



10 GHz Cassegrain
Antenna Set



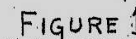
38 dBi

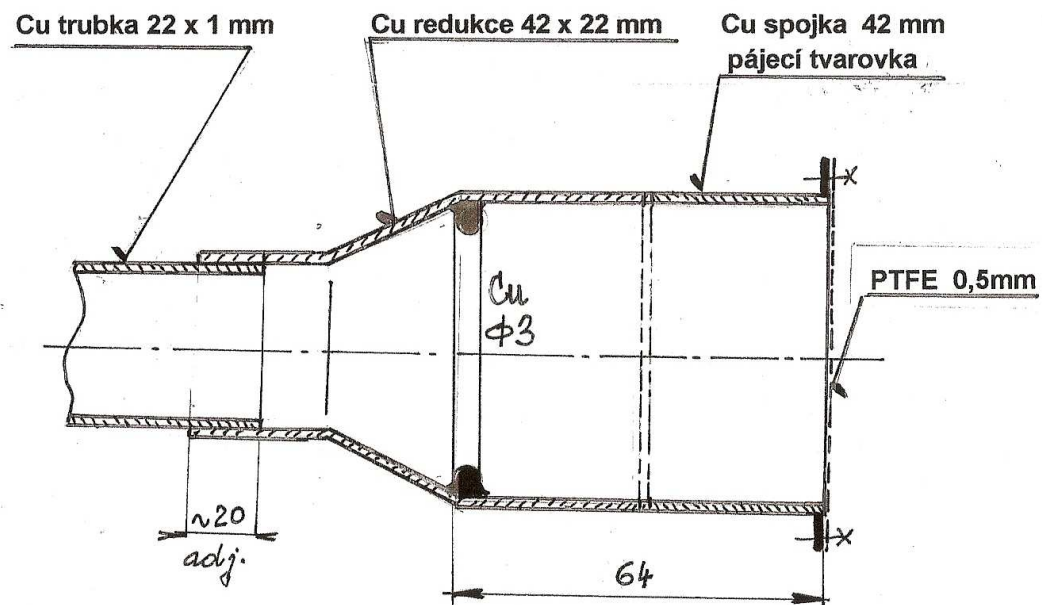
W2IMU - G3PHO – WB5LUA – G7MRF



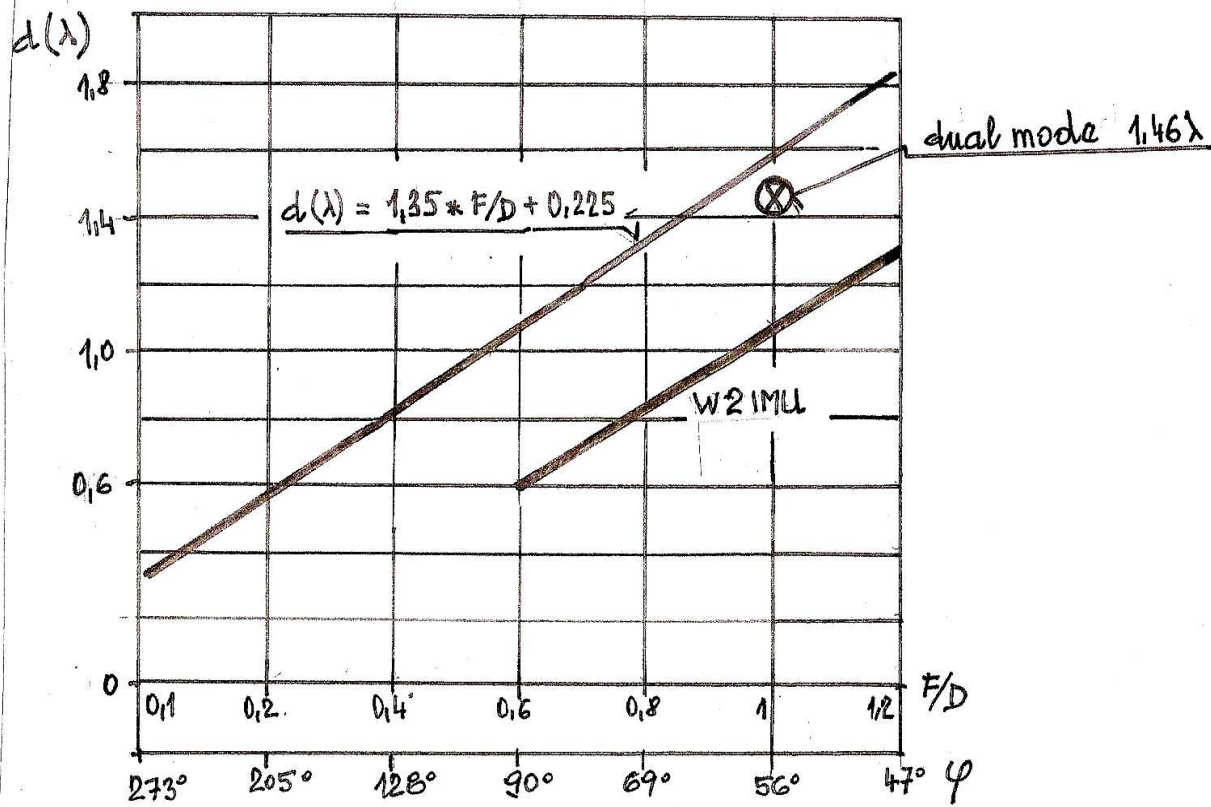
A & B ARE RECT. W.G. PORTS OF OPPOSITE CIRCULAR POLARIZATION

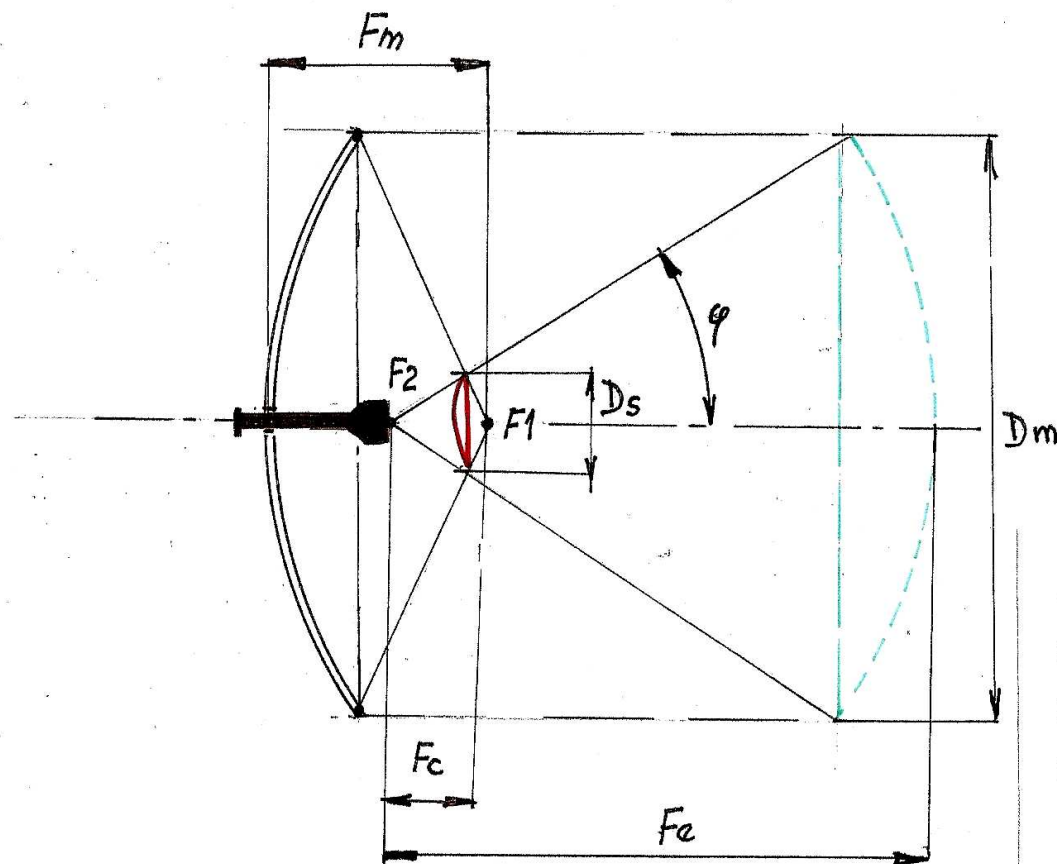
For parabolic reflectors of 48 inch diameter or larger, and with more commonly available f/d ratios from 0.35 to 0.5, **this feed together with an appropriate subreflector can result in a very efficient and high gain rear feedline Cassegrainian antenna.**





Dual mode feedhorn 10 GHz modifikace OK 2BFF $\phi \geq 31^\circ$ / - 10dB
CZ sortiment





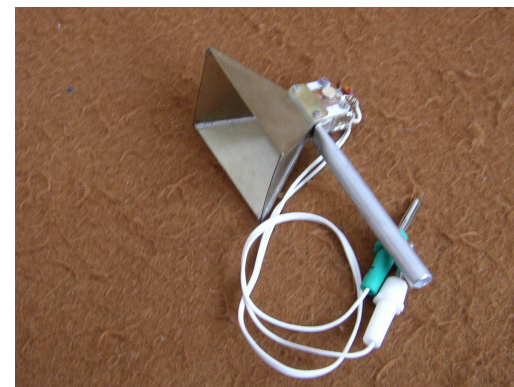
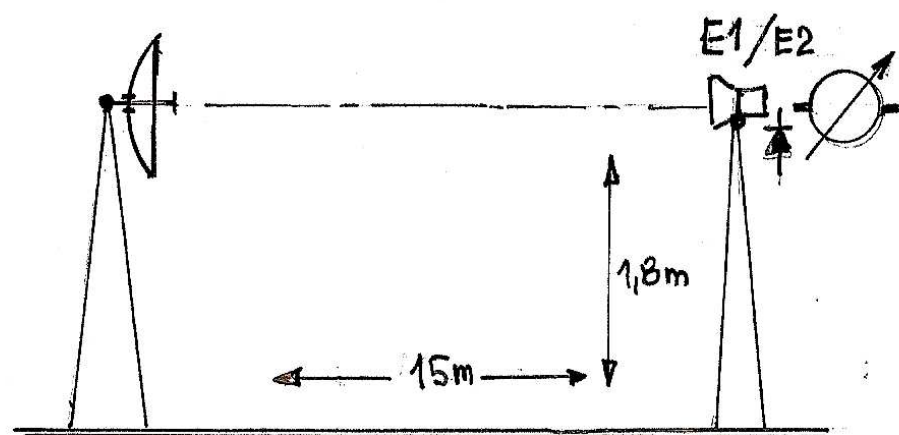
$$D_m = 900 \text{ mm} \quad F_m = 315 \text{ mm} \quad F_m / D_m = 0,35$$

$$D_s = 130 \text{ mm} \quad F_c = 130 \text{ mm} \quad \varphi \geq 31^\circ / -10\text{dB}$$

$$F_e = 891 \text{ mm} \quad F_e / D_m = 0,99$$

Rovnice pro subreflektor (hyperboloid) souřadnice X – v ose paraboly

$$X = 28,51 \left[\sqrt{1 + (Y/58,32)^2} - 1 \right]$$



Dish 600 mm 35dBi + Penny feed

naměřeno E1 = 100

Dish 900 mm 38 dBi + Cass. dual mode feed

E2 = 200

- přínos větší paraboly + 3 dB přínos Cass.versus Penny + 3 dB



gl 73 !

OK 2 BFF