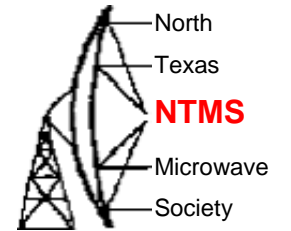


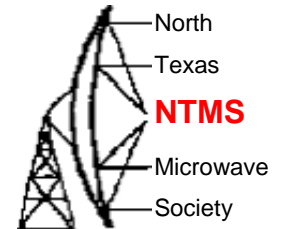
W5HN



A 134GHz Dxpedition to England

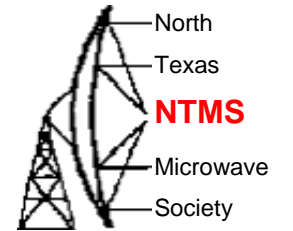
Meg Robinson N2NQI, M0FRE
Dave Robinson WW2R, G4FRE

History

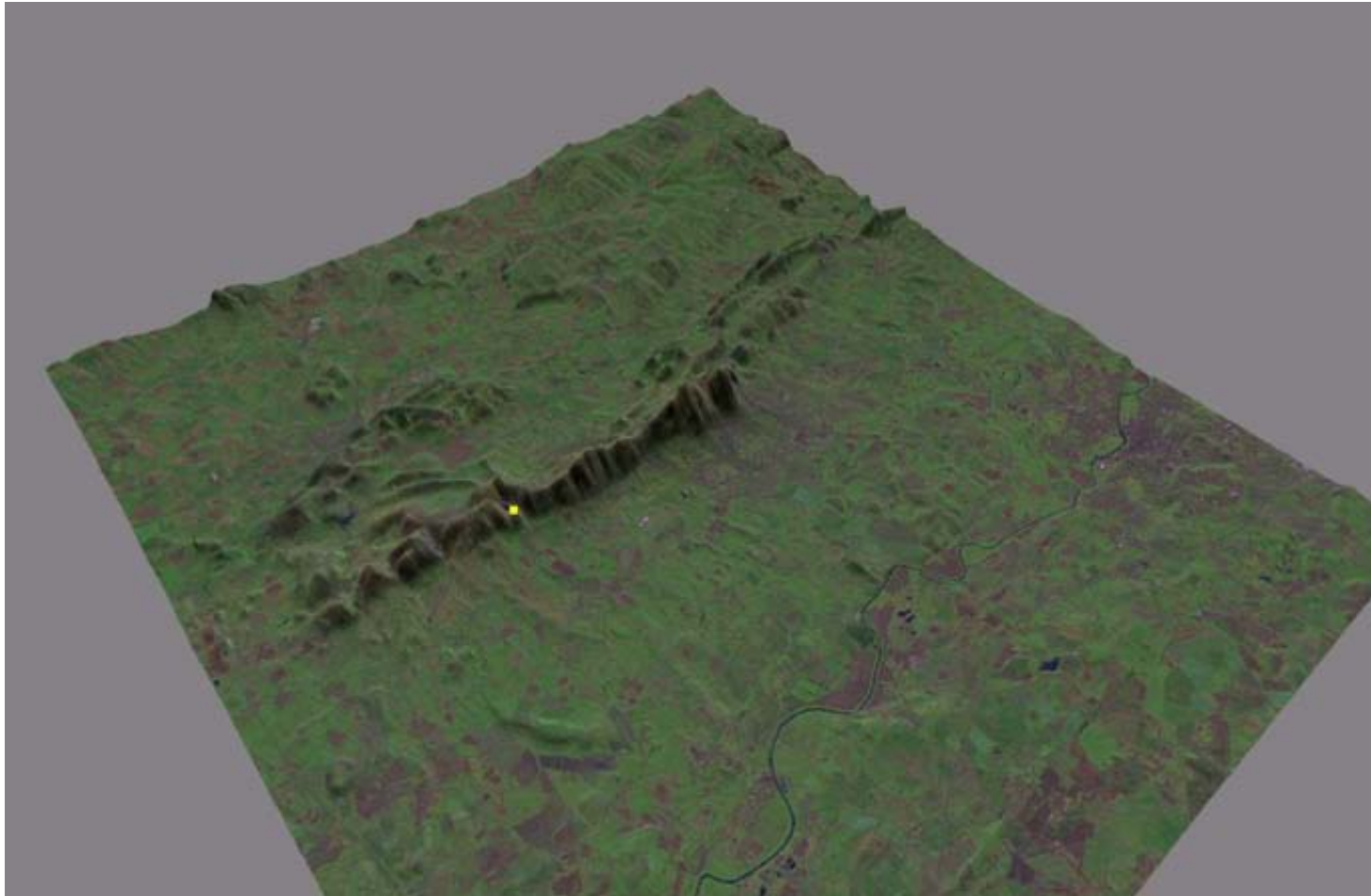
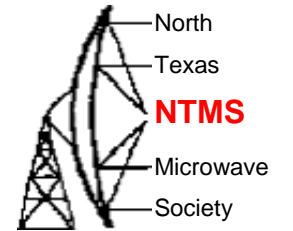


1. Had the first UK QSO on 145GHz in 2001
2. 145GHz band now lost in UK, but have now got 134GHz
3. Challenge to try for the 1st 134GHz QSO
4. Acquired an apartment in IO82UC with **EXCELLENT** takeoff to East. **NO** takeoff to West.
5. Started building gear after being inspired at MUD 2005
6. Gear not finished by Xmas UK visit, so next chance was to try on my "Birthday" trip to England in February

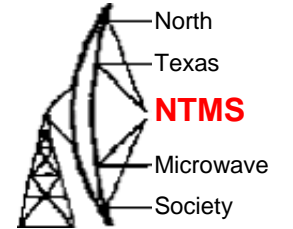
MOFRE QTH



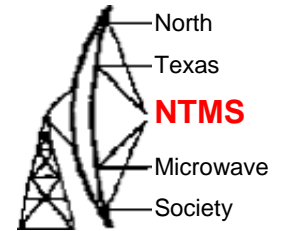
3D view



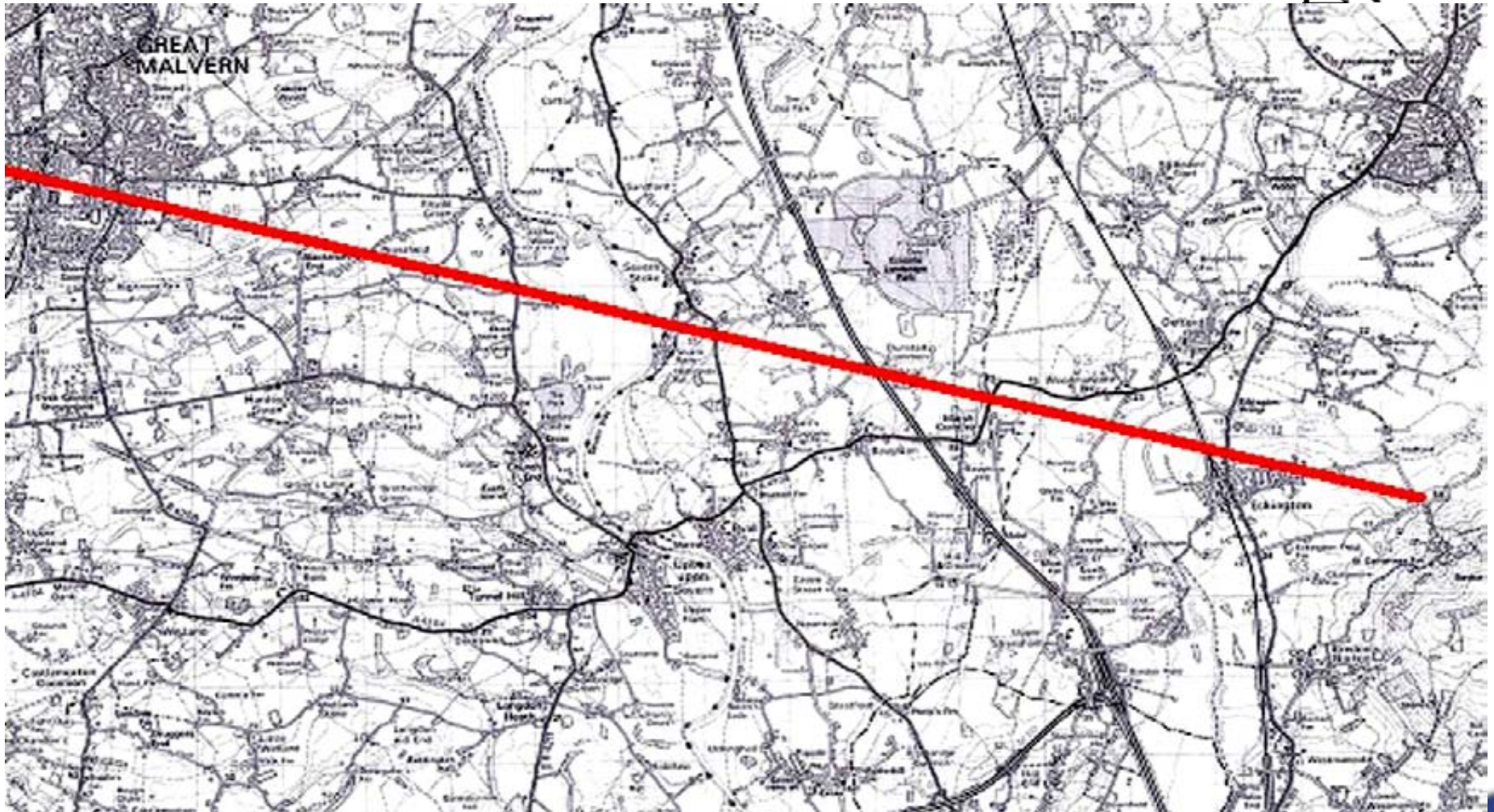
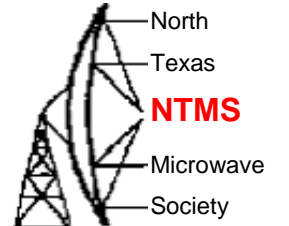
Takeoff West



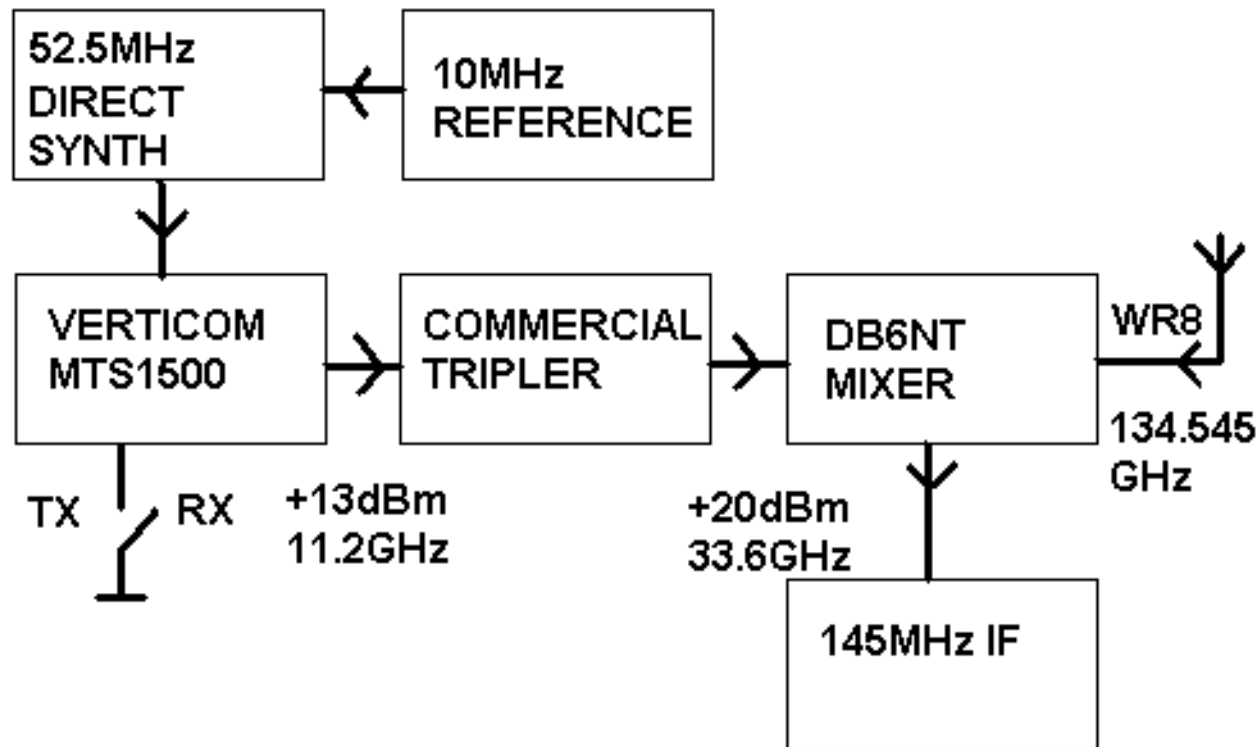
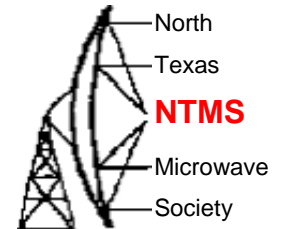
Takeoff East



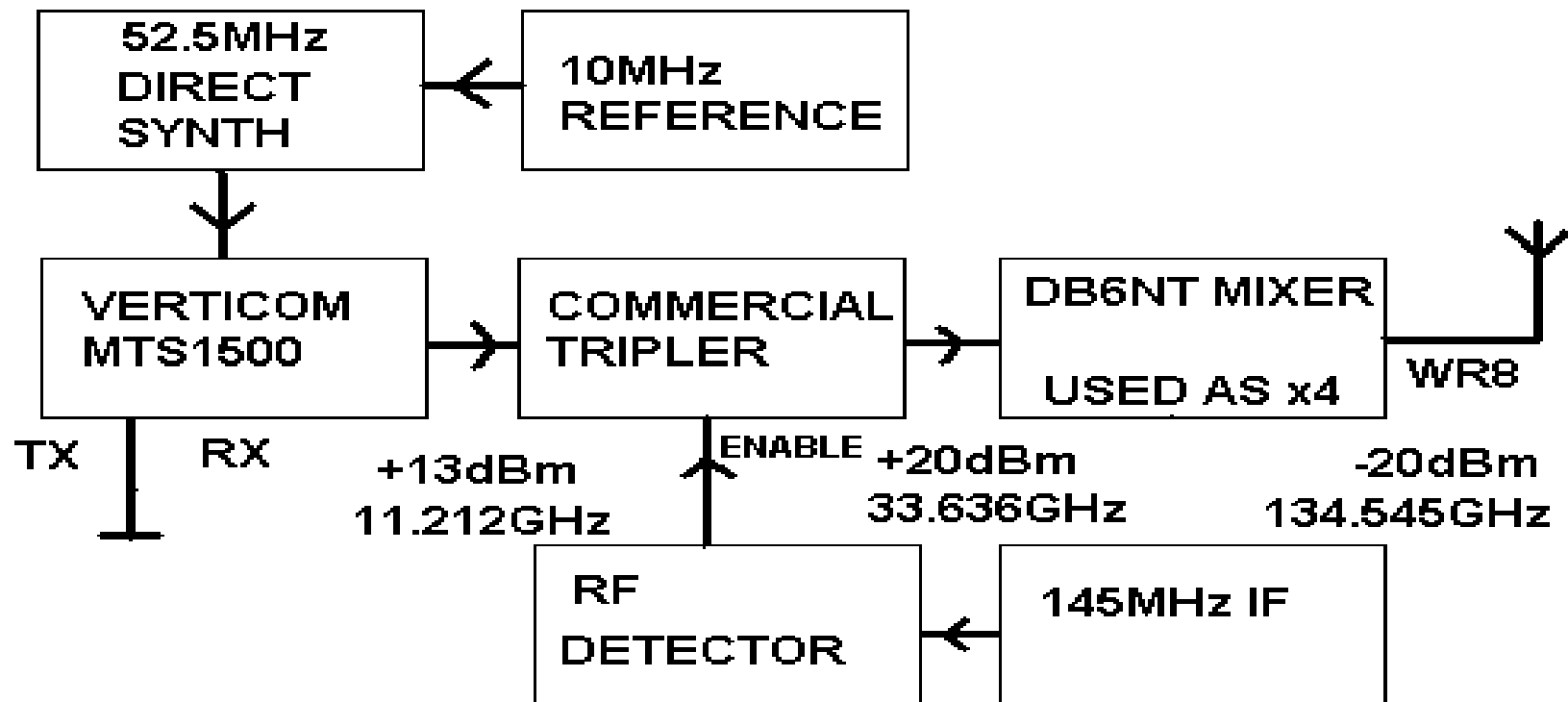
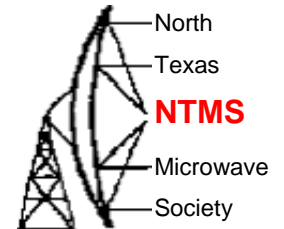
Path IO82UC to IO82XC



134GHz Rx Block Diagram

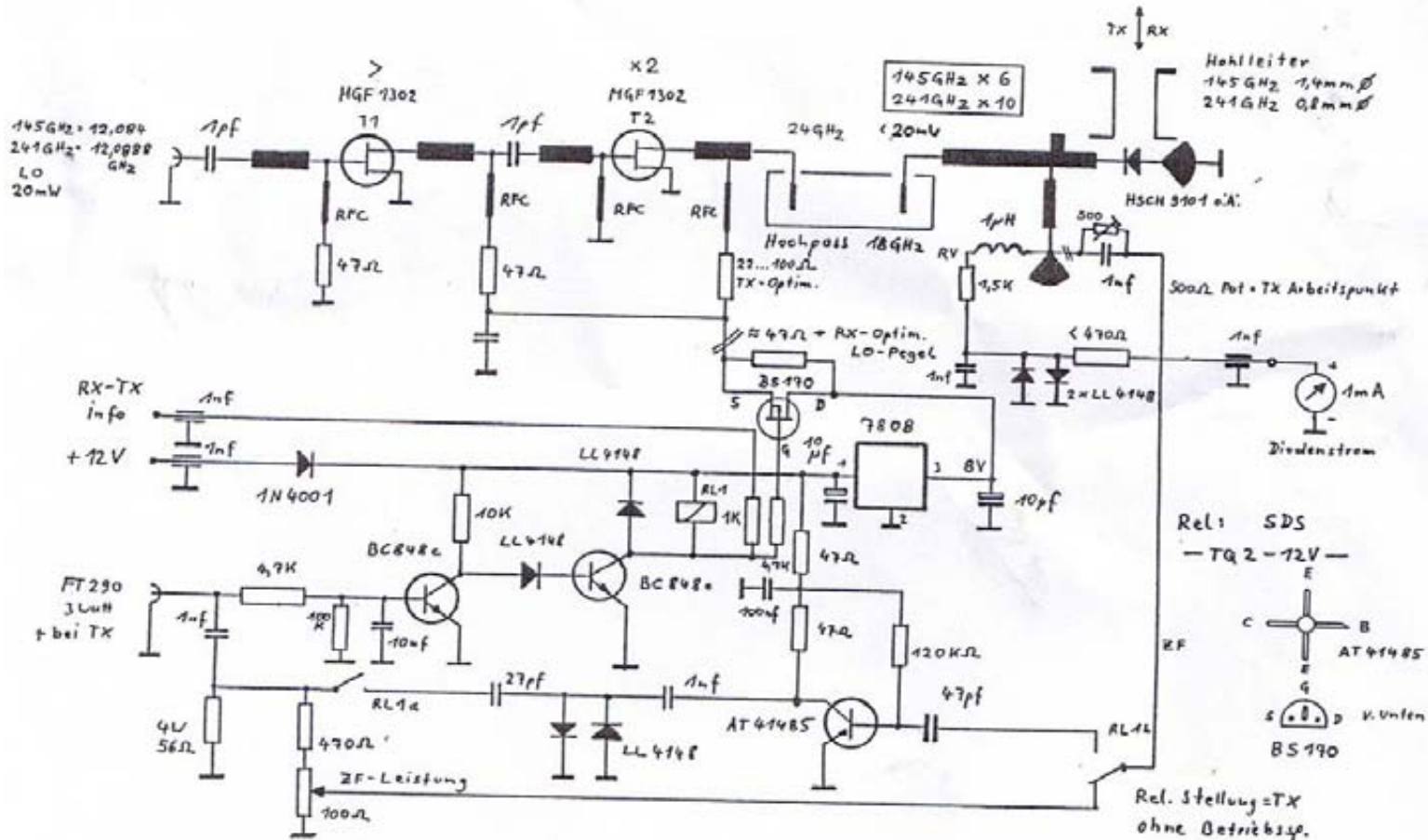
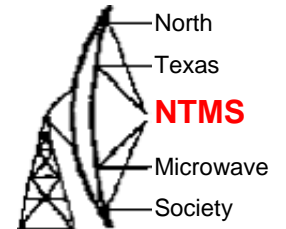


134GHz TX Block diagram

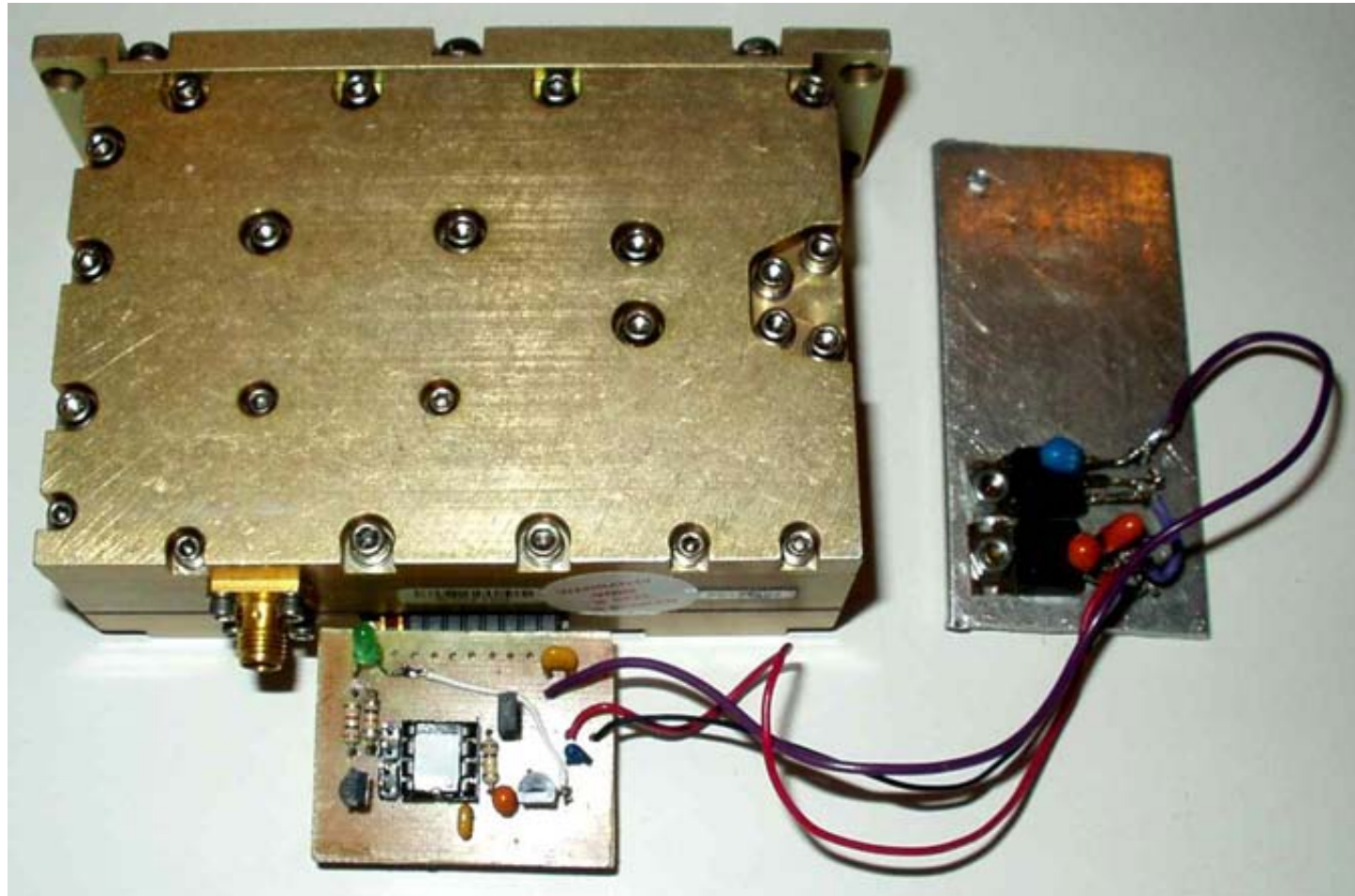
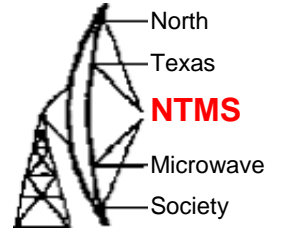


Note that the PLL *reference* is the same between RX and TX, only the PLL programming alters

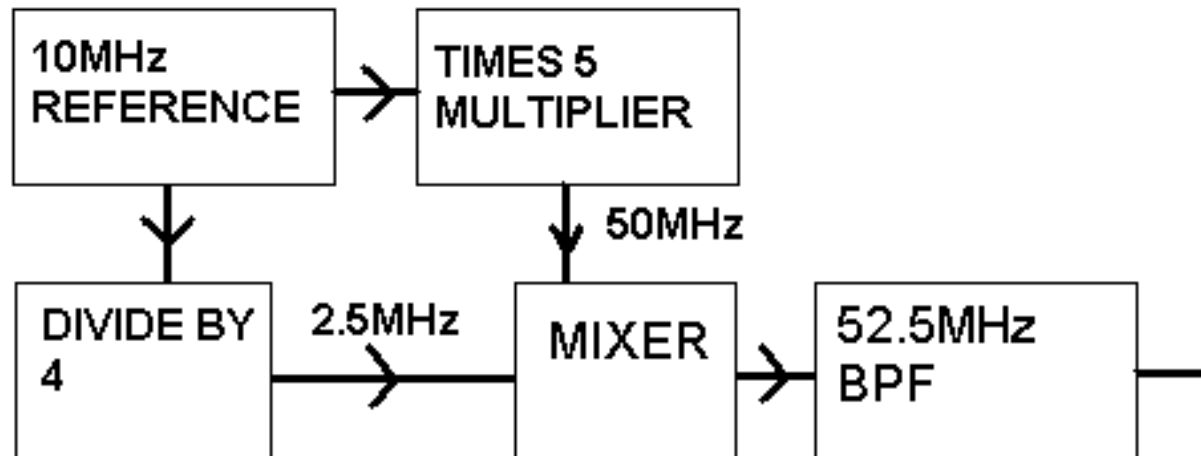
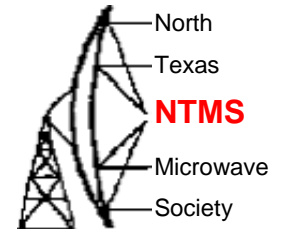
Original DB6NT 145G Xverter



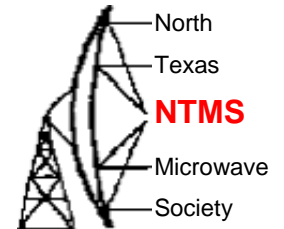
Verticom Brick



52.5MHz REFERENCE

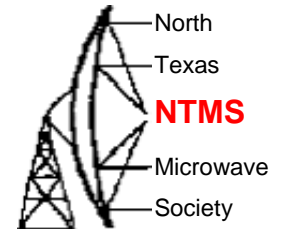


Schedule



- Feb 16: Arrive at apartment. Hook up z3801 reference, start survey. Suitable condx
- Feb 17: Suitable condx. Z3801 still locking
- Feb 18: GPS survey completes in evening; (west blockage caused slowness). Suitable condx
- Feb 19: Early thick fog! Go for scenic coffee. Watch Olympics
Fog Clears 2100z. QSO at 2244. Temp -3.5C!
- Feb 20: go to Airport!

Summary



- M0FRE IO82UC 158m ASL

IC202 + XVERTER. GPS 10MHz REF. WR8 HORN

- G4FRE/P IO82XC 61m ASL

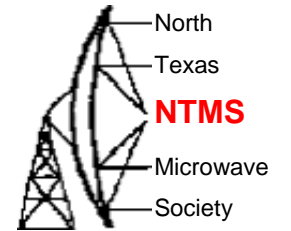
FT817+XVERTER. 10MHz Rb REF. 0.25m dish with WR8 Cassegrain feed.

Dish aligned using telescopic sight. (M0FRE located alongside a 10th century Priory which is illuminated at night.)

QSO COMPLETED AT 2244 ON 19 FEB.

539/529 REPORTS. 17.73km

References



145GHz mixer

- Dubus Technik IV