

EME @ DL6SH in JN48SW

from tropo to moonbounce



About beginning

Georg DF1SR asked me:

*Slawek can I park
my small dish in
your location
for a while?*

Results see next slides...



First operation via moon on 1296

Heard some ON7UN very strong in cw
(when on moon not in this position)

Made 12 qso's with big guns in 2008
with that dish:

3m Solid Dish DF1SR f/d 0,4
DGOVE ATV preamp Nf= 0,8 dB
Pout=250W

No readouts, using moon shadow



First own dish in 2009

3 m Mesh Dish f/d 0,32

Nf = 0,48 dB

Pout=250 W

Moon shadow „controller“



First improvements

3,7 m Mesh Dish f/d 0,26

Nf = 0,4 dB

Pout=250 W

Moon shadow „controller“



Looking for better dish

- found a **nice 4,8 dish at Zdenek OK3RM** near Pilsen not very far from Prague

The story:

Asked are you willing to sell?

Yes maybe..

When I can come over for pick up?

Everytime as you want

OK, I will come tomorrow!

No answer.... after a while OK OK

**Was there at 09:00 in the morning after a trip of 300 km with my trailer
Dish and support was in my trailer after at evening -> very happy!**

Building up the Eme Tower



All builders work made by my self alone
Using mainly my hands only
8 m³ of concrete homemade
Tower from German railway

New 4.8m dish



4,8 m Mesh Dish f/d 0,40

$N_f = 0,4$ dB

$P_{out} = 250$ W

First QSO october 2010

Lots of people helped put this together

4.8m dish converted to 6.5m

6,5 m Mesh Dish

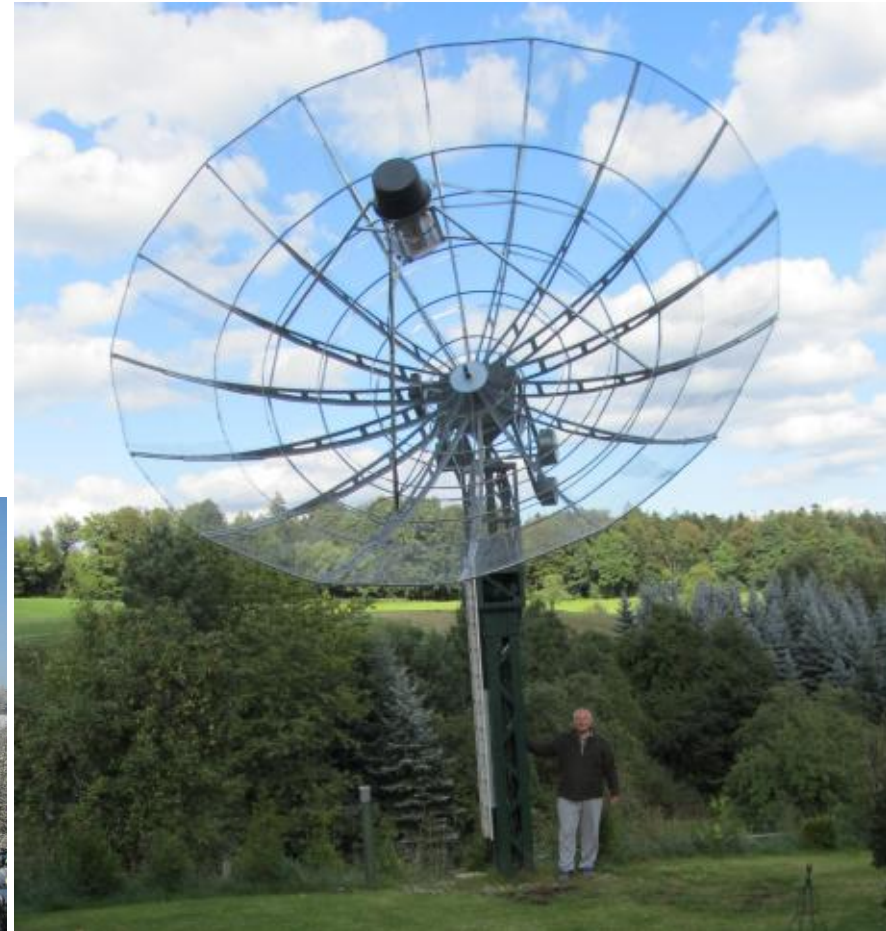
f/d 0,30

Nf = 0,4 dB

Pout=250 W

In operation 2011

BUT:



End of 6.5 m dish in December 2011



What to do now?

Dish destroyed
Operator frustrated

End of EME adventure?

-> **NO!**

Slawek will look for a new dish



A new dish has to be build

- ordered a 6 m dish at OK3RM
- much bigger dish support tube made by DF1SR & friends
- While inspecting the EME tower I realised that there was sufficient space for even a bigger dish
- After some calculations I decided to increase the Dish Diameter by 1m.....all by myself
But in radius of course
- Lots of Hams and Non Hams helped in this Project

New 8m dish



8m dish in winter

8 m Mesh Dish

f/d 0,30

Nf=0,2 dB

Pout=500 W on 1296 MHz

A more secure and safe

Parking position to prevent
any future catastrophes



Feed access



144 MHz operation

- OK1DFC ring feed



432 MHz operation

OK1DFC
ring feed



1296 MHz operation



Shack



Gearbox system OK2DL



Statistics

- 144 MHz: 2 CW inits, *over 270 JT inits*
- 432 MHz: 41 CW inits, 11 SSB inits, *over 100 JT inits*
- 1296 MHz: 170 CW inits, 73 SSB inits, *over 170 JT inits*
- 5760 MHz: 10 CW inits, 1 SSB

Some eme travelling



Next project

- Big dish: help need please contact Slawek



Thank you!

Any Questions?