands; they are quiet, just a few blurred OH's. I look at the indices reported by the Ionoprobe software; the A-index is 8-9 which mean that the high auroral activity persists. I now think on what the best strategy may be, and I think of what may be the survival strategy for the indigenous creatures in the Arctic. If I was a Polar Bear looking for prey; with the difference that I am only



looking for a ham friend to get in my log, what would I do! Well, the polar bear wags his head from side to side to pick up even the faintest scent, while trotting through the empty ice realm. So I have to do the same; tirelessly tuning all the bands, turning the beam back and forth and noting down every sign of life. I look at the Aurora Oval; the northeast part of Russia is inside the oval; I have to concentrate on this area. And, this pays off. There are a number of UA9's and O's which we have not worked. They are easily worked on a quiet band.

I continue my search; there are not many stations to hear, and I do not need to use the log program dupe check functionality; it is just to look at the last few lines in the log.

This old operator can still remember the good old days (sic), when the long tiring night hours were rewarded at morning break with openings on 15M to the Far East; with endless and easy worked very disciplined pile-ups. I can dream, this will definitely not happen under these conditions; no JA pile-up this morning. Anyway, the slow pace of QSO's gives time to reminisce!

I try to call CQ's, to be a band opener, but in vain. I guess that you have to be a real QRO to open anything inside the Aurora Oval.

I hang around on 15M as I know that if this band opens, there may be long distance stations to work, and the QRM will be lower than on 20M. I find an empty frequency; not difficult as there is nothing to hear. I start to call CQ, turning the beam; I have an optimistic perception of the -3dB beam width! Then I realize that I am on top of an OH; not that I hear him, but I hear someone calling him, and not me!

Then I change my tactics; I hang around the OH's, tail-ending the DX they work, asking him to move 3 kc's up. It is a win-win situation (for me and the DX); the OH draws the DX stations to where I am listening, the OH's don't hear me so I do not QRM them; and the DX station moved up 3 kc's gets a new multiplier; JW. And my tail-ending sin is forgiven; as I'm a new multiplier. This works for a short period, soon all stations I can hear are WB4's.

I promise to buy you (OH's) a beer when I sail with you on the new year Contest and DX meeting, to make good for the tail ending!

As it gets lighter conditions improves and I find more stations to call. But the condx are very fluent, so I move between 15, 20 and 40M. Normally the high band prevails, and is encouraging, just to be disappointing shortly after.

At this time in the contest we get may stray calls; "... what is your callsign .."; but there is nobody coming back after we have answered; we are also WB4's at those who can hear us!

The last hours of the contest are just hard work for few QSO's. Our multiplier score is also low; where are they?

There are no signs of improving condx; our dream of a JA opening is still a dream; maybe next year?

When we wind up, our QSO and multiplier numbers are lower than last year; even with the good openings on 15M and 10M.

Halvard, who is an electronics and software engineer, and who has programmed our logging software, scans through the log and fixes a band-change error. Then the log is submitted; within an hour after the test!

The log-submission robot is just marvellous; some eager guys have done some very important work on this. Kudos to the contest committee!

As other logs are submitted we can compare our results with the others; great!

## Wrapping up

During the night the WX has turned; and it is overcast with very light snow. The hillsides so beautifully shining in yellow and brown in the low sun earlier days are now glittering in white draping, equally beautiful! The temperature is swinging down to  $-10^{\circ}\text{C}$ , and with a breeze it gets a little chilly. But that's nothing compared to what will come through the winter. The outside temperature thermometer shows  $-38.5^{\circ}\text{C}$  as lowest temperature registered (since it was reset). Obviously, that must have been last winter.

The frost has made it impossible to recover the coax that was laid out to the sand bank and the Butternut. We calculate the voltage required to apply say 10W per m of coax, to try to "burn" it out of the ice. But we let it stay in place. Maybe the ice is there to stay until the spring; so the coax may benefit other visitors? We will obviously save the cost for the overweight on our return trip; and have money for an even better coax next year; win-win?

The shack is reserved and plane tickets will be booked for 2012 when we get home.

We will plan new antennas and hone our equipment; the dreams about running linears DOL are still around! Maybe next year?

We will see; there are many inspirations and reams in this hobby!



## **"Polar Battle" – SAC 2011 as seen from the USA**

Allen, N2KW

The dust has settled, and both sections of the 53rd running of SAC are now history. Congratulations to the winners, greetings to the competitors, and a big THANK YOU to the many casual participants that determine the winning scores.

I would also like to thank NARU for the concept. I thank SRAL for a most competent job of administering the 2011 event, and, most of all, I thank K1TTT for his hospitality. More on that later...

New for the 2011 event was the "Single Op – Multiband-High Power ASSISTED" category. As the holder of the North American record score in "Single Op - Multiband-High Power" I felt this was a good compliment. Victory proved elusive, however, as Romeo at RW9C bested both my QSO total and score! No shame in being topped by the RK9CWA Clubstation, or by Romeo's fine operating. N2KW will just have to settle for high score from North America. Poka Romeo! In truth, there is nobody that is in a better position to appreciate his efforts!

In the years of scarcity of sunspots, the outcome of this contest (for North Americans) has been determined on 80 meters. Contacts on 80 and 40 are scored at three times the value of an HF contact. A good antenna system on 80 practically guarantees victory. If you operate from the Northeast quadrant of North America, this goes double. If I did well in MA, you can be sure that someone with equal skills would do even better from ME, or from VE9/VY2. When he gets around to it, I predict that VY2ZM will set a record that won't be threatened for many years!

The 2011 contest had SOME conditions on 10 meters, but the band didn't even START to get "good" until late October. All things being equal, 10 will become an important band in 2012. It remains to be seen if will eclipse 80 in importance however, because of the difference in scoring. Remember: "There's no meters, like ten meters!"

While there were 53 stations that I worked on four bands, there were only a dozen that made it into the log on all five. (\*). Of those 12, over half were Finns! Clearly, contesting is something taken seriously by the OH crowd.

(\*) Stations worked on five bands include LN3Z, OH0X, OH2BH, OH2PM, OH5DA, OH7RJ, OH8A, OU4O, SA1A, SJ2W, SK3W, and SM6CNN.

The equipment at K1TTT includes a 4-Square antenna on 80 meters that is made from 4 insulated Rohn 25G tower sections, and elevated radials. It is full-size, and plays incredibly well. On the other bands, there are stacked pairs of Force 12 4-element yagis. The station has constantly evolved over its 28-year history, and is now a quite formidable installation. For a virtual tour, go to [www.k1ttt.net](http://www.k1ttt.net).

I operate on the Multioperator team at Dave's QTH, for ARRL-DX (CW) and CQWW (CW) in the 160 meter chair. I earned that seat by demonstrating that I can keep it warm for 14-hour shifts. There are certainly operators who can run a higher hourly rate, but remember the fable about "The Hare and the Tortise" and you will see the secret of whatever success I have enjoyed.

Dave encourages his Multioperator team to activate the station for "Minor" contests, which I have taken advantage of in the past. If you hear N2KW with a loud signal, you know where I am. At home, my signal is as bad as a mobile, sometimes worse (I have a decent mobile signal). Having a poor signal may sharpen your skills, but "you can't work 'em if you can't hear 'em" is absolutely true. I like to pay my "rent" by bringing awards to the walls at K1TTT. I cannot begin to tell you how much it bothers me that I am STILL waiting for my Plaque from the 2010 SAC event. This was a new North American record, and I thought it would be there before the 2011 event. LZ2RS tells me that he won the QRP section, but also has no award. If you don't hear N2KW in the 2012 event, now you will know why.



Allen N2KW working IOTA at K1TTT ([www.k1ttt.net](http://www.k1ttt.net)).



## See Arkala and QRT – SAC CW 2011

Ilkka, OH1WZ

‘A visit to Naples kills all your travelling desires’ – was a phrase I learned as a kid from my old man, who did the trip to Italy in 1953. Naples has Vesuvius, inter alia, while Arkala in Kiiminki has the Mammuth, and not much else. I still have not been to Italy myself, but I’ve now visited Arkala, and fondled the Mammuth. Since it was exciting, I must share the experience, so here we go<sup>4</sup>.

Arkala, or OH8X, is a really big radio station that has probably the best marketing of all contest stations. For a regular guy like me, it is almost incomprehensible in magnitude and complexity. I was trying to explain my non-radio friends using metaphors how I felt before going there to operate a contest. “Well, it is like going to Tierra del Fuego if you were a birdwatcher”, or, “imagine 100 supermodels around you, early summer morning, at sunrise 3 am, running naked on dew meadow”. Well, maybe the latter analogue was a bit exaggerated. And when you arrive to Arkala in mid September, there are no naked supermodels.

My first SAC CW was in 1985. And I felt big then too. Toke OH1VX (SK) and Jukka OH1GL helped me to get on the air from OH1AD. This ARC had a 42-m rotating mast and that was something for a penniless 17-yr-old high school student. Back in those days ARCs did well in Finland. The standard of living was low enough to force people to merge their efforts to achieve things together; stuff that they would not be able to do on their own, otherwise. And many clubs in OH had big antenna installations. Young flat broke hams had access to state-of-the-art antenna installations. If there is something that I miss, it is the times, when clubs did well.

Let’s get back to 2011. This was the year of SAC agitation. I had spent too many hours (ref. XYL) preparing for the SAC PileUP! that was published a week before the CW event. PU! tried to allure non-OH participants, while the Zorro-Goal team would focus on the OH stations. This team did an amazing job and somehow managed to get nearly 200 OH-stations to QRV on SAC CW. That is almost 5% of the OH ham population! In contests the old rule applies – ‘the more the merrier’. I was excited to go to OH8X to learn on the bands how the two agitation campaigns had succeeded.

You easily come to the conclusion that Arkala is quite far in the North, if you happen to live south.

From the Helsinki perspective, it is really far. It is one of those places that you don’t stop at – a village by the Oulu-Kuusamo highway, 50 km from Oulu. And what on earth is Oulu then? Well, it is a place where river Oulujoki meets the Baltic Sea – the tar city of Finland. Tar trade blossomed some time ago, and nowadays Oulu hosts high-tech industry, which also explains why the ham density in the region is high. Oulu is 65°N, so it doesn’t quite reach the Arctic circle at 67°N. One or two million people that live further north on Tellus. In SAC 2011, there were several stations active from Oulu (OH6KN, 6CT, 8A, 8JT, ...).

I live far away from Arkala, so some traveling was necessary. There is a railroad from Helsinki to Oulu and further north, but the tracks were being repaired and the railroad company was in trouble after having introduced a new ticket booking IT-system – so I chose a flight instead. Not very environmentally friendly, but hey, it was the DX-expedition of my life!



In Arkala, I did some 3D photography, which we enjoyed a week later at Hki-Vantaa airport (OH7WV, OH6KZP, OH2BH, OH1WZ). The red-blue glasses are too expensive to send out to you readers, so you just need to imagine how it was!

The contest is 24 hours in Saturday-Sunday, but I arrived on the Thursday and left on Monday. The reason of course was that I wanted to enjoy the station as much as possible.

It was really disappointing to read the SWPC news in the web before leaving for Arkala – a CME was fired towards Tellus with estimated time of arrival just at the beginning of the contest. Well, I knew that even SWPC can make mistakes and did not bother about it (denial of facts). On Thursday and Friday I even received guests at Arkala – Olli OH0XX and Juha OH8CW came and we decided to have some fun.

<sup>4</sup> I have actually been there a few times to work M/2.



This is the photo that we sent out to TOEC reflector (in Sweden) on the eve of the contest. Olli was the northernmost station in OH in SAC at Matti's QTH (OH9RI), 67N. The t-shirt has the colors of SM with some funny symbols. These shirts were sold in OH last summer, to commemorate the victory of OH over SM in Ice Hockey World Championships (Photo OH8CW).

Juhani OH8JT is the president of the Oulu ARC, OH8AA and an active RTTY contester. Juhani brought me some tubes for the SAC trophies that were announced in PileUP! 15(4). The other source was Manu, OH7UE.



Juhani, OH8JT and the beautiful EL-34 tubes on the Arkala balcony.

My trip to OH8X was made possible by Juha, OH8NC, who wasn't in Arkala unfortunately. Juha had even arranged that his neighbor Junnu fetched me from the airport and gave me Juha's car! Nothing could stop me from getting my second SAC CW SOAB HP win.

#### Google Earth:

65°11'5.67"N, 26°14'55.82"E

#### National Land Survey of Finland:

<http://kansalaisen.karttapaikka.fi/linkki?scale=2000&text=Arkala&srs=EPSG%3A3067&y=7229189&mode=orto&x=464798&lang=en>



If you happen to visit OH8X, the last stop is in Kiiminki to buy the necessities. And don't be surprised to see Olli, OH0XX there. His home is in Jääli, Kiiminki.

SAC	EU	AS	W/E	AF/SA	JA	h
80	400	2.2	~ 880		40	4
40	600	2.3	~ 1400		60	6
20	1300	2.5	~ 3250		75	10
15	350	2.6	~ 900		60	3
10	50	2.5	~ 125		40	1
	2700		6555		100 Q/L	
24:	4x6 + 0				2 Q/L	
	4x5 + 4				275	
	4x5	12 L		115 Q/L		
					275	
	OH8X	OH8X	~ TEST -		6.5	
	CALL	5NN	1T3		1375	
	~TU -				1450	
	~TU -	OH8X			1,587,500	

In the plane, THU, I made my plans the usual way. When these were done, 28MHz was wide open and the ionosphere ok. 1.5M with 2700Qs was the target.

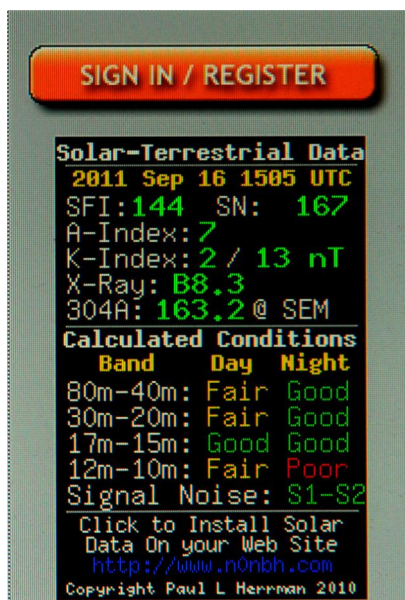


Travelling to Oulu from Helsinki is reasonably priced owing to competition, just 80€ both ways.

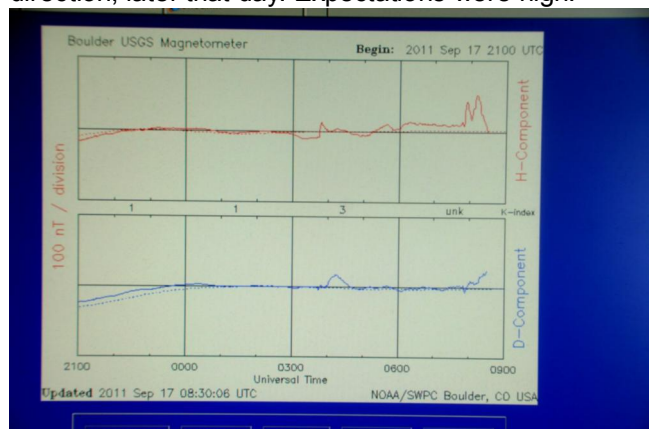


I don't know what you see from the window of your shower room, but this is what Arkala offers!





On Friday evening, 20 hours into the contest, the conditions were great. I logged JAs and VKs on 10M and experimented with the 80M 5-el into the same direction, later that day. Expectations were high!

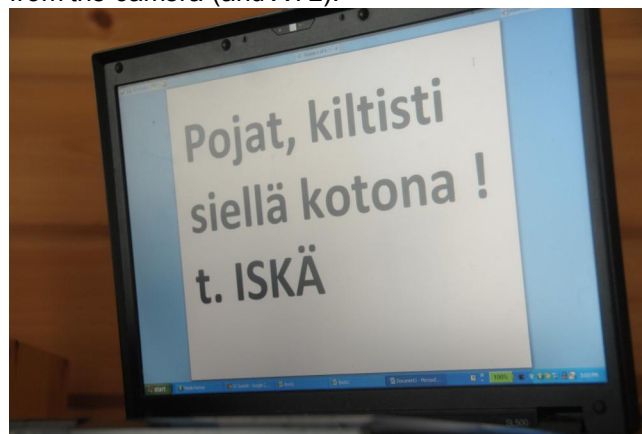


On Saturday Sept 17, I had started to grasp the installations (they are complex at OH8X), and had learned how to get some CW out of the boxes (Wintest manual became familiar) – it was time to follow the magnetometer in Boulder (It's the favorite movie/channel I watch during a contest). 08:29 UTC, 3.5 hours into the contest - Arghh!! The CME (coronal mass ejection) had begun. Being 65N is the worst thinkable place, because Aurora kills <10MHz propagation, no matter what VOACAP says at that moment.



You are not alone in Arkala. Toni, OH2UA had configured the Webcam to broadcast hamschack events via the Arkala website. It took me while to 'find' the RJ45 for that thing, but no worries – I was prepared for the camera: I had my Finnish flag to cover up the ope-

rator and a small Finnish flag to veil the beer cans from the camera (and XYL).



The webcam was also followed by my offspring at home. The msg on the laptop screen said "Boys, behave and be nice to Mom!"



OH8X is in the middle of an old sand pit. It is not deep. The surrounding forests are nice. The Norway spruces look 'northerners' – narrow crowns that can withstand snow loads. And Arkala is in the reindeer area. This one I spotted while jogging on the forest road. I spotted a deaf hunter there as well, on the road side. He has an excellent dog (called Skimmer?) that was taught to bring the hare straight into the viewfinder. He was definitely assisted?



This picture of the mammoth was taken with a 400 mm lens from distance of 600 m. You don't easily get lost in the neighboring forests thanks to the OH8X landmarks.





Arkala is 65N where the precipitation:evaporation ratio is high and peatlands dominate the landscape (50-75%). In September the vegetation starts to have nice autumn colors. I took the picture when I went to the mire to mull over the disappointing performance in SAC CW 2011.



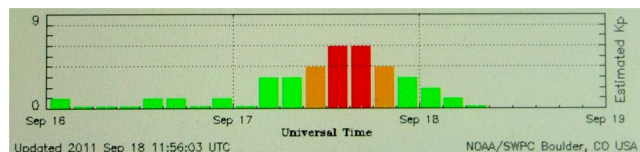
A rowan with autumn colors. It grows below the 6/6/6-el on 20M (100 m high mast!).

Summary					
BAND	QSO	DUP	MLTS	POINTS	AVG
80	218	3	35	465	2.13
40	511	11	48	1171	2.29
20	693	4	63	1646	2.38
15	430	1	58	1054	2.45
10	65	0	26	152	2.34
TOTAL	1917	19	230	4488	2.34
FINAL SCORE: 1 032 240					

The contest was a nice experience although I knew I was playing in another game, up in Arkala. I also felt pity for Olli, who was optimistic about his arctic OH9R operation, 67°N. Wintest showed a 1M score for me at the end, and the mult totals were atypical of OH1WZ. The aurora was overwhelming and I felt unarmed with my 5-el 80M and 4/4-el 40M armament.

It was hot in the shack all the time. Air conditioner was on, but it did not help much. Later on Sunday, I learned that the switch on the Sauna oven had been stuck and I had run 10kW output in the Sauna during the whole of SAC CW. But I never went to Sauna, which is known to have happened at OH9RI! And I never crossed the 3510 kHz barrier, well, so did some others as well, except that we stayed on different sides. It

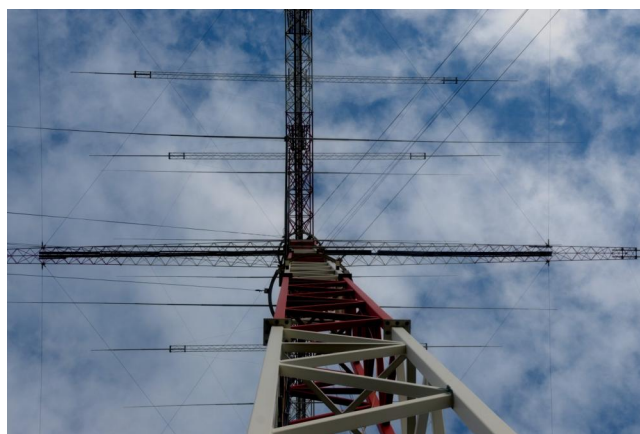
was disappointing to me to learn that the 3510 kHz violators were not given proper punishment. But we can all make our own conclusions – to me, for example, the top 6 SOAB list looks a bit different, when the violators are mopped from it.



The supernatural beings of radio propagation are not supporting my contest expeditions. In 2000, CQ WW SSB, the CME came on day #2 (OH0BH), and now, in 2011, the low bands were wiped away at OH8X, when I was given a chance to go there. Well, as Martti once said, Finland is the country for the radio-have-nots.

Arkala is a magical place, almost surreal. When I hit the airways before, during, and after the contest, I could taste a bite of that magic. “QRZ from radio Arkala?” – I’d say into the microphone. It felt special. When you operate at OH8X you can be sure that there a hundred guys that would swap stations with you instantly. I felt like been given the chance to try out Hamilton’s F1, or not quite, but something in that direction.

Before leaving to Arkala I had promised the XYL and myself that this would be the last 24/48-hour (full effort) contest for me. Knowing this, I tried to push hard, stayed above 3510, did SO2R, and moved stuff around. It did not help. It is a bit embarrassing to place #6 from Arkala, but life continues. SAC 2011 was the year of activity and I felt good for having participated in that process and it felt good to hear so many familiar OH-calls on the air. The calls reminded me of the people behind the calls. In the end, the people are everything also in this hobby. And there are extraordinary people that make OH8X. Thanks.



Left image of a stereo pair showing the belly of the Mammoth. Visit Arkala to get the 3D effects!

Cheers, OH1WZ

**Crossing to the dark side -  
ES5TV piloting OH8X for SAC SSB 2011**  
Tonno, ES5TV



I had this wonderful opportunity presented to me by the Arcala gang to operate their superstation in SAC SSB and take part in the historical polar battle. Having been for years on the other end of the line on the non-scandinavian side this promised to be very interesting. Additionally I finally had the chance to see the famous station and maybe spot Santa Clause running in the forest among reindeer and eskimos.

Special thanks to Toni for feeding, transporting, educating and amusing me and meanwhile travelling 600 km to Helsinki area to operate from OH2BH station and being sick while doing all that!

The station, needless to say, is really an awesome achievement of serious engineering, design and commitment. You have seen the picture of the monster 160/80 tower but nothing compares to actually standing below that creature. To me that is a unique feeling that so far I have only experienced standing under the tower of Eiffel. You are simply stunned and completely intimidated about what an incomprehensibly immense and brutal structure humankind has created out of metal. I must have just stood there for 15 minutes without moving the first time I got a full view of it. Totally crazy!

On the other edge of the spectrum of solid design and big towers there was a small crooked

JP tribander on top of a 5 meter mast next to the shack. The antenna was really struggling hard to stay up there already when I got to the site with no wind and probably would have fallen down by itself unless the big storm that hit the area on Friday had not finished its existence. The storm also left me without electricity for a few hours on Friday but nothing is more romantic than being in a cosy wooden shack in the middle of tundra a few steps from the North Pole being cut off from the rest of the world for undetermined time and having to survive on the ancient chocolate cookies left into the fridge by viking Ottar during one of his visits in the 9th century.

The contest was great fun of course with good activity. Due to dissapointing low bands at night with almost no DX and pretty closed high bands the second day I failed to make a new SAC record. But the nighttime propagation on high bands to North America was great and steady rates were provided by 20 and 15 meters till 02-03z.

People ask about strategy and the differences between strategy compared when working SAC from outside Scandinavia. There is no difference! Work everybody you meet everywhere you can and be present everywhere you can! That's it. SAC is a low rate contest from both sides and you have to move not only mults but ordinary QSOs also when you are a Scandinavian station. I was running almost entire contest on two bands with dual CQ. I realized at the end of the first hour of the contest that S&P does not work in this contest at all as there is noone to be worked. I needed to figure out something else and dual CQ appeared to be perfect. I believe it added at least 500-700 Qs to my score as not only could I run on two bands in parallel but I could also QSY all the callers to the other band and most of them kindly did. It worked especially well in the night with US stations on 20 and 15 when I was able to basically double my rate and moving quite a few guys also to 10 meters.

So I am sure Arcala is heading towards great results now with the long waited support by the sun. The same seems to hold true about SAC. I very much enjoy the new web page, super prompt results and great and detailed UBN reports. Way to go guys!!

73  
Tonno  
ES5TV



## OH0Z Odyssey 2011

Tomi, OH6EI



In the previous PU issue you may have noticed some of OH6EI's eternal optimism about winning the Scandinavian Activity Contest (SAC). In this update you will find out that the story is to be continued next year.

Anyway, starting from the hardware point of view, a lot of work has been done with OH0Z this year. As you can imagine, wind conditions in Åland's hilltops are rough, especially in the autumn and winter periods. The antennas have thus needed repairing almost every year. Bigger or smaller.

As OH0Z is also a test laboratory of Suomen Antenni Ltd, the proud father of the system, Juha OH1JT, is quite often thinking of improvements. To compensate the wind burden, Juha had designed a system which is based on stacked short-boom tribanders. In principle the station was planned for efficient SO2R operating with at least two sets of antennas. The drawbacks appear in multi operations: there are limitations in beam headings and the use of tribanders causes internal interference.

The previous systems were erected about ten years ago. Now when we are approaching the sunspot maximum, Juha found quite an elegant solution for developing the A tower: take down five tribanders and rearrange them as stacked longer-boom 5 L's for 15M and 20M. Ten meters was already in shape with a stack of four antennas in a separate tower.

The idea was born in the spring, and with coordination of vacation times, the hard labor camp was set to the beginning of August. Juha

and I were the motivated tower-apes, getting help from Harryi OH6VM at the rope end. Harri is a temporary team member this year, with Ari OH5DX being occupied with other activities. The ambitious work plan was successful: a huge amount of work was done in only three but long days. Big thanks are due to Esther the rain-goddess, for staying away, and to Tuulikki the wind-goddess, for keeping her temper down.

The last team member, Juha OH9MM, was not able to participate in the antenna party, but later on he did his share of station development by fixing the cabin floor and adding some extra isolation. We had some really cool contest weekends last winter: temperatures were below  $-25^{\circ}\text{C}$  also in Åland, which usually enjoys milder winters.

Let's now move on to operating, which is the main goal in all this. By surprise, my employer gave me a Sabbath to operate the autumn's contests: 2 x SAC and 2 x CQWW. No sponsoring, unfortunately, but these things happen too much in work life nowadays.

### SAC CW

For SAC CW, everything was well set prior to the contest. Not yet knowing about the Sabbath, I had booked flights for the CW portion, planning not to take any days off work. I arrived Friday evening, slept well, and operated in good spirits. I was pleased with my effort, but it was not even



close to good enough: in the final results I'm as low as 5th. See you next year...

## **SAC SSB**

Some hardware work was scheduled before SAC SSB. Juha OH9MM with the task force Rami OH3BHL and Hannu OH3DP came to repair the floor. With their help, a JP2000 tribander was also erected on a tube mast, fixed to EU. I also started building a 2-el wire beam for 80 m. However, by Friday afternoon it was obvious that time was rolling fast and there was no sense in doing any heavy work any more. The help forces left Friday evening.

Saturday went by while re-installing station cables and systems that had been carried outside while working on the floor. As you know, all these little things are very time consuming. Anyway, everything was ready well on time. But another problem started to take shape. It had been appearing already during the week, but I tried to ignore and suppress it with sheer will power. When the contest had been going on for a couple of hours, I was quite certain of what would happen. And it did, after 6-7 hours. I totally lost my voice and had to quit. I really pushed my voice envelope: until Tuesday I could only whisper, and my normal voice wasn't back until Saturday.

## **CQ WW SSB**

The next trip was for CQ WW SSB, and to be sure to get all things done, I arrived on Thursday. I continued constructing the 80 m wire beam, which in my mind was almost ready. But but. There is a little of this, a little of that, and before I knew it, it was Friday afternoon. At 3:30 p.m. I finally connected the cable and tested. Luckily the antenna worked but the narrow SWR-dip was too low in the band. No hard work any more, no antenna tuning.

With small things to be done inside, I was not able to go to sleep early enough. The day's hard work in the rain also ate my mental energy and spoiled the high motivation I had had at home. Dark clouds were gathering in my sub-conscious. Some weird contact problems appeared with band switching but there was no time to do any further checking.

The contest started. 20 m was not open and it was very difficult to get any runs going in the first hours. Little by little it got better and I began to warm up. When the morning had broken, I stepped out for the first you know what. And what did I see? In the B tower, half the feed element of the lower 20 m 3L beam was hanging on the guy bearing, the cable keeping it from falling. It's

amazing that it had happened during just that night, when even the wind was not that strong.

Of course there were a lot of antennas and this was not even close to a fatal defect for a station which had at least two sets of antennas. But I almost heard how my moral backbone snapped. From that point on it was a tourist expedition. I climbed the tower and brought the loose piece down to be fixed later.

Conditions were excellent and I enjoyed many nice runs and pushing OH0Z through numerous pile ups in assisted class. The final result was about 5 M points and 3.1 k QSOs. However, I was disappointed at myself for giving up and quitting the race.

## **CQ WW CW**

One effort was left, clearly the main goal of my contest year: WW CW. Strong support came once again from OH1JT, who during the SSB part had already sensed what was going to come, when I had called him on Friday afternoon. This time he wanted everything to be totally OK for the contest, so he volunteered to come with me.

We arrived early on Thursday and began working inside. Until nine it was dark, after that we attacked the broken beam. Juha also found many other things to do. These things were not fatal nor noticeable in normal operating. But after each improvement I felt better and better.

Even on Friday, Juha found work to be done outside. To myself, all heavy work such as climbing was already forbidden. I stayed inside, making the systems ready and testing everything. We had also replaced the Dunestar band filters with new ones, and they needed to be connected and checked thoroughly so that all bands would go right. Unfortunately one important gimmick was not included in the re-installation: a nasty-sounding alarm, which indicates that lines A and B are on the same band.

The last check was that antennas were pointing in the direction shown by the indicator. The antennas were even turned to the starting directions, just in case the wind would become strong. Heavy winds were forecasted for the weekend. It was about 4 p.m. and everything was ready. I took Juha to the airport and he returned home. I drove back, ate, cleaned a little and went to sleep.

I woke up 30 minutes before the start, made coffee and was ready to go. 20 m was now open and the starting run of W's was good, then it dried out after a couple of hours and I moved to the lower bands. The good going continued. I felt better than James Brown. Daylight came and

activity moved to the high bands. 10 m to JA, and 15 too. Nice DX collected on the second radio.

Well you know how contests go. One gets high without drugs, the flow takes over. And time flies. The first 24 hours done. The most difficult hours are ahead. 20 m is not open as it was in the beginning. Luckily good runs are available on the low bands. But things are slowing down and I'm getting tired. My back is cramping due to too tense sitting position. I set the alarm clock to be sure and lay back on the sofa for 40 minutes. I don't fall asleep, but visit the borderline.

It's 05 GMT, my back is relaxed, and I feel almost perky. The rate is quite low, but I try to chase DX on the low bands. It has begun to storm outside, or at least the wind is heavy. The day breaks and I move to the high bands. Again 10 m works to Japan and 15 too. However, it seems that Europeans are strong and they bury the DX's. Good rates anyway.

The day passes and the wind is building up. Now it really is a storm. Luckily the antennas are still turning. It feels like the hut is going to fall over, or that at least the roof will get ripped off. I go on operating all the time. Lights fade a couple of times, what if power fails? I also notice that the A line's antenna switch in position B is dead. Well, as stated before, there is a lot of antennas. Quitting did not even cross my mind this time.

It's getting dark early. The high bands are open to the US and I have a good run on 15 m. The wind goes berserk. It sounds like somebody is throwing rocks onto the roof. Possibly hail or heavy rain. But what is worst, band noise rapidly builds up to way over S nine. Static rain, oh no. There goes my run.

I check all the bands and they don't sound good. But with the EU sloper, the 40 m band is quiet and I begin calling there. A moderate EU run. After some time the static is over and I return to the high bands. But no more good runs are available. Yes, I do get some QSOs, but it seems that the storm washed my runs away.

So the end is approaching. All of Sunday has gone smoothly, but now the last three hours seem to be life long. The last one is the worst and produces the first hallucinations of the contest. Finally it's over and it's time to switch off everything. Oh boy, how quiet it is. Now go to sleep... It's difficult.

I got up before 07 GMT, feeling really tired after fragmentary sleep. I began to slowly pack things and clean up the place. I got outside to check if there are any antennas left after storm. The storm was over, but winds were still heavy. And what did I see? The 10 m stack is pointing to Africa. Unfortunately I was beaming US. No wonder I didn't get a US run on 10 m.

I was a little confused for a couple of days. I was pleased with my effort but didn't know whether I

did well or not. Quite well after all, even though the EU top went beyond reach. 5.3 kQSOs and 6.9 M points. At least I claimed Åland's SOAB HP record, the earlier one being by OH1JT from 1999, also from OH0Z.



***Celebrating the unique art of killing  
the RBNs from the amateur bands***

**The battle is not yet lost –  
it is about to begin!**

Ever felt like doing a gag on the W3LPL machine? Become a member in our new club. We teach you how create an antiskimmer. Let's have the robots fight another.

No dues included because of huge donations that we have received. We look forward to welcoming you as a RBNmops member and joining in the fun! Just spot W3LPL/P5 on the darn DX-summit and we contact you!

#### **Lukijapalautetta (Reader comment)**

Junnu Kainuusta: "nykyään ihan sama workkiiko bandilla vai morserunnerilla kun tietokonehommaa on kaikki.. mitä virkaa on VFO-nupilla? Sen voisi kustannustekijänä jättää pois radioista. Voisitte vähän ryhdistäytyä siellä toimituksessa ja puhua asioista niiden oikeilla nimillä, ettekä pelleillä. Meillä Puolangalla juodaan pontikkaa, parta ajetaan kirveellä ja siat syödään karvoineen, otakaa siitä mallia"

**Junnu from Kainuu says: "Nowadays it does not matter if you work on the band or with MorseRunner, it is that computer stuff all around... why do we need VFO knobs? It's darn expensive to build and useless in a rig. You might pull your socks up there at PU! editorial office and start to call things with their real name. Stop f%&ing around. In Puolanka, we drink only moonshine, shave with an axe, and eat the pigs with the hair on. There's an example for you!"**

**World Meeting of Contest Clubs (WMCC)**  
**Friday February 3, 2012**  
**Helsinki**

**APPRECIATION OF AMATEUR  
RADIO CONTESTING**



m/s Viking Mariella, ashore Helsinki.

Local time (GMT+2)

**11:00 Opening**

Seppo Sisättö, OH1VR.  
President of CCF

**11:10 Panel: Where we are?**

Lionel Parker, G5LP  
Kazunori Watanabe, JK3GAD  
Audience  
Chairman Jouko Häyrynen, OH1RX

**12:00 Lesson's of WRTC's**

Doug Grant, K1DG.  
President of WRTC 2014

**12:30 Lunch**

**13:30 Cloud contesting – a wild vision**

Tönno Vahk, ES5TV

**14:15 Openness – online scoring**

How to make contesting more interesting  
for the audience & Joe, the average ham?  
Don Field, G3XTT; Jose Hierro, EA7KW

**15:00 Coffee**

**15:15 New breed to contesting**

Open discussion  
Chairman Jouko Häyrynen, OH1RX

**16:00 Contest Ethics & Etiquette**

Jukka Klemola, OH6LI  
Cruise spokesman on the CQWW CC  
Concept of FAIR PLAY

**16:40 Closing ceremony**

Thoughts of the Day

17:30 Ferry leaves to Stockholm

**18:00 Get-together**

Buffet dinner

**CCF/OHDXF Contest & DX Meeting**  
**Saturday February 4, 2012**  
**Stockholm**



m/s Viking Mariella, ashore Stockholm. Daytime  
registered visitors (300 SEKs) are welcome.

Local time (GMT+1)

**10:00 Opening**

CCF - Seppo Sisättö, OH1VR  
OHDXF - Veijo Kontas, OH6KN

**10:05 ST0R – A new DXCC entity**

Jose Hierro, EA7KW

**10:40 WRTC 2014 update**

Doug Grant, K1DG

**11:15 Coffee**

**11:30 Antennas – new approaches**

Pekka Ketonen, OH1TV

**12:10 ...DXpedition to Sint Maarten**

Richard Gelber, K2WR

**12:30 Lunch**

**13:30 Pile up contest**

Mikko Pöyhönen, OH4XX

**14:00 Solar topics and high-latitude propagation issues**

Carl Luetzelschwab, K9LA

**14:45 Coffee Break**

**15:00 H40KJ – Small scale big DX-pedition**

Jacek Kubiak, SP5DRH

**15:30 Closing ceremony**

Output of the WMCC  
Winners of the Pile Up Contest

**16:00 Daytime visitors leave the ferry**

16:45 Ferry leaves to Helsinki

**Gala dinner in the evening**



# Welcome to the Arctic Cruise!



## Tavataan maissa jo ennen risteilyä!

Tule tapaamaan risteilyvieraitamme jo torstai-iltana 2. helmikuuta, vaikka et ehkä itse risteilylle pääsisikään. Epävirallinen kokoontumisemme on hotelli Scandic Grand Marinan baarissa Helsingin Kajanokalla kello 19.30SA alkaen.

Tervetuloa!

## REGISTRATION TO

WMCC and CCF/OHDXF meeting on board  
Viking Mariella Feb 3–5, 2012

<http://www.oh3ap.fi/formccf.html>

**LAST DAY of registration is Jan 10, 2012!**

Questions to OH1VR: [seppo.sisatto@uta.fi](mailto:seppo.sisatto@uta.fi)

## Visit us in Stockholm Saturday, Feb 4

We invite SMs to participate our program on Saturday at Stockholm Harbor. The participation fee, 300 SEKs, includes a buffet lunch. Register ASAP. You can pay your fee in Stockholm.

## Hotel offer in Helsinki

Hotel Scandic Grand Marina has done us the following offer for the nights Feb 2–3 and Feb 5–6:

Feb 2–3, 100€, code: SIS020212,  
Reservation by Jan 19.

Feb 5–6, 70€, code: SIS050212,  
Reservation by Jan 22.

Name of the quota: Contest Club Finland

Scandic Grand Marina  
Katajanokanlaituri 7 (street address)  
POB 00160 Helsinki  
Telephone +358 9 16 661  
Fax +358 9 166 6857  
E-mail: [grandmarina@scandichotels.com](mailto:grandmarina@scandichotels.com)

More information:

<http://www.scandichotels.com/Hotels/Countries/Finland/Helsinki/Hotels/Scandic-Grand-Marina/>



## SAC activity in OH6-land

Jari OH6BG



SAC:n SSB-osaan osallistuneen radioamatööriase-  
man antennit: Lyhennetyt jagit 80M ja 40M sekä sta-  
kattu Force 12 C31XR.



OH6-aseman maston Makita-merkkinen heavy-duty  
kääntömoottori piti vaihtaa ennen Ilmaveiviä. Ei  
tasoitusta länsinaapurille.



SAC on vakavaa mutta pyyteetöntä radiourheilua. Ja  
uteliaat naapurit pysyvät kunnioittavan välimatkan  
päässä. (This warning keeps unwanted people away  
from the shack).

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### WHO'S WHO IN RADIO CONTESTING

PileUP! asked Marek SQ2GXO to shed light  
on the wrtc-rank.com website

During 2010 SN0HQ group post-IARU contest mee-  
ting, Kaz SP2FAX offered his station to operator wi-  
lling to fight for a Team Leader slot for WRTC 2014. I  
made decision to seize the opportunity and started en-  
tering qualification events.

Of course I wanted to know how many WRTC points  
I'm earning from each event without waiting for final  
scores and official rankings. Using data from 3830  
summary tables it was doable even with my weak MS  
Excel skills. Problems started when I wanted to know  
how I'm doing compared to competition. It was clear  
that it cannot be done manually and I need to write so-  
me software to do this. To have my work useful for o-  
thers I decided to make it a website. I bought hosting  
account on virtual server and wrtc-rank domain and  
started work on source code. Website is written in php  
and is using MySQL database for storing all the data.  
Currently (after 18 qualifying events) database is stor-  
ing total of ~160000 records. Three main sources for  
contest results are used: 3830, lists of received logs  
with claimed scores usually published on contest  
sponsor websites and of course final result articles.  
Source code is still having some changes after feed-  
back for website visitors and due to variety of data for-  
mats of contest results. Website design is very simple  
with no fancy graphics, but It makes it more clear and  
pages loads faster.

So if you haven't done this yet, visit <http://www.wrtc-rank.com/> to see who is who in a race to WRTC 2014.

#### Admin:

Name: Marek (Mark)  
Callsing: SQ2GXO (ex. SQ4GXO)  
Born: 1981  
Licensed: 1997  
Profession: Software Engineer

### Contesting instructions

1. There are a dozen ways around the UBN check. It's just statistics and you need to be within the confidence intervals. Joint cheating with your buddies helps in getting the odds on your side as you all claim the same unique. Go for the call-book!
2. Output power is subjective matter. If you sense that 200W is QRP, these feelings cannot be denied by anyone. Recall that amps are sold in cabinets of same dimensions – and front panels are changeable (5 kW model looks the same as the 1 kW). Power meters also have tunable scales. If you run QRO on 20M into a 3-el, let everyone know that you have a 4x6-el array. Use RXs near the DX to get the TX:RX ratio right – or, actually, who cares.
3. You are entitled to get the multiplier first. It was you who found it on your screen! When you use a SDR-RX near the DX, you actually can just transmit until the DX gets back to you. Remember also that transmitting is not restricted to one DX-pileup – you can always afterwards check the hard disk drives of your SDR network, who actually replied to you, if you transmit in many places simultaneously.
4. The frequency belongs to you. And when you think of it – there's barely anything more pleasant than pushing people aside. Their joy is doubled when you read their whining at the QRP.COM.
5. 48 hours is inhumane. Health issues – who wants those? You don't have to be as irresponsible as CQ WW committee – and it's actually much nicer when you are SOAB with someone.

Great Qs in Physics – Part 1 of 289

What is the speed of dark?

Mikä on mastomiesten suosikki jännityselokuvien sarjassa?

- Kadonneen paarten metsästäjät.

### C.W. Radiosport died on SDR battlefied

Sergeant C.W. Radiosport was reported killed in action by his company member, private E. L. Bug. Sergeant Radiosport was caught in ambush by remote controlled fighter robots of type SDR-RX.



Private Bug told the reporters that C.W. Radiosport had wrestled bravely, on his own, against a platoon of RBNs, which is when the dreadful events started.

C.W. Radiosport was born in the late 1950s and he was well known for his entertaining character. There are many who sorrow his demise. The service was held at HF chapel, Megahertz road 599, ClusterTown.



Jatkumoa löytyy, lähettäjä väitti tämän olevan liiton nuorisoleiriltä...



Which did you spot first? The 3-el STEPPIR or the pink saddle?

You can tell this to your friend on the CCF Feb cruise.



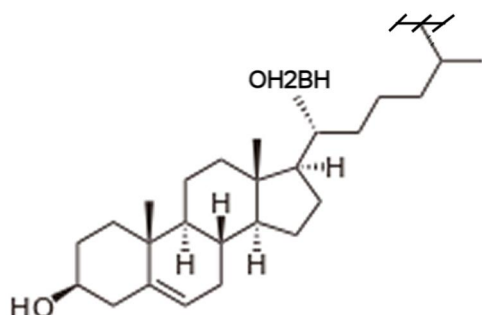


"RF-choked" by Perttu Korpela, 10. Perttu was asked to illustrate amateur radio (at home). That is not a QSL from K0FF in the op's hand.



## PileUP!'s Science Corner

**Foxtrot News**, Stockholm. Dr. Jesper Croft-hill, of the famous Croft-hill family of scientists, reports having isolated a new molecule from the human brain. They call it the Con-testerol.



Increased con-testerol levels in patients cause insomnia and restlessness, particularly in autumn months. Dr. Croft-hill assumes that con-testerol biosynthesis can only be found in a number of people who have the gene fault. Until now, all his patients were from Finland.

## Laihialaista radioamatööri toimintaa

Mitä laihialaishamssi huusi mastosta pudotessaan XYL:lle? "Laita sapuskaa vaan ittelles – mää syön sairaalas".

Seuraavalla kerralla 80:n biimistä pudotessaan: Ja sitten kantajat vaan ruakitahan....

Mistä Laihialla saadaan antennilankaa? Sitä syntyy kun kaksi laihialaista löytävät lantin.

Kuntakisassa oli aikanaan sääntö, jonka mukaan Laihialta ei tarvittu QSL-kuittausta. Saatiin Laihiakin ääneen.

Mistä kutospiirissä ajellessa tietää olevansa Laihialla? Siitä, että dipoleissa roikkuu vessapaperia kuivumassa.

Mistä Laihialaiset bevet on tehty? No naapurin sähköpaimenlangasta tietty!

Mikä on laihialaisen kontesteri kilpailuluokka? Naapurilta saatujen käytettyjen batterien Aliteho-QRP-luokka

Entäs miten laihialaiskontesterin talo lämmitetään: Linkussa on sen verran pitkät kaapelit ja pyörät, että sitä työnnellään huoneesta toiseen.

Mitä Laihialainen operaattori sähköttää kisassa? no e e e - a e (555 15)

Laihialaishamssi kehui kaverilleen, että minä tapoin isäni. Kaveri sanoi, että pöljähän sinä olet, johon toinen sanoi, että ei siinä mitään pöljää ole, sillä ens kesänä täällä on SRALlin leiri ja orvot pääsevät ilmaiseksi

Mistä laihialainen OP keskustelee Kisan jälkeen? Säästetyistä kW-tunneista.

Laihialla oli radioamatöörinestori kuollut. Paikallislehdellä oli tapana silloin antaa ilmaista ilmoitustilaa neljän sanan verran. Talon ainoa poika mietti ja mietti miten ilmoituksen nyt muotoilisi, jotta kaikki mahdollinen hyöty paapan kuolinilmoituksesta saataisiin irti. Viimein lehden sivulta saatiin lukea: "Paappa kuoli. Rigi myytävänä."

Mistä taas tietää, että on tullut vanhaksi? Kun entiset tyttöystävät tulevat potkukelkalla vastaan --- kesällä.

PileUP! congratulates Finland's World-famous Radio Amateur

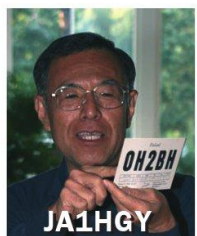
## Martti OH2BH – 50 YEARS ON THE AIR

# 1961–2011 – 50 GREAT YEARS OF DX & CONTEST ACE

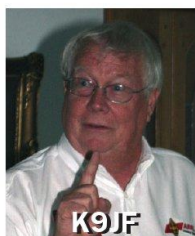
# OH2BH

It was back in April, 1961 when the mailman delivered the amateur radio license of OH2BH. In November of that same year, OH2BH scored 19.240 points in the CQWW CW Contest. The gate was opened to the big wide world for a 15-year old schoolboy. Now fifty years later, it is time to pause and recall many of the happenings that followed, to treasure and salute them together with those who have shared the excitement of those other years.

Looking back, there is no doubt that Contesting and DXing have dominated the stage performance of Bravo Hotel. Hence it was time to prepare for the 50th anniversary with the right script to greet the multitudes and bring in DX once again in a fresh and timeless fashion.



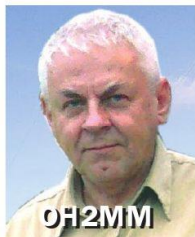
JA1HGY



K9JF



OH2IW



OH2MM



OH2UA



OH7EA

### ON HOME FRONT

While the actual OH2BH station was activated throughout the jubilee year of 2011 by Pasi, OH2IW; Ville, OH2MM; Toni, OH2UA and Antti, OH7EA to the tune of more than 20.000 QSOs, it was time to honor those golden years and bring them alive in their original format. The first ever Japanese QSO partner Nao, JA1HGY along with teen-age friend, ARRL's Jim, K9JF came to the happy gathering, adding to the locals who have been a vital part of the OH2BH story.

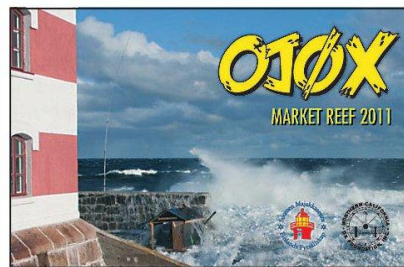
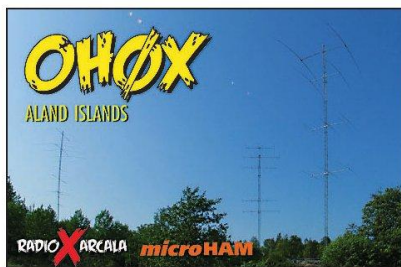
Delighting his OH friends and capping up 2011 was a novel Zorro Mål concept seeing five-hundred OH's up in arms going against their arch rival Sweden and taking the Scandinavian Activity Contest honors back to where they belong. Everyone was reminiscing about those great, happy moments of 50 years gone by. Thanks, guys!

### ON THE ROAD

At the start of this saga in the late 1960s, a first ever new DXCC country activation - Market Reef, OJOMR — changed the life of OH2BH and he became part of the entertainment industry and turned into the common property and friend of everyone — at least those who had worked a new counter. So, Market Reef had to be revisited now. With this in mind, the stage was set for a 15-man OJOX show for the duration of four weeks. Ultimately, the operation also included the activation of Market Reef for the first time in the CQWW SSB Contest. You may wish to visit [www.qrz.com/db/OJOX](http://www.qrz.com/db/OJOX) for a look at the cast of characters and to enjoy the daily reports filed by lonely Monk Martzonero.



## ENJOYING X-RATED STATION NETWORK



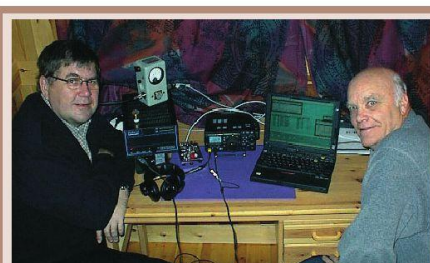
### MONK MARTZONERO IN THE HEAT OF A NEW COUNTRY RESOLUTION

Why is it that the Finnish side of OJØ counts for DXCC and the Swedish side does not? In the small wee hours, this question came up and a heated discussion ensued. The Swedish monks found themselves in exile and therefore felt, rightly so, that a great unfairness existed in the monastery.

"You have grossly cheated us; you took the monastery, gave us barren rocks that are oftentimes under the water, you gave us a piece of wasteland, and now we are in exile!", claimed the Swedish monks.

Since Martzonero had more years under his belt, he proposed a sharing strategy – nothing can beat a compromise. "You see", he said in a final rescue attempt, "as the main building stands in Finland, how about if we adjust the borderline once more and you get the other building? Isn't that a reasonable act of sharing?"

The other building is made of solid concrete and is much in need. And it does ensure a sense of belonging and regular visits by Finnish monks to Sweden. This resulted in an immediate resolution of the conflict, with white smoke billowing from the Market Reef smoke pipe — just like in the Vatican when a new Pope is elected. The other building turned out to be an outhouse (picture on left).



Along with innumerable DX and Contest expeditons over 50 years, the past several decades have seen Martti doing DXpeditions with Wayne, N7NG on fifteen (15) different occasions, on all six continents. These DXpeditions inspired them both to hone their operating into an ultimate art form, resulting in publications and papers from both. If nothing else, their legacy can be encapsulated in the following sentence:

*Pileup behavior directly reflects the quality of the DXpedition operator.*

### MORE THAN 150 CALLSIGNS USED BY OH2BH

9M0S, 3A2K, 3A/OH2BH, 3C1EG, **3C0AN**, 3D2AM, 4J1FS, 4U1ITU, 4U1UN, 5B/SV1GA, 5R8X, 5T5BH, 6W/OH2MM, 8P9BH, 8R1K, 9H3BH, 9H9BH, 9M6BH, 9M8X, 9Y4VT, A61AF, **BS7H**, BV/OH2BH, BV0AA, **BV9P**, B1A, BY1DX, BY1PK, BT1WW, BT2HC, C21BH, ZD3X, C5AX, CN2B, CR9BH, CT1BCM, CT7B, CT3/OH2BH, CT3BH, CT3BZ, CT9AT, CT9BZ, CU2/OH2BH, CU2A, CU2X, CR2A, CR2X, CU2KG, DX1S, DX9C, **E44DX**, EA8ACH, EA8BH, EA8RCT, EA8ZS, EA9AM; FOKH/FC, FJ/OH2AM, FK/OH2BH, FW8ZZ, GD6IA, GJ2A, MU2K, H44DX, **H40AA**, HBOAZD, 7J7ABH, JT1A, JW5E, JY8BH, AH3D, OH2BH/W6, NJ6/OH2BH, OH2BH/KH6, AH3D/KHO, AH3C/KH5J, LG5LG, OD5HC, OD5IQ, OH2BH, OH2BE, OH2AM, OH2EW, OH2R, OH5BH, OH8X, OG2B, OH50BH, OH60BH, OH9/N7NG, OH0BH, OH0A, OH0B, OH0W, OH0AM, OH0DX, OH2AM/OH0, OH0/W3UR, **OJ0MR**, OJ0DX, OJ0AM, OH0MD/OJO, OJ0B, OJ0J, OJ0X, OX8XX, P4/OH2BH, P5/OH2AM, **P51BH**, ZW5B, PS2T, **SORASD**, S01DX, S9A, S9BB, SJ9WL, ST2FF/ST0, 6T1YP, SV1GA/A, T88BH, T80A, TC4X, TA4ZM, TF3IRA, TGOAA, **TX0DX**, VP2ARS, V31BH, V51Z, VK9XM, VP2V/KC6KOU, VP8BZL, VP8CBA, VP8SSI, VR2BH, VU4AN, XF4L, XU2BH, XX9X, XX9TZ, XZ1A, XZ1N, XZ1X, XZ2BH, **403T**, 403B, YW0D, **YU8/OH2R**, ZA1A, ZA1B, ZA1BH, ZA1DX, ZA1UT, ZS9Z/ZS1

### THANK YOU

You have all graciously partaken of these wonderful 50 years of life and excitement. You have contacted OH2BH under several of those more than 150 callsigns activated, including a dozen modeled new DXCC countries. Thank you for following the OH2BH Saga and being part of it with so many QSOs. The sincerest thanks go to Leena, OH2BE and the two great kids, Petrita and Petri, who have certainly tasted the world while keeping up with Dad.

*The 50th anniversary has now slowly receded to the past.*



## You Are In The Log

Jari Jokiniemi, OH3BU

Everyone knows that communications fail except occasionally and due to factors that are completely out of our control. Even hearing the exact words does not always help. When a politician, for example, says that he or she takes full responsibility, even the most stupid moron on earth understands that the politician in question is definitely not going to resign because of you losing your pension funds. One should note, however, that despite of hearing the words 'take full responsibility' only the rare and lucky observer is in the position to know if what was actually communicated was 'I am going to flee the country to Caribbean to enjoy your money' or 'I am going to target advancing to even higher position, and then you are going to lose not only your pension but also your house, your car, and your wife'. Or then he could simply mean that 'oops, that red button really took down the whole electrical network, sorry'. Communicating is a two-way game that is not to be taken lightly.

Our hobby is all about communicating, so we should set an example that shows how one can get the message through even in most harsh conditions. And we should show it proudly. Consider our log checking procedures and QSL cards. It is very often the case that one actually did have a completely valid contact, but due to long hours without sleep, the call of the other part was typed just a little bit wrong. Suppose you keep an old fashioned paper log, like many of us do. You see there an entry that looks like OH10A. Don't you think a bit unfair to reply 'not in log' if OH10A requested your card? Right. It is obvious that in this case it's just your bad hand writing that causes any problems. You are the one who should fix that one, i.e. send him your card and with cordial compliments. Remember, that you may have made mistakes into a computer log, too. The other party may very well be OH1A, as well. So you should send your card to him, too.

And you see, this is exactly what many top class dx-peditions do. It is called The One Letter Rule. If the other details of the card are ok, you should consider it a good QSO and send your card promptly. Remember, nobody would send you a direct card and 10 dollars for a contact that never existed. Act gentlemanly and fix your log!

So why are we not doing the same favor in contesting? Instead of behaving like gentlemen, we have made all these marvelous log checking programs that not only take away your hard earned contacts from your automatically checked logs, they also penalize and humiliate you by making your busted calls public. This is not going to attract more youngsters to our hobby. This is not

the solution, this is the problem.

This is something we should fix. Properly implementing The One Letter Rule to contest log checking, would be a good start. But when improving our life, we should not settle for the easy and obvious solutions. As everyone knows, when one is tired, one often makes not only one but two mistakes simultaneously. It is very easy to type OH10A when the call actually was OG20A. H and G letters are very close in a keyboard, you see. Close things often get mixed accidentally.

This reminds me how often I get cards that have the date or time wrong. Usually the time is off some hour or so. Perhaps the other end has simply not changed his clock to summer time or winter time, whichever is in question closer. And the minutes are wrong almost in almost fifty percent of all the cards I receive. Most funnily, even the band is sometimes written wrongly. I still have a card from EA8 on two meters band. I even don't operate two meters. Well, actually that QSO took place on twenty meters. Don't you think that it is very unfair to condemn the contact bad if there is a time error of a few minutes or a few hours or a few months? Right, this is exactly how they do it on dxing.

In addition to these technicalities, we should raise the bar and widen our abstraction level. In other words, we should take into account the ordinary operating procedures. Think for a moment how you greet your friends. Do you say 'Hello VP4GAW/6' or do you say 'Hello Bob'. Right. We use well known abbreviations and pseudonyms. This is so also with radios. Very often, especially in a big pile up, one does not say the full call sign. Instead, a typical caller repeats the suffix of his or her call sign, often for hours, in a desperate attempt to get the QSO. This favored operating mode is called The Last Two. Thus, when making a contact with OH10A, the dx says 'OA five nine'. This is really same as saying 'Marty you are five nine'. Just a short cut to speed up the things. Note that five nine does not necessarily mean five nine. Why else are there so many repeats when trying to figure out what are the two letters we are communicating with right now. Five nine is just a way of saying 'Hello'. Obviously there is no need to receive such compliments to have a completely valid QSO.

Considering all the facts that we have seen, we can now present The Improved Log Checking Procedure. It goes as follows: If there are at least two similar letters of a call claiming a contact, and they are within the same day or two, in the same or different band, one should grant the contact points and perhaps the multipliers, too.

I am sure that this smallish improvement will increase our contest scores and be well-received by the great majority. You are five nine, you are in the log.

## A different kind of remote controller

Esa, OH7WV

Already many years ago I decided to build a remote station that I could get on the air as living on the other side of the world does not allow me to get on the air at home. So, a brand new Ten-Tec Omni VII found itself a way from the factory onto my table in Finland. The QTH is somewhat challenged in terms of putting up antennas, so I ended up putting up a simple G5RV.

It was supposed to be a breeze to get the system up and running. Connect the radio to a power supply and to a router, set some parameters, install the One Plug software and that's it. Ok, for switching on and off the station utility power I purchased a box I can control with an SMS.

Everything worked right off the bat in the local network. Once I moved the control 4000 miles away, I got to notice that the audio stutters badly and the control is very slow. Both of these were a huge disappointment as this meant I'm not getting on the air unless some improvements are done. I tried the N4PY control program instead of Ten-Tec's One Plug with no real improvement. I decided to add a PC at the radio site and thus forget the reason I bought the Omni VII in the first place. The first step was to use the PC for audio through Skype. It worked quite well but I still had the inconvenience with extremely slow control. I asked some IT people and got an advice to install the control program on the radio PC and control it over Teamviewer. That's what I did. The timeline from the beginning now stretches to about two years. Just a few QSO's were made and I didn't spend much time on the radio before this change.

Well, this last change required that radio be connected via RS-232 instead of LAN. Now the control worked pretty good but I got a huge problem with the audio. There was a strong background noise that is impossible to describe and it basically made the connection useless. A normal Skype worked fine between the PC's so I figured the RS-232 is the culprit. The next step was to connect everything on the same ground and make galvanic isolation to the audio lines. No help. So I gave up.

Until I got a new inspiration; another ham in Savo gave me this idea. I threw the Omni VII into a nearby lake (made a nice splash, by the way) and employed my trusty FT-1000MP Mark V which had been sitting in a box for years. I ordered the Remoterig boxes from SM-land to go along with it. I believed they would work well. They did. (\*)

But for the control I didn't want to use a virtual control, i.e. PC screen anymore. On the other hand my current residence country does not allow bringing in radios so I couldn't use the "twin" concept. Instead, I bought a cheap, broken, Mark V on eBay, stripped off the front panel and threw the rest into the same lake (Yaesu made nicer splash than Ten-Tec).

Now here is the best part of this innovation: I fabricated a frame with same dimensions as the radio front panel. It has a number of stepping motors and solenoids and this system is attached to the real radio. The control end reads the original buttons and encoders and sends simple messages to the corresponding motor or solenoid at the radio. What I do at the control end, press a button or spin the VFO or some other knob, the same thing is repeated at the radio end. The SW is very simple and the Remoterig conveys those multiplexed commands easily through its COM1-port. I purposely left out the front panel controls that get very little or no use at all, like the up/down buttons, Class A button etc. To have a more real operating feel, the front panel is attached to a box about the size of a real MP (an old, empty, desktop enclosure painted black).

Frequency display? To keep things simple, at the real radio there is a web camera and what it sees is displayed at the control head by an LCD screen that replaces the original frequency display.

There are still some minor adjustments to be made and I'm targeting to get this 100% functional on April 1<sup>st</sup>, 2012.

PS. Until (\*) the story is 100% true except the lake part of it.

[Donate](#)

PileUP! has been an open access radio journal 2006–2011, and the people who made it, the contributors and the editors, all worked on voluntary basis. We editors thought that we could ask you for your funds, now, when the Last Blast is in your hands. CCF does not need your help. No, it is loaded, but we suggest that those of you who feel that PU! '06–'11 was worth something, please donate that something or more to kids (e.g.)



## SKIMMERS AND RBN MAKE INROADS – FINLAND FALLS BEHIND IN THE RACE TO BENEFIT FROM NEW MULTI CONTESTING TECHNOLOGY?

Martti, OH2BH/9H9BH

Has Finland, possibly in company with other countries in the Far North, fallen by the wayside when it comes to the advancement of science and technology? Are the Finns bogged down in the quagmire of a pre-industrial era? Or, to put it in another way, has what used to be a technology savvy Finland seen its status fall in the wake of Nokia's sagging fortunes? Have the country's achievements faded into the mists of history? Will Finland re-emerge or is it going to see the wheels turning back? These are interesting questions - right?

The outgoing editorial team of PileUP! Magazine has adopted a somewhat old-fashioned posture in terms of throwing out multi-op contesting with the bath water<sup>5</sup> - that is, losing the good parts when trying to get rid of the bad parts of contesting. Finland boasts a long tradition of multi-multi contesting, with world wins scored by OH2AM (2), OH5SM, ZD3X, EA8CR (2), OH0W and EA8ZS (2). We're talking about ten multi-multi world wins down in the course of years. Added to this are European top honors won by OH2U, unchallenged to the present day.

Hence, there is a proud tradition to build on, but efforts to take full advantage of modern technology in multi categories have been missing. And, with PileUP! failing to promote new technology, we risk losing everything that OH has stood for in the past. Finnish multi-op contesting is faced with the specter of an imminent downturn.

Let's get down to business and sort this out. If you already know the technology involved, Reverse Beacon Network (RBN), just skip this write-up and go forward. If you do not even know the word "skimmer", maybe you have to update yourself to today's world! Your choice.

<http://www.reversebeacon.net/>

### **Welcome to the Reverse Beacon Network**

*The Reverse Beacon Network is a revolutionary new idea. Instead of beacons actively transmitting signals, the RBN is a network of stations listening to the bands and reporting what stations they hear, when and how well.*

<sup>5</sup> We editors don't recognize ourselves from this statement, but we have been saying that our sport is not comparable over time.

## Using my 9H9BH operation as a stepping stone

When I traveled to Malta for CQWW CW to celebrate my jubilee year, there was no way I could aim for a top score in that contest. The mission was different. Often, when the mission is indeed different, I have set some other targets. This time it was to make a 9H multiplier – rare on CW – available to the contesting community but do it differently. Just sit on one frequency like a pancake and see how the S&P skills are with the folks out in the world. Not move a bit but stay near the band edges as my setup was extremely modest and not ready to fight for frequency. While taking initial preparatory steps, I communicated with KC1XX, K3LR, and W3LPL to let them know that I would test their S&P skills and give them a report. I knew roughly that they used RBN assistance, but I had no idea about the magnitude of its role in their multi-multi operations.

I also informed them that I would be doing the 'measuring' only from 40M and up as I expected that my short Butternut sky-stick and my end-fed wire would not make it possible for anyone to hear me well enough on 160/80M. Also, I thought U.S. stations would not even answer if I called them with such antennas on low bands. Juha, OH1JT made me a last-minute 1:6 transformer to allow me to try something out on the low bands. So, there I was to give out a few 9H multipliers, and, to do my S&P analyzing.



### **Do not underestimate your Sky-Stick (Butternut)**

My first surprise was that I was able to hang in there hour after hour totally unprepared - for a total of 44 hours. This came as a surprise not only to myself but more so to Leena (the pride of my eye) who was left alone for 44 hours, just feeding me with some food from her lonely breakfast, lunch and dinner sessions. Thanks Leena, a wonderful holiday it was!



But I was quite surprised at several other things as well. One was that my score seemed reasonable, with not a single S&P (and just using the sky-hook), leaving our mother ship, OH8X, for example, behind in score. It is also worth noting that Toivo, ES2RR, at the helm of OH8X never found me and was thus left with zero multipliers for Malta. In contrast, Tomi, OH6EI at OH0Z came in among the first callers on several bands I started up with. So much so that I seriously suspected that OH0Z was multi-single with the smoldering wreck of an RBN in the woods. Congrats Tomi - your early calls were unexpected but valuable - the only OH0 - as I never heard OH0V, for example. No wonder you racked up a good score!

Summary:

Band	QSOs	Zones	Countries
160:	544	11	59
80:	433	11	56
40:	850	21	63
20:	1129	29	81
15:	838	28	64
10:	1222	33	92
Total:	5016	133	415

Total Score = 4,757,188

So, my first message here is to take a sky-stick with you on your family vacation, and go for it at the band edges with your hook - let your XYL eat all the dinners and more.

Buy her several books and give her several aromatic massage bookings while making a spa hotel your operating location - all this comfortably located poolside. And candlelight dinners? Oh, yes. Contesting cuisine, in turn, would never accommodate much in the way of candles.

### But back to the original mission

A total surprise came in the shape of the three U.S. multi-multi stations mentioned earlier. When I unleashed my first CQ on a new band, they were there - so much so that on 20M, K3LR was my first 20M QSO overall (!) and in three cases KC1XX was my first USA QSO overall (!). In two cases, when NR4M and N2MF were the first USA QSOs, one of the three came in within 5 minutes from my first USA QSO. Were they all racing with skimmers or just with bare hands? Was there any room left for hunting excellence or was it more like target practice, i.e. firing a gun at a specified target at a shooting range? I was reminded of my own hunting trip to Urumqi, China where a wild yak was hauled in front of me and my biggest fear was that I might accidentally hit the haulers...

ZAP! - and the animal is dead. Hooray for a successful hunt. Does today's multi category S&P merely boil down to target practice at a shooting range?

Let's look at this table first.

### Race for finding 9H9BH (9H9PP) for a new multiplier

The purpose of this exercise was to track the speed of finding/logging 9H9BH after its first USA QSO by KC1XX, K3LR, W3LPL and NR5M.

Band	First USA	First	Second	Third	Fourth
160M	KC1XX	KC1XX 0028	K3LR 0101	NR5M 0151	W3LPL next day
80M	NR4M 0249	KC1XX 0253	W3LPL 0330	K3LR 0338	NR5M 0756
40M	KC1XX	KC1XX 0441	K3LR 0442	W3LPL 0442	NR5M 0444
20M	K3LR*	K3LR 0645	W3LPL 0709	KC1XX 0751	NR5M 1207
15M**	N2MF 1135	W3LPL 1139	KC1XX 1207	K3LR 1209	NR5M 1330
10M	N1DG 1154	KC1XX 1314	K3LR 1608	NR5M next day	W3LPL nil

\* First overall QSO on 20M

\*\* Taken from 9H3PP (HA5PP) log as first 9H on 15M – NR5M from 9H9BH log

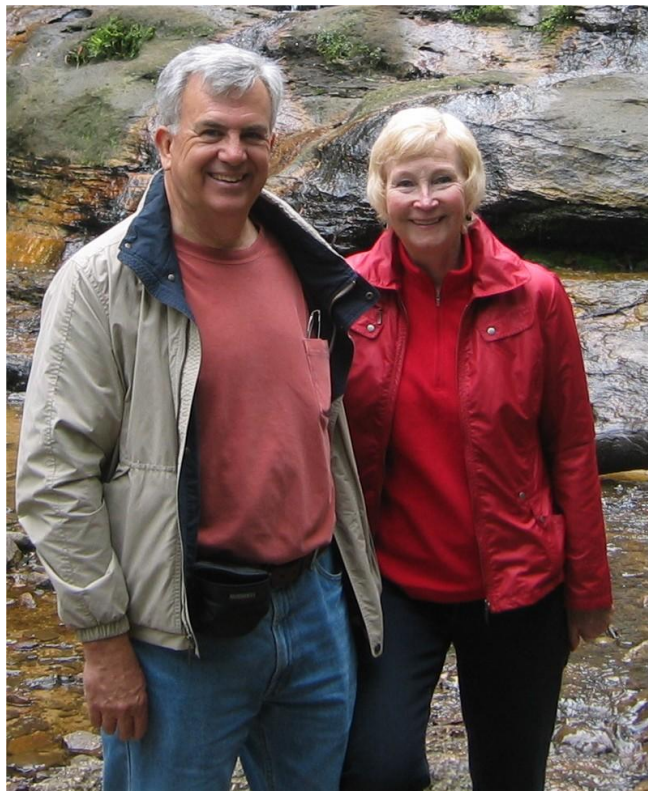
The German (DR1A) multi-multi achieved great results with 9H9BH. No wonder the OH2U EU record was finally broken. The past shook hands with the present. I did not contact the NR5M team in Texas but after the contest I noticed their impressive performance in finding me on all bands, with my sky-hook reaching Texas even on 160/80M.

I asked Frank, W3LPL whether the multiplier race for 9H9BH was valuable - can this type of an approach reflect the quality of the operators?

W3LPL: There was multiple activity from Malta during the 2011 CQWW CW DX Contest, except on 160M and 80M; hence not all band observations are relevant.

But in short, all results are RBN based but probably differentiated by early openings to Europe from KC1XX but also with excellent operators at KC1XX. While in K3LR's case, Tim's operators seemed to be overall the best.

### **Discussing RBN now further with Frank, W3LPL**



Frank W3LPL and XYL Phyllis on a recent trip to zone 30.

Frank Donovan, W3LPL, soon 65, is a multi-multi veteran who started in multi-multi back in 1974 (PJ9T) and who in the course of several decades is credited with many achievements, not only keeping up with ever evolving technologies and making a lot of home-brew stuff with a reasonable budget but also opening his great station to many guest operators - even those who may not have a huge track-record. The W3LPL home station entered multi-multi contesting in 1979 - 32 years ago - and still remains on top after 45 wins in the CQWW/ARRL DX contests with state-of-the-art station architecture not only in terms of RBN but all aspects of a competitive Amateur Radio station.

This is not to underrate Matt, KC1XX and Tim, K3LR who come from slightly different walks of life but who have provided a healthy arena for continuous improvement and competitive spirit that is a must for Amateur Radio in general and contesting in particular. It also needs to be stated that this trio stands on a solid foundation perso-

nally, and fierce competition only helps to further enrich their relationship. Contesting Is!

W3LPL says: You correctly perceive that the CW skimmer has fundamentally changed CW multi-multi competition and much more than one would think. The RBN is a much bigger factor than any individual CW skimmer, including the skimmer inside W3LPL. (KC1XX does not have a co-located skimmer but uses RBN exclusively.)

The RBN produced over 3.5 million DX spots during the 2011 CQWW CW. That's well over one thousand DX spots per minute during many hours, and commonly more than 500 DX spots per minute on each band when it was open to Europe.

OH2BH: How did you feel when skimmers came to your site for the first time? And how about today?

W3LPL: At first I was quite skeptical. I quickly became a believer during the 2009 CQWW CW DX Contest when the WZ7I CW skimmer sent out a DX spot for a JA station on 15M during the middle of the night. This single DX spot alerted us to a strong long path opening that resulted in an excellent run of JAs and many new multipliers while our 15M operators were sleeping.

OH2BH: Yes, Frank, I see that you have elaborate skimmer machinery but KC1XX uses RBN just with a piece of software at his station. Interesting!

W3LPL: Of course, the vast majority of the skimmer DX spots were duplicates that are handled by the software and cannot be handled by the operators at that rate. The skimmer and the RBN still produce a huge workload on both the run and the second operator. (It's no longer correct to refer to an "S&P" operator who is now a skimmer pounce "SP" operator. We worked well over a thousand skimmer pounce QSOs and only about one hundred S&P QSOs (usually when the band was very quiet).

OH2BH: Gosh, we even need to rename the operators - no runners and multipliers any more! In other words, the past (S&P) and the present (RBN) shake hands in a ratio of 1:10.

W3LPL: Unfortunately there were about 50,000 skimmer spots of broken callsigns, more than ten bad spots per minute on individual bands when they were open to Europe. Handling the bad DX spots is a big challenge and human beings do not like handling bad DX spots especially at those high rates. We're developing new software at

W3LPL to manage bad spots more effectively. I'm sure we handled the high rates of bad QSOs much less effectively than our competition.

OH2BH: Interesting, the multi-multi development work is now moved from hardware to software - but isn't it the trend in all development in electronic gadgets, ours included? Have we lost the game altogether, and for how many years have the OH multis wandered in the dark?

W3LPL: CW skimmers became a significant factor in multi competition in the USA during the 2009 CQWW CW DX Contest. We did not yet have a local CW skimmer at W3LPL in 2009. Instead, we connected via the internet to a few CW skimmers in the northeastern USA.

The RBN has drastically increased the importance of having excellent operators with a somewhat different script than in the past, but also two interlocked stations on each band with equally good antenna systems at both stations. The capability to listen with very little interference when the opposite transmitter is on the air is crucial.

OH2BH: Now I feel better, Frank. We haven't lost it all as these two years are not much although time flies very fast these days. I have also learned that RBN is supported by several individuals in Scandinavia, such as LA5EKA, OH6BG OH8-LQ, SE0X and SK3W. Thus the knowledge is here but it has not been implemented at multi stations here yet.

## Summary

This is where it is safe to stop and start asking these fundamental questions. Where is the world going? This is not for me, I stay with the ancient stuff. That's how I got started, and I will stick with it. Remember the old days of wooden ships and iron men? Now it's the other way around - you know all that crap. Is there any room left for the iron men? You remember those who made QSOs in the past? Don't you remember?

OH2BH: Frank, one final item. Do you have a station made of iron and your men made of wood?

W3LPL: RBN has made it vastly more important for a competitive multi not only to have very good operators - in a somewhat different way than in the past - but also to have two interlocked stations on every band with equally good antennas. It's critically important to have minimal interference between the stations so that the second station can interleave skimmer QSOs between the runner's QSOs with as little effect as possible on

run rates of over 150 per hour. The stations must be located side-by-side so the two operators can instantly coordinate their QSOs. This is a second game. No room for Win-Test talks!

The concept of using a second station primarily for multis is obsolete. The second stations now work multipliers and at least ten percent of the total QSOs on each band.

OH2BH: Hey guys, we are frozen, obsolete people. Come on, here's where the world is going. Clean your pot and get on with the game. So does the rest of the world.

Thanks Frank for sharing these interesting issues with us. While just finalizing a draft for my 50th jubilee year QSL card, all this prompted me to encapsulate the ideas in these sentences:

Experimenting with novel technology advances and trying out a variety of applications, with their cleverness and ingeniousness able to change your whole life in a way never imagined before, can be quite mind-boggling - and educational. It took 50 years to learn that evolution will never stop, but it does assume from mankind continued improvement. In this endeavor, competitive Amateur Radio offers a valuable way forward. (© OH2BH)

## Additional comments and links for those who may wish to enter NRAU contest with the aid of RBN – Reverse Beacon Network

The RBN has made it unnecessary to have a local CW skimmer at the station. The focus has shifted from optimizing the performance of a local CW skimmer to using sophisticated software in order to fully exploit RBN spots and to suppress RBN spots with bad calls.

OH2BH: Can you briefly describe the overall setup for those of us here who may wish to jump into deep water in future Finnish domestic contesting with a potential RBN category?

W3LPL: The local CW skimmer at W3LPL uses a Quicksilver QS1R software defined radio (SDR).

<http://www.srl-lc.com>

The QS1R runs VE3NEA Skimmer Server software providing 192 kHz of bandwidth on each of seven bands simultaneously.

<http://www.dxatlas.com/SkimServer>



A complex arrangement of relays, bandpass filters and preamplifiers makes all of my transmit and receive antennas available for selection into the single RF input of the QS1R receiver.

The relays allow the transmit antennas to feed the QS1R whenever the transmitter is inactive. When the transmitter activates, the relays automatically switch the QS1R to a receiving antenna on that band. On 160M and 80M, the QS1R is always connected to one or more operator selected Beverage antennas via K9AY receive antenna switching systems.

<http://www.aytechnologies.com/Products/RAS8x2data.htm>

A set of nine W3LPL bandpass filters combines the RF from all nine HF bands into the single RF input of the QS1R receiver.

<http://www.k1ttt.net/technote/w3lplfil.html>

Four Clifton Laboratories high dynamic range Norton preamplifiers compensate for the excess loss on 17, 15, 12 and 10M that results from connecting nine W3LPL bandpass filters together at the input to the QS1R receiver. Additional W3LPL bandpass filters protect the inputs of each of the four preamplifiers.

[http://www.cliftonlaboratories.com/z10043a\\_norton\\_amplifier.htm](http://www.cliftonlaboratories.com/z10043a_norton_amplifier.htm)

We use custom software to manage RBN DX spots. AR Cluster Version 6 can also be used very effectively for this purpose and to control the DX spots sent to from the local skimmer to the RBN.

OH2BH: You are also feeding the DX Cluster network from your skimmer? Which criteria have you adopted for "filtering" out the desired spots?

W3LPL: All of our local skimmer DX spots are sent to the RBN, none of our local skimmer spots are allowed to go to the DX Cluster network. We send only manually generated DX spots to the DX Cluster network during contests.

Except in our multi-multi DX contests, I use custom software to select and verify RBN spots for specific callsigns before transferring the verified RBN spots to the DX Cluster network. There are less than one thousand callsigns in the list and most are relatively rare. The primary advantage of this software is that it often detects the selected DX stations when they send their first CQ on a new band. This software is always turned off during our multi-multi DX contests.

## HYVÄÄ JOULUA

Äs dee är  
Äs dee är  
Riemuin kilkattaa  
Eipä paljon aikaakaan  
Koolit ruutuun vilahtaa

Äs dee är  
Äs dee är  
Riemuin kilkattaa  
Hiirellä kun napsauttaa  
Kyllä kusot lohkeaa!

## IRWIN LAULUJA LIPASTONLAATIKOSTA – Skimmerit, skannerit...

Skimmerit, damdadaa  
Skannerit, damdadaa  
Rollerit, damdadaa  
Niin ja pipo myös

Oli skimmerit, skannerit, rollerit ja pipo  
Kisashäkkiin kun astelin näin  
Oli skimmerit, skannerit, rollerit ja pipo  
Näin kertoimet silmissäin  
Hiirellä klikaten kaikki kohtasin  
Koolista viis kun kusot loggasin  
Oli skimmerit, skannerit, rollerit ja pipo  
Kun pojot lokiin workin näin

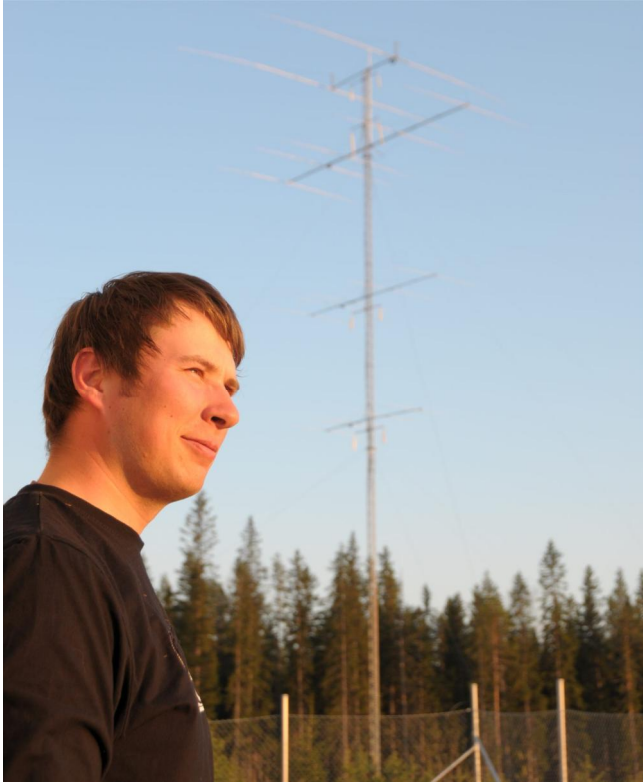
Skimmerit, damdadaa  
Skannerit, damdadaa  
Rollerit, damdadaa  
Niin ja pipo myös

Mä olin vefoton nörtti  
Ja kaikkihan tiesi sen  
Ilman vefoa pärjäten  
Käsi hiirellä workkien  
Se harmitti toisia tietenkin  
Mutta nauratti mua vain



Viljo, 7 sends greetings to Arkala folks. The new headphones are great for karaoke, too. The old ones are visible in the backgnd. Viljo would like get on the air, when the twin brothers occupy the TV couch. "A little TVI is the right cure", he says.

**“Just a hobby” – Contest operation from CR2X**  
Toni, OH2UA



I was about to write an article about the CR2X station, but ended up sharing a story about what it takes to make a serious CQWW contest effort from a DX QTH. On the e-mail reflectors it's often said that radiosport is just a hobby. I don't know any professional contesters, but for me RADIOSPORT is not JUST a hobby. Most often this “just a hobby” approach arises when Ordinary Joe writes on the Cq-Contest reflector regarding his opinion on cheating in contests. Ordinary Joe takes part in CQWW from his home station, operating 13 prime-time hours of the contest and finishing #169 in his state. For Joe it doesn't matter if he finishes #169 or #172 and therefore cheating is not a problem for him. I appreciate Joe's effort to take part in the contest a lot and truly understand his opinion. But in most of the cases, Joe has very little clue about what kind of an effort it is to go for top box standings.

For me, getting ready for a 48-hour effort is a long project. Many things that prepare me for the contest are actually done in my head running as a “background process.” Mental preparation begins already a couple of months prior the contest. Slowly my mind starts wandering from everyday subjects to the contest and more and more often I find myself staring into the emptiness, thinking of some contest-related detail. It can be something like passing a particular multiplier, configuring the logging software or managing the pileup with different voice tones.

A more intensive period begins about four weeks before the contest. Normally this includes one visit to the station to maintain towers, antennas and equipment and to make sure that everything is OK for the upcoming contest season. There are a lot of practical things to arrange; booking flights, renting a car,

figuring out the situation at the station, etc. If something is broken at the site, everything needs to be carried from home. The worst thing is if something unpredictable is found out when arriving at the station.

Since I'm not an active DXer nor do I have station at home, some preparation is also needed for figuring out the propagation and getting used with DX petitions and other contest operations. For this purpose, the Internet has made life easy because all of the information is there. The DX Summit database and the Reverse Beacon Network are really useful tools when getting prepared. Getting used with competitors' logs, as well as my own log and notes from the previous year is also quite a time-consuming but important part of preparation. This “paper work” phase easily takes all nights for one week (approx. 15-30 hours). This part of preparation is normally done about two weeks before the contest.

One week before the contest it's time to pack your stuff and head to the station. Arriving at the Azores on Monday gives five days to make the station ready and get prepared for the contest. Normally some small stuff is still done at the station, but it's important to avoid demanding physical work. At this time the latest propagation knowledge is gathered and I begin making the operating plan. For me it starts from the target. I set my target for each band for Qs (EU/NA/DX) and multipliers. The most important thing is to find the balance between the bands in order to maximize the score. Based on the target and propagation predictions, I set my operating plan. I try to plan my operating as accurately as possible, normally dividing a 48-hour contest into 96 timeslots. For each time slot I try to figure out the best way to maximize the score for the main and secondary radios.

Getting used to real pileups always takes some time. Operating before the contest is really important in order to ensure that the station works fine, getting the latest feeling of the propagation and fine-tuning all of the little details – like SSB/CW messages.



Being a non-native English speaker, I have to put a lot of effort into getting things to jell on SSB. It's quite hard to unlearn manners and “bad habits.” As an example, quite often I find myself giving a report on SSB as “you're 59 14” instead of just “59 14” without the useless “you're.” Saying that extra “you're” takes about 300 ms more than just “59 14.” During a 48-



hour contest one can end up using almost 50 minutes only saying "you're." With an average rate of 200 Q/h it makes 167 lost QSOs and a lot of wasted energy.

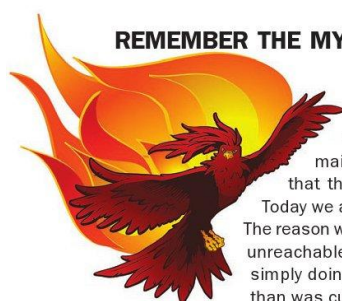
On the other hand on CW, the world has changed a lot since Skimmer came around. I used to play a little with speed variations and some half spaces in my CQ messages to make my CW sound better and to give my callsign kind of a unique rhythm. But Skimmer does not recognize such callsigns. After analyzing one lost contest it was found that my call was spotted by Skimmers only a couple of times while my competitors had a huge number of spots. So I was "forced" to go back to standard CW, even though it doesn't sound that good in my ear.

A couple of days prior the contest I try to sleep as much as possible, go to bed early and wake up well before sunrise. I also begin to eat less and lighter food in order to get used to hunger and to let my body get used to a lower energy level and an empty stomach. Then on Friday it's just chilling around, tuning the bands, running pileups and getting to bed early.

The contest itself is quite straightforward. If nothing surprising arises, it's just operating based on the operating plan and trying to stay in the chair. Most of the work is already done and now it's just enjoying the pileups.

I hope this gives an idea what radiosport is about when it's not just a hobby. I also hope that the next time Ordinary Joe is about to write a post to the Cq-Contest reflector and make statements against contest committee acts against cheating, he might think that cheating in radiosport may be somewhat different when fighting for the top box. Because if Joe's XYL cannot let an observer enter their house with shoes on, it doesn't mean that the observer program should not be executed.

To summarize my thoughts right after the dust of CQWW 2011 had set, the following text was printed on the CR2X 2011 QSL cards:



### REMEMBER THE MYTHICAL PHOENIX BIRD?

Ever since the CR2X super station was built in the westernmost corner of Europe, and beating CR2X from the mainland was impossible, there were claims that the Azores should not count for Europe. Today we all know that those thoughts were false. The reason why scores made from the Azores seemed unreachable was that the Radio Arcala team was simply doing things better and more professionally than was customary in radiosport.

Raising the bar came as a shock to our competitors, leading to claims about an unbeatable QTH. But after taking a deep breath and realizing what Radio Arcala was all about — making things better — they were back, ready to battle with us. Suddenly the Azores was again part of Europe, and unassailable scores were just words no one could even remember.

After setting new European CQWW SSB and CW records in 2010, coming back for the 2011 season was not easy. Mother Nature gave us a chance to push the records one step further but we were not ready. Today's radiosport is just like any other sport. Winners do everything — down to the smallest detail — better than others. We were not ready for this season. Things just did not jell. We were not there for the winning.

But just like a phoenix rising from the ashes, CR2X will be reborn for one more contest season. The work for the 2012 season has begun. Our target is nothing less than pushing the records again to a level that is said to be impossible.

*The legendary Muhammad Ali once said: "Impossible is just a big word thrown around by small men who find it easier to live the world they've been given than to explore the power they have to change it. Impossible is not a fact. It's an opinion. Impossible is not a declaration. It's a dare. Impossible is potential. Impossible is temporary. Impossible is nothing."*

**Operator: Toni Linden, OH2UA**  
**QTH: Ribeira Grande, São Miguel, Azores Islands**

**Equipment:** 2x Yaesu FTDX5000 & OM Power auto-amps

**Automation:** microHAM, OM7ZZ & Hamation, K7MI

**Towers (3) and RAC-X Controllers** by 403A and YT3M

**Customized Antennas** by OH1JT and K6MYC & M2 Antenna Systems

NA Tower: Stacked 10-L interlaced 10-15-20 yagis

EU Tower: Stacked 10-L interlaced 10-15-20 yagis + 2-L 40M

Rotating Tower: 10-L interlaced 10-15-20 yagi, 2-L 40M + 2-L 80M

160M: L-vertical and DXE 4-direction beverage

Meet the Azores-Finland Friendship Consortium: Fernando Tavares, CU2BV; Jose Melo, CU2CE; Francisco Gil, CU2DX; Martti Laine, OH2BH/ CU2KG; Juha Hultko, OH8NC/ CU2KH and Toni Linden, OH2UA/ CU2KI.

Visit Azores: [www.visitazores.com](http://www.visitazores.com), [www.cu2a.com](http://www.cu2a.com) & [www.radioarcala.com](http://www.radioarcala.com)



### CQ WW CW OH-activity

(Source pileup.ru, Dec 14, 2011)

SO 28 MHz LP1WW (OH0XX)	#1 WW
SO 14 MHz CR6T (OH1NOA)	#2 WW, 1EU
SO 7 MHz OH0V (OH6LI)	#4 WW
SO 3.5 MHz EF8S (OH2BYS)	#1 WW
SO 1.8 MHz OH6MW	#3 WW
SOAB QRP OH5Z (OH5WH)	#4 WW, 1EU
SOAB HP OH0Z (OH6EI)	#4 EU
SO 21 MHz OH1F (OH1TM)	#4 EU
SO 3.5 MHz OH5VT	#6 EU
SOAB HP 9H9BH (OH2BH)	#11 EU
SOAB HP OH8X (ES2RR)	#14 EU

### CQ WW SSB OH-activity

(Source pileup.ru, Dec 29, 2011)

SOAB HP CR2X (OH2UA)	#3 WW, #1EU
SO 7 MHz OH0V (OH6LI)	#6 WW
SO 7 MHz OH8A (OH4KA)	#6 WW (A)
SO 3.5 MHz EF8S (Byssi)	#1 WW
SO 3.5 MHz OH1TX	#4 WW
SO 1.8 MHz OH6MW	#5 WW
SOAB HP OH8X (OH6KZP)	#7 EU
SOAB HP OH0Z (OH6EI)	#10 EU (A)
SO 14MHz OG73X (OH8LQ)	#3 EU (A)
M/2 OJ0X	#6 EU

## OH0Z uudet antennit ja stakkipurnukat

Juha, OH1JT/OH2N

Tomin juttu Ahvenanmaan uusista antenneista kesälle 2011 (toisaalla tässä lehdessä) oli kimokkeena tälle tarinalle.

Kesän aikana oli kypsynyt ajatus uusiksi OH0Z:n ns. A-tornin antennivarustus. Olivathan vanhimmat tribanderit olleet mastossa yli 10-vuotta. Oli aika täysremontin. Samoihin aikoihin alkoi itää ajatus luopua vanhasta tribanderistakista. Luopumispäätökseen vaikutti moni asia. Esimerkiksi SO2R työskentelyssä tribanderi ei ole kaikkein paras antenni, mm. 20M harmooninen vahvistuu reippaasti kymville, ja jos A-tornin stakilla ajaa viidellätoista, ei toisella radiolla voi käyttää muita A-tornin antenneja. Ongelmat korostuu, multi rypistysten yhteydessä, silloin ei A-tornilla voi käytännössä ajaa kuin kahtakymppiä. Antenniremontille oli myös psykologinen tilaus. Tomin (OH6EI) tulevaa SAC & CQWW eforttia täytyi tukea.. Edellisen vuoden kosintakahinoissa murskatut sarvet oli syytä paikata uusilla ja vielä uljaimilla piikeillä.

Aloitin kiivaan Eznecin pyörittämisen, vertailin vanhan tribanderisetin gainia muihin vaihtoehtoihin. Tribanderisetti antaa yllättävän hyvän gainin viidellätoista ja kympillä. Gaini on luokkaa 18dBi eli käytännössä vastaa 5-6L pitkäpuomista stakia. Kahdellakympillä tribandeilla sain gainiksi noin 16dBi eli perinteisen 204BA stakin luokkaa. Tässä vaiheessa tajusin ottaa huomioon myös tribanderien koksit. Vanhassa setissä anteissa käytettiin vanhaa surplus koksia RG-213. Koska vanhassa stakissa oli kaikenkaikkiaan 5 kpl antenneja, oli jokaiselle antennille menevä kaapeli yllättävän pitkä (17m), joten jos laskee koko setin kaapelihäviöt uudestaan saa todelliset gainit. Varsinkin 10M ja 15M gaini tippuu hulpeesti pelkien kaapelihäviöiden takia. (luokkaa 2-1,5dB) Tämän asian tajuaminen lisäsi motivaatiota laskea uudet antennit paremmilla kokseilla. (Paremmilla kaapeleilla oli helposti kompensoitavissa mahdollisia tappiota antennien gainissa).

Suunnittelin uudet 15M 5L pitkäpuomiset joilla stakissa saa gainia luokkaa 18dBi. Kaksikymppiä onkin jo paljon haastavampi. Jo pelkästään sen takia, että mekaniikka alkaa muodostua haasteeksi. Kokemukset saaren tuulioloista ovat opettaneet että täti-Tuulikin voimia on syytä kunnioittaa. Joten aivan tolkuttoman pitkäpuominen vaihtoehto ei tulisi kestäämään - Tuulikin kynsissä. Näinollen 20M puomiksi tuli mekaaninen kompromissi - 12 metriä. Gainia sain kahden stakilla luokkaa 17dBi, eli noin 1dB vanhan tappioksi.

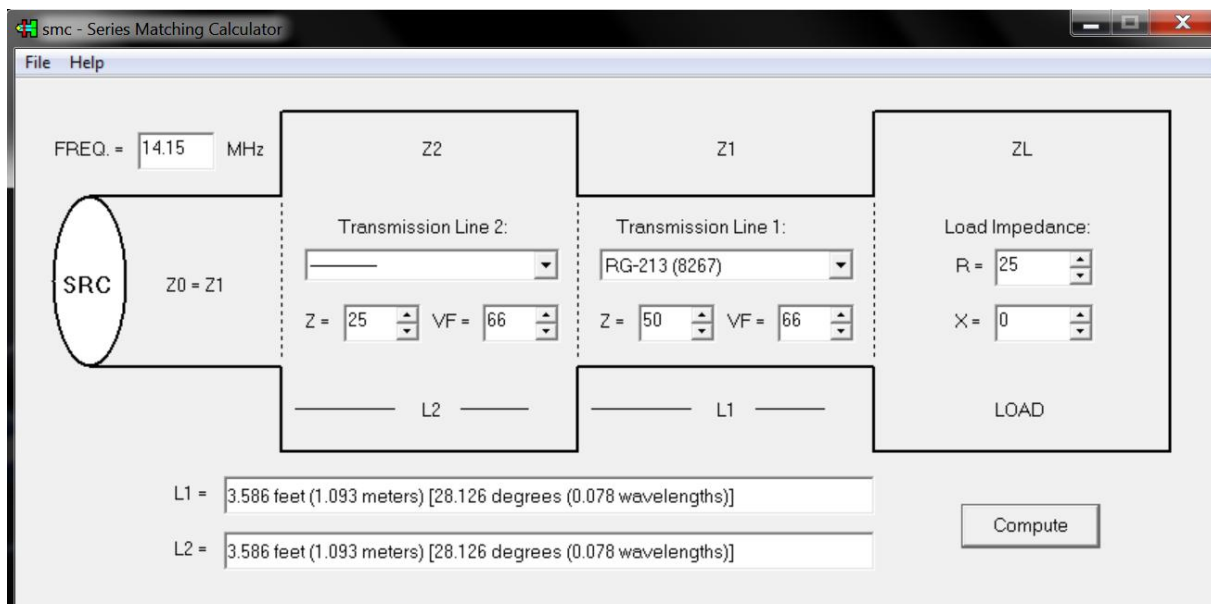
Todellisuudessa gainiero on uuden hyväksi enemmän, koska uudessa stakissa käytetään ecoflex koksia, jonka vaimennus on karkeasti 50% rg213 koksiin verrattuna, desibeleissä. Uudet antennit suunnittelin suoraan 50Ω syötölle. Siihen päädyin sen takia, että antenneista haluttiin laajakaistaisempia kuin perinteisistä monoista eli SWR-käppyrä haluttiin laakeeksi. Päädyin siis kahden 5L antenni stakkiin 20M ja 15M:llä. Kympin antenniksi tuli yksi 4L yagi. Alunperin olin suunnitellut 5L antennin mutta apumiehenä häärännyt komeasarvinen rautasahamies teki nopeakin nopeamman amputaation puomille ja "päätti" uuden antennin olevan 4L. Nettogainia 15M ja 20M tuli se noin 1,5-2dB. Kympillä tuli takkiin noin 3,5dB mutta kympillä meillä oli 4L nelikko, joten tappio siellä ei tunnu niin pahalta.

Uusien antennien myötä jouduin suunnittelemaan uusiksi myös stakkipurkit. Vanhassa tribanderistakissa käytettiin laajakaistaista ferriittimuuntajaa, joka nostaa impedanssin 10-12Ω ylös 50Ω:iin. Eli ne ei käy millekään monobanderi stakille. Perinteisesti kahden monobanderin stakaussovitusta tehdään 75Ω varttiaallon Q-muuntajilla. Sinänsä ihan toimiva ratkaisu, jos onnistuu jostakin löytämään hyvälaatuista 75 ohmista, johon saa vielä toimivat liittimet. (Yleensä 75Ω liittimet ovat F-liittimiä ja ne ei kestä tehoa). Näin olen Q-muuntaja sovitusta ei tullut kuuloonkaan. Mitä jää jäljelle? Ensimmäinen ajatus oli käyttää vanhaa tuttua SMC-sovitusta. SMC tulee enganninkielisestä lyhennyksestä **Series Matching Calculator**. Greg Ordyn **W8WWV** on tehnyt PC-ohjelman jolla voi laskea nopeasti ja simpelisti sovitusta kahdella eripituisella / eri impedanssin koksilla. Ohjelma on ilmainen ja ladattavissa <http://www.seed-solutions.com/gregordy/Software/SMC.htm> Eka kuvassa on esimerkki 20M sovituksesta.

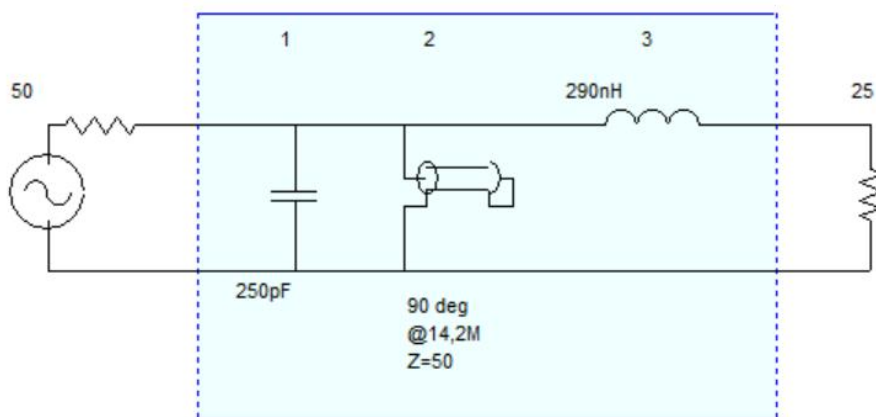
Ohjelmalla voi suunnitella paljon muutakin, esim yagien sovitusta yms. Tätä sovitusta menetettiin käytettiin mm. Kanarian multi/multeissa 2000-luvun alussa. Erittäin helppo ja luotettava rakentaa, suurena etuna myös se että voi käyttää tavallista 50-ohmista kaapelia ja liittimiä.

Vaikka SMC-sovitusta on tuttu ja turvallinen ajatus jostakin uudesta ja erilaisesta iti. Pähkäilyjen jälkeen päädyin perinteiseen LC-piiriin jolla tehdään sovitusta 25>50 ohmiin. Päädyin oheisen skeman mukainen kytkentään, joka on asennettu mastossa olevaan alumiini koteloon. Kotelossa on siis käytännössä vain yksi konkka, kela ja liittimet. Helppoa ja halpaa. Kuvassa 2 on skema 20M sovituspurkista.





Kuva 1. L2 on tehty kahdesta rinnan kytketystä 50-ohmisesta rg-213 koksista, L1 on tavallinen rg-213 koksi. Tässä vain esimerkkinä kahdenkympin sovitus.



Kuva 2. 20M sovituspurkin skema.

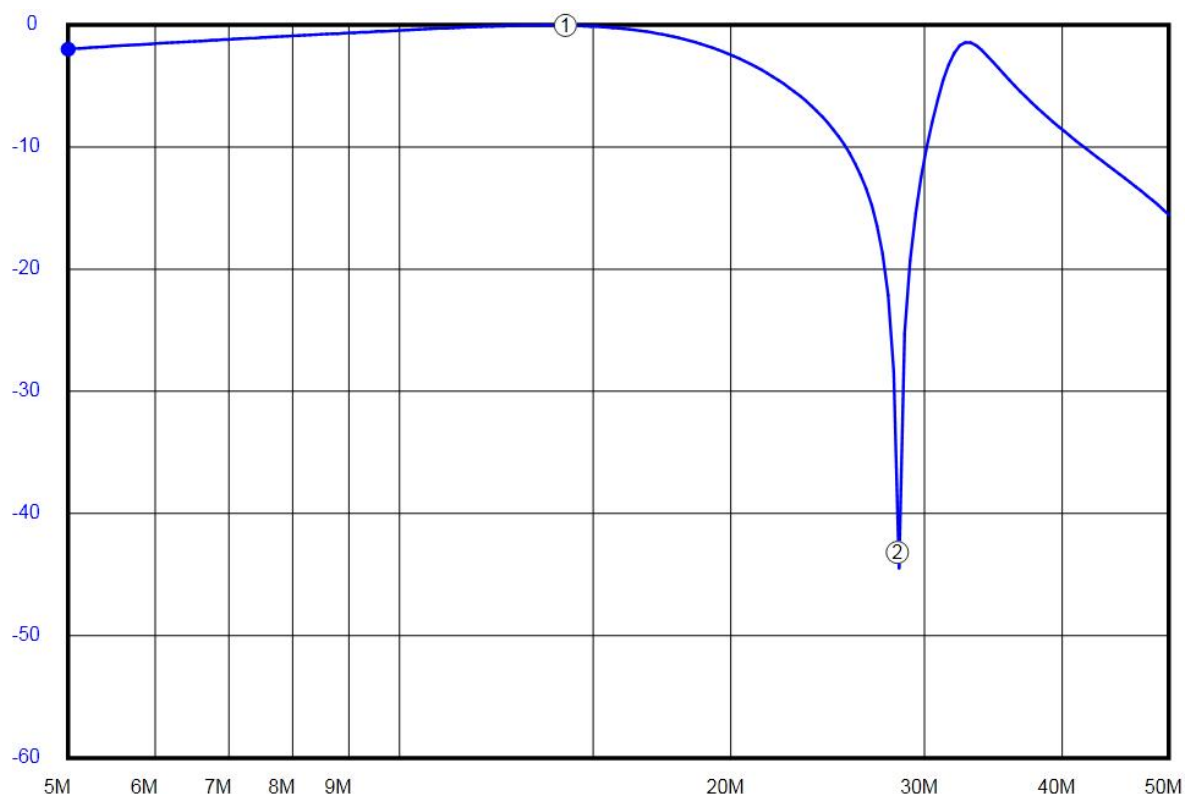
Lisäsin kelan ja konkan lisäksi yhden varttiaallon oikosuljetun stubin, jolla saa helposti ja halvasti lisävaimennusta 10M harmoniselle. Kuva 3 kertoo päästökäyrästä ja sovituksesta.

Suunnitteluohjelma, jolla mallinsin LC-piirin on ARRL-handbookin mukana tuleva pieni ELSIE ohjelma, jolla voi mallintaa pieniä LC-piirejä ja siirtolinjoja. Ohjelmasta on olemassa ilmainen koeversio

<http://www.tonnesoftware.com/elsie.html>

Ilmaisversiolla pystyy mallintamaan oheisen piirin. Ilmaisversion rajoituksena on asteiden lukumäärä, joka ilmaisversiossa on rajattu seitsemään, mikä riitti varsin hyvin minun yksinkertaiselle kytkennälle. Samalla periaatteella tein 15M purkin. Käytännön mittaus osoitti että sovitus toimi kuten mallinnus antoi odottaakin, minkä voi helposti testata keinokuormilla ja VNA:lla.

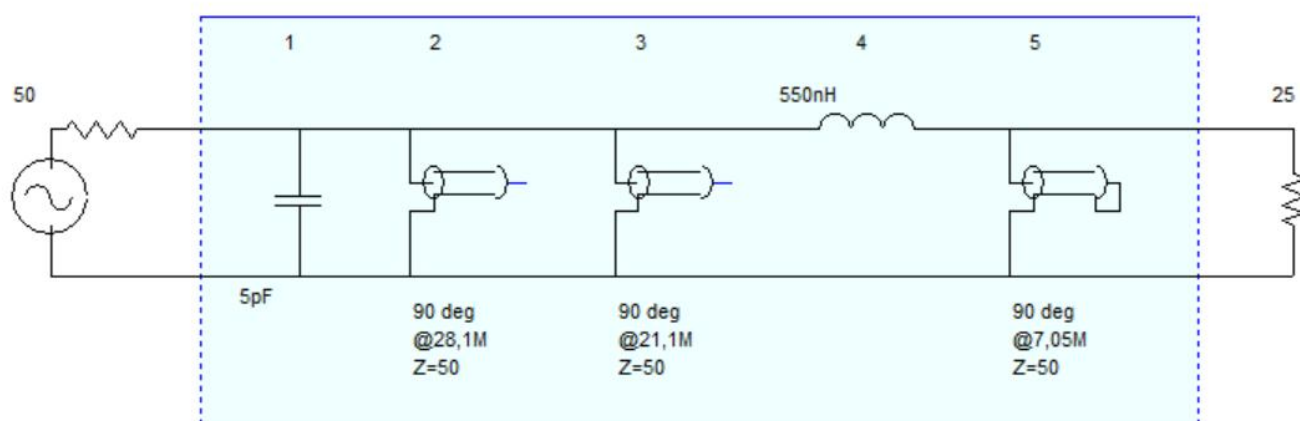
Koska A-tornin kaikissa yläbandin stakeissa oli käytössä uudet sovituspurkit alkoi itää ajatus myös vaihtaa 40M sovituspurnukka. Alkuperäinen neljänkympin stakkisovitus oli tehty SMC-ohjelmalla yli kymmenen vuotta sitten, joten oli jo aika korvata sekin uudella. Sen suunnittelussa käytin tietysti samaa periaatetta kuin yläbandeilla. Mutta asiaa aikani päähkäiltyäni syntyi ajatus kehittää kytkentää hieman lisää. Miksen korvaisi alkuperäistä konkkaa yhdellä tai kahdella avoimella stubilla jolloin saisin lisää vaimennusta yläbandien harmonisille. Kaikki jotka ovat ajaneet multi/multia tietävät että 40M on bandi joka louskuttaa harmonisia etenkin viidelletoista ja kymppille. Varsinkin kymppille kertaantuu harmonisia muilta bandeilta, jolloin radioiden etupää joutuu koviin. Kuvassa 4 on skema uudesta 40M sovituksesta.



Details of markers:

Frequency:	Trans.:	Angle:	Return:	Delay:	VSWR:	Zin:	Zangle:	Real:	Imaginary:
1 14,15M	-0,03491	-47,899	-25,237	20,78n	1,1158	49,441	6,2311	49,149	-5,3662
2 28,35M	-43,161	-152,85	-0,00021	-1,073u	>1000	0,27439	89,873	0,00061	-0,27438

Kuva 3. 20 M parannellun, kypiltä suojatun purkin päästökäyrä.



Kuva 4. 40M uusi sovituspurkki.

Konkka on korvattu kahdella avoimella stubilla. Toinen on viritetty 15M ja toinen 10M. Kytkenässä on mukana myös 40m oma oikosuljettu varttiaallon stubi joka auttaa etenkin 20M harmoniseen. 5pF konkka edustaa mallinnuksessa käytettyä hajakapasitanssia. Kaikissa näissä sovituspurkeissa kelat on ilmakeloja, jotka on tehty 3mm kuparilangasta. Kun asentaa kelat purkkiin on syytä pitää huoli että kelat on asennettu vähintään puolen halkaisijan verran erilleen kotelon seinämästä. Konkka on tavallisia doorknobbeja. Konkka/konkkien tulee kestää RF-virtaa,

joten doorknobkien käyttö on suositeltavaa. Käytäntö on osoittanut että koteloihin on syytä muistaa porata pieni vesireikä ja mieluiten kotelon alakulmaan, jotta kondenssiovesi pääsee valumaan ulos. (minulla on kokemusta vesitiiviistä sovituspurkeista, joka hölskyi vettä, kun se otettiin mastosta alas mysteerisen vian vuoksi). Ilmakelojen laskemiseen löytyy useita ilmaisia ohjelmia, joilla saa laskettua kelan arvot riittävän tarkasti. Esimerkiksi DL5SWB ohjelma, joka on ilmainen ja pyörii tavallisessa wintuutti koneessa [http://www.dl5swb.de/html/mini\\_ring\\_core\\_calculator.htm](http://www.dl5swb.de/html/mini_ring_core_calculator.htm)



Mittasin ja tarkistin omat sovituspurkit DG8SAQ VNWA laitteella. Mallinus ja todellisuus vastaavat erittäin hyvin. Jos stubeissa käyttää rg213 koksia ei todelliset vaimennukset ole aivan noin hyviä kuin mallinnus antaa olettaa. Todellisuudessa stubien vaimennus on bandista riippuen noin 5–10dB huonompi kuin mallinnus. Mainittakoon sellainen seikka, että uusissa purkeissa on kaikki liittimet 7/16-liittimiä. Niiden hyvä puoli on se että niissä on valmiina O-rengastiiviste, joka suojaa liittimen kosteudelta, toisin sanoen ne on ammatilaisten liittimiä ja tarkoitettu liitoksiin, joita käytetään säiden armoilla. Perinteisissä PL-259 liittimissä ei ole mitään sääsuojausta, ja kokemus on osoittanut että niiden käyttö johtaa jossakin vaiheessa liitoksen hapettumiseen. (tiedän että on olemassa vulkanoivaa teippiä, liimallista kutistesukkaa jne., mutta en vain kerta kaikkiaan luota niihin).

Mastotöistä sen verran että itse antennien purku mastosta meni hyvin. Vanhat antennit saatiin purettua noin kuudessa tunnissa. Urakkaa helpotti tietysti se että olimme Tomin kanssa kumpikin vuorotellen mastossa. Joten mastoapinan kuormitus per päivä jäi siedettävälle tasolle. Työskentelyä helpotti sekin, että olimme Tomin kanssa olleet vastaavissa tilanteissa ennenkin ja huumorin kukkaset on noukittu lähtökohtaisesti samasta penkistä, jolloin säästyään yllätyksiltä ja työma-raali säilyy vakaalla tasolla.

Antennien kasauksessa saimme apua, kun Harri OH6VM saapui seuraamme, auttaen meitä merkittävästi antennien kasauksessa ja nostoissa. Itse kasaus ja nosto meni hyvin. Koko urakka purkuineen, kasauksineen ja nostoineen vei kolmelta mieheltä kolme päivää. Pienenä yksityiskohtana mainittakoon että muutimme elementtien kiinnitystä siten että kaikkiin antennielementtiin liitoksiin laitettiin kaksi alumiininiittä. Aika näyttää kuinka ne kestävät Tuulikin riepotusta. Olimme onnekkaita sään suhteen sillä täti-Tuulikki malttoi mielensä ja antoi meidän puuhailia kohuullisen tyynessä ja lämpimässä säässä.

Remontin jälkeen odotin mielenkiinnolla uusien sarvien vetovoimaa. Jo nyt voi sanoa että Tomi onnistui erinomaisesti CQWW CW kisassa.

Juha, oh2n



OH0Z valmiina koitoksiin.

#### Timo, OH3ZE muistelee

Elettiin 70-luvun alkupuolta ja ystäväni Matti, OH3ZN oli hankkinut kunnon rigit pärjätäkseen OH-kontesteissa. Oli sitä aikaa, että 100 watilla ei saanut kaikkia piirejä millään workittua. Matin pöydällä Nekalan Kirvestie 7:ssä Drake B-linja ja komea lineaarinen. Oli vaihtanut ne Fiat 850 henkilöautoon erään nykyisin kokeneemman kaupamiehen kanssa. Oli vaihdettu dipoleihin RG8 telkkarikoksin tilalle ja signaali olikin vallan komea läpi Suomen. Olin silloin Puolustuslaitoksen hommissa ja lainattiin Ilmavoimien radioasemalta Bird 43 *kunnon pulikalla* Matin itsetunnon kohottamiseksi. Tehtiin 5 min koeponnistus ja neula seiso 2200W kohdalla koko testin ajan vaikka YD1130't oli jo valkohehkuiset.. Matti totesi **"kunnon peli – parempi kuin se ketun viiatti."** Mielestäni kunnon komplimentti linukan tekijälle Tampereen kaupunginreviisorilta.

Workittiin sitten KS Sainiota ja kelit olivat jälleen surkeat. Matti ajaa pileuppiä 3685 kun yht'äkkiä Kontesti-Korhonen Sotkamosta erehtyi osumaan jaksolle kilpakutsua huutamaan. Ekin signaali oli Tampereen tasolla aika olematon, vaikka oli jo silloin kaseissakin kilowatteja.. Matti, vaikka hämäläinen olikin, ei kauaa Ekiä siinä kuunnellut vaan loihe lausumaan, pikemminkin huutamaan – ne, jotka Matin muistavat, tietävät äänitason – että, **'mitä se Ekikin siinä oikein rällää, eikö se tiedä, että täällä on kontesti menossa?'** Satu in kuulemaan tapauksen *Pohjoisessa Hämeessä*, jonne Eki kuului jotenkuten väristen ja vastaa Matille

**"ei tarvii kettuilla, vaikka on enempi kusoja.."**

## Pyyteetön radiourheilija

Ari OH6MW

Tämä ei ole muistokirjoitus. Pepe elää vielä. Mutta, jos tällä otsikolla pitää kirjoittaa niin Pepe on syytä mainita. Itse hänestä ei ole tätä kirjoittamaan.

Tänä viikonloppuna Pepe workkii Stew Perry Topband Speciaalia, varmuuden vuoksi kaikilla bandeilla. Miksi hän rajoittaisi Stew Perryn ihannuutta vain top bandille, ilosanoma hienosta kisasta pitää viedä muillekin. Yläbandeilla haahuillessaan Pepe löytää pileupin, sellaisen pienellä kirjoitetun Pileupin, ei sitä lehteä. Taitaa olla Joulusaari vk9xx. Pepe asettuu pileuppiin, kääntää mastoaan, tuuppaa linukkaansa ropelit pyörimään ja aloittaa kutsumaan. Joulupukki kuulee Pepen. Ensin tietysti Stew Perry yhteys lokaattoreiden kanssa, sitten seuraavalla minuutilla Stew Perry kilpailun ulkopuolinen radioyhteys ilman lokaattoreita ja viiden minuutin päästä kolmas yhteys ilman raporttia ja ilman lokaattoria. Pepe pohjustaa vielä neljättä yhteyttä ilman kutsua, ilman raporttia, mutta muut hönkivät voimallisemmin. Noh, kolme qsoa on ihan hyvin.

Siinä pileupissa kahlatessaan Pepe kuulee, että siellä on muitakin. Mustikkamaan Maija ja Hörökulman Heikki ainakin naapurista. Maijalla ja Heikillä näyttää olevan vaikeuksia saada yhteys Joulusaaren amatööriin. Kutsuvat äänikäheänä ja cw-merkki huurussa minkä jaksavat. Sääliksi ihan käy. Pepe aloittaa kutsumaan Maijan jaksolla, Maijan kutsulla. Ei aikaakaan kun Joulupukki vastaa ja antaa Maijalle raporttia. Pepe siirtyy Joulupukin jaksolle ja huutaa: "Nyt Maija, se antaa sulle 59 plus 40, vastaa, vastaa". Maijaparka on ihan hämmennyksissään, ei tiedä mitä tekisi. Nopeasti Pepe menee Maijan jaksolle ja antaa raporttia. Joulupukki kiittää ja niin Maija on saanut uuden maan. Hyvä Maija, ei kun kortit kasaan ja Amerikkaan. Pepe varaa vielä hetken Joulupukin jaksoa ja raportoi asian Maijalle, jotta Maija osaa laittaa toteutuneen lokiinsa.

Mutta nyt Heikki on ainut jolta yhteys Joulupukiin puuttuu. Eihän asiaa näin voi jättää. Pepe alkaa kutsumaan Heikin kutsulla ja pian Heikilläkin on Joulusaari lokissaan. Kaikki ovat niin iloisia.

Kerhoillassa Pepe kuulee yllättäen, että kaikilla ei ole mastoa ja linukkaa. Joillakin on ongelmia laittaa mitään antennia ja harrastavat ihan väärin tätä jaloa harrastettamme. Pepe toteaa, että asiaan on parasta puuttua tai muuten vielä joutuvat ihan hakoteille tai mikä vielä pahempaa, sekaantuvat yhdistyspolitiikkaan. Pepe hakkaa metsää, vähän omaansa ja vähän naapurin ja ostaa pienen maston. Kuljettaa maston iltahämärässä ker-

rostalon katolle, missä noviisi asuu, vetää koxin alas ja koputtaa noviisin ikkunaan. Tässä sinulle koaksiaali, kytke tämä sinne laitteeseesi niin alkaa kuulumaan, Pepe sanoo. Noviisi ottaa syöttöjohdon ikionnellisena ja alkaa pyörittämään pileupia 3799:ssä. Takana ovat turhuuden ajat sata kHz alempana, nyt qso lentää pitemmälle. Oheisorinää kuuluu Italiasta saakka, toisin kuin ennen. Samana iltana Pepe pakkaa kiiltävän linukan joulukääreisiin ja vie sen noviisin oven eteen, soittaa ovikelloa ja kiirehtii pois. Alakerrasta nurkan takaa Pepe seuraa minkälainen riemu noviisin kotona alkaa, uusi automaatti-Alffa kiiltää ja naapuritkin käyvät ihmettä katsomassa. Naapurin kolme tietäjää asentavat Alffan kiinni noviisin laitteisiin, tuovat jalokiviä mahdollisia korjauslaskuja kattamaan ja toivottavat hyviä yhteyksiä. Oi ihanaa, kyllä amatööri on mukavaa.

Pepe palaa kotiin vaimon moitittavaksi, taas on halot hakkaamatta ja puista tippuneet havuneulat nypymättä nurmikolta. Pepe alkaa töihin, koska vaimoa pitää ilmeisesti totella.

Pepe seuraa syrjäilmällä bandilla noviisin meenoa, jotta nuori etenisi kaikkien taiteen sääntöjen mukaan harrasteessamme. Joulusaaren peditio alkaa näköjään kiinnostamaan noviisiakin. Mutta voi vahinkoa, joulupeditio menee rytylle. Asiaan on syytä puuttua. Pepe menee pileuppiin, ei siihen kuuluisaan lehteen vaan bandille siihen hässäkkään ja kertoo Joulupukille, että tämä rytyily on syytä lopettaa. Lupaava noviisi voi saada pahoja vaikutteita ja alkaa kilkuttamaan kaiket päivät. Joulupukki ymmärtää yskän, laittaa ryyt sivuun ja menee sähköttämään. Kaikki hyvin ja noviisinkin uskaltaa päästää bandille katsomaan sähkötyspileupin ihmelapsia.

No mutta mitä kummaa, aina niin hyvin käyttäytyvässä bandiväestössä joku häiriköi Joulupukin pileupissa. Ja mikä valitettavinta, se näyttäisi olevan westcoast-Pekka, joka spottaa aina kiitos-viestin clusterille tuhansille asiasta suuresti kiinnostuneille, kun saa radioyhteyden suurten järvien tuolle puolelle. Pepen täytyy tehdä asialle jotain. Onneksi vanha kalakaveri on eläinlääkäri, joka hallitsee tällaiset rimpuilut. Pepe välittää westcoast-Pekan yhteystiedot Tohtorille joka lupaa suorittaa viivyttelemättä kotikäynnin westcoast-Pekalle laittaakseen annostukset kohdilleen. Ja pian Joulupukin pileup on taas täynnä vain hyvin käyttäytyviä harrasteemme malliyläksilöitä.

Pepen pyyteetön toiminta hyväksemme ei jää havaitsematta. Sujuvan yhdistyspolitiikan rauhoittama kaikkien pyyteettömien amatöörien yhteinen liitto antaa Pepelle ylimääräisessä joulukokouksessa kilpailutoiminnan erikoispalkinnon, Jää-

maan-Lindellin-Koposen-Laron palkinnot sekä taannehtivasti vuoden perusluokkalaisen palkinnon vuosilta 2005-2010. Vuoden titarin palkinto 2011 tulee muiden auttamisesta pileupeissa ja kaupan päälle liiton kankainen viiri kultaharkolla ja tammenlehvillä titaanisen Antibeamin ja valurautamaston viennistä Riihimäen korkeimman kerrostalon katolle yksin ilman hinureita tai muita nostureita. Pyyteettömänä ritarina Pepe on hämillään kaikesta häneen kohdistetusta huomios-  
ta. Pepe myy kaikki palkintonsa joulukokouksen pihassa ja lyhentää Kreikan valtionvelkaa myyntituotoilla. Tästä kiitollisena Kreikan radioamatööriliitto myöntää Pepelle kuukauden loman Athoksella. Sinne Pepe lähettää mamman aurinkoa otamaan ja keskittyy kotona neulasten siivoamiseen ja hyvän mielen tuomiseen kaiken maailman ammattilaisille ja amatööreille. Hyvää joulua.

(Ed. This story & OH6MW won the writers contests I & II of PileUP!)

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## TOWER BREAKING NEWS

27.12.2011

Timo, OH1NX reports that he was planning to order new towers (#2, #3), but the process is now speeded up. A lumberjack just needs to clear the area first.



PileUP! 15(3) had pictures of the 48-m-tall beauty. This is the view that confronted OH1NX Dec 26, 2011 after the record-high winds had knocked down lots of tall trees in the vicinity. The tower could resist two spruce trees that fell on the guy wires but then a big pine came down and crushed it. Jaska, OH1TX gave the needed immediate first-aid (Sauna in Taivassalo) to Timo. The electricity was missing for 59 hours in Kivelä. Not 44 or 55.

## 4K9W

Many of us recognize the callsign 4K9W, a rare but active contest multiplier. But not many of us know the perseverance of Vlad, the man behind the callsign. He has been bedridden for years, but continues to enjoy the action that ham radio and contests bring into his life. Follow Vlad's story and support him through

<http://4k9w.blogspot.com/>





## OG1M:n mullistava antenni- ja kelikokeilu

Seppo, OH1VR

CQ WW SSB antaa luontaiset mahdollisuudet erilaisille antenni- ja kelikokeiluille vaativissa bandioissa. Tämä oli lähtökohta OG1M:n tämänvuotiselle osallistumiselle. Kokosimme viisimiehistiimin, joka lähti kisaamaan multi/single luokassa täysin palkein kellon tullessa kolme lauantaina aamuyöstä. Tavoitteeksi oli asetettu kunnianhimoiset 4400 yhteyttä ja 5,6 miljoonaa pistettä. Tavoiteasetanta perustui edellisvuoden tulokseen ja parantuneisiin kympin keleihin.

Kusomyllyssämme tekivät töitä kaksi Elecraftin K3 transceiveriä, Acomin 2000A ja SPE 1K-FA lineaariset ja isossa mastossa (42 m) antennina kerrostetut biimit 10-20 m, 4-el 40 m ja dipolit sekä sloperit 80:lle ja 160:lle. Pikkumastossa (24m) pyöri 3-el SteppIR kertoimia metsästämisessä. Tässä tekniset perustat seuraavassa esitettävien antenni- ja kelikokeilujemme luotettavuuden arvioimiseksi. Lähestymistapamme täytti tieteelliset kriteerit vähintään kohtuullisella tasolla.

### Kelihavainnot

Seuraavat johtopäätökset perustuvat kahteen näkökulmaan: 3830:ssa julkaistuihin OH- ja SM-tuloksiin sekä omiin kilpailun aikana tehtyihin havaintoihin. Yleisesti havaitsimme, että kelit suosivat tänä vuonna sekä Pohjois- että Etelä-Suomea. Sen sijaan väliin jäävä alue Suomea kärsi keliin puutteesta. Asemia toki kuului mutta radioyhteyksien saaminen niihin oli vaikeaa. Oli siis ns. yksisuuntaista keliä, jollaisesta on käyty ajoittain keskustelua.

Erityisen selväpiirteisesti nämä ilmiöt esiintyivät kymppillä, jossa kelit etenivät tuttua kaavaa noudattaen: ensiksi idän asemat ovat kaakkois-Suomen radioamatöörien workittavissa, sitten seuraa pääkaupunkiseutu ja 10-20 minuuttia sen jälkeen on mahdollista saada nämä jo lähes tunnin kuuluneet idän ihmeet pohjoisemmassakin sijaitsevien OH-asemien lokiin.

Tänä vuonna edellä esitetty kaava oli poikkeuksellisen paikkansa pitävä. Käytössämme olleella 2x6 elementin kymppin antennijärjestelmällä on aikaisemmin ollut mahdollista päästä läpi heti pääkaupunkiseudun isojen pyssyjen jälkeen. Tänä vuonna edelle menivät jo dipoli- ja pikkutehoasematkin. Keli oli siis poikkeuksellinen. Erityisen poikkeuksellista oli se, että tämä kymppin kaava toimi aivan samalla tavoin ilman poikkeuksia jällekympille saakka.

Auringossa tapahtui siten kilpailuviikonloppuna jotain sellaista, jonka vaikutukset rajoittuivat suhteellisen kapealle alueelle. Yleensä näiden purkausten vaikutukset ovat voimakkaimmat mitä pohjoisemmille leveysasteille mennään. Uskonkin, että auringon tutkijoilta saadaan lähikuukausina uutta tietoa syistä, jotka johtivat nyt havaittuihin keli-ilmiöihin.

### Antennikokeilumme

Antennikokeilumme tulokset jäivät lopulta hyvin suppeiksi. Kaikki antennit menivät odotetusti viireeseen ja SWR oli kaikissa vähintään siedettävällä tasolla.

Seuraavassa bandikohtainen tarkastelu:

28 MHz 2 x 6el oli tehokas tykki. Sen voima näkyi erityisesti workittaessa kauaksi ja poimittaessa heikkoja pikkutehoasemia Afrikasta.

21 MHz ja 14 MHz 2 x 5 elementtiset kuten edellä. Kerrostamisen vahvuudet tulivat esille erityisesti pitkälle kuten Kaliforniaan ja Pacificiin workittaessa.

7 MHz 4-el kuuli ja lähetti odotetun hyvin.

3,5 ja 1,8 MHz dipolit ja sloperit: ei yllätyksiä ellei sellaiseksi lasketa 1,8 MHz:n länteen suunnatun sloperin kykyä workkia JT5DX suhteellisen helposti.

Kakkosmasto ja SteppIR. Kerroinantenni oli salainen aseemme. 500 – 700 W siihen tuotti kutsujasta riippuen hyvää tulosta. Joskus tuntui jopa siltä, että kertoimia saatiin helpommin kuin kusoja kerrostetuilla antennilla.

Johtopäätös: Antennimme olivat kohtuullisella tasolla kunnossa mutta erityistä huomiota ansaitsi kerroinantennimme tehokkuus. Toisin sanoen meillä on perustellut syyt jatkaa sen pohtimista, kuinka suhteellisen matalalla oleva 3-el biimi voi toimia jopa tehokkaammin kuin kaksi kertaa korkeammalla oleva useampielementtinen biimi. Sen selvittämiseen tarvitaan perusteellisempi tieteellinen tutkimus, jossa yhdeksi tekijäksi otetaan edellä aikaisemmin käsitellyt kelihavainnot. Luovassa voi olla aivan uusi näkökulma kilpailuaseman rakentamiseen.

## OG1M:n tulos

BAND	QSO	CQ	DXC	DUP	POINTS	AVG
160	137	8	44	1	149	1.09
80	139	11	55	0	167	1.20
40	309	29	91	0	562	1.82
20	568	39	127	0	1354	2.38
15	488	35	128	4	903	1.85
10	499	39	138	1	1096	2.20
TOTAL	2140	161	583	6	4231	1.98
=====						
TOTAL SCORE : 3 147 864						

Eli karkeistain: Saavutimme puolet tavoitteestamme, joka oli kuitenkin asetettu järkevästi ja jonka voi sanoa olleet sopusoinnussa sekä Pohjois- että Etelä-Suomen tulosten kanssa. Jotain poikkeuksellista oli siis kisan aikana ilmassa, kun jäimme näin pahasti tavoitteesta.

## Toissijaisia havaintoja

1. Pystyimme kiistatta osoittamaan, että esimerkiksi japanilaisia asemia voi helpoiten workkia 40 metrillä suuntaamalla antenni suoraan koilliseen. Esimerkiksi pitkäaikainen koikeilumme workkia niitä suoraan etelästä tekee kusion saamisen liki mahdottomaksi,
2. Alaskan workkiminen kaakosta ei sekään onnistu,
3. Low Power –luokan kenialaisasema ei kuulu kymppillä 90 astetta sivuun biimattuna, vaikka klusterin mukaan kaikki muut sen kuulevat,
4. 3-el SteppIR tuotti CE –kertoimen 20:llä loppuillasta läpi sikäläisen iltpäivän jenkkimuurin. Edellisvuonna sen murtaminen ei onnistunut edes 2 x 5 el:llä. Tämä kokemus tukee edellä esitettyjä havaintojamme pikkuantennin tehosta.
5. Neljän edellisen havainnon perusteella on tiivistymässä johtopäätös, että antennin oikealla suuntaamisella on jonkinlaista vaikutusta yhteyksien syntymiseen.
6. Kesken kuumen kisan on syytä siis varmistaa, että näyttölaitteen lukema ja pihalla seisovan maston antennisuunnat ovat yhtäpitävät. Näyttölaittejärjestelmään liittyvä maston potentio-metri onkin siksi syytä asentaa siten, että se ei pääse vapaasti pyörimään. Niin torjutaan tilanne, jossa näyttölaitte vain arpoo suuntia eikä osu oikeaan kuin sattumalta.

CQ WW SSB 2011 oli hieno kisa. Tiimimme oppi siitä paljon.

## Seppo Sisättö OH1VR



Vexi OH3LB kertoimia metsästävässä ja Hannu OH3WW run-aseman operaattorina. CW WW SSB 2011.



OG1M:n 'kisamenestyksen' avain: suunnannäyttöpottikka. (The component that determines the random ANT-azimuth at OG1M)

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**Featuring a real RADIO AMATEUR – Veijo Kontas, OH6KN**  
Ilkka, OH1WZ



Veijo in Arkala by OH6BG.

I met Veijo the first time in 2007, when visiting radio Arkala, and staying at his place, in a suburb of Oulu. It did not take me long to realize that here is a radio amateur of the kind that are not being manufactured anymore. The Oulu trip was the start of the OH8X Cycle 24 project, and it was about joint brainstorming, engineering and the OH8X pilots (See photo on the right). The drivers OH2UA, OH4JFN and OH6UM came up with ideas, and it was Veijo's role to quickly decide if these were feasible. The motivation for him was of course that he would need to plan the circuits, acquire components, write the needed C/assembly-code, and build and install everything. Well not quite, as OH8X is about teamwork, and for example the antenna control software was being acquired from a third party, as I recall. I recall also fleeing the company and sneaking to Veijo's home-lab; it was filled with high-tech instruments and handbooks, oh yes, but I could only recognize the soldering iron. An engineer's lab it was.

Somehow after that trip and visit to OH6KN I felt that I myself missed something, because I chose differently in 1987, and did not go for HUT-electronics. I felt back then that I might risk a good hobby if the work had any overlap with it. I asked Veijo this question, but he saw no problem in that, and did not, when he once entered Oulu University/electronics. The exciting fact here is that Veijo is at the top in both fields: amateur radio and professional electronics (Nokia). Somehow I wanted to shed some light on this in this OH6KN-profile.

But Veijo's home wasn't Oulu. Oulu is in the OH8 call area. Young OH6KN became QRV in Seinäjoki. The same 1959 cohort in Seinäjoki

region had also many other hams. One was Pasi, OH6UM, long-time friend and a hardcore contender. OH6KN was very young when he got the licence and he now has been QRV during six decades. This also means that Veijo has modified everything from Drake C-lines to the modern Yaesu radios.



Oulu, young OH8X pilots @OH6KN, the station main engineer is listening for wishes concerning the cockpit. April 2007.

In OH, Veijo is most well known for his roles in OHDXF (President) and OH8X (Main engineer). I called a few of OH hams to prepare for this profile, and heard words like 'organized', 'diplomatic', and 'relaxed, yet determined'. "Yes, I remember the little OH6KN well, when he tapped me on the shoulder at SRAL camp sometime in early 1970s – he was maybe 12, but wanted to get DX-hints from me", said Hannu OH1XX, the #1 OH DXer. I prepared many Qs for Veijo, and he was very



kind and answered them all in one single respond, which follows below. You can reverse-engineer the Qs.

*"I was born 1959 in Lapua (OH6 land) into a family of a doctor father and a nurse mother. Even though being a medical doctor, my father was very scientifically oriented and he took me to the radio classes at OH6AC. I passed the Novice exam in 1970<sup>6</sup> and got call sign OH6KN and my father got OH6KM. The general class license I got 1972. For a couple of months I was the youngest ham in Finland.*

*The 70s was very active operating time. I had a reasonable station at home and did lot of DX-ing and contesting. From time to time I contested also from the local big stations, like OH6AC, OH6AM multi-multi and OH6JW and this was very often with Pasi, OH6UM.*

*One important period in my life was being as an exchange student in Los Angeles in 1976-77, where I lived in a ham radio family. There I got to know the Southern California DX Club and amongst others, the world famous Don C. Wallace, W6AM. In LA, I also got a deeper exposure to the 'modern electronics' (of 70s). This interest quite much inspired my professional carrier.*

*The first half of eighties was spent at the University of Oulu, where I got a MSc degree in Electronics with variety of sub specialties, like SW, RF, DSP and general HW. I sort of liked all areas of the art. I got married in early 80s with my high-school girl friend, Marja OH6EZ and good resonance produced two wonderful daughters in late 80s.*

*This is when the pushed back hobby started slowly to flourish, like cactus in the desert after 10 years without water. Especially after divorce in 1996 I got sucked big time in to the hobby, as much as the busy work at Nokia allowed. I first upgraded the station at home and then in 2001 started to realize the 'Arcala dream', that I apparently had inherited in blood from my father. Juha, OH8NC joined the odyssey quite early on and the rest is history.*

*It took two years to wade through 100 estate candidates with quite strict criteria. In 2003 we purchased the land and set up 4 towers and the old shack and contesting began right away. The next few years was mostly spent on improving the antennas and building the station automation in phased manner. Pasi OH2IW/OH6UM was the main contester and most contests were single band during plummeting sun spots. In 2007, the gear was changed drastically, when Martti, OH2BH and Toni OH2UA and couple of others joined the Arcala gang. More antennas were built and the automation was restarted based on inno-*

*vation by the operators - 'the F1 drivers'. The concept of the current cockpit was born and the rest was execution, even though quite tedious one. Arcala has an organization and I am the 'CTO' as well as the main 'worker ant' of the Oulu station. I've spent to date around 5000 hours in the project (time equals to building of 3 houses). The culmination of the construction was the erection of the M7 monster 160/80m yagi. Development continues in areas like remote control, but also just to maintain Arcala class station takes fair amount of time.*

*Looking at the hobby as whole, I find 3 areas of most interesting: high-end technology, DX-ing and contesting, maybe even in this order. All Arcala aluminum has given DXing quite a different perspective. I've also participated to couple of DX-peditions to the Pacific and one to 5R8 and that's big fun. I've served long time on the OHDXF board and lately also as the President. On the contesting side I've been following many / all of the testers at Arcala and learnt a lot and every now and then it is fun to run some 'manageable' contest like SAC – kampen. In 2002, I got hooked to WRTC, where I was in charge of score board and part of the financing. In 2006, in Brazil, I was again in charge of the scoreboard. In 2010, I was just helping the two Finnish teams in Moscow and plan to be there in 2014 in the W1-land.*

*The technology part of the hobby deserves a chapter of its own. At Nokia I've done quite a successful career managing the micro circuit development for almost two decades. It required one to be always on the top of the technology on global level. The same philosophy has been applied to Arcala technology – aim high and then execute. As I've witnessed the tube era, the birth of the microprocessors and phenomenal development of the silicon technologies, it is just natural to see, that new technologies like digital modes, remote control, advanced SDR radios, etc. come to our hobby. Some of these can have major impacts in eg. contesting and DXing and not always positive ones. Today probably the hottest topics are skimmer in contesting and remote stations in DXing. About skimmer I tend to think, that it is fine as long as it is located within the general 500m station rule. Using remote stations in DXing the DXCC rules set the stage quite well. And it certainly doesn't allow to use a RX on the other side of the world for that rare low band DX. Technology continues to develop at blazing speed and it is important, that hams are in the front line, but also the rule makers have to be well alert to update the rules to match the time."*

<sup>6</sup> Eds. It should be 1969, but since Veijo could not find 100% proof, that it was 1969 – he says 1970.

During the past years of publication of PileUP! Magazine, capturing the OH2AM story in words and pictures was discussed on a number of occasions<sup>7</sup>. However, this was something that was never accomplished for a variety of reasons. But it is true that the OH2AM story has affected OH contesting greatly. The actual details and victories have lived through the years around camp fires into the small wee hours. Now some 50 years later, the OH2AM saga is still reflected in numerous activities and on the pages of "The Last Blast".



To recognize the original OH2AM group – the OH2B's - from the 1960's, here is a rare picture taken at their Sorvalampi radio site:  
standing from left; OH2BW, OH2BH, OH2BBM and OH2BS and  
seated from left; OH2BQ, OH2BC, OH2QV, OH2SB (SK) and OH2BBR.  
(OH2KH is missing)

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<sup>7</sup> This is quite true, another even older story that waits for writers, is the OH1AA m/m legend.

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## PileUP! Hall of Fame members elected

Friends of PileUP! gathered downtown Helsinki on Nov 19, 2011 to celebrate the work done with PileUP! during 1997-2011 and SAC 2011. The current editorial board had also the pleasure to invite people as nominees of a special award, membership in the PileUP! Hall of Fame. Namely, we felt strongly that some people have done a great deal for the common good. And we faced a problem since so many people had done good. In total six hams were selected to the Hall of Fame on this first occasion. They were:

**Martti, OH2BH.** In the last 10 years, Martti's role in the very existence of PileUP! has been crucial. He provided with ideas, editorial content, stories, contributors, and mental support.

**Timo, OH1NOA.** Editor-in-charge for the first nine years and now again in 2012.

**Jari, OH3BU.** Reliable regular contributor, whose articles compelled the readers to think.

**Olli, OH0XX.** Olli was simply the favorite of the editors. Daring writer with pleasant QSLs.

**Ilkka, OH1WZ.** This person makes an issue of PileUP! from chipboard if needed. He has been a regular contributor from the beginning in 1997.

**Esa, OH7WV.** Esa is an endless source of PileUP! humor, which was essential in keeping editors, writers, and readers going.

In addition, we awarded **Juha OH1JT** for the best SOAPBOX Trophy (Sponsored by OH1WZ) in SAC 2011. <http://lists.contesting.com/pipermail/ccf/2011-September/010133.html>

To acknowledge the exceptional work done for the SAC contest, **Kim OH6KZP** was given a special PileUP! trophy 'Best SAC manager 2011'. **Ari, OH6MW** won both writing contests of PileUP! and received a trophy for his outstanding merits as a writer. The tubes for the trophies were sponsored by Ilkka OH1WZ, Esa OH7WV, Manu OH7UE and Juhani OH8JT. Trophies were manufactured by OH1WZ and the USB and LSB harmonics (10 yrs).



Mr. CCF Cruise, Pasi OH6UM; Olli, OH0XX; Jari OH3BU; Ari OH6MW and Tomi, OH6EI.



PileUP! 15(4½), a special 3D issue in 4 pages was available at the Nov 19 meeting, and there only.



Martti OH2BH and Leena OH2BE. A week later they were 9H9BH in CQ WW CW.



Juha, OH1JT receives his trophy, OH2XX and OH2MA in the front.

## SAC 2011 Spronsored PileUP! trophies - Winners Ilkka OH1WZ

In PileUP! 15(4) special PileUP! SAC trophies were introduced on page 11. They numbered 15, and each trophy was sponsored by individual amateurs in Norway, Sweden and Finland. The idea was to promote participation of non-Scandinavian stations. PileUP! editors promised to nurture the project. This included promotion, trophy manufacture, organizing the lottery of winners, and finally the mailing. The campaign is non-recurrent, but hopefully something similar springs up for 2012.

The objective in having a Best SoapBox trophy was to promote writers and to get material for this issue. Unfortunately the log-robot at sactest.net treated soapbox comments brutally. Namely, any special characters in the log file's soapbox, or address line, prevented the log from being accepted and stored into the database. I had to go for the e-mail reflector stories and this is how the winner, OH1JT was found.

The other trophies were based on the final results, which were obtained in the beginning of November. The rules were such that several stations could qualify for a lottery, where the final winner was drawn. This lottery took place in Cantina West restaurant in Helsinki on November 19. We had prepared an MS-excel spreadsheet for the lottery and used the random number generator (rand) of Excel to determine the winner. The different number of 'lottery tickets' per participant was considered. Leena OH2BE pressed the F9 button (draw of the winners), while 14 OMs witnessed the event. Luckily someone™ remembered to record the winners.



The lottery. Leena OH2BE pressing the F9 button, and Juha OH8NC is wondering what is going on.

The lottery xls -file can be seen at  
<http://www.helsinki.fi/~korpela/PU/CW/>

The (donors) and winners of the trophies were

SoapBox	(OH1WZ)	OH1JT
Baltic CW	(OH5NQ)	LY2BKT
Baltic SSB	(SM5AJV)	LY1SR
Oceania	(LA6FJA)	ZM2B
NA CW	(SM0IMJ)	N4RV
NA SSB	(OG9X)	K7RL
AF/SA	(OH6XX)	5R8FU
JA	(OH1NX)	JA2KVB
EU	(SM6LRR)	UY2IG
BY CW	(OH7WV)	BA1GN/8
BY SSB	(OH7WV)	BA1SN
Acc CW	(OH2UA)	UT8UL
Acc SSB	(OH6KN)	DJ4MH
Mult CW	(OH2BH)	UN9GD
Mult SSB	(OH8NC)	RW1CW



PileUP! Hall of Fame and SAC PileUP! trophies under construction. The engraved 'gold-plated' plates are still missing. The EL-34 trophy (left) went finally to OH7WV for the Hall of Fame membership. The one on the right was reserved for SAC.



PileUP! Hall of Fame members OH1WZ and OH0XX (tube is 813 from BY by OH7WV) send regards to SM-land! and to all trophy winners.

PileUP! editors warmly thank the donors of PileUP! SAC 2011 trophies.



## Good bye DXing,

In the Old Days we didn't need a cluster to identify Gus Browning. His fist was enough. The attitude in that era was not "me me me first" – we used to help fellow hams to get the rare DX.

Of course that was a long long time ago. It was before the Super Amps, DX Cluster and ... skimmers.

The past several years I have tried to work DX with a wire antenna. It used to be rewarding and fun. But no more.

I could work the DX if I found it before it was spotted on the cluster. Now it is almost impossible to do that because the skimmer spots are almost immediate. I have told W3LPL what I think about his robot system, but he insists to carry on despite of many of us disagreeing.

So what happens today: I have found a DX using the "old fashioned" way of turning my VFO. Before I have chance to call, the cluster spots comes in. In a few seconds there will be several carriers on the frequency - the automatic linears by users who don't care. There will be an uncontrolled chorus calling the DX and nobody listening if the DX is working split or not. And if the DX is really rare - at least here in EU - there will be the jammers. I know the fist of some of these "old bitter" types. But what is the joy they get from their activity?

DXing used to be fun. But no more. The propeller-head computer neirds have turned it into a computer game. My pain limit has been exceeded.

Good Bye Dxing. I still find some enjoyable QSOs using QRP power. There are still some gentlemen in the hobby. But how long?

**73 Emppu OH2BF**

Mitä laihialaiset hamssit tekevät kun tulee kylmä? Kokoontuvat istumaan lineaarisen ympärille. Entä mitä he tekevät kun tulee oikein kylmä? Pistävät lineaarisen päälle.

Mitä eroa on multi-multilla ja hautajaisilla? Hautajaisissa yksi ei ryyppää.



Saatuaan kylkiluunsa kuntoon, PileUP!n Lönnrot, Kohosen Rane jatkoi perinnekieruettaan eteläisemmässä Suomessa kielten viilennytyä. Lämmikkeistä ei toki olisi ollut puutetta pohjoisemmassakaan, päinvastoin.

Tällä kertaa Ranen kontaktit olivat hyvin vapaaehtoisvoittoisia. Hän pääsi tutustumaan organisaatioon, joka on useimmille täysin tuntematon. Kyseessä on Vapaaehtoinen kisapalvelunopeutusjärjestö, Vakipano.

Vakipanon jäseniltä herui ainakin tämä perinnesanonta:

*Mouhijärvi: "Joka kuuseen kurkottaa, saa dipolinsa kuuseen."*

Lisäksi varsin huumoripitoiselta organisaatiolta irtosivat seuraavat sanonnat (Paikkakunta tuntematon):

*Lukee kuin piru Radioamatööriä.*

*Joka vanhoja muistelee, tietää workittavat kertoimet.*

*Joka viimeksi nauraa, on voittanut kontestin.*

*Ja viimeisenä: Mikä perkele siinä on kun huonot kelit aina vituttaa?*

Valitettavasti ensimmäiseen hankkeeseen saadut tuohikirstu ja siinä ollut sisältö on edelleen teillä tietymättömillä. Kirstusta viis mutta PU! toimitus harmittelee menetettyjä kolmea kossupulloa.



## Term & Acronym Doctor –

Terms explained visually – so that You know.



**RBN.** That's simple. It stands for Reverse Bursting Nelly. The stuff you send out there is at your sight after a short delay. And you can see others' too.



**Skimmer.** With this device you can get the juiciest pieces from the RB-Nelly.

**Assisted.** A term that usually relates to something abnormal. For example a ..hatching, a ..sex, or a pass, as in basketball or ice hockey, that enables the receiver to score a goal. This term is the first in the history of the Visual Term Doctor that could not be etched.. oh, wait a while, this might do?...



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**Model A.** "Never heard you but it was a QSO?"

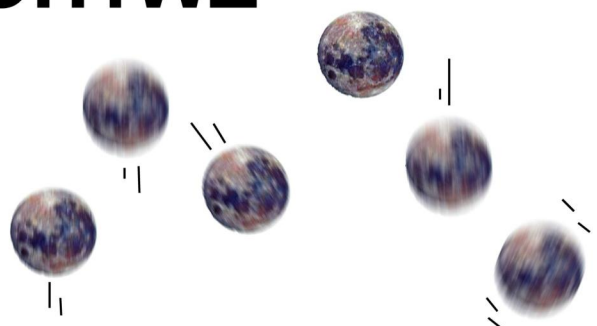


**Model B.** for SWV hams, who report having viewed someone in the RBN/DX-Summit listings.



**Model C.** "Moonbounce"

# OH1WZ



Thanks for the EME QSO

## SDR:n ja CW Skimmerin puolesta

Jukka OH4MFA, OG4T

**Operaattori:** topbandilla viihtyvä sunnuntaikon-testeri, tykkääenimmäkseen plokkailla, ei pidä assisted luokkia kaiken pahan alkuna, pitää nettiklusterivihjeitä aika turhina johtuen niiden yleensä heikosta kuulumisprosentista, CQ:n kutsuminen on operaattorin mielestä epämiellyttävän rasittavaa (kun/jos yrittää kuunnella kaikki hiljaakin pihisevät asemat, jotka kuuluvat milloin mistäkin suunnasta, vasen kynnärpääkin taas vihoittelee CQWW:n ja Stew Perryn jälkimainingeissa kiertokytkinten vääntelystä).

**Setup:** PMSDR-vastaanotin, antenni sama kuin rigille, EMU0202 äänikortti, PC + CW Skimmer, Loki-PC + N1MM WLAN yhteydessä CW Skimmeriin portissa 7300, nettivihjeitä ei bandimapissa.

Vain yhdenbandin vastaanottomahdollisuus kerrallaan näillä laitteilla. Perinteisellä metodilla plokkailla ison kisan alkuvaiheessa operaattorilta meni helposti tunti kelatessa koko bandi alhaalta ylostai ylhäältä alas. Skimmerin avustamana bandin selaus nopeutuu huomattavasti. Ctrl + nuoli alas/ylös näppäimillä pompitaan kätevästi workkimattomien eli sinisten ja punaisten spottien kohdille.

Operaattori pääsee monesti kovempaan rateen plokkaamalla kuin CQ:ta kutsumalla. Aikana ennen skimmeriä, kun bandia oli selattu kisan kuluessa aika monta kertaa läpi ja kyllästymiseen saakka oli kuunneltu samojen asemien CQ:t, siihen alkoi suorastaan tympääntymään. Nyt ei ole tarvetta jäädä kuuntelemaan jokaisen CQ TEST aseman kutsua loppuun; band mapissa kutsu näkyy harmaana, silloin kun se on jo aiemmin workittu.

Skimmerin avulla voi keskittyä selaamaan manuaalisesti tyhjän näköisiä kohtia bandimapissa, tai yrittää workkia sinne ilmestyviä uusia asemia. Ei pitäisi jäädä montaakaan lyhyemmänkin aikaa CQ:ta kutsuvaa asemaa huomioimatta. Kaikki hyötynevät kusomäärien mahdollisesti kasvaessa.

Harvinaisuudet löytyvät, kun selaa skimmerin näytöltä isot pileupit. Kaikkia DX kutsuja ei siis tule spottina, kun eivät välttämättä anna montakaan kertaa kutsuaan tai ovat muuten vaan heikkoja kuulumaan. Yleensä Skimmerin spotiksi kaima asema kuuluu, ei tosin aina. Se on muuten aika sitkeä kaveri kuuntelemaan eli QSB:n vaikutuksen kyllä huomaa. Joskus täytyy hieman taajuutta säätää, johtuu ehkä vasta-aseman siirtymästä. Kahdella VFO:lla voi kikkailla pause na-

pilla ja plokkailla kahdella VFO:lla vuorotellen, kun joutuu aina välillä jonottamaan.

Kontesti- tai DX-pileupissa on kätevää seurata Skimmerin näytöltä, mistä asema poimii kutsuja lokiin. Varsinkin isot peditiot harvinaisemmissa paikoissa aiheuttavat niin leveän pileupin, että on muutoin melkoisen hankalaa löytää sopivaa kutsumisjaksoa. Eli Skimmeri ei ole pelkästään kontestikäyttöön sopiva apuväline.

Kun operaattori joskus sattuu kutsumaan CQ:ta, silloin Skimmerin tuoma hyöty vähenee, koska sen tehollinen kuuntelu-aika lyhenee. SDR:n etupäätä suojaava rele kytkee antennin pois päältä lähetyksen ajaksi. Lähinnä sitä voi hyödyntää visuaalisena apuna siihen onko joku vastaamassa. Suurin apu taitaa olla siinä, että operaattori löytää bandilta melko helposti suhteellisen tyhjän reijän, johon mennä kutsumaan.

Skimmeri antaa myös turhia spotteja tai kopittaa jotain väärin, elia semien kutsut on vielä kuunneltava ihan omin korvin ennenkuin lyö kuson lokiin. Mikäli bandilla on muutakin liikennettä kuin varsinaiset kisa-asemat, niin ne CQ:n kutsijat voi laittaa "mustalle listalle", eivätkä tule sitten uudelleen häiritsemään.

SDR+Skimmeri on antanut operaattorille uutta intoa osallistua kisoihin. Joissain pääsee assisted luokkaan, joskus saa laittaa lokin multiop-luokkaan. Muuta ei operaattori tarvitsisi kuin isomman linukan, ettei tarvitsisi niin pitkään jonottaa. Liian usein jää kaukaisemmat asemat vielä oman lokin ulkopuolelle. Ja SDR-vastaanotin jossain hiljaisessa paikassa nettiyhteyden päässä saataisi helpottaa myös kaukaisten asemien kuulemistakin. Mutta se on sitten jo ihan toinen juttu se. Kisoissahan yleensä ottaen antennit pitää olla kytkettynä kaapeleilla radioihin.



Olenneaisimmat rautaosat: äänikortti ja SDR-vastaanotin.

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### Muut lehdet – In other Journals

Vitniss-lehti 11/2011: "Pään hakkaaminen seinään kuluttaa 150 kaloria tunnissa".

### Tapahtumia – Events

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### Sekalaista – Miscellaneous

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Email: [adhd@contesting.com](mailto:adhd@contesting.com).

Searching for corporate sponsors for a scientific experiment. As already theoretically proven, a bad contester in a good 3-point location will beat hands down a top-contester in a bad 1-point location. I want to prove this experimentally. One of the world champions in SOHP will be forced to operate from a tribander station in Kuusamo, Finland. I want your money so that a bad operator (that's me) can go to a two-week vacation in Caribbean and activate one of the bigger rental stations in CQWW SSB. I accept cash, travellers cheques, international money orders, and PayPal. For more details email: [whiner@contestclubfinland.fi](mailto:whiner@contestclubfinland.fi).

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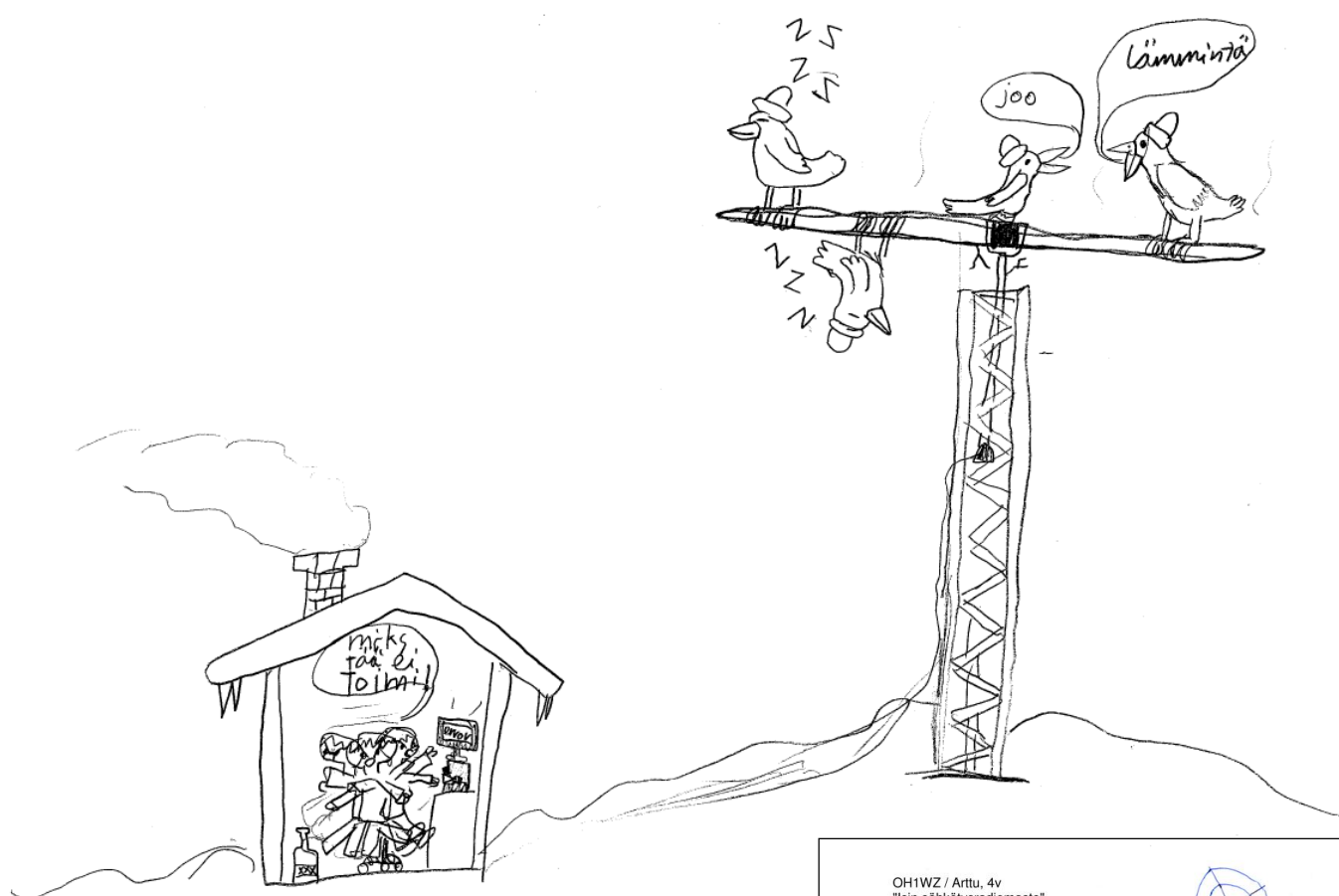
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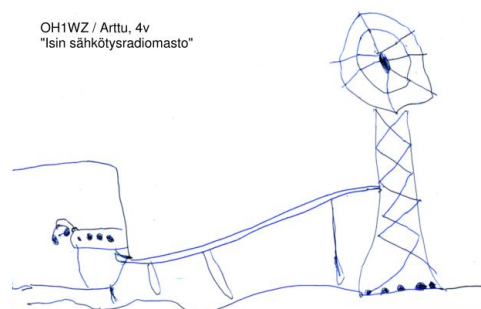
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VASTAANOTTAJA, Addressee



Arttu, 10. "Why isn't Dad getting any signals out?"

OH1WZ / Arttu, 4v  
"Isin sähkötyösi radiomasto"



PileUP! 10(1) had this back-cover by the same artist. OH1WZ went from QUAD to STEPPIR in 2006-2011.