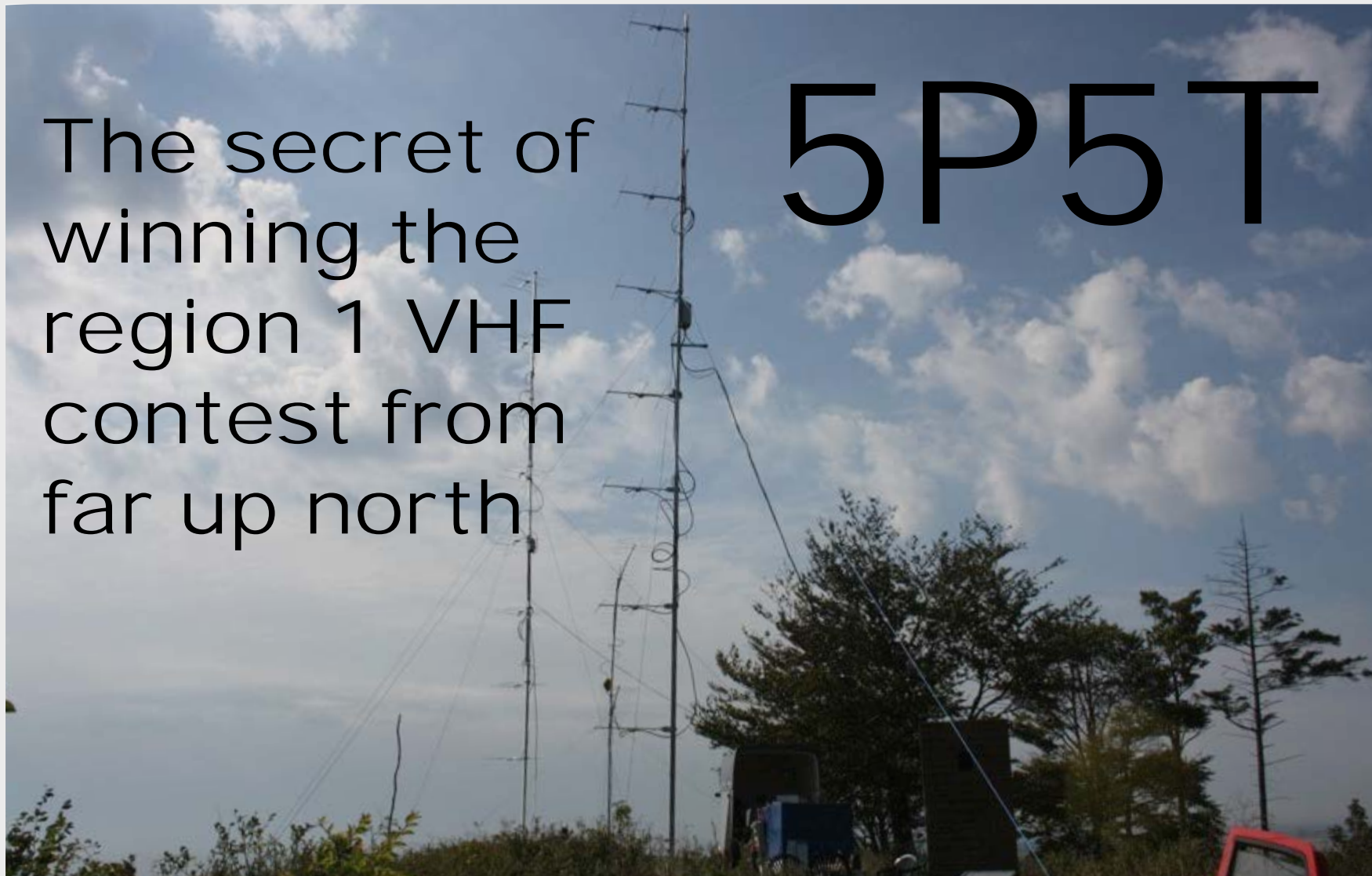


The secret of
winning the
region 1 VHF
contest from
far up north

5P5T



Who are 5P5T



OZ1FDH



OZ1DJJ/OX3LX



PA5DD/OZ1DOQ



OZ1GER



A
G



OZ5BD/OX5T

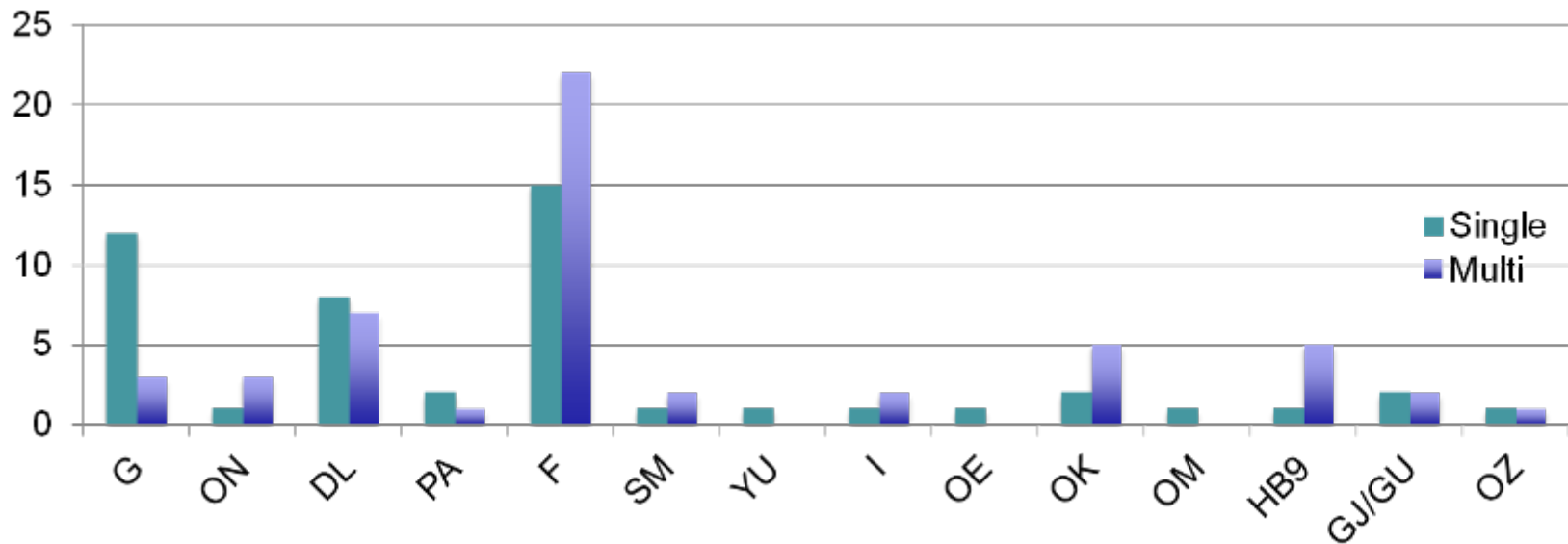
OZ1HDF

Why the region 1 VHF test?

- It is the largest prize you can dream of in a VHF contest. It doesn't get any bigger!
- You need state of the art equipment and the best operators.
- OZ hasn't won since 1973, but sometimes miracles happen!
- My own dream started in 1979, -a few months after I got my license...

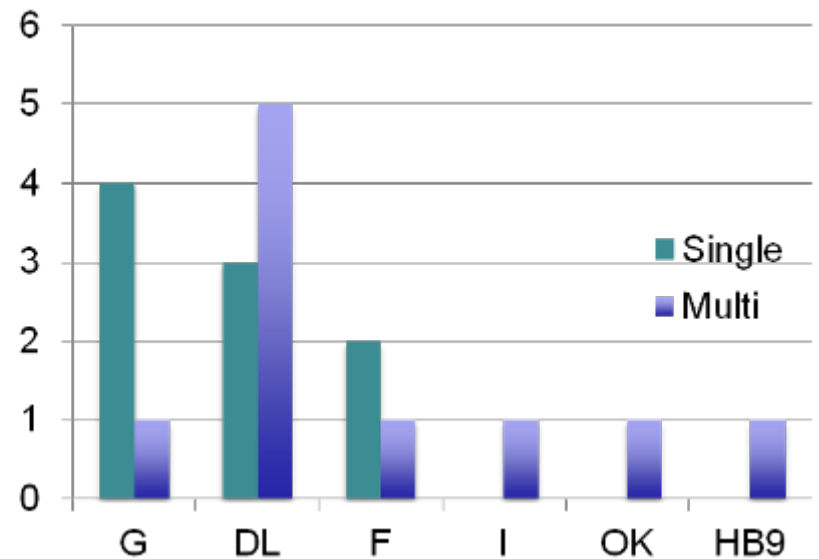


Distribution of winners by DXCC

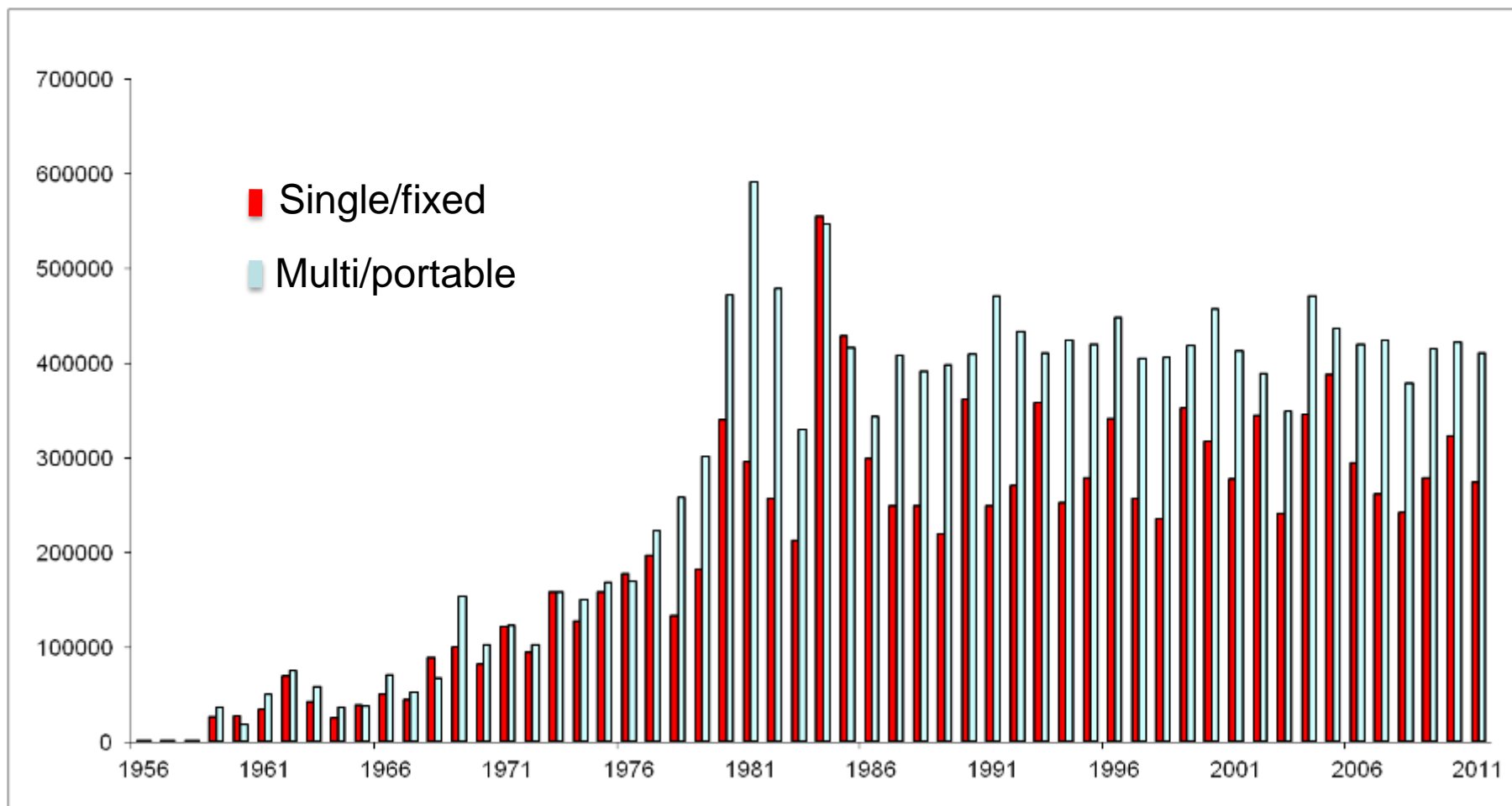


1956-2011

2001-2011



Winning scores 1956-2011



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

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
VIA P. BOX 39 . DK-7400 HERNING
OR VIA BUREAU

VY 73

Meldgaard Tryk . Herning.

1. 144 MHz - stálé QTH

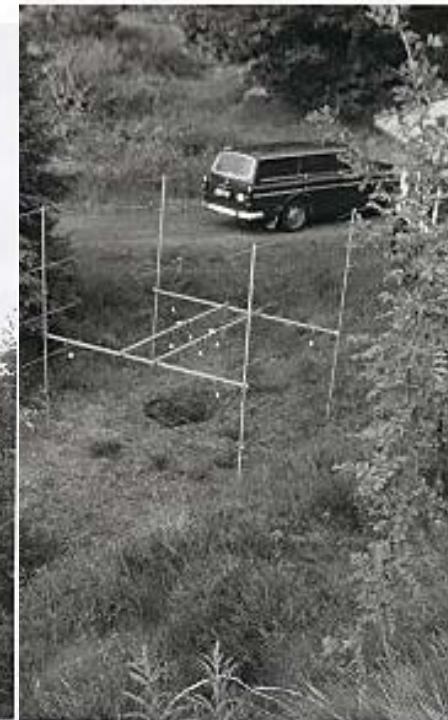
| | |
|------------|---------|
| 1. OZ1OZ | 100 765 |
| 2. OZ6OL | 95 427 |
| 3. G2JF | 86 558 |
| 4. PD3HEL | 59 792 |
| 5. DLØBR | 56 911 |
| <hr/> | |
| 57. OK1VHN | 19 551 |
| 69. OK1VCW | 17 741 |
| 72. OK1NQ | 17 347 |

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 |
| <hr/> | |
| 12. OK1PG/P | 65 928 |
| 24. OK3CD/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,
-1969 was not a good year in OK.



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

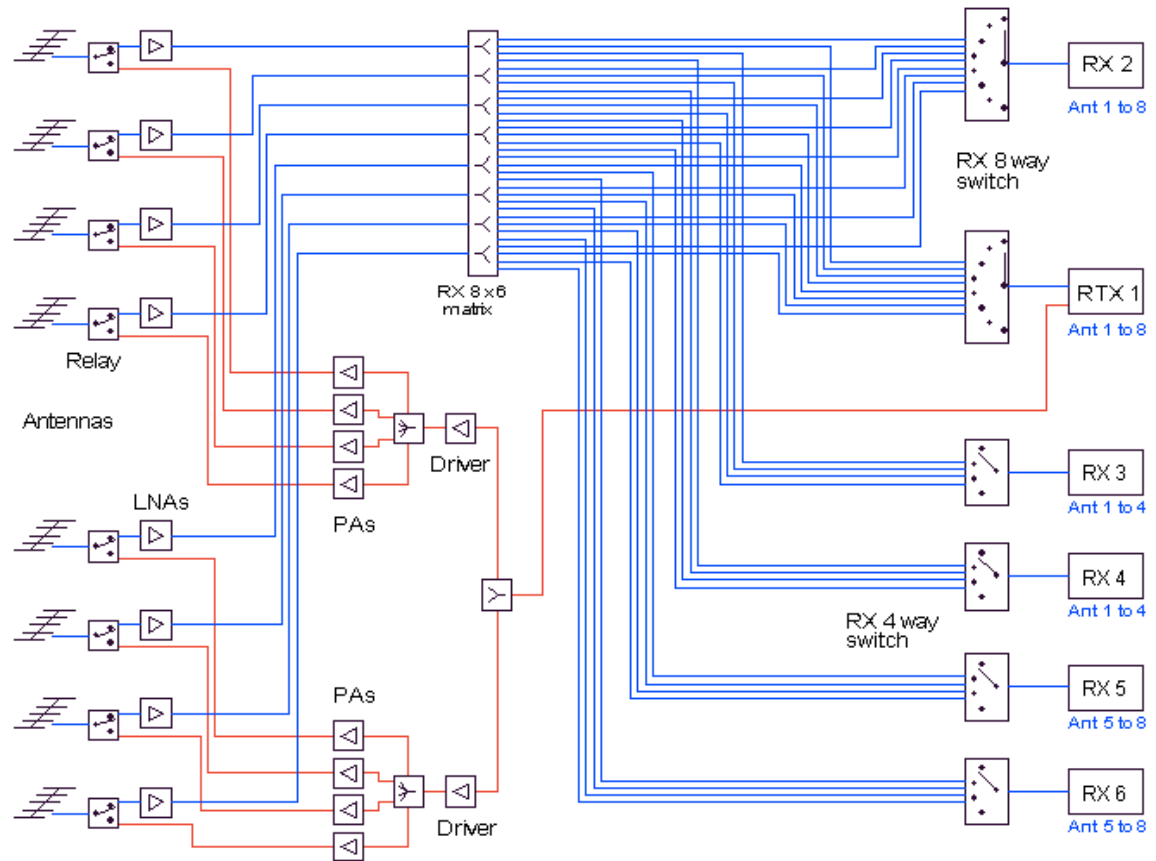


Sněžka 1602 m ASL HK29b

BIG set up: IO3V, winner 2001

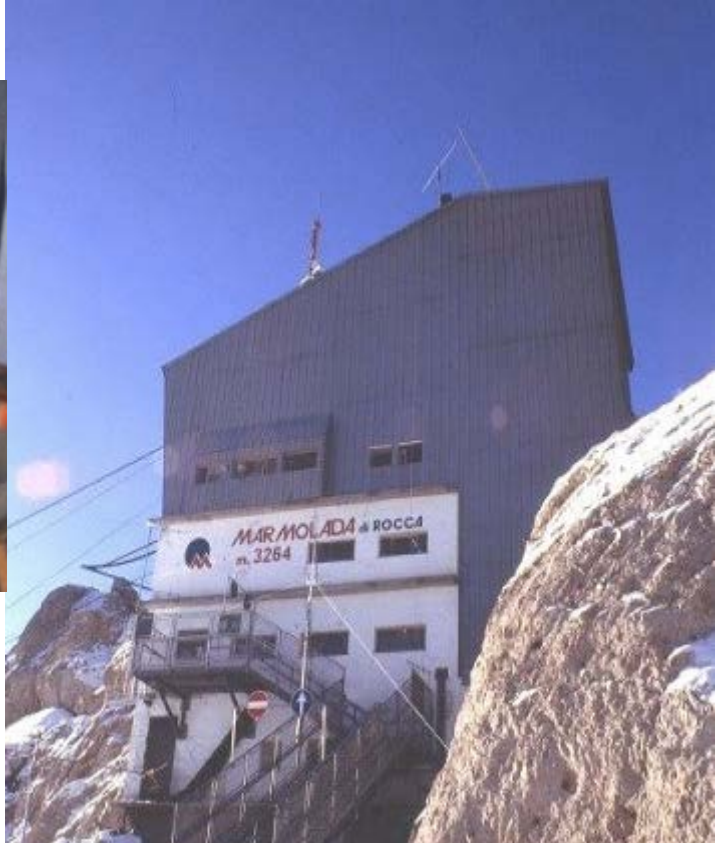
- 3264 m ASL
- 8 x antenna systems
- 8 x PA
- 4 x 2nd RX

Winner with
987 QSO og
417,00 points



[BACK](#)

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 could it be possible to win the 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

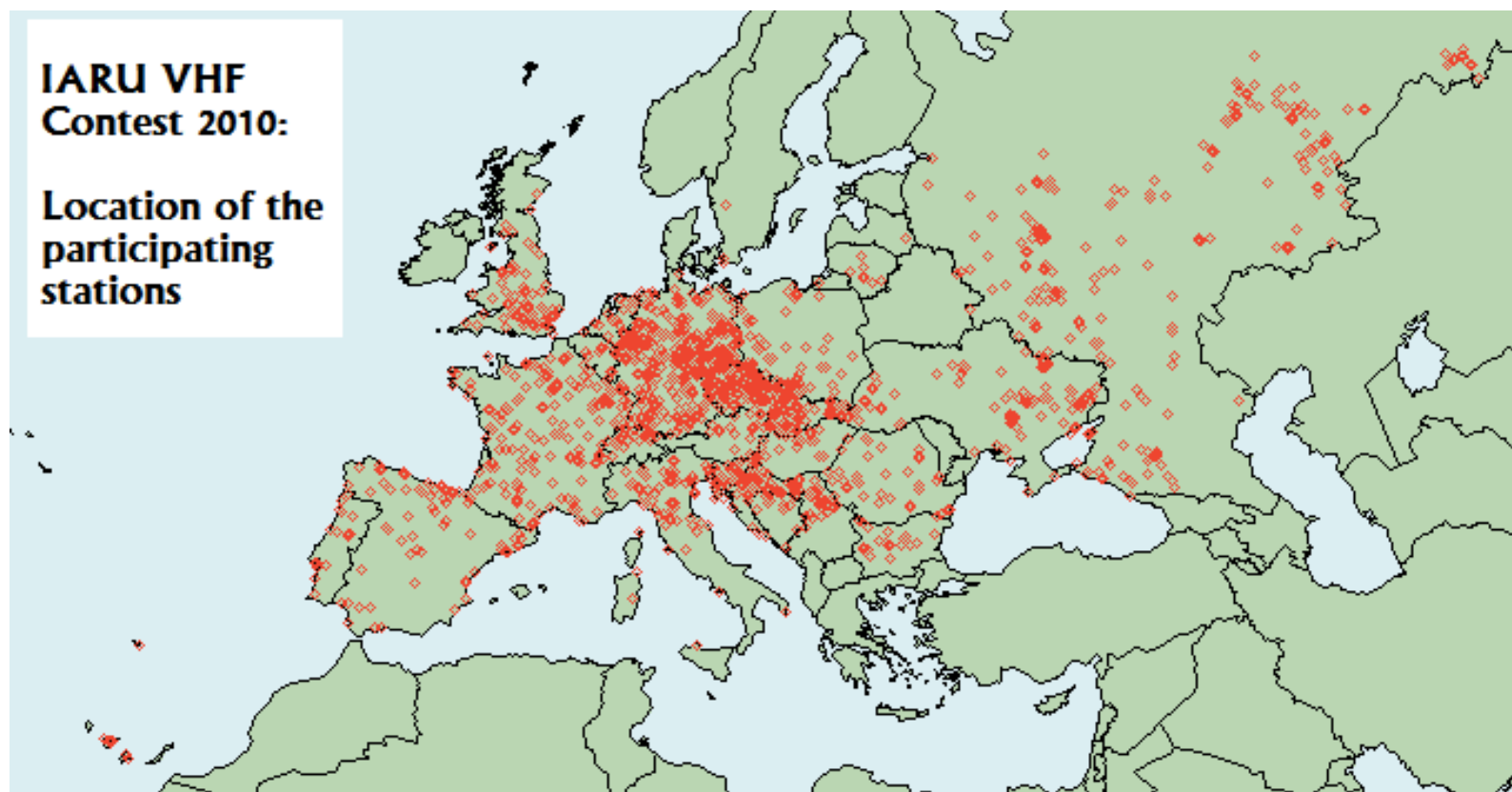
& blood, sweat and tears + LUCK!

Contest optimisation

***Contest impact* = QTH x *In* Operator x Reliability² x $\sqrt{\text{ERP}}$
x beamwidth x Ant. gain x sports car effect**

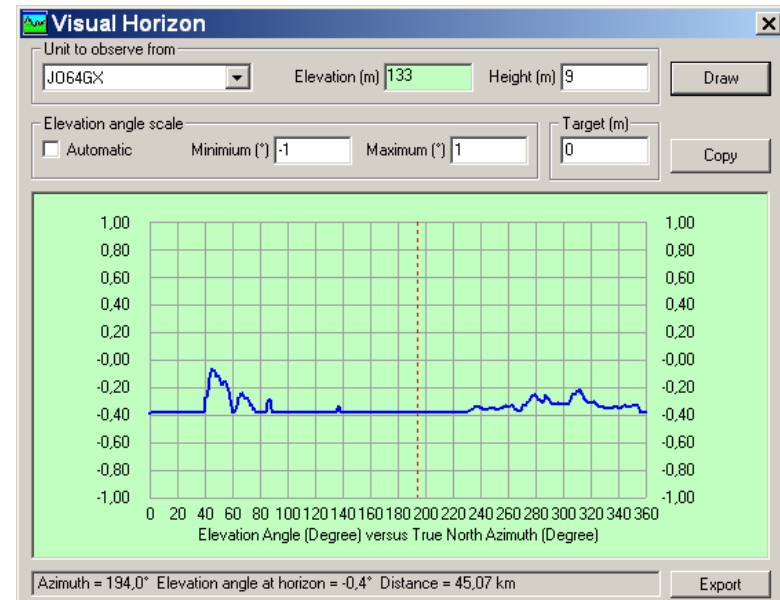
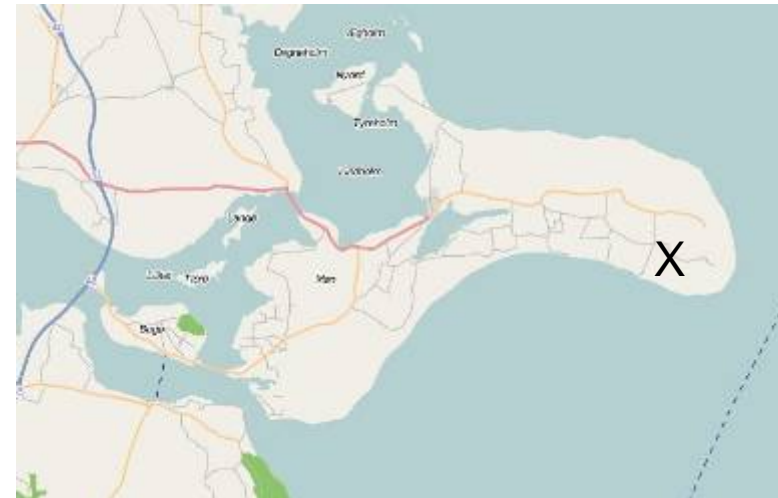
The activity has moved eastward

- From OK in 2011 there were 244 logs!! (OZ 1 log ☹)
- More stn from SP, LY, UR
- Lower activity in England and Holland
- Better equipment



QTH Kongsbjerg, Moen JO64gx

- Reasonable accessibility
- Free take-off over water
- NO trees
- Reasonable ASL 134 m
- Good take off 360 degrees



View direction 140-200 deg



First attempt 2007

OZ1HDF, OZ1DJJ and OZ1FDH



4x4 el Tonna, 2x18 el M2
661 QSO's 283000 points (error rate 13%)



Antennas



Power

- 2007 Assorted generators
- 2008- 30 kw diesel



Fixing the high voltage cables.....



Visits by Murphy

- 2007 None
- 2008 Relay melt down
- 2009 None
- 2010 Blown screen supply
- 2011 Blown preamp
- 2012 Antenna crash, faulty ant relay
- 2013 None
- 2014 IC7700 failure, TX overdrive
- 2015 Water in switch box
- 2016 None
- 2017 High voltage fail
- 2018 ?



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 |


September 2013

New operators

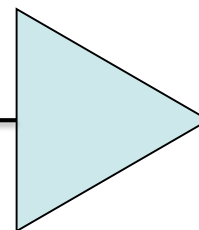


Final result 2013

Section: 145 MHz, Multi Operator

| | Pl. Call | Loc. | QSOs | Points | -QSOs | Error-% |
|--|-----------|--------|------|--------|-------|---------|
|  | 1. 5P5T | JO64GX | 898 | 472547 | 18 | 2.1 |
| | 2. OE1W | JN77TX | 1035 | 443939 | 30 | 3.6 |
| | 3. DL0GTH | JO50JP | 1087 | 409225 | 29 | 3.3 |
| | 4. OL7M | JO80FG | 869 | 359162 | 19 | 2.3 |
| | 5. SN7L | JO70SS | 883 | 355654 | 20 | 2.2 |
| | 6. OL9W | JN99CL | 819 | 352515 | 18 | 3.3 |
| | 7. OK7O | JN69OU | 924 | 339520 | 25 | 3.4 |
| | 8. G8P | JO01QD | 745 | 315738 | 13 | 2.0 |
| | 9. DR2X | JO40QL | 867 | 309396 | 26 | 3.6 |
| | 10. OM3W | JN99CH | 696 | 287284 | 17 | 2.9 |

5P5T station 2013



4x10 el
rotor
(default
235 deg)

8x3 el
220 deg

8x3 el
160 deg

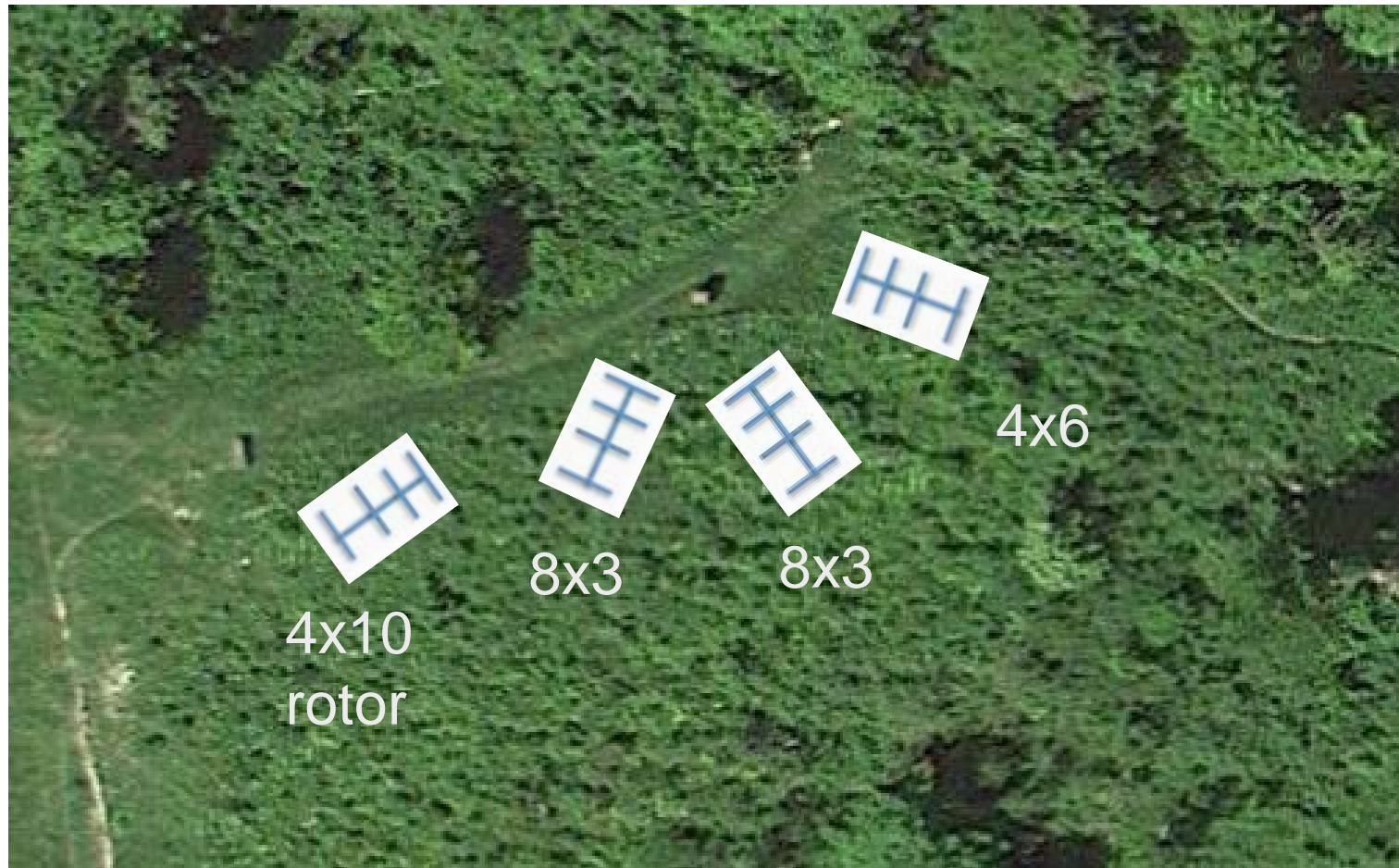
4x6 el
100 deg

Antennas

- 4x10 el DK7ZB, 4x6 el OZ5HF, 16x3 el DK7ZB



Placement of antennas



←→
20 m

↓
180 deg

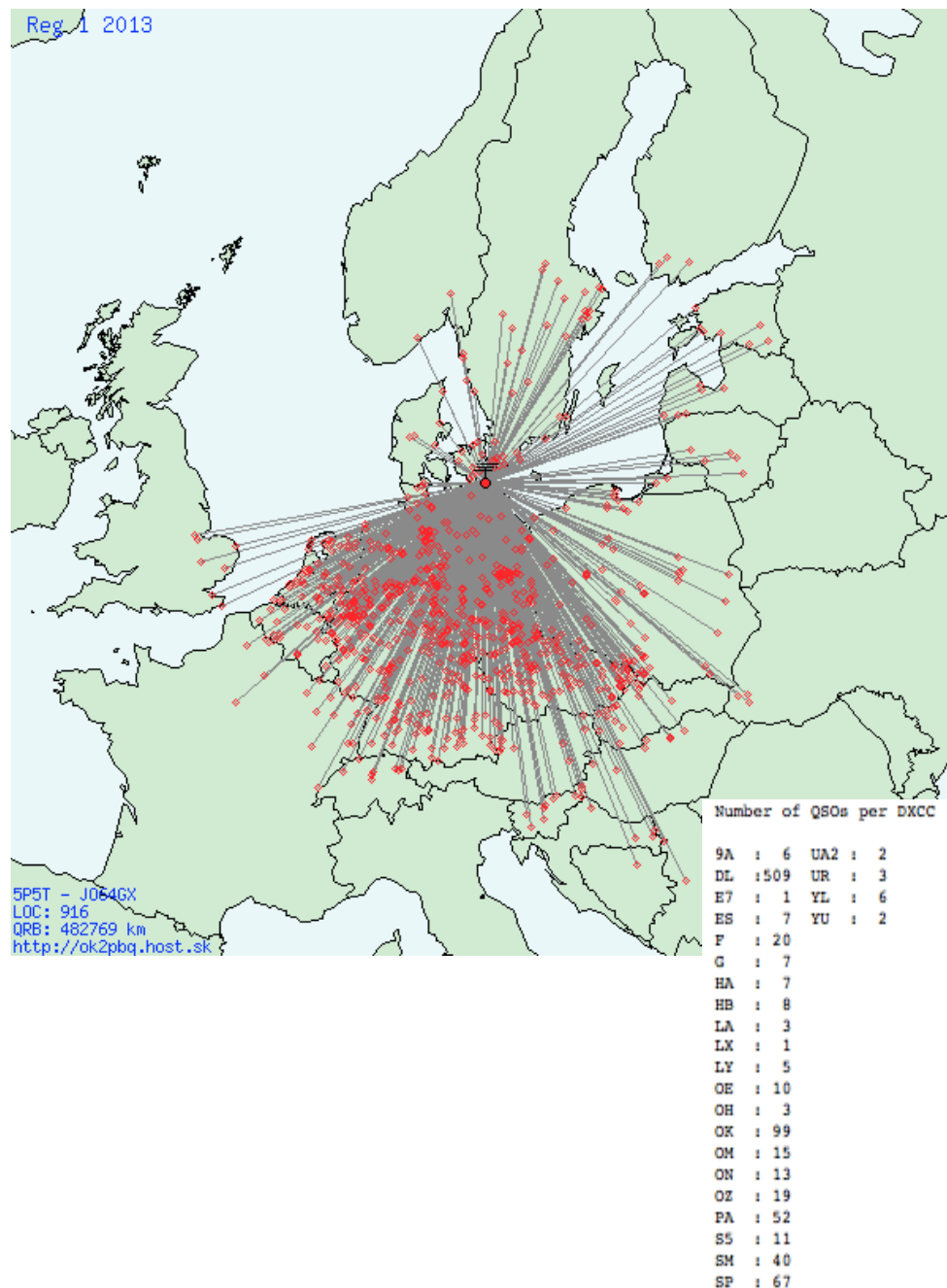
Operator position



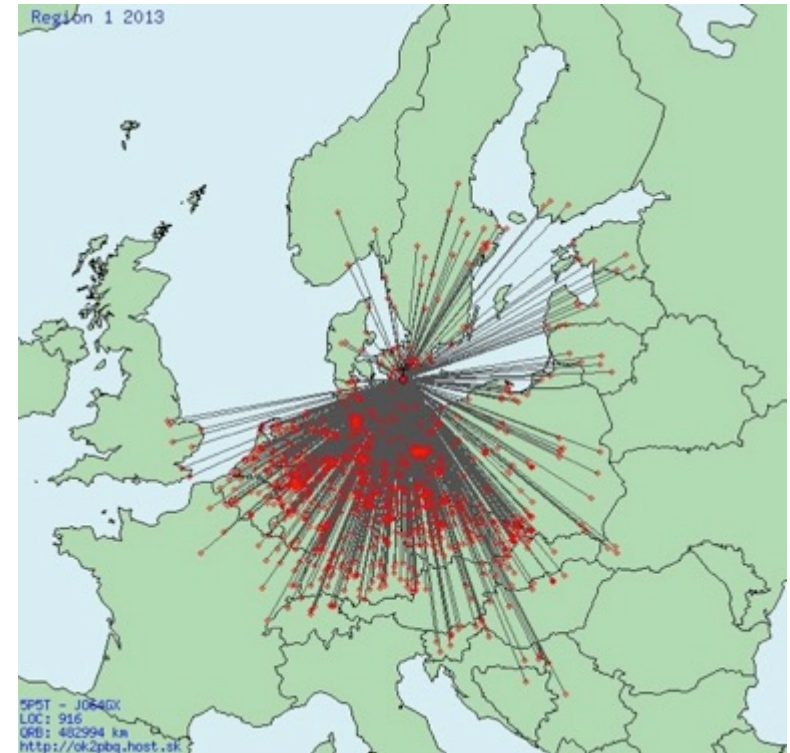
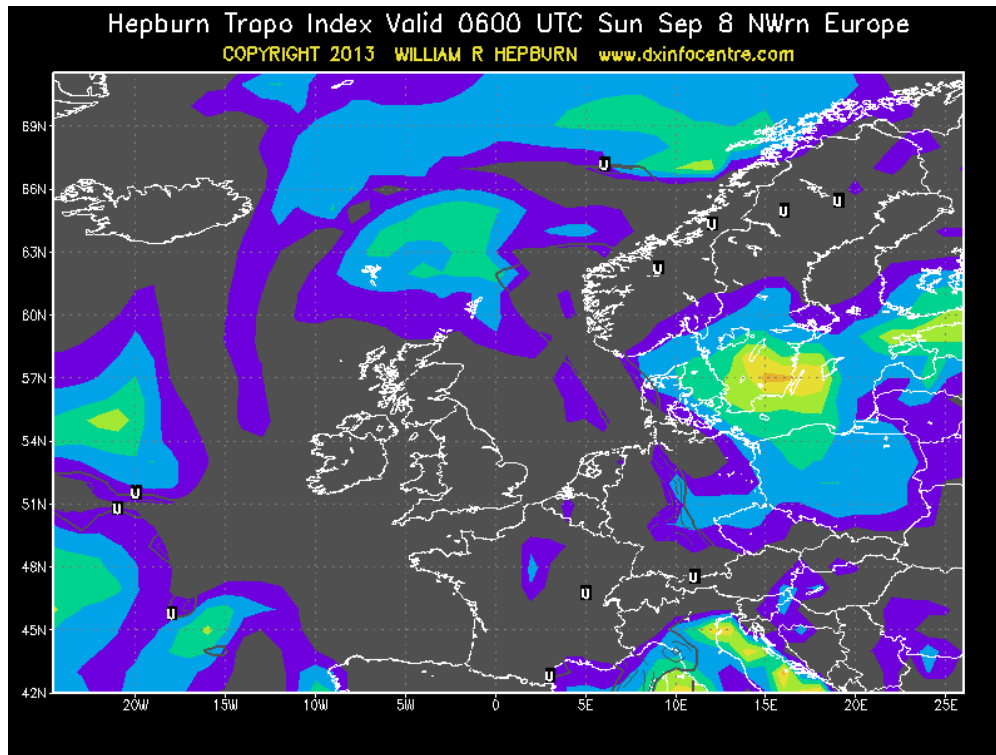
- Horsetrailer (without horse)
- Overview and simplicity
 - Only 1 turnable antenna system
 - Limit the number of buttons, cables and mess
- Rackmounted equipment
- Screens for 1st and 2nd operator

Facts

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



Condx were good, but not fantastic



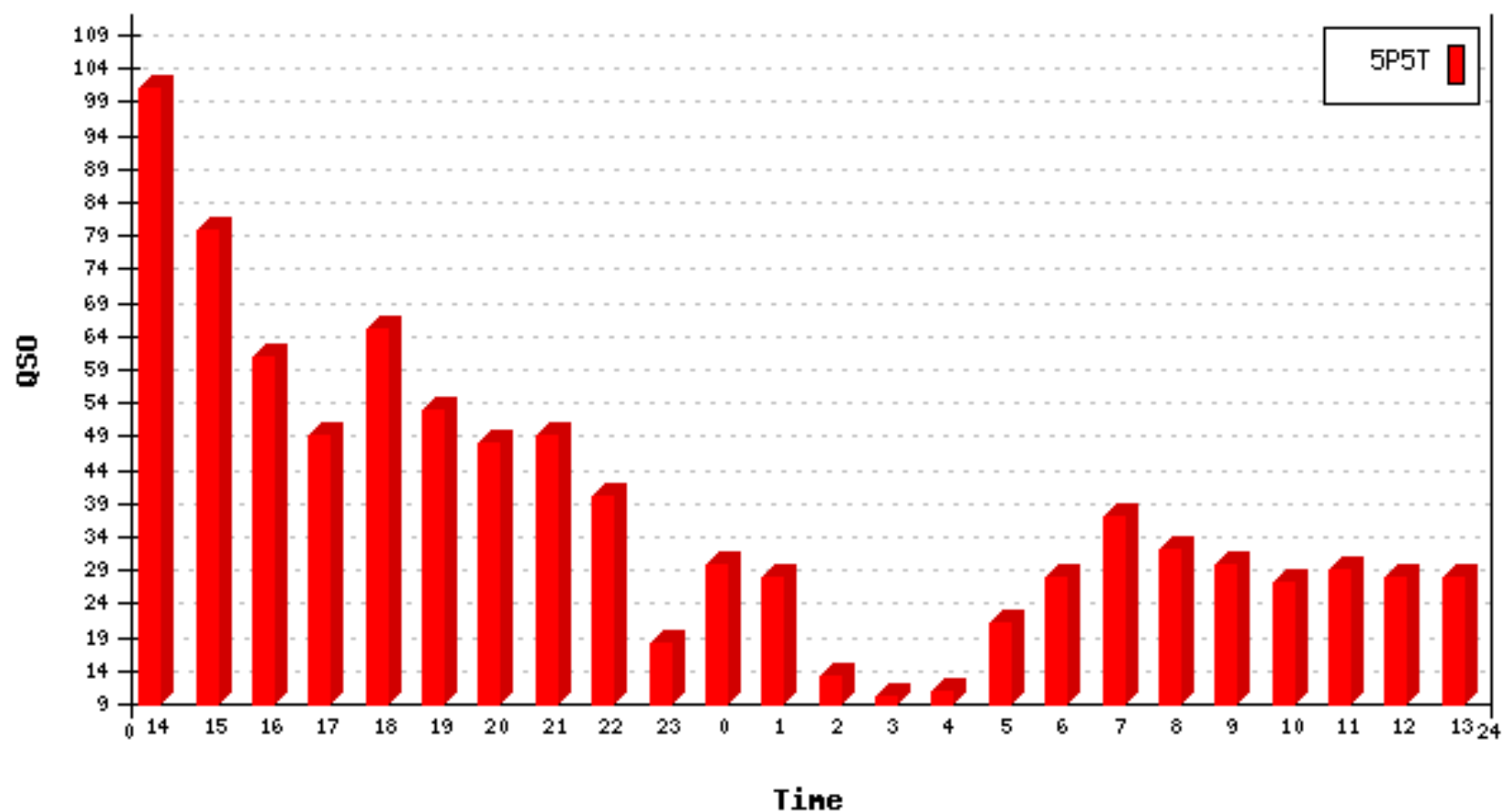
For once we appeared to be in the sweet spot.
Main competitors were DL0GTH and OE1W

QSO/hour, good activity during night

VHF Contest 2013 144 MHz

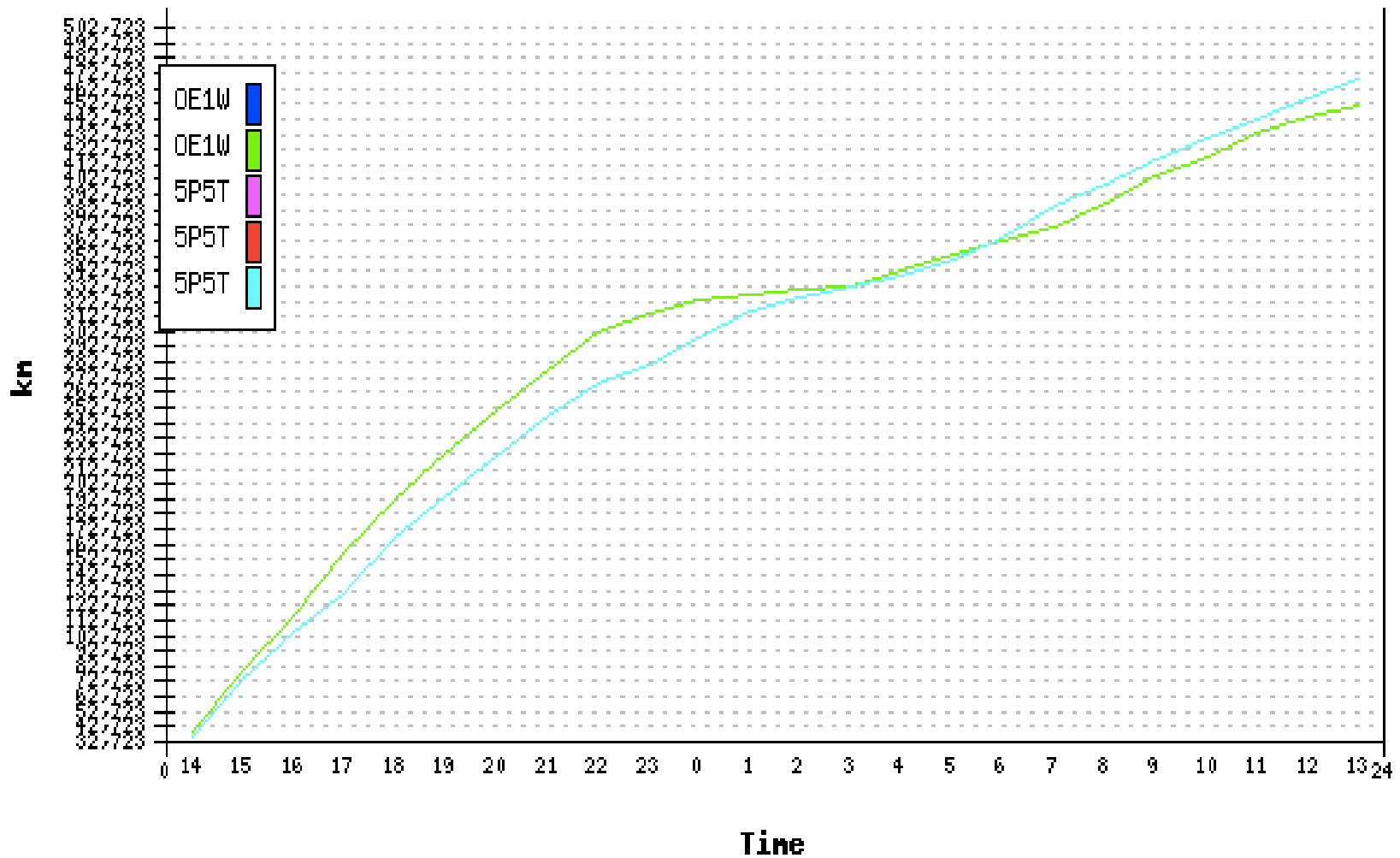
VHFContest.net

QSO/hod

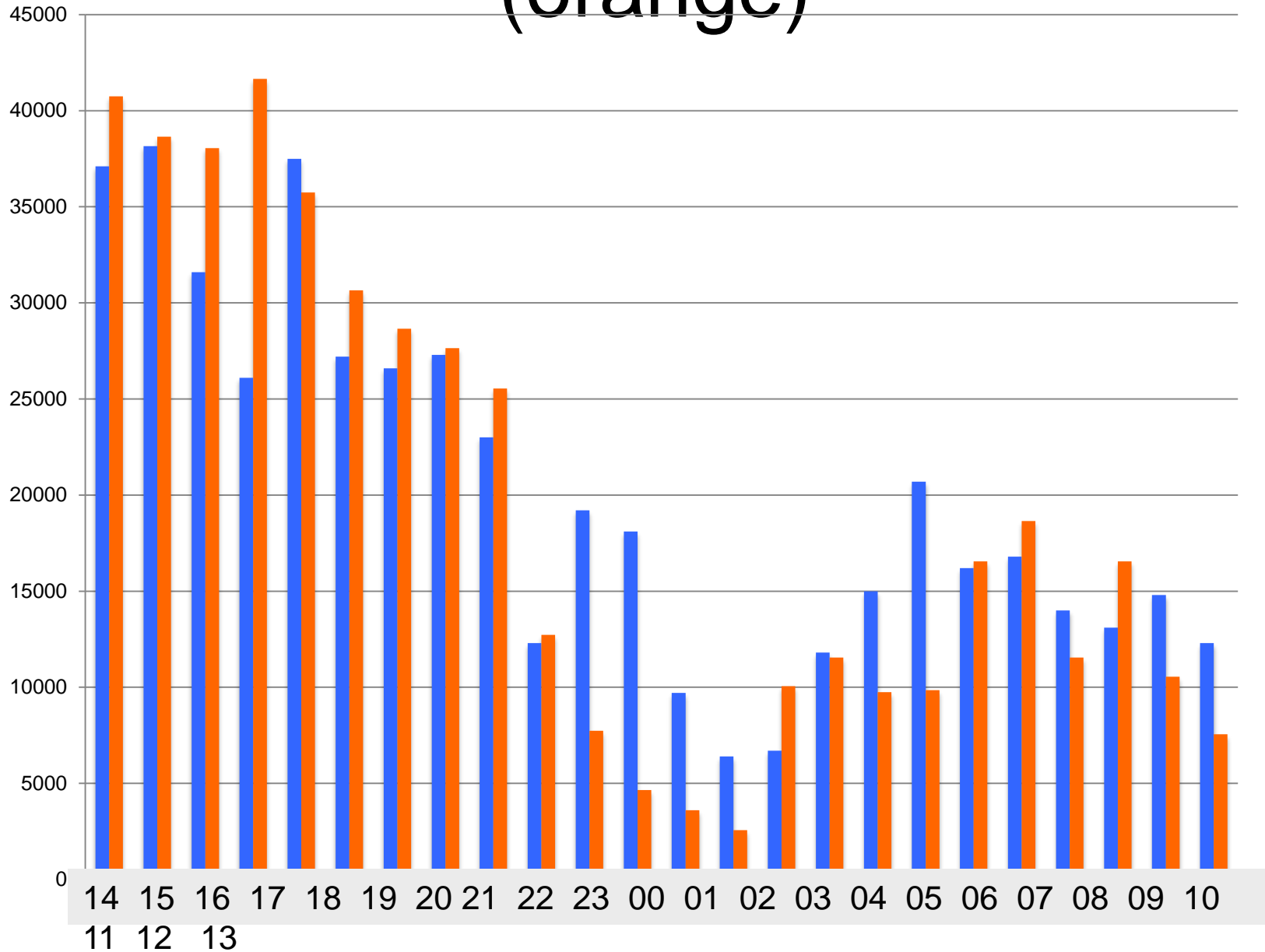


OE1W had the lead until 0600

km/hour



Points/time 5P5T (blue) vs. OE1W (orange)



Equipment



Setup & operating



Food!

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



What does it take to win from up north?

- A good QTH
- Simplicity for the operating position
- A very attentive 2nd operator
- Equipment 99,9% reliable
- At least 16 dB ant gain, wide horizontal angle
- Hard work!
- Endurance (every year!)
- Luck (condx and Murphy)
- Fried fish with parsly sauce



The end

- There is no other VHF contest as the september contest!
- You may win or 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

