

## Spring-Contest– back again on the top of the Schneekopf

Winterseason 2012/2013 was a very long one in deed, until April we had snow and the temperatures were below 10 degree Celsius, so that we had fear to do the contest on our winter-qth, Wetzstein again. In the end of April the weather-conditions changed, so that the last remaining parts of snow could be put off by an excavator. On the 18<sup>th</sup> of April 2013 Harti, DL6AUI wrote to all:

Hello OMs,  
the excavator has been arrived!  
73 de Harti

The way to the Schneekopf could be passed, the approval to use the way was given by the Thüringenstate forest office Oberhof very quickly and without any problems – many thanks to ThüringenForst because of understanding all radio-amateur affairs now and during the passed years, too.

On the 4<sup>th</sup> of May Frank, DL2ALF, Harti, DL6AUI, Matthias, DM5CT, Oli, DL2ARD, Jens, DL2AKT, Sebastian, DG5CST and Rainer, DJ1RK had met on top of the Schneekopf at 09.00 AM in order to start up putting together the antennas and all of the rig. Later on we met Roland, DK4RC and all the other OM's supporting DLOGTH. All of the crew was complete, so that we had no stress putting all the stuff together.



Harti, DL6AUI prepares building up the 23cm-parabol

We had gone with all the equipment on top of the mountain, which was put into DB5SB's VW Bus on Friday, May 3<sup>rd</sup> – thanks to Sebastian for giving this “postal yellow” bus out of your QRL. At first we put together the 23cm parabola as we did in every contest, all was prepared by Harti DL6AUI in a real perfect manner.



Jens, DL2AKT, Matthias, DM5CT and Harti, DL6AUI mounting the 23 cm parabola

During all our work it started raining very slightly, temperatures were quite well concerning our QTH in 986 m asl. Saturday and Sunday afternoon we expected very spring-like weather, a high-pressure system should destroy the rainy weather into direction south – hope of having rain-scatter on the higher bands ....



The 23 cm-PA is put together including its telemetry - upchecked by Harti, DL6AUI

After building up the parabola (including telemetry and preamplifier) the mast is put up into the air. We could start mounting the 13 cm and 9 cm antennas on a second mast. After this we put together the parabolas for 6 cm, 3 cm and 1,2 cm on a separate mast.



„Egyptian triangular method“ to determine the place of the masts carrying the parabolas. The mast carrying the 23 cm antenna you can see in the front.

All parabolas have to be turned by the rotators without touching themselves, so that the position had to be determined by a special method created by Harti, DL6AUI. We call it the “Egyptian triangular method”, hi. Jens, DL2AKT is able to determine the place of the mast carrying 13 and 9 cm parabolas. On the place where the antennas for 6/3 and 1,2 cm will be put together you can see Harti, DL6AUI.



Matthias, DM5CT checking the direction of the 6 cm, 3 cm and 1,2 cm parabolas

Every parabola is carrying the PA, preamplifier and telemetry for its special band, a result of a severe engineering work since the last years. All of the parabolas are full aluminium dishes, those fore 13 cm and 23 have a dish of metal plaid.



All of the micro-wave antennas are put together ..

Harti, DL6AUI put the 13 cm an 9 cm parabolas exact into the direction south, the same must be done for all the other antennas. Jens, DL2AKT and Matthias, DM5CT are giving support finding the correct direction.

A little bit below the Schneekopf-plateau the 70 cm and 2 m yagi-antennas were put up by Oli, DL2ARD, Sebastian, DG5CST, Roland, DK4RC and the other OM's from Greiz-city.



4x15ele YU7EF-70cm-Yagis, the complete rig for 47 GHz and 76 GHz you can see on the left hand side on a tripod

For the 70 cm-Band 4x15ele YU7EF-Yagis were mounted on a special mast, another group of 4x13ele Flexa Yagis were put together for 70 cm, too, just below the tripod carrying the parabolas for 47 and 76 GHz. On 144 MHz 2x15ele M2-Yagis were in use (see below).



2x 15ele M<sup>2</sup>-Yagis used on 144 MHz

Putting together all the antennas was completely without any problems, so that we could start building up radio equipment.

During the last years a special “contest rack” controlling up to four transverters including telemetry and antenna rotors was constructed. A GPS-RX and a IC706 which controlled the transverters was implemented into the “contest rack”, too. This rack was used for 6, 3 and 1,2 cm band as we did during the contests before. A TR1296 transverter by Frank, DL2ALF and an Elecraft K3 by Matthias, DM5CT were in use on 23 cm. 13 and 9 cm working-station was covered by a transverters (13 cm, 9 cm) from Roland, DK4RC, and another IC706.



„Contest-Rack“ for the 6, 3 und 1,2 cm band in the microwave shack inside the VW-Bus from Sebastian, DB5SB)



Putting together the microwave shack, Matthias, DM5CT and Alex DH1NAX doing installation work ...



.... Sometimes you have to get in more deeply ...



Matthias, DM5CT, connecting the TR1296H and K3

In the beginning of the contest all was put together and worked without any problems. The conditions on the “lower” Bands were quite normal – no Tropo or Es. On 144 MHz we had one qso in a distance of more than 1.000 km with YU7ACU on May 5<sup>th</sup> at 04:49 UTC in KN05QC, SSB. Just 2 and a half hour before on 02:03 resp. 02:30 UTC we succeeded in having two qso’s in a distance of more than 900 km (YT1S, JN94RO, 934 km/ YU1EF, KN05CD, 930 km). On 70 cm the ODX was 974 km (YL3AG on the 4<sup>th</sup> of May, 22:30 UTC in KO06WK – CW) followed by G8VHI on the 04<sup>th</sup> of May on 17:08 UTC (IO92FM, 877 km) and G6OES (IO92FJ, 875 km).



Norbert, DL3ANK, operating 144 MHz



432 MHz-Antennas and VW-Bus

Special attention must be given to qso’s via airplane-scatter on 23 cm and 13 cm. The new AirScout-Software by Frank, DL2ALF gave an excellent support. Using this software you can forecast every qso in a precision of 1 minute. Using this software we could reach G8OHM in IO92AJ (903 km, 4<sup>th</sup> of May, 2055 UTC). More the less we had 7 other qso’s in a distance from more than 700 km on 23 cm. The number of qso’s on 23 cm – 220 – seemed to be a new record!

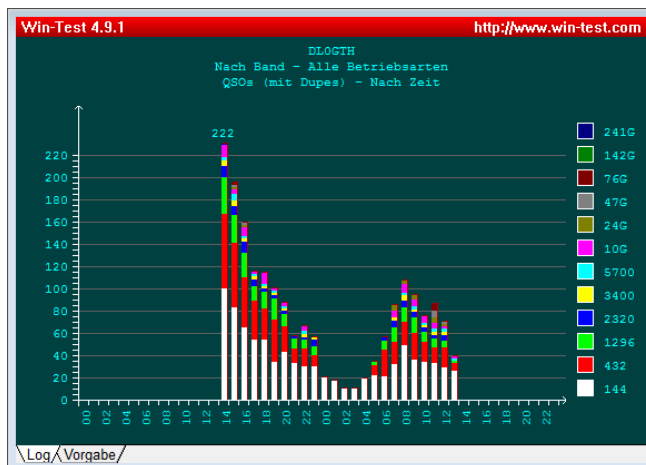


Contest in the „Microwave-Bus“: Sebastian, Jens, Frank and Alex covering the bands 23 cm upto 1,2 cm.

Things went as well as on 23 cm on higher bands, too. On 13 cm we had 68 (!) QSO's, ODX was 810 km (9A2SB, 04<sup>th</sup> of May, 21:05 UTC, JN95GM)

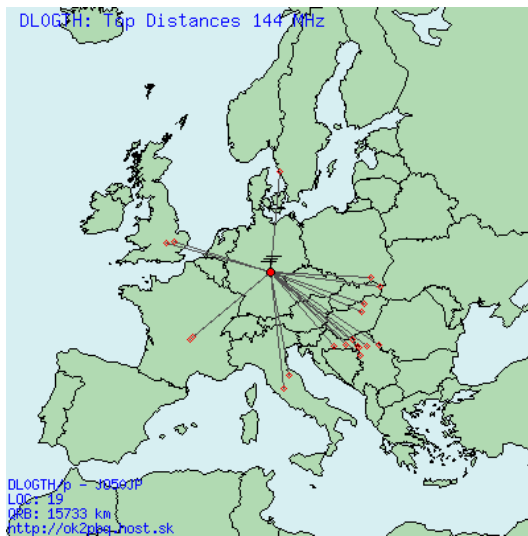
Freq.	QSO	Date	UTC	MODE	CALL	LOC	Km
3400	30	05.05.2013	08:14	CW	G3XDY	JO02OB	684
5700	23	04.05.2013	18:12	CW	SP6GWB	JO80JG	427
10G	64	04.05.2013	18:22	CW	OL7Q	JN99FN	560
24G	16	05.05.2013	09:57	SSB	DL7QY	JN59BD	174
47G	8	04.05.2013	16:53	SSB	OK1AIY/P	JO60LJ	156
76G	6	04.05.2013	15:44	CW	DB6NT	JO50TI	68

The table presents the situation on the bands between 9 cm up to 0,3 cm, those results are really satisfying.

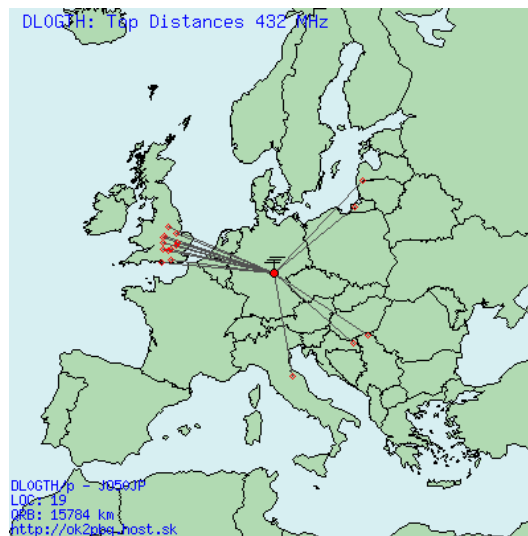


During the first hour we had 220 QSO's , during the following 3 hours there were about 167 QSO's in the log. Until 01:00 UTC the number of QSO's went down, on 02:00 UTC we reached its minimum (below 20 QSO's per hour) – but the distance increased. On 04:00 UTC the number of QSO increased again. On May 05<sup>th</sup> we had the ODX of the contest, YU7ACO in a distance of 1.000 km away from the Schneekopf in KN05QC.

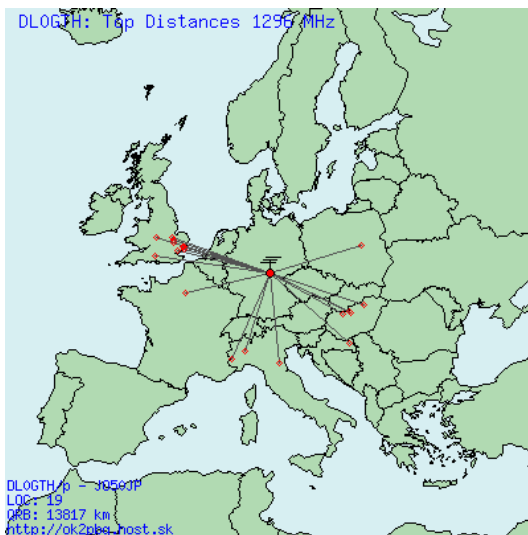
The top distances on 2 m, 70 cm, 23 cm, 13 cm, 9 cm, and 6 cm are shown in the following charts:



DLOGTH: Top distance 144 MHz



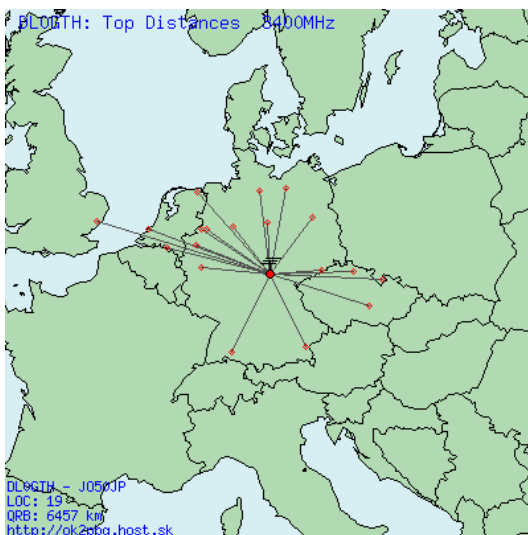
DLOGTH: Top distance 432 MHz



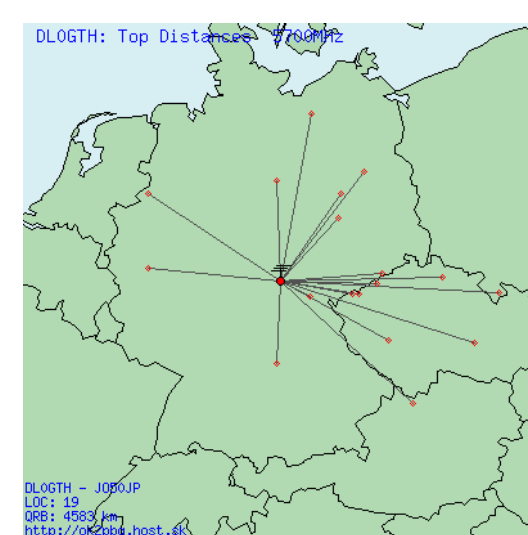
DLOGTH: Top distance 1296 MHz



DLOGTH: Top distance 2320 MHz



DLOGTH: Top distance 3400MHz



DLOGTH: Top distance 5700 MHz



DLOGTH - ODX in the contest of 04./05.05.2013 on the Schneekopf						
Band	Date	Call	UTC	DIST (KM)	LOC	WKD LOCs
2 m	05.05.2013	YU7ACO	04:49	1.000	KN05QC	99
70 cm	04.05.2013	YL3AG	22:30	974	KO06WK	85
23 cm	04.05.2013	G3OHM	20:38	903	IO92AJ	62
13 cm	04.05.2013	9A2SB	21:05	810	JN95GM	35
9 cm	05.05.2013	G3XDY	08:14	684	JO02OB	19
6 cm	04.05.2013	SP6GWB	18:12	427	JO80JG	14
3 cm	04.05.2013	OL7Q	18:22	560	JN99FN	27
1,5 cm	05.05.2013	DL7QY	09:57	174	JN59BD	4
1,2 cm	04.05.2013	OK1AIY/P	16:53	156	JO60LJ	2
0,6 cm	04.05.2013	DB6NT	15:44	68	JO50TI	1

We had 1.771 QSOS and 348 squares in total. The middle of distance was 312 km/QSO, a total score of 548.812 – an excellent result, without any broke down of equipment, as extensive as ever ....



Harti puts in all the equipment



Everything must be placed exactly ....

Without the support of so much OM's the contest on the Schneekopf isn't possible, and DLOGTH would have to be silent at all. Special thanks to the Ham's in the "second row", doing hard work, too. Special to those, who put all the equipment into the bus on the Friday before contest starts and put it off on Sunday evening after the contest is over in order to place all the stuff into the store in Gotha again... Thanks to all OM's who gave us a call in order to stay friend with DLOGTH again.



DLOGTH in „May-Contest“ 04../05.of May 2013 on the Schneekopf (JO50JP)



I would like to stay here on top of the Schneekopf enjoying spring time, until you are here again in June

