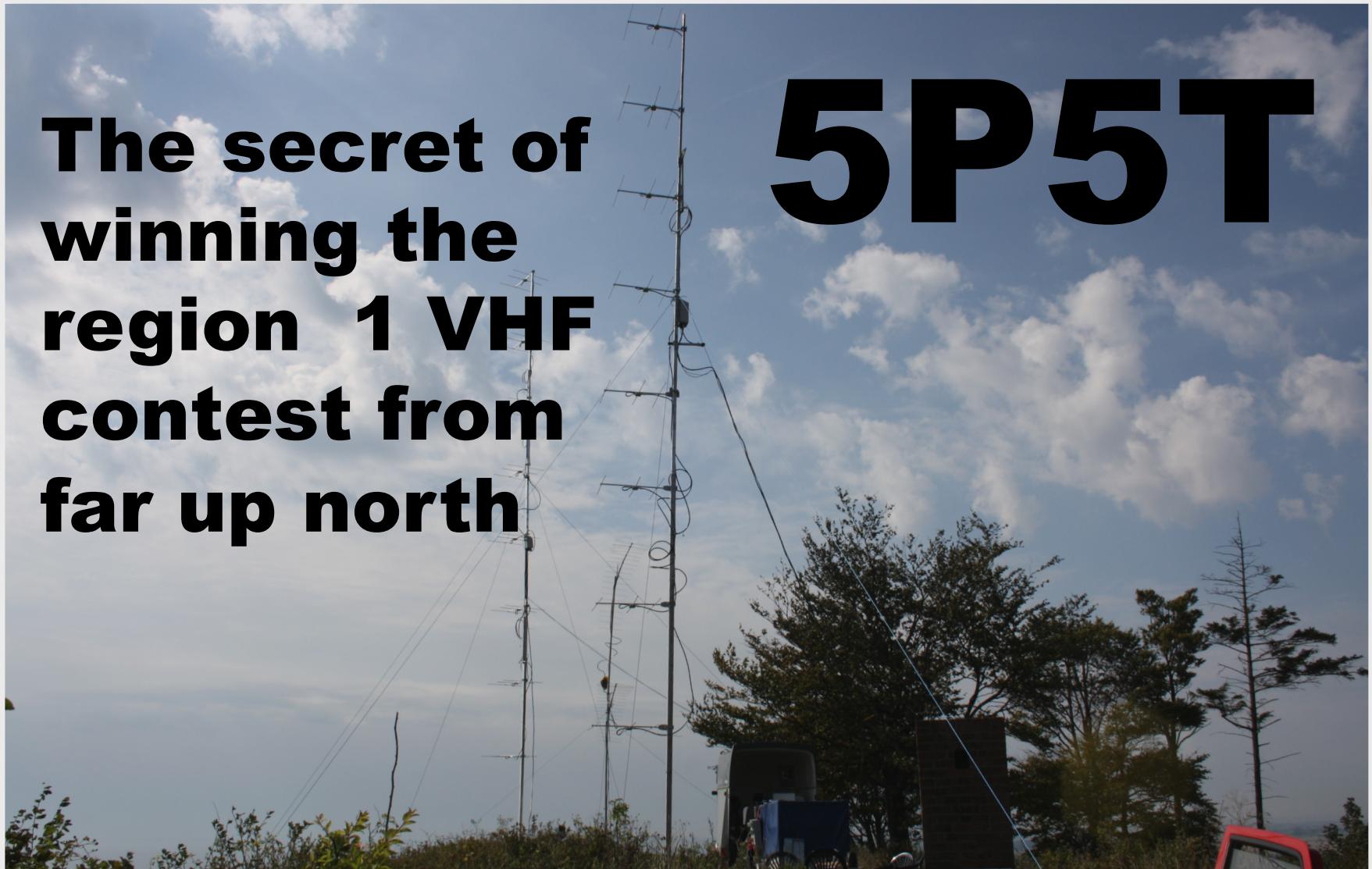


**The secret of  
winning the  
region 1 VHF  
contest from  
far up north**

**5P5T**



# Who are 5P5T

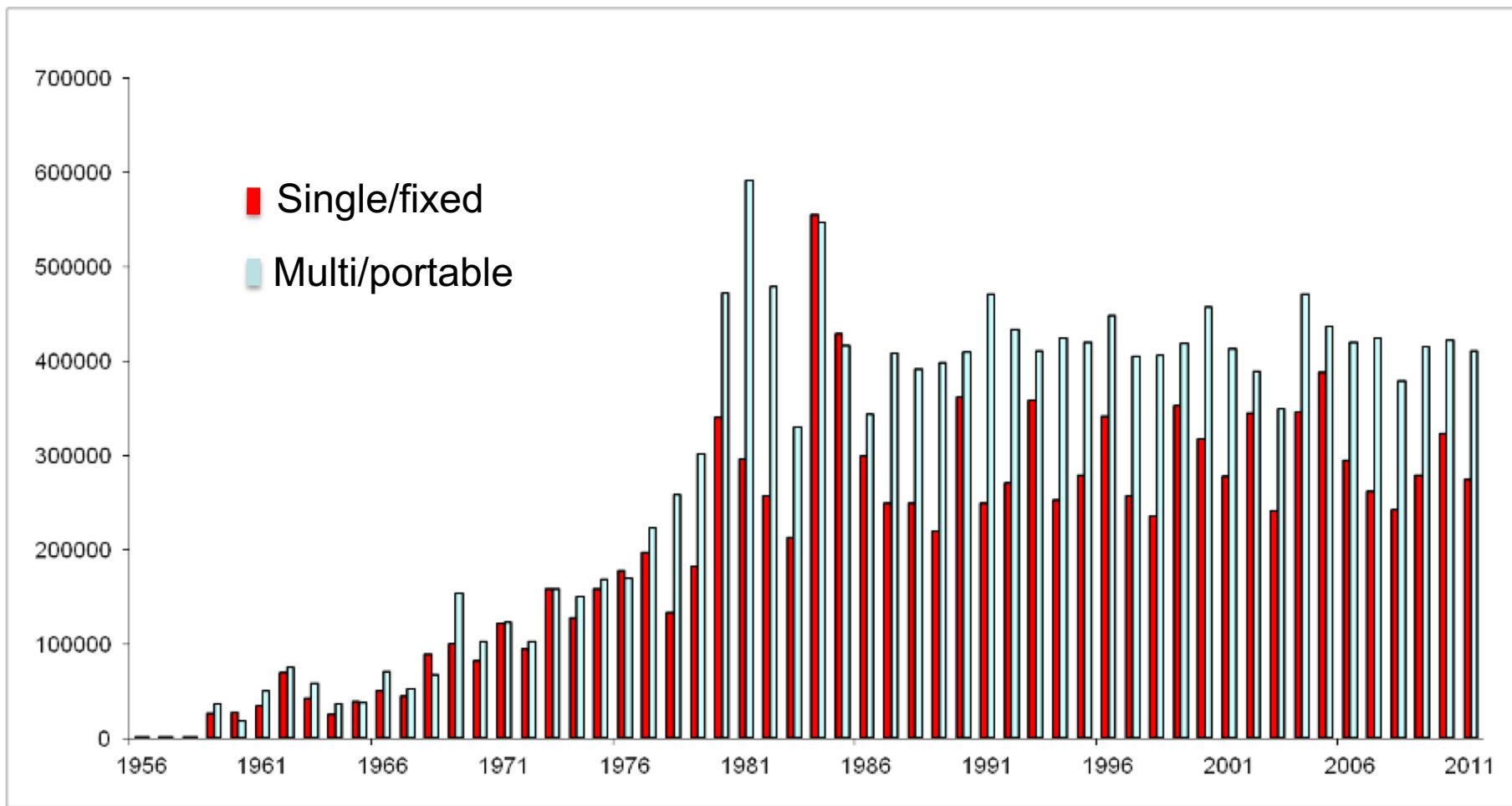
- OZ1DJJ/OX3LX
- PA5DD/OZ1DOQ
- OZ1GER
- OZ5BD/OX5T
- OZ1FDH
- OZ1HDF
- AG6QV/OZ1GPI

# Why this fascination with the region 1 VHF test?

- It is by far the largest thing you can dream of winning in a VHF contest. It doesn't get any bigger!
- You need state of the art equipment and the best operators. Sometimes miracles happen!
- My own dream started in 1979, -a few months after I got my license...

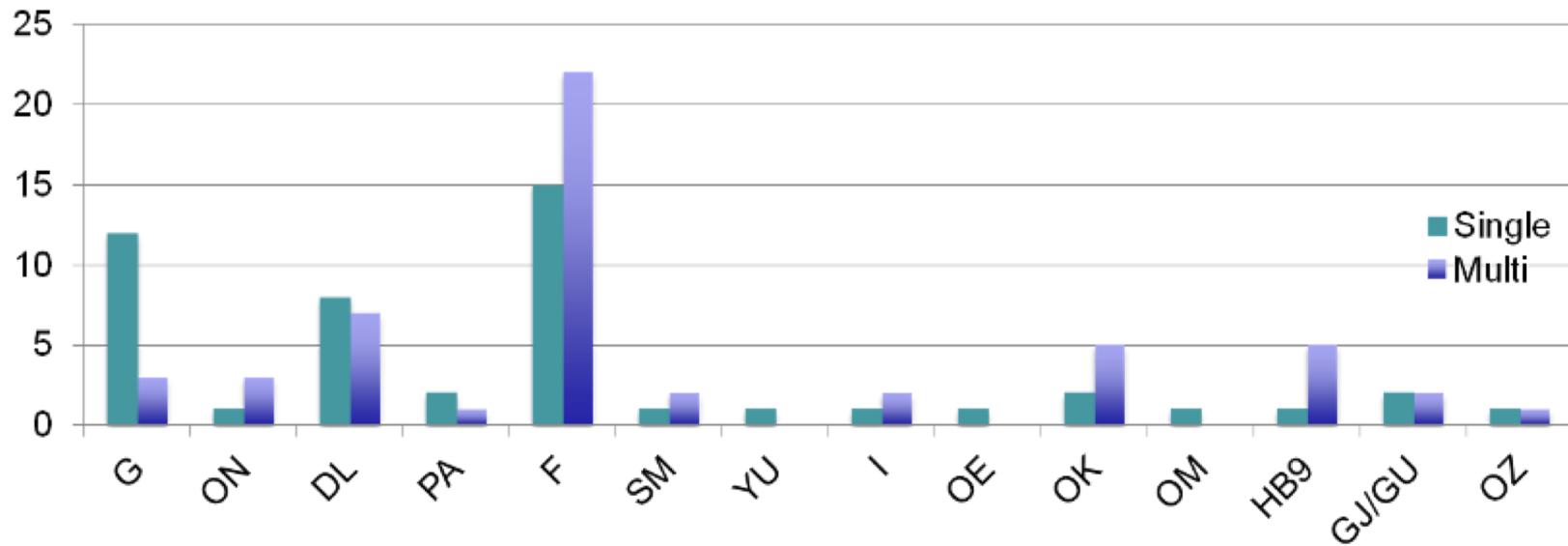


# Winning scores 1956-2011



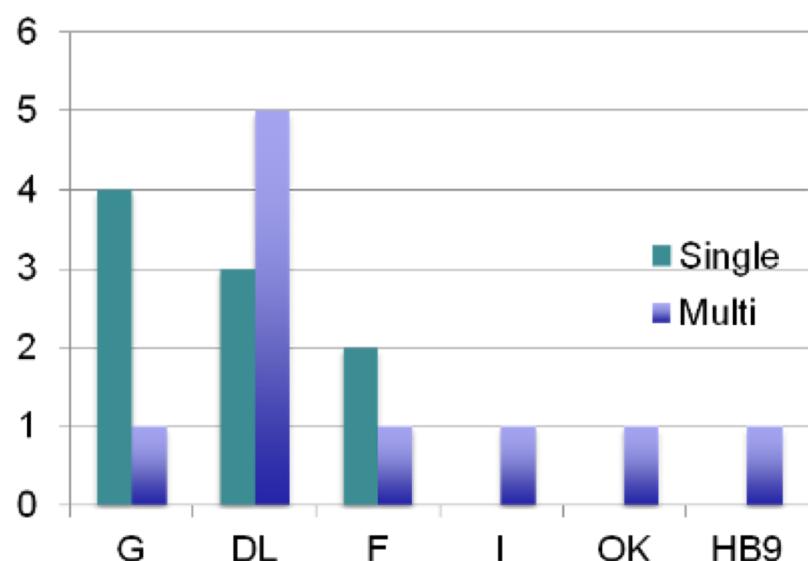
Records: Points OK1KHI/P 1982, 591,000; QSO's DL0GTH 2006, 1245 QSO

# Distribution of winners by DXCC



1956-2011

2001-2011



# 1969

## —the golden year for OZ!

DANISH VHF/UHF STATION

# OZ1OZ

QTH: » LINDEBALLE «

QRA: EP17E - 135 m o/SEA

TO RADIO	DATE	GMT	MC	RST	
			144-432 1296		

OPERATORS: OZ9PZ POUL & OZ2CV CARSTEN

PSE/TNX QSL

VY 73

VIA P. BOX 39 . DK-7400 HERNING

OR VIA BUREAU

Meldgaard Tryk , Herning.

### 1. 144 MHz - stående QTH

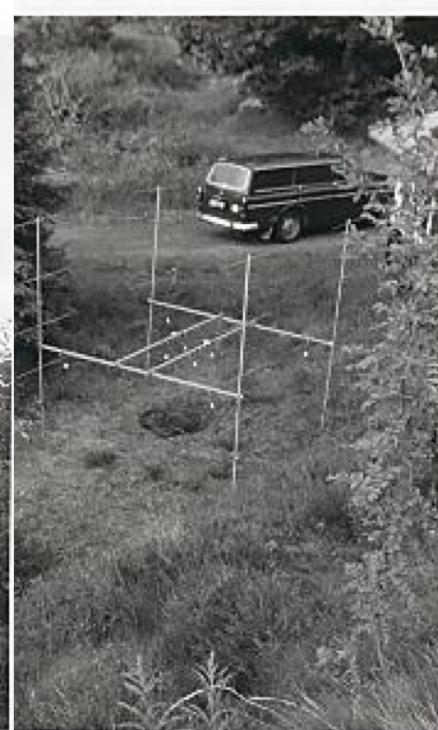
1. OZ1OZ	100 765
2. OZ6OL	95 427
3. G2JF	86 558
4. PD3HEL	59 792
5. DLØBR	56 911
57. OK1VHN	19 551
69. OK1VCW	17 741
72. OK1NQ	17 347

### 2. 144 MHz - přech. QTH

1. SK6AB/7	153 497
2. SM7BZX/P	137 873
3. OZ9SW/P	106 873
4. DK3GG/P	89 867
5. OZ3PU/P	85 736
12. OK1PG/P	65 928
24. OK3CDI/P	51 223
37. OK3HO/P	45 244

# OZ1OZ 1969

- RX: 6CW4
- TX: QQE 06/4
  - x-tal controlled only AM and FM
- Ant 4x6 el
- Operators OZ9PZ, OZ2CV, OZ2ND and OZ5GN
- The trophy never arrived, but 1969 was not a good year in OK.



# 1973 –also a good year for OZ

- OZ9OT/A from southern Fuen
  - Ca. 300 QSO
  - 48 el group ant. And 4cx250 PA
  - Operators OZ9OT og OZ5DE

## Sektion 1 144-MHz-Feststationen

1. F9FTA 94.857
2. OZ5TE 85.190
3. DC8EEA 80.831
4. DLØPT 79.508
5. DK2MNA 78.284

364 Einsendungen

## Sektion 2 144-MHz-Portabelstationen

1. OZ9OT/A 103.040
2. PAØZAZ/p 92.914
3. OZ1OZ/p 91.711
4. OE5XXL/2 88.985
5. DK3GG/p 85.310

303 Einsendungen

# OZ7TST –another active OZ station back in the 70'er and 80'es



# Sněžka –Czech Republic

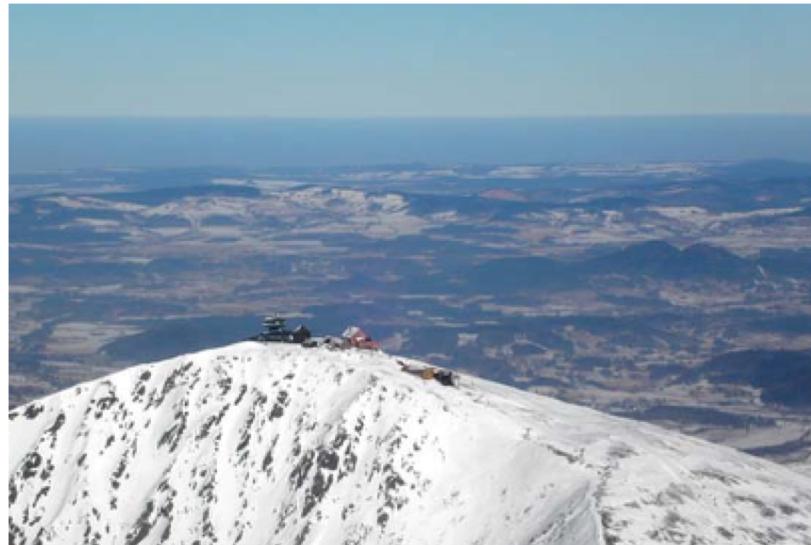
## September 3 1981



1602 m ASL HK29b

# OK1KHI/P 1981

- Absolut all time record of 591,000 points and 1103 QSO
- A modest station achieved this fantastic result
  - 2 x PA0MS yagi
  - PA with QQE 06/40 80 w
  - 2nd RX didn't work

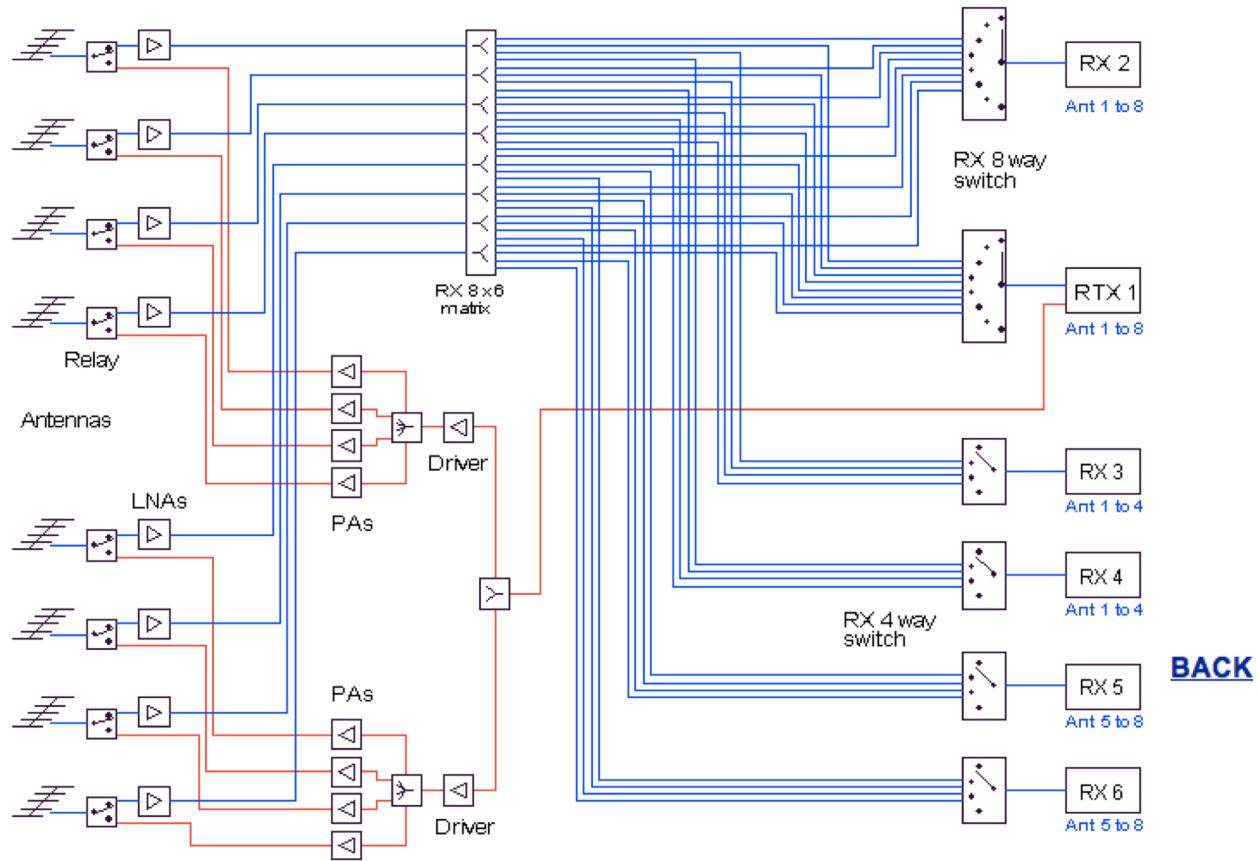


1602 m ASL HK29b

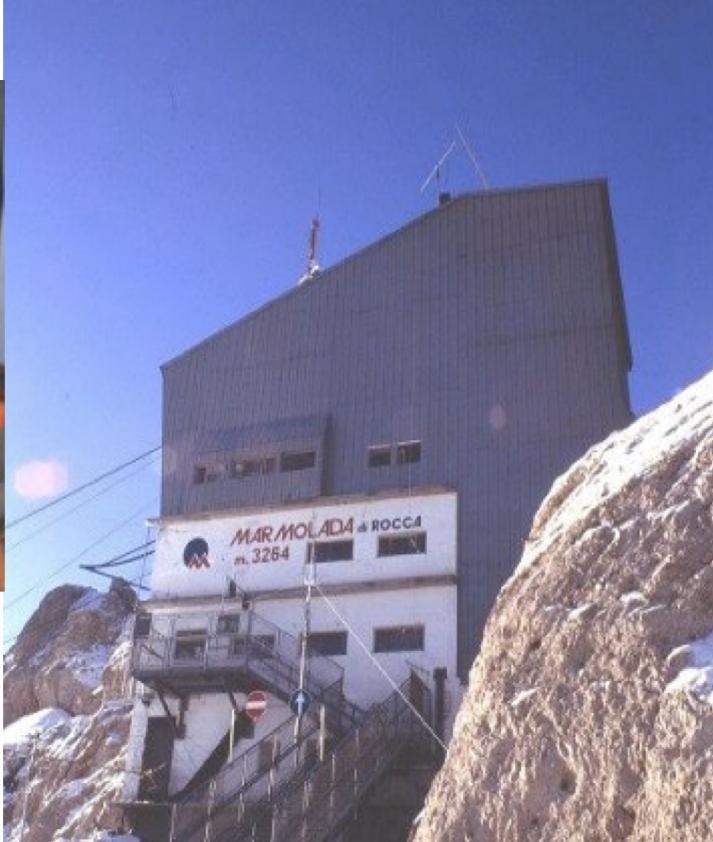
# BIG set up: IO3V, winner 2001

- 3264 m ASL
- 8 x antenna systems
- 8 x PA
- 4 x 2nd RX

Winner with  
987 QSO og  
417,00 points



IO3V  
JN56



# DR9A –winner 2006, 2009-2011

- QTH in Schwarzwald  
JN48 ca. 850 m ASL
- 38 m mast with multiple  
ant. systems
- Also winner of the UHF  
contest on 432 and  
1296 MHz from the  
same QTH



# Central European QRM!

OL4A

DM7A



-a potential source of neighbour conflicts ☺

# How is it possible to win the region 1 VHF test from OZ these days?



OZ1DJJ, OZ1FDH, PA5DD, OZ1GER, OZ5BD

# You need:

1. More points than the other stations ☺
2. The right QTH
3. Good equipment
4. Good operators
5. Knowledge of the band and activity
6. Good planning

& blood, sweat and tears + LUCK!

# Contest Impact

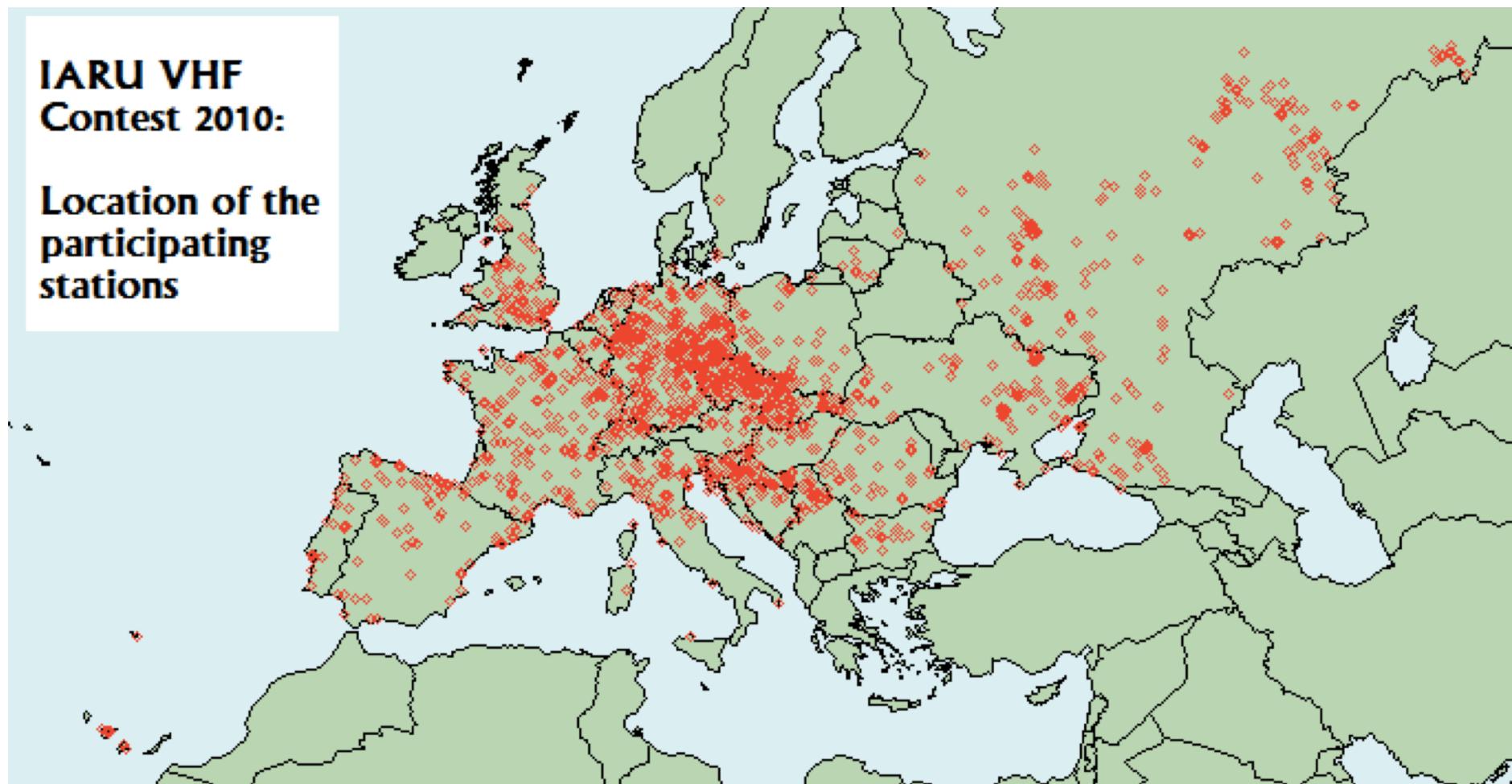
=

**QTH x *In* Operator x Reliability<sup>2</sup> x  $\sqrt{\text{ERP}}$  x  
beamwidth x Ant. gain x sports car effect**

# The activity has moved eastward

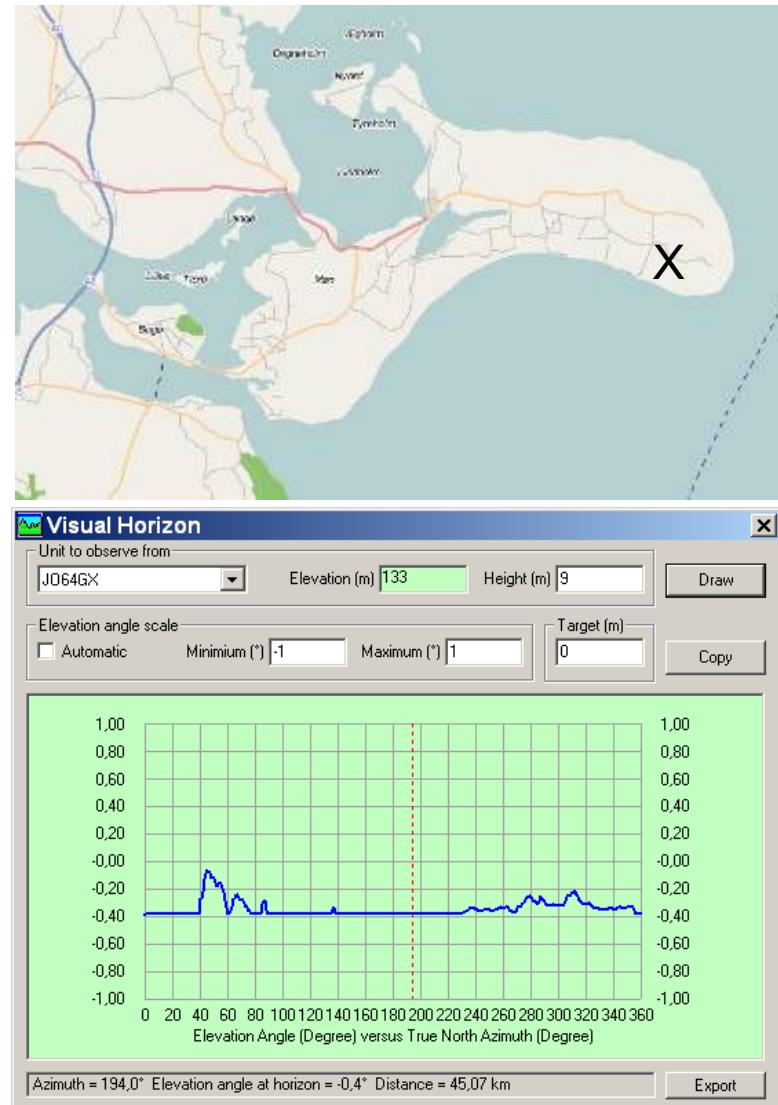
IARU VHF  
Contest 2010:

Location of the  
participating  
stations



# QTH Kongsbjerg, Moen JO64gx

- Reasonable accessibility
- Free take off over water
- NO trees
- Reasonable ASL
- Good take off 360 degrees



# Direction 140-200 deg



# First attempt 2007

## OZ1HDF, OZ1DJJ and OZ1FDH





# Antennas



# Power

- 2007 Assorted generators
- 2008- 30 kw diesel



# Mounting the high voltage cables.....



# Visits by Murphy

- 2007 None
- 2008 Relay melt down
- 2009 None
- 2010 screen supply
- 2011 Blown preamp
- 2012 Antenna crash
- 2013 None
- 2014 ?



# Results 2007-2012

	QSO	Points
2007	661	284357
2008	630	283256
2009	664	314557
2010	720	338085
2011	831	417369
2012	662	321517

5P5T 2011 831 QSO  
418,000 points (unchecked)



# Final result 2011

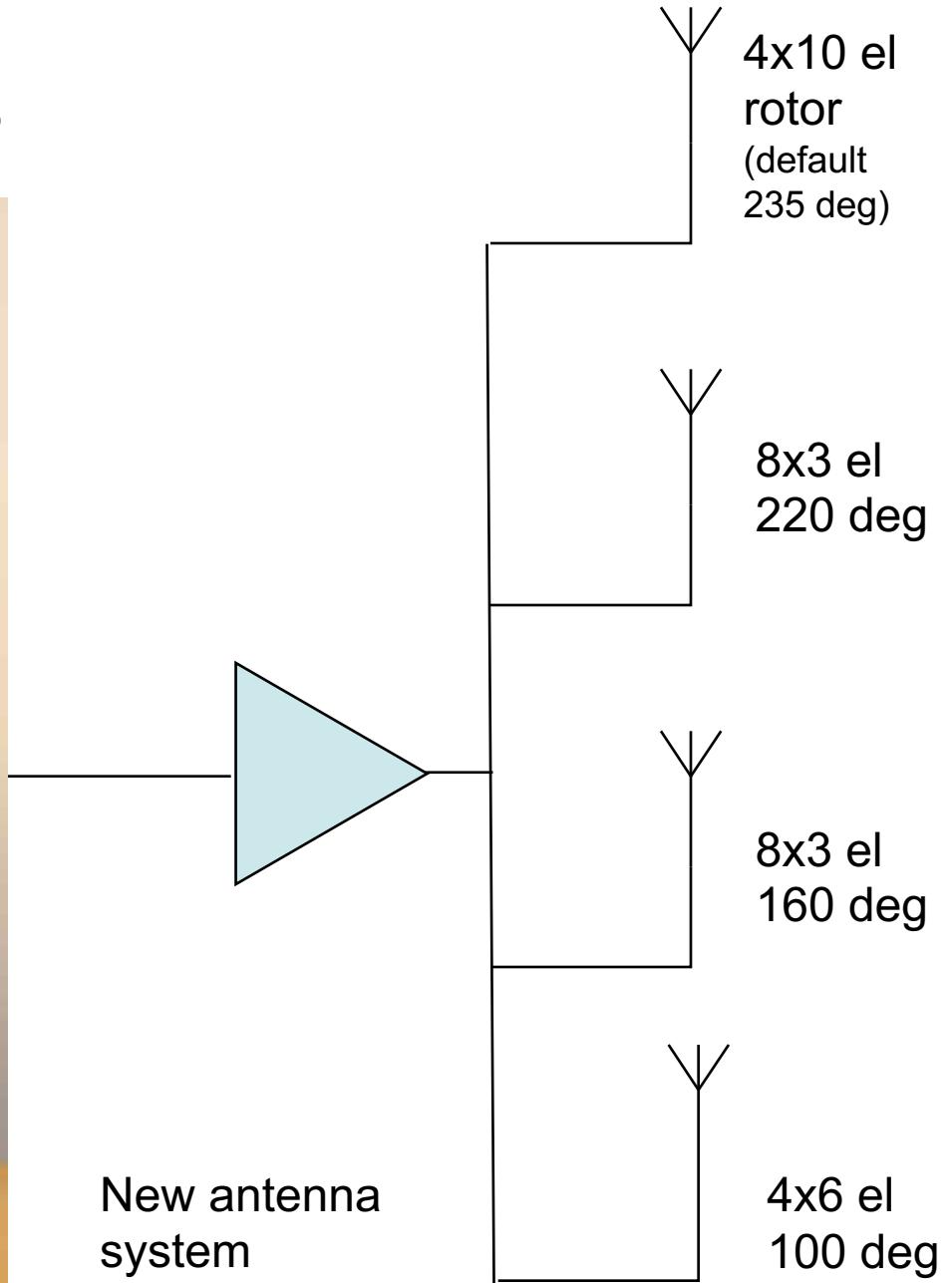
## Section: 145 MHz, Multi Operator

---

Pl.	Call	Loc	QSOs	Points
1	DR9A	JN48EQ	947	410559
2	5P5T	JO64GX	808	402451
3	DL0GTH	JO50JP	1077	389579

---

# 5P5T station 2013

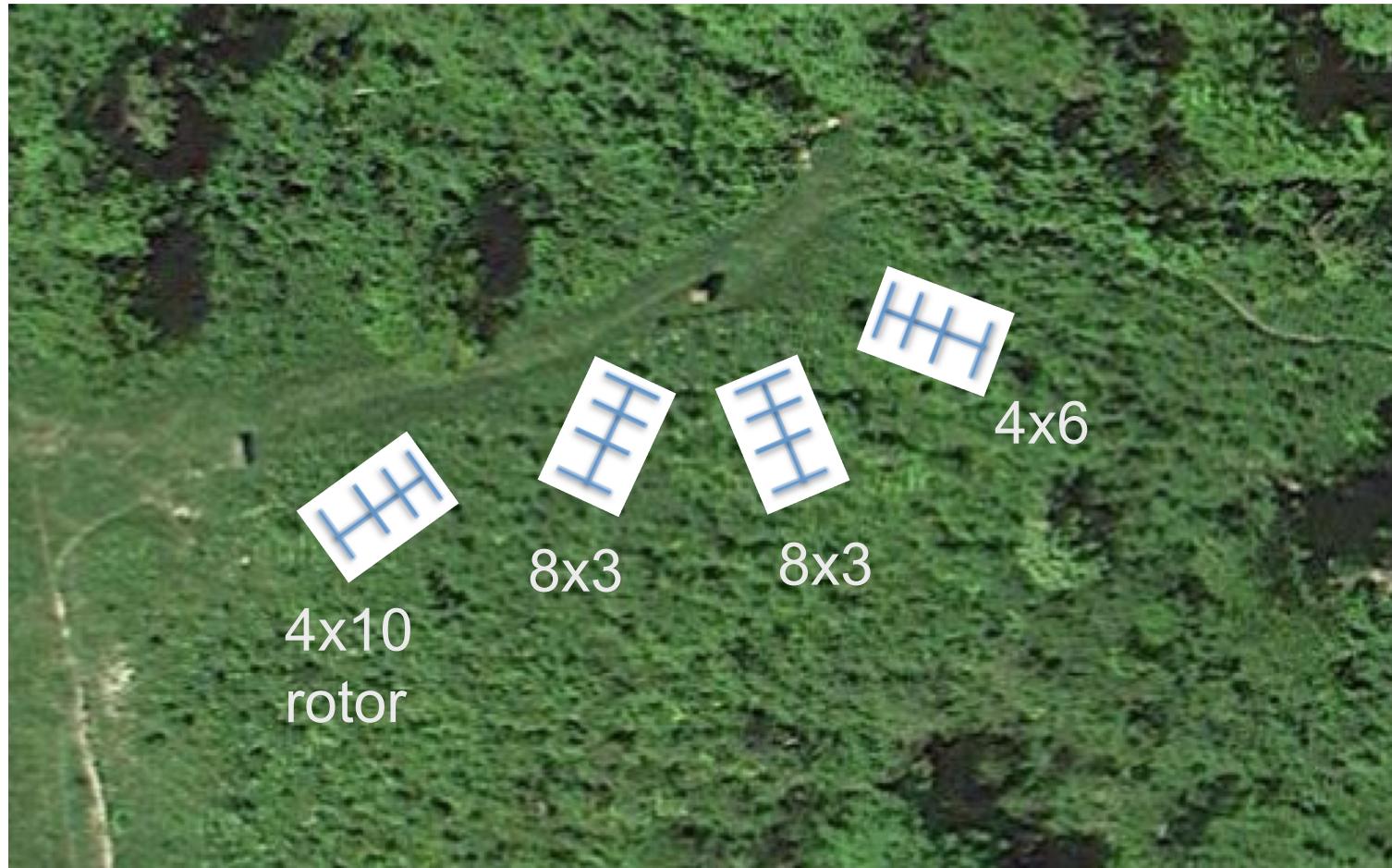


# Antennas

- 4x10 el, 4x6 el and 16x3 el



# Placement of antennas



↔

20 m

↓

180 deg

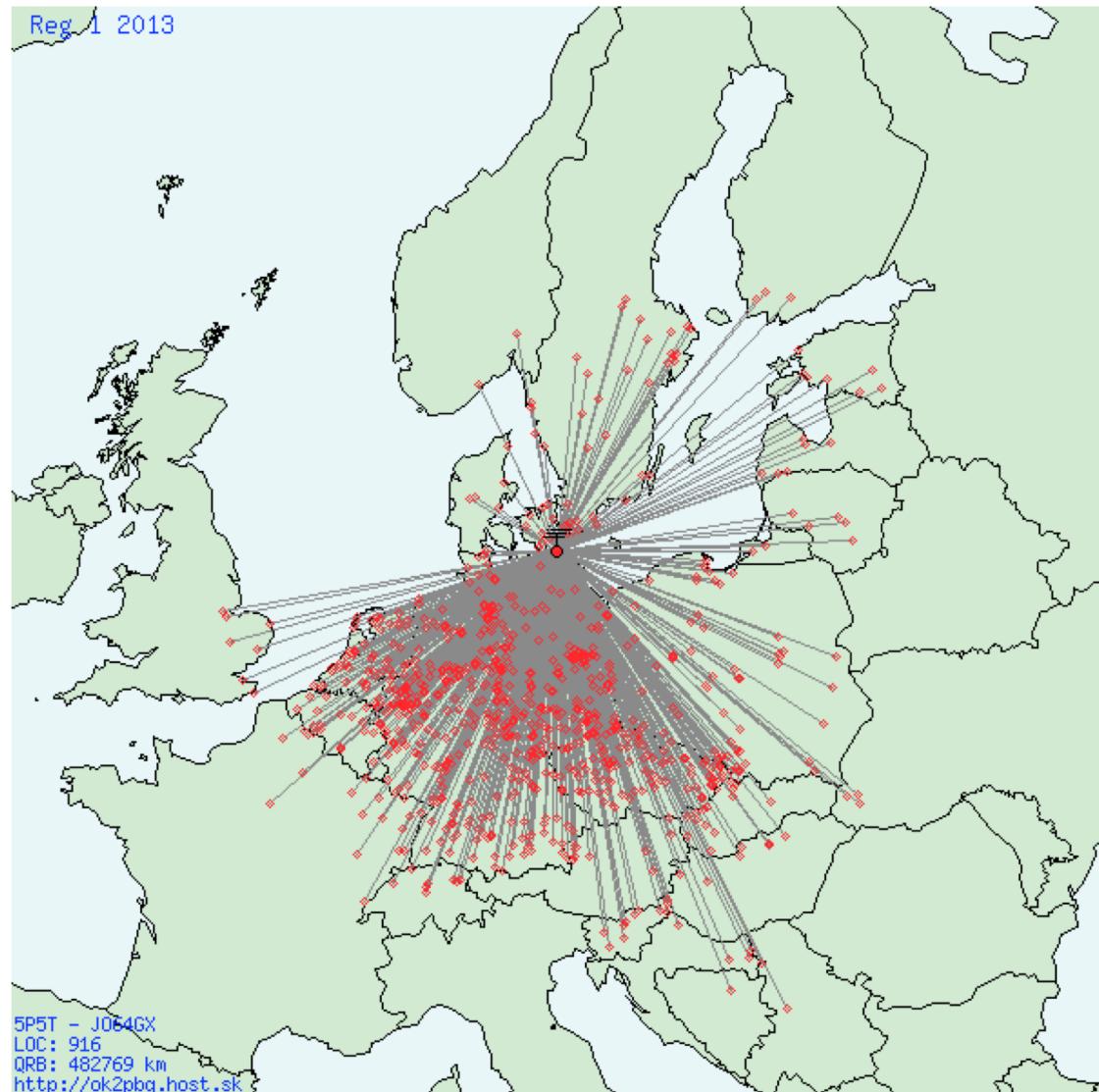
# Operator position



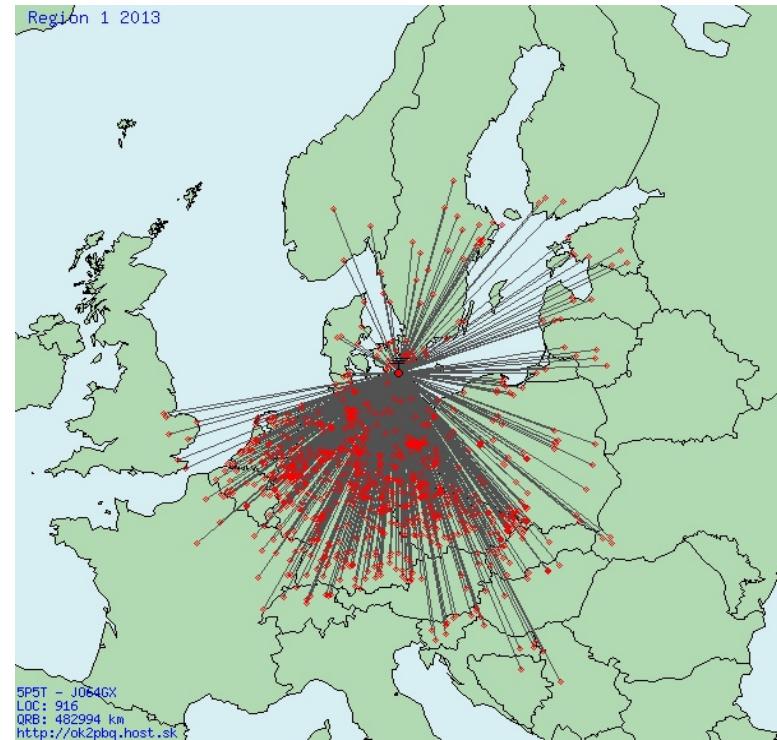
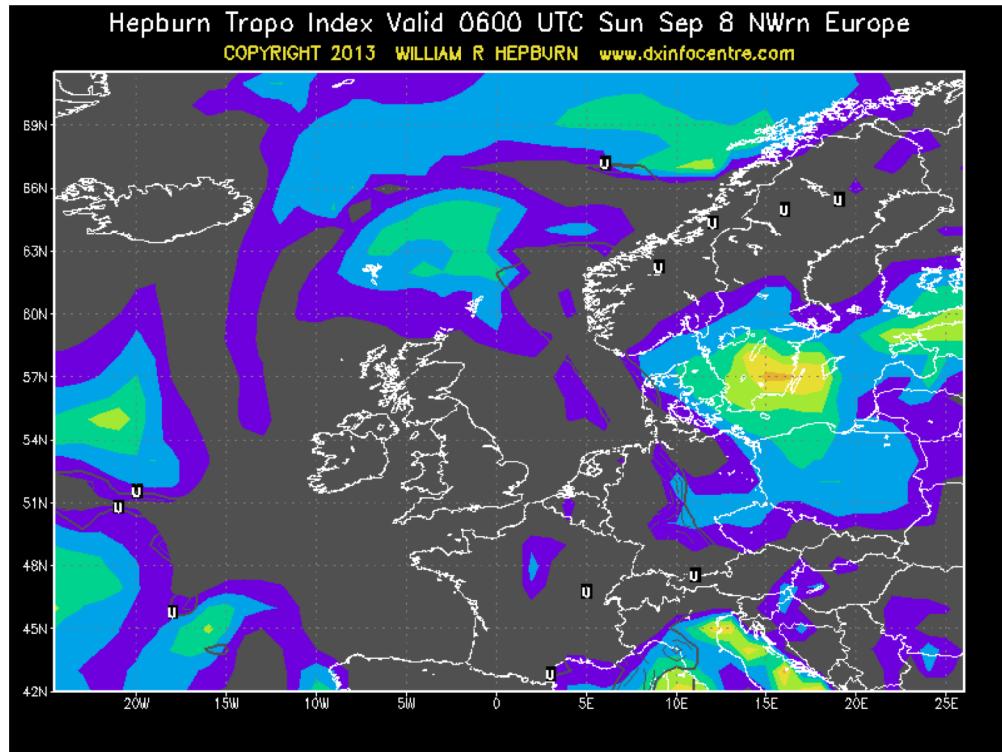
- Horsetrailer (without horse)
- Overview and simplicity
  - Only 1 turnable antenna system
  - Limit the number of buttons, cables and mess
- Rackmounted equipment
- Screens for 1st and 2nd operator

# Fakta

- PA5DD, OZ1DJJ,  
OZ1GER &  
OZ1FDH
- 916 QSO
- 482870 points  
(527/QSO)
- 123 loc
- 25 DXCC
- ODX YT1VP  
1321 km



# Condx were good, but not fantastic



# Final result 2013

Section: 145 MHz, Multi Operator

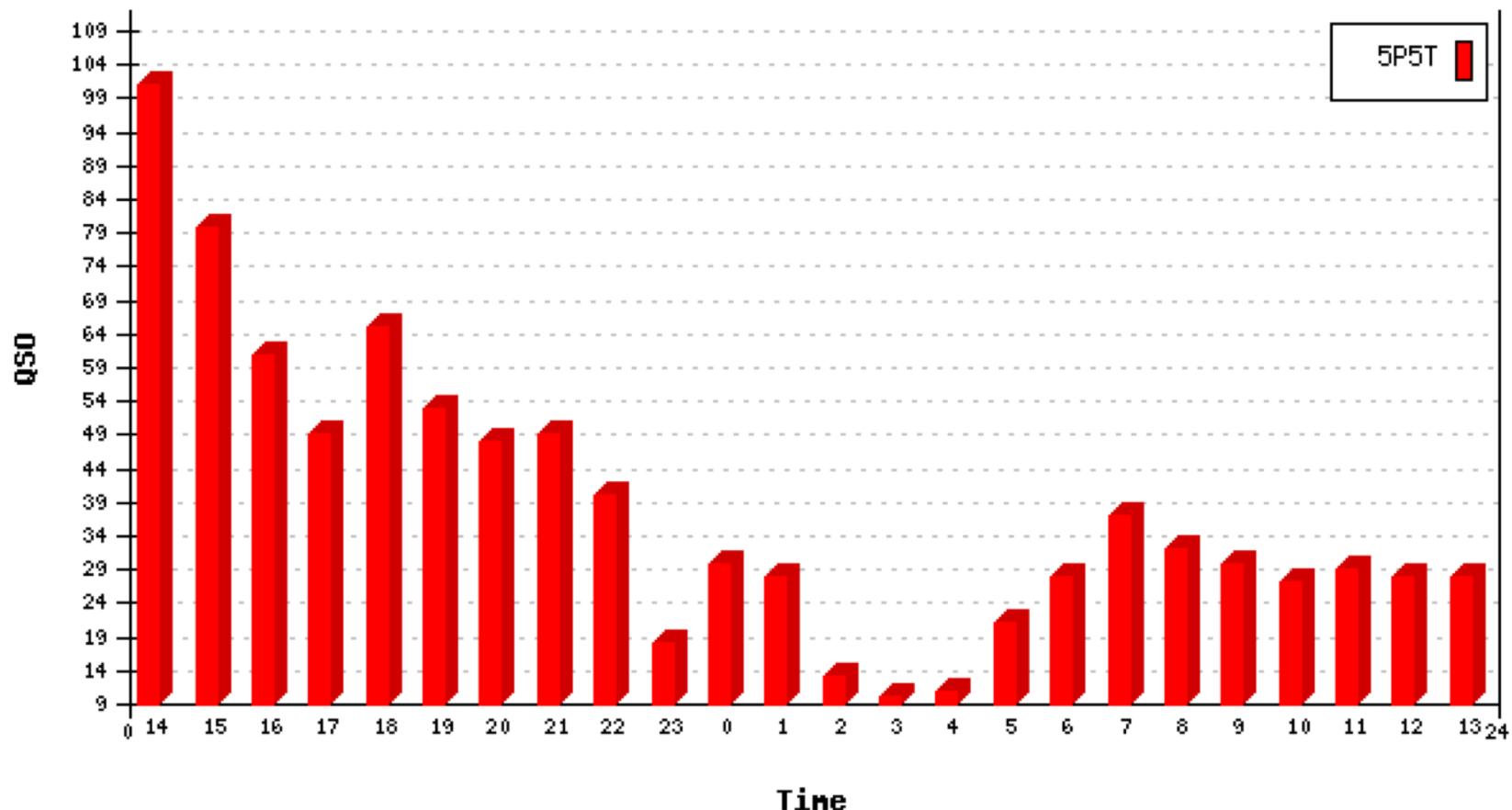
P1.	Call	Loc.	QSOs	Points	-QSOs	Error-%
1.	5P5T	J064GX	898	472547	18	2.1
2.	OE1W	JN77TX	1035	443939	30	3.6
3.	DL0GTH	J050JP	1087	409225	29	3.3
4.	OL7M	J080FG	869	359162	19	2.3
5.	SN7L	J070SS	883	355654	20	2.2
6.	OL9W	JN99CL	819	352515	18	3.3
7.	OK7O	JN69OU	924	339520	25	3.4
8.	G8P	J001QD	745	315738	13	2.0
9.	DR2X	J040QL	867	309396	26	3.6
10.	OM3W	JN99CH	696	287284	17	2.9

# QSO/hour, good activity during night

VHF Contest 2013 144 MHz

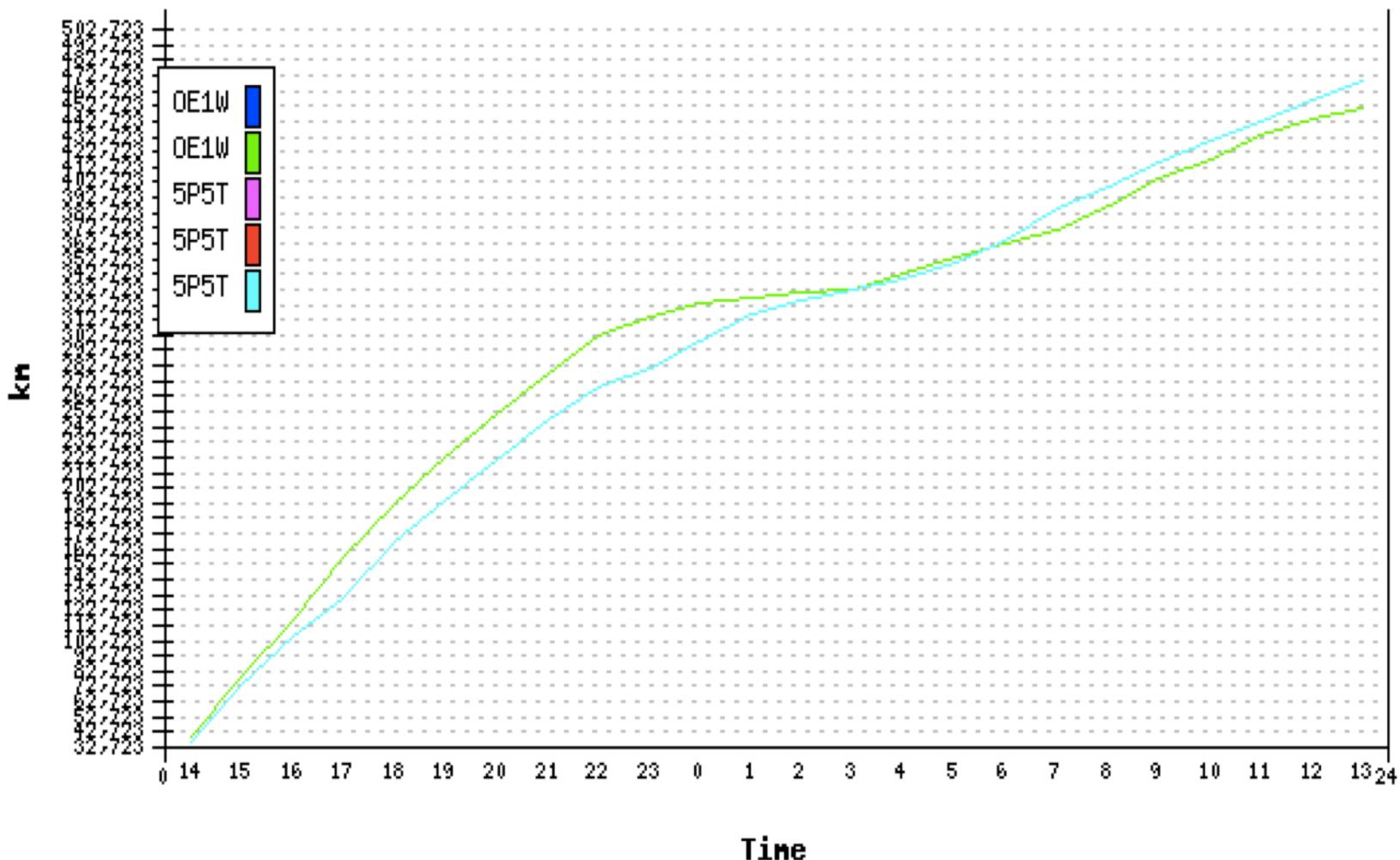
VHFContest.net

QSO/hod

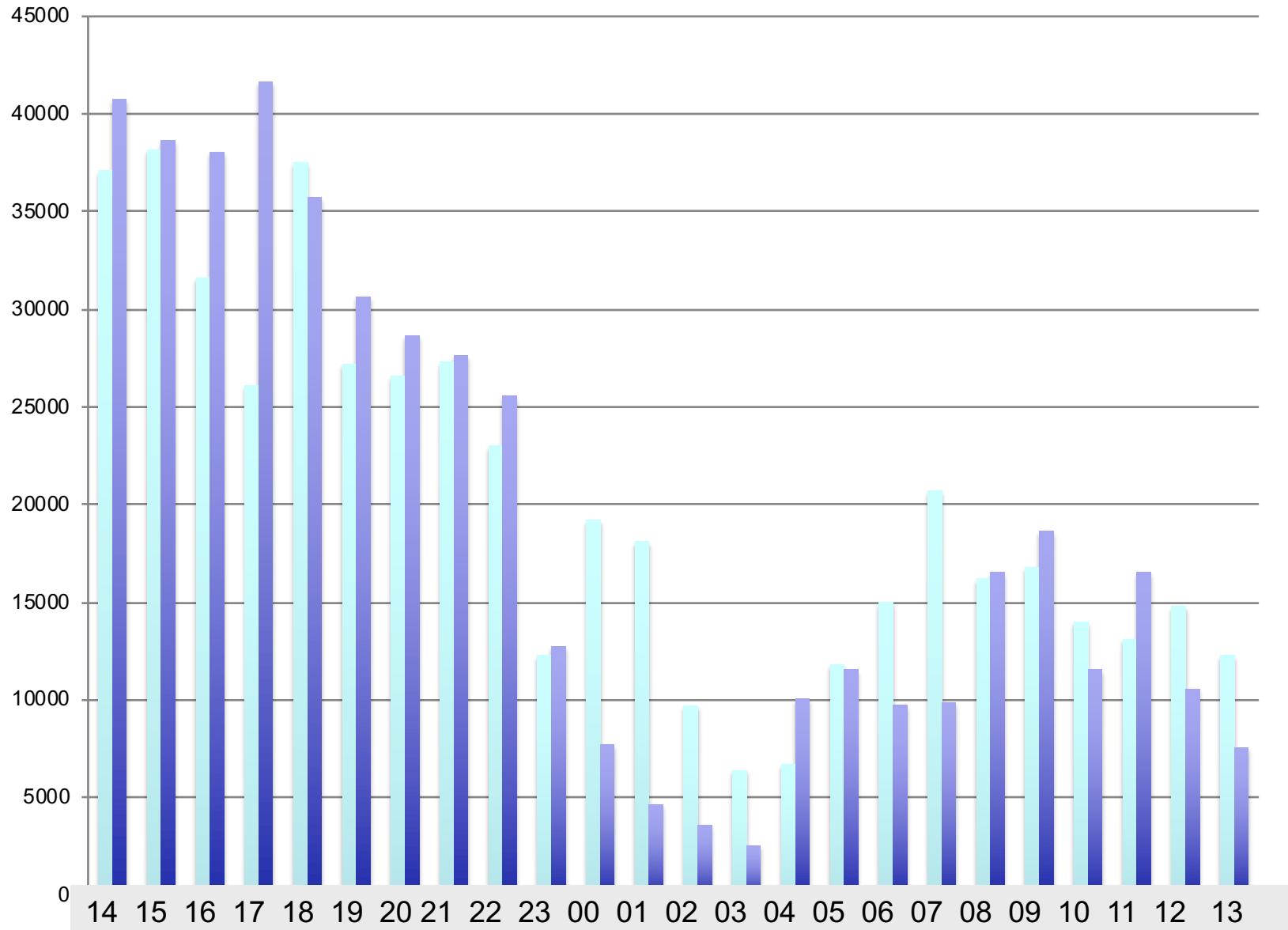


# OE1W had the lead until 0600

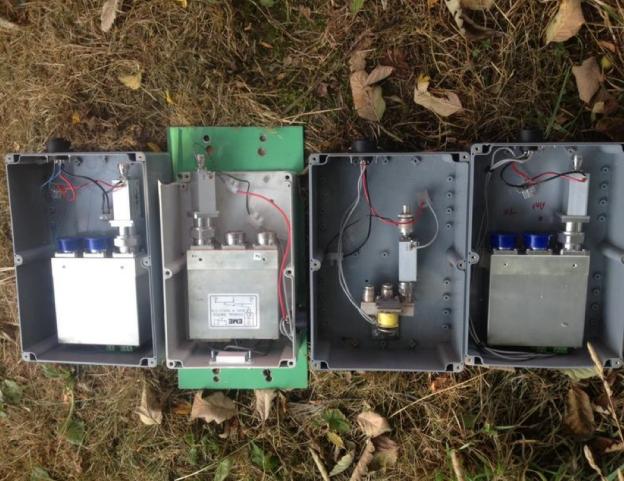
km/hour



# Points/time 5P5T vs. OE1W (dark blue)



# Equipment



# Setup & operating



# Food!

- Chili con carne a'la HAM
- PA heating of butter pastry ☺



# Hvad skal der til?

- En god QTH
- Overskuelig operatørplads (kun det nødvendige)
- En meget opmærksom 2nd operator
- Udstyr der fungerer mindst 99%
- Antenner højt gain, bred horisontal åbningsvinkel
- Hårdt arbejde
- Vedholdenhed (hvert år!)
- Held (let løftede forhold)
- Stegt rødspætte med persillesovs



# The end

- There is no other VHF contest like the region 1 september contest!
- You may win or you may loose, but the fun of the effort and teamwork, is worth it all.
- Guest operators, new members and visitors are VERY welcome
- CU in the next contest

