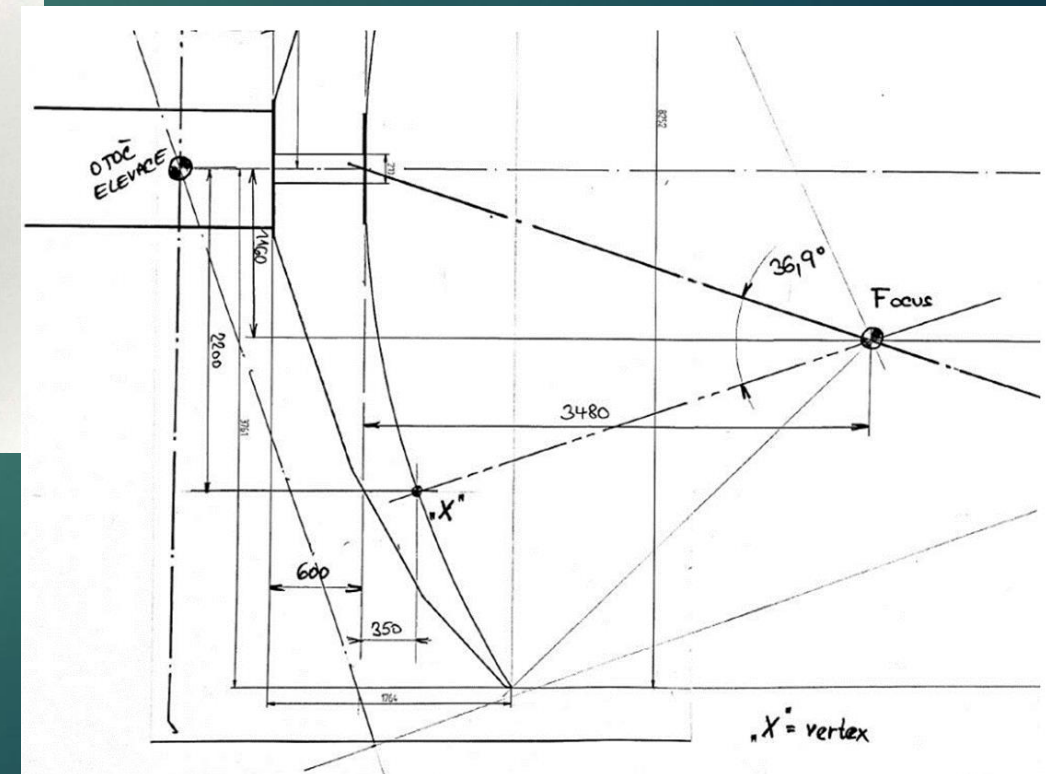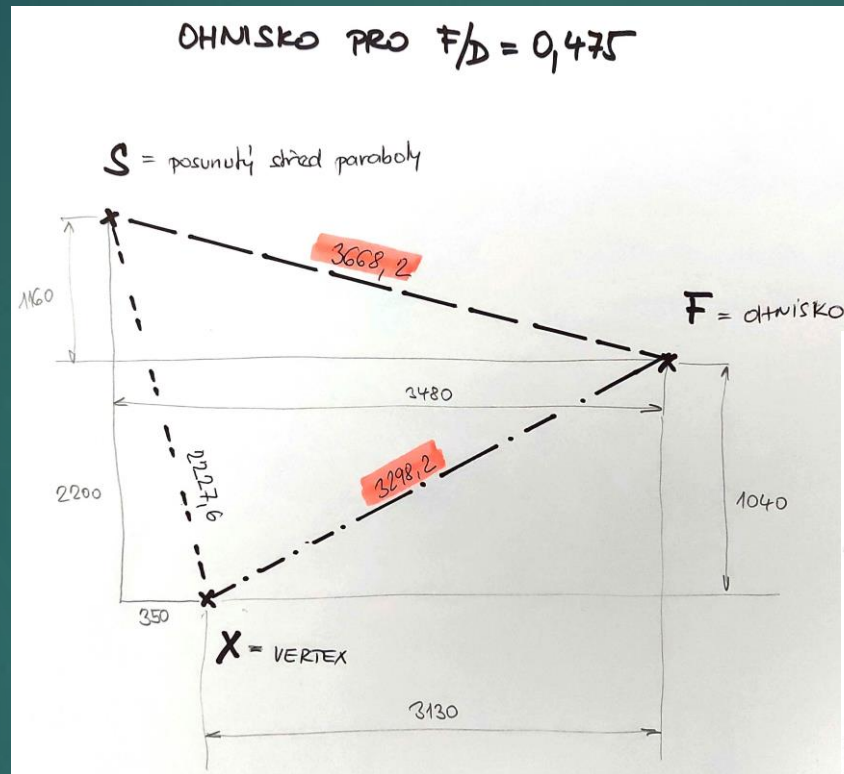# Final setup and operation of 8m offset dish

Setup procedure:

➤ Status of the dish after completion 10/2021
➤ Calculation of the exact position of the dish focus
➤ Production of setting jig
➤ Production of anchoring elements of the jig fixture
➤ Adjusting the feed holder to the focal point
➤ Feed axis offset angle setting
➤ Measuring the Sun's noise
➤ Measuring Moon Noise
➤ CW, SSB and Q65 echo test
➤ EME connections realized after feedhorn adjustment
➤ Production of feedhorn for 432 MHz
➤ Test of the dish for 432 MHz band

Antenna and focus adjustment 03/2022

- Calculation of the exact position of the parabola focus

OHNISKO PRO F/D = 0,475

S = posunutý střed paraboly

3668,2

F = ohnisko

1160

3480

2200

2227,6

3298,2

1040

350

X = VERTEX

3130

OTOČ ELEVACE

36,9°

Focus

3480

600

350

"X"

"X" = vertex

Antenna and focus adjustment 03/2022

- Production of setting jig
- Production of anchoring elements of the fixture
- Adjusting the feed holder to the focal point

Antenna and focus adjustment 03/2022

- Feed axis offset angle adjustment 36.9°
- Measuring the Sun's noise
- **22.5dB - 123 SFU**
- Measuring Moon Noise
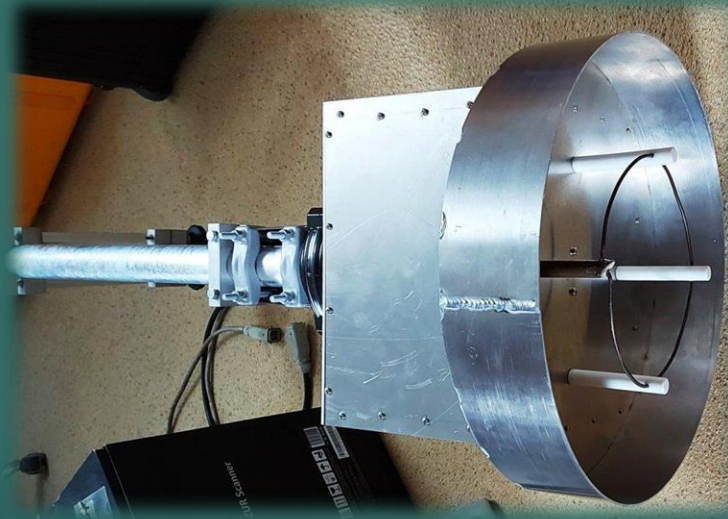- **1,1dB – clear sky**

After dish and focus adjustment 03/2022

- Self-echo test CW - 599, SSB - 57 and Q65 +02 DB, - 10W easily detectable CW signal
- EME QSO realized with **NC1I** and **N1V**
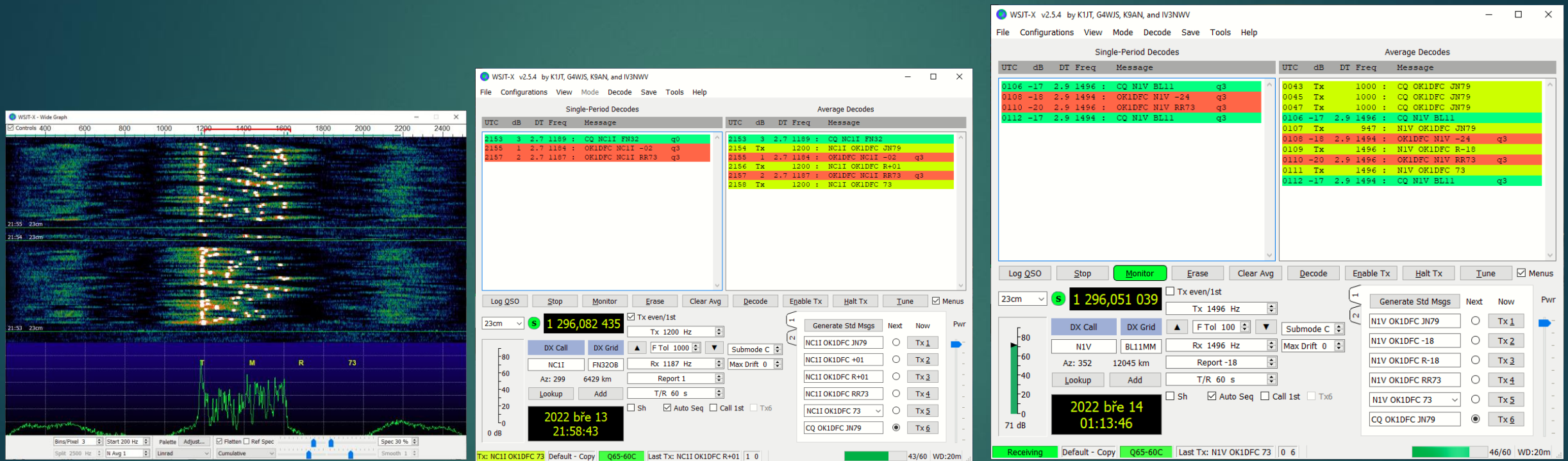
- CW smallest station 180cm offset and 50W RF 539
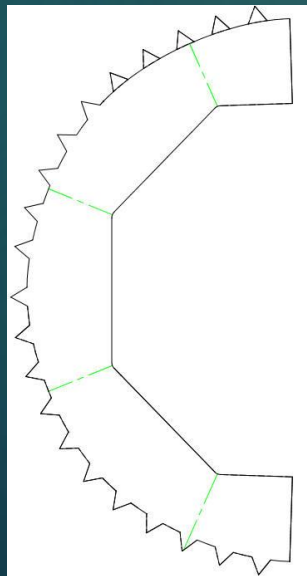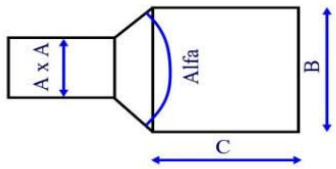- Q65 3m dish and **3W** RF !!! -18DB - **PA0TBR**

Dish and focus adjustment 03/2022

- Production of the 432 MHz feedhorn - Loop feed

Feeds

- Construction of 1296 MHz feed - septum OK1DFC
- Funnel W2IMU
- F/D = **0.457**
- 1296 and 2320 MHz

Dish and focus adjustment 03/2022

- 432 MHz dish test
- Smallest station 10el. Single Yagi and 100W -27 DB
- Sun **20dB** at SFU 123, up to 18° angle of elevation

Conclusion

Thank you for your attention - Questions ????