

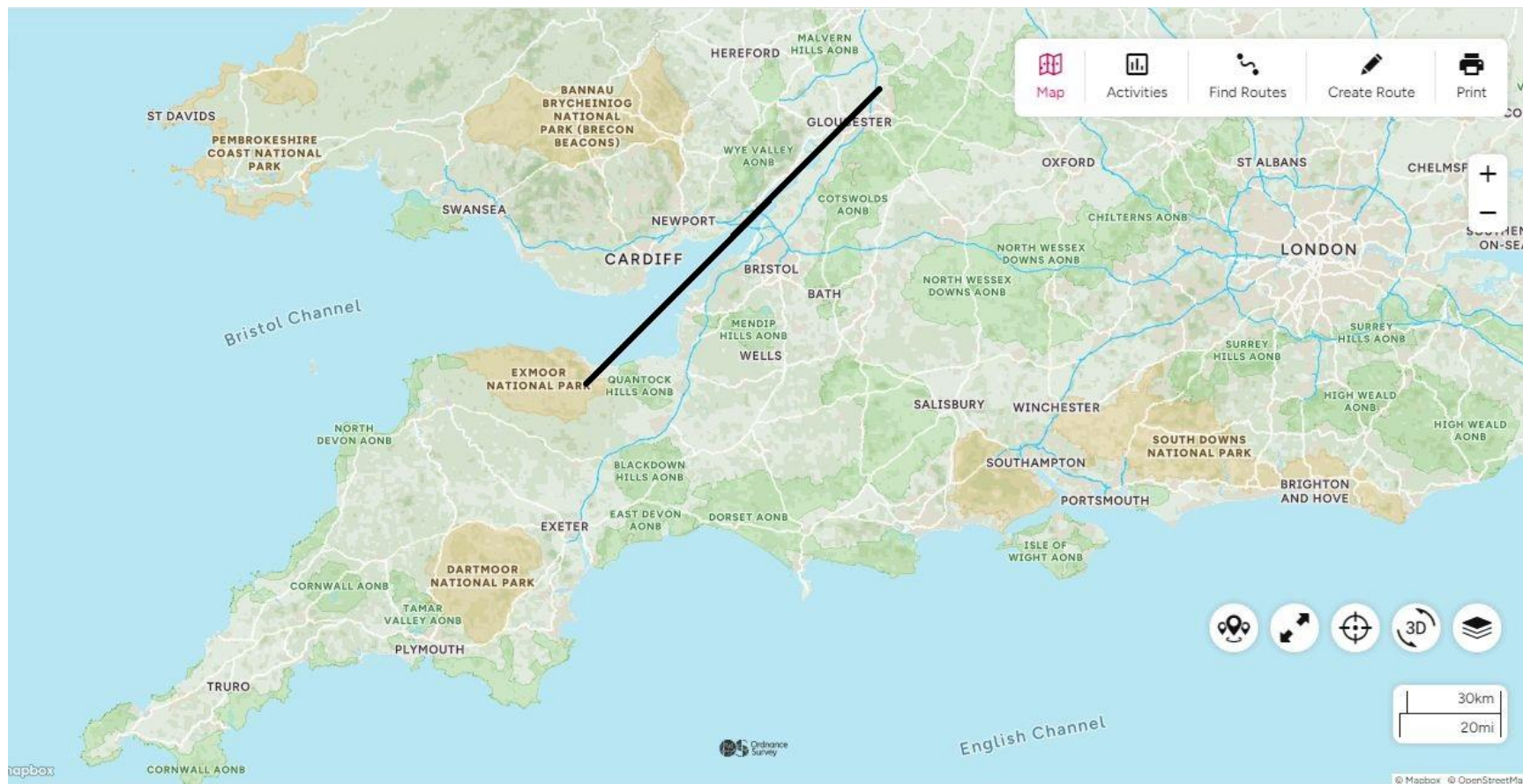
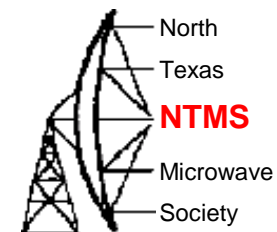
# G4FRE activity update for 2024

Dave Robinson G4FRE, WW2R

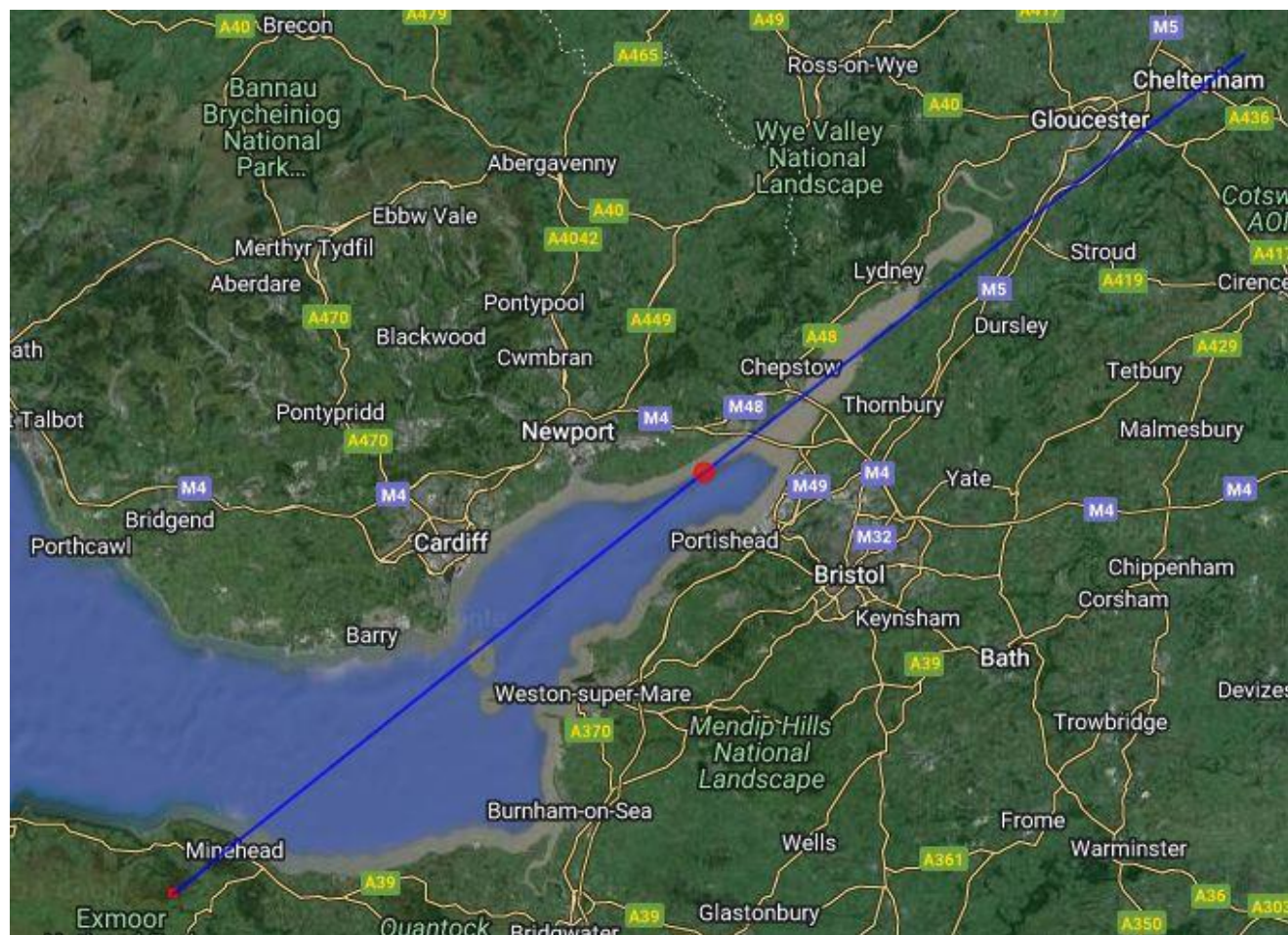
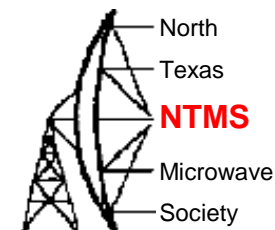
7 December 2024

# DATV DX

# Geography

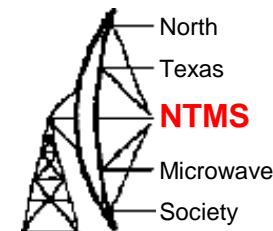


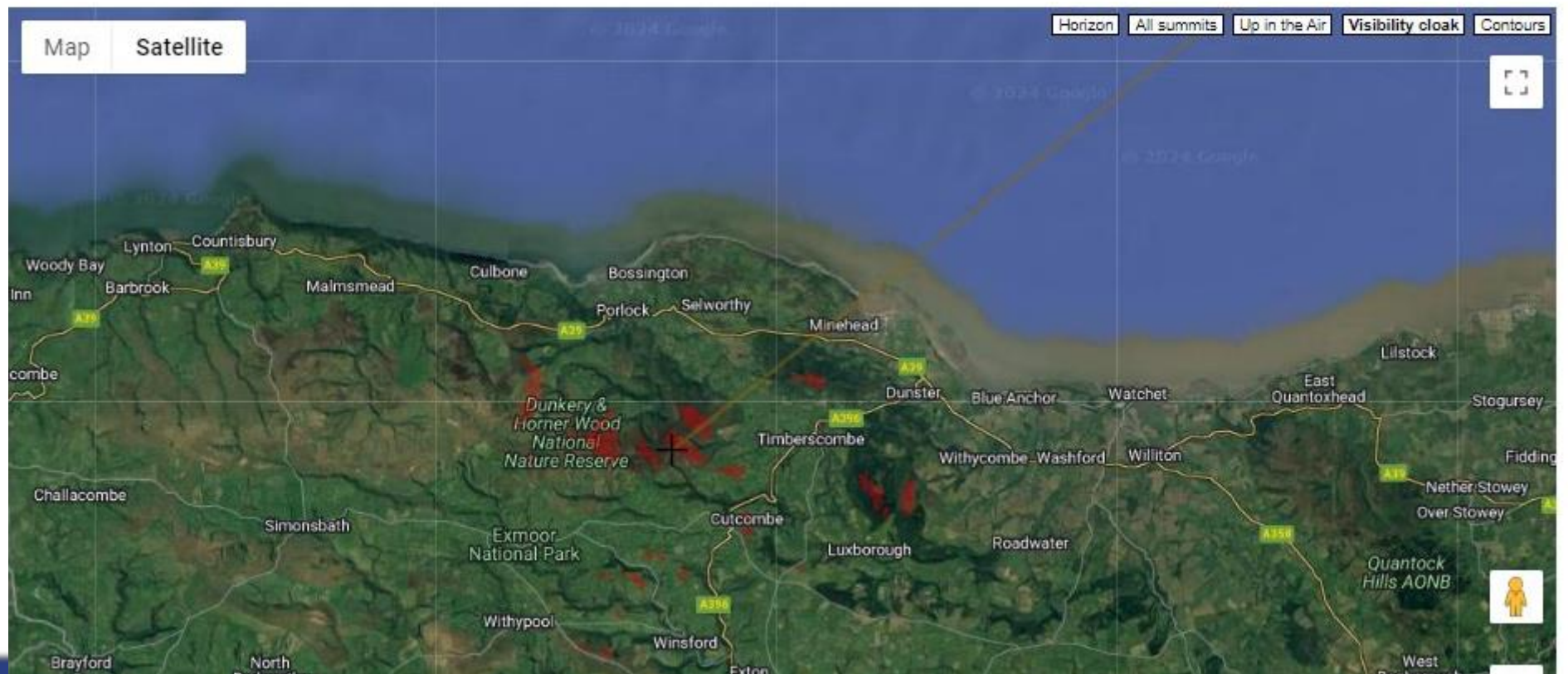
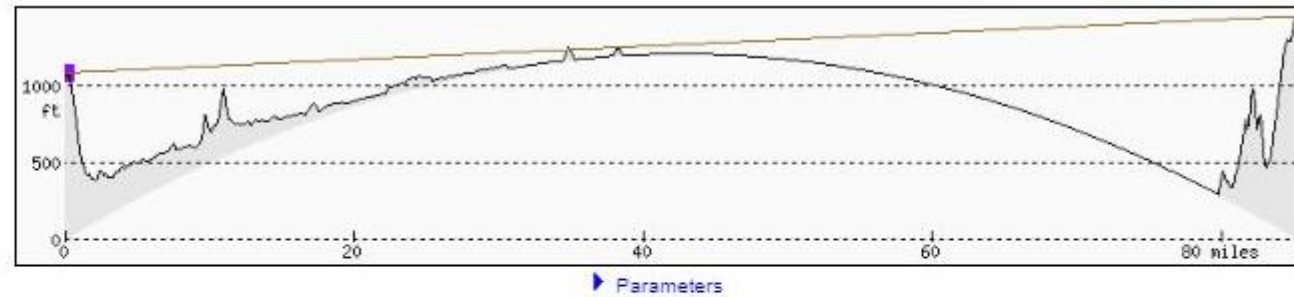
# The Path 136km





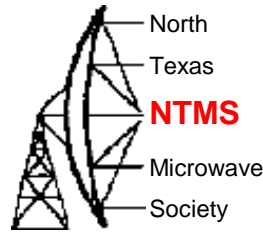
# Previously worked on 24GHz DATV from IO81XW81 136km





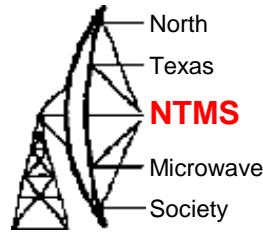


# Decided to go and experience the other end!



Also try to extend 76GHz UK NB record

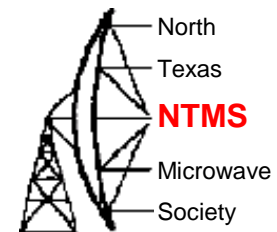
# Roadside Location Previously used by G8GTZ



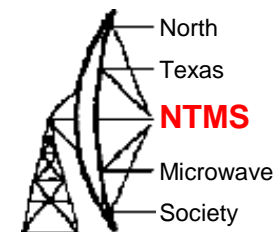
Worked G8CUB/P 24GHz NBFM and 47GHz SSB  
Too much moisture for 76GHz



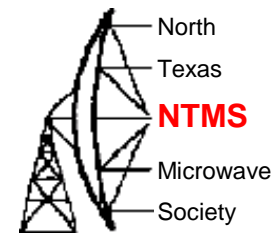
# View back to IO81XW



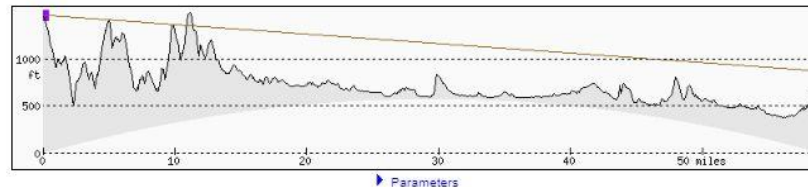
# The Island Blockage (left)



# While I ws there...

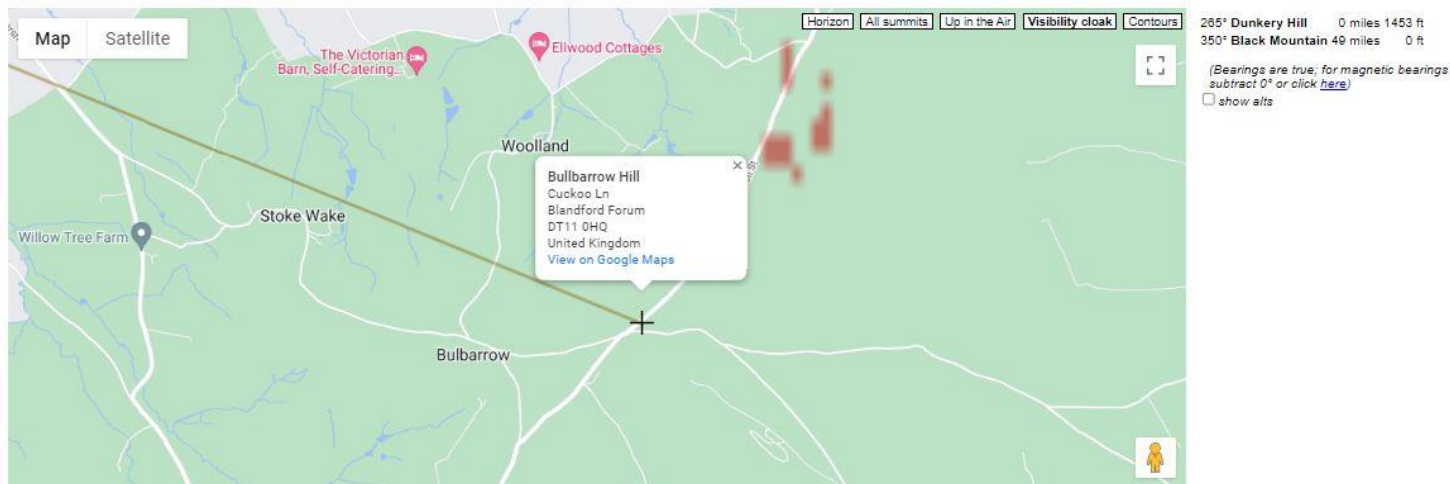


Worked IO80UU at 96km on 24GHz DATV  
 Worked IO80UU at 96km on 47 GHz CW  
 (Both obstructed paths)



[Hide profile 1](#)

[Show profile 2](#)





# IARU TV contest 2024

# IARU TV 2024 Day 1

Started at IO81XW

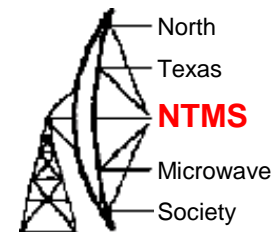
- Worked G8GTZ/P IO81FD on 5 10 and 24GHz  
136km
- Worked G4XAT/P IO91GI on 5 10 and 24GHz  
76km

Went to IO91BV

- Worked G4XAT/P IO91GI on 5 10 and 24GHz  
67km

Drove 80 miles to a hotel near IO91GI

# IARU TV 2024 Day 2

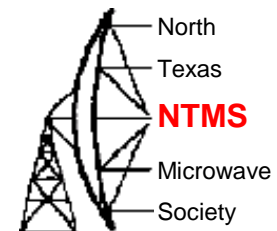


Went to IO91GI25 Combe Gibbet

- Worked G4XAT/P IO91GI on 5 10 and 24GHz
- Worked G8GTZ/P IO91GC on 5 10 24 47 and 76GHz (28km)
- Worked G8GKQ/P IO91JA on 5 10 and 24GHz (41km)
- Worked G8GTZ/P IO91JI on 5 10 24 47 and 76GHz (35km)



# IARU TV 2024 Day 2



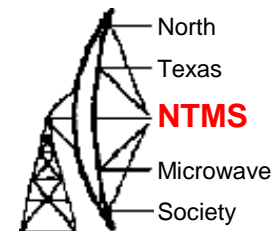
The Gibbet

76GHz

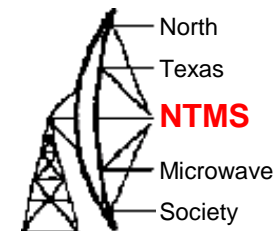
47 GHz



# On the way I visited G4XAT/P



# IO91GI61



Went to IO91GI61 Combe Masts  
 Worked G8GTZ/P IO90MX on 5 10 24 47 and 76GHz



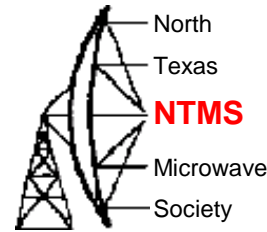
DVB-S2 Lock  
 146.064 MHz  
 333 KS  
 FEC 1/2  
 QPSK  
 G8GTZ/p  
 Portsdown 4  
 H264 AAC  
 MER 3.0 (1.0 needed)  
 RF Input Level -71 dB  
**1928**  
 Touch Left to Hide Overlay  
 Touch Centre to Exit  
 IO90MX 76GHz

54km UK 76GHz DATV Record



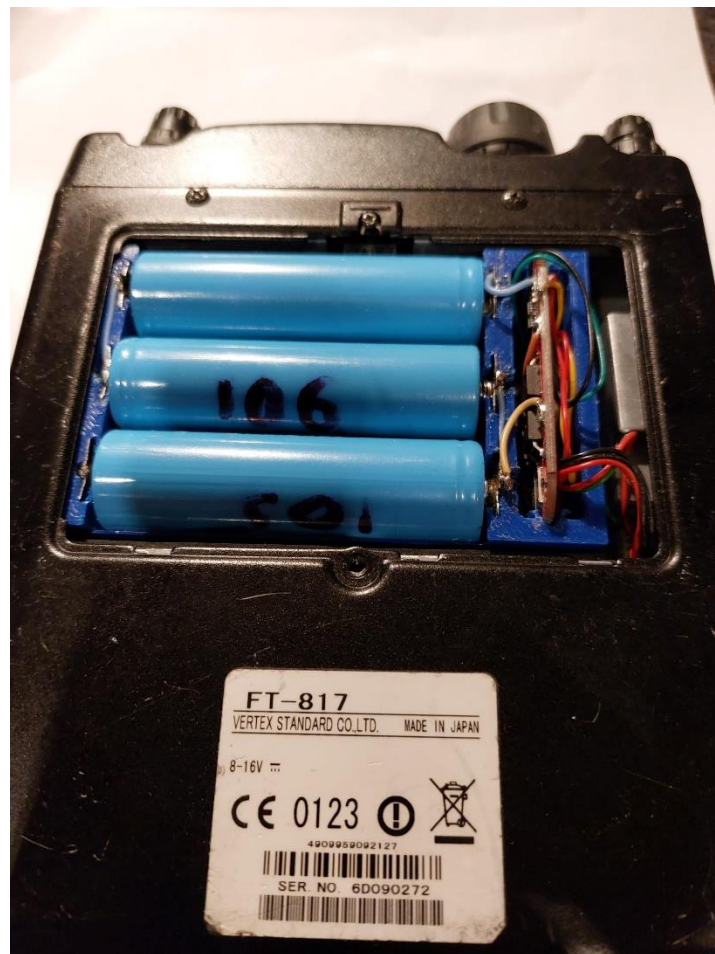
# Construction Projects

# FT817 battery pack



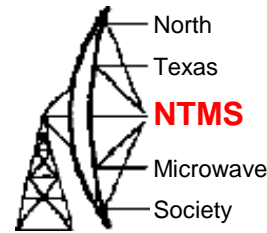
- FT-817 battery holder with BMS :  
<https://www.thingiverse.com/thing:4551923>
- Files for Holder and replacement lid (taller batteries) to 3D print provided
- BMS battery terminals from aliexpress \$4
- Important to add wire from battery negative to BMS negative terminal or battery pack doesn't get turned on at FT817 turn on

# FT817 Li-ion (18650) Battery Power

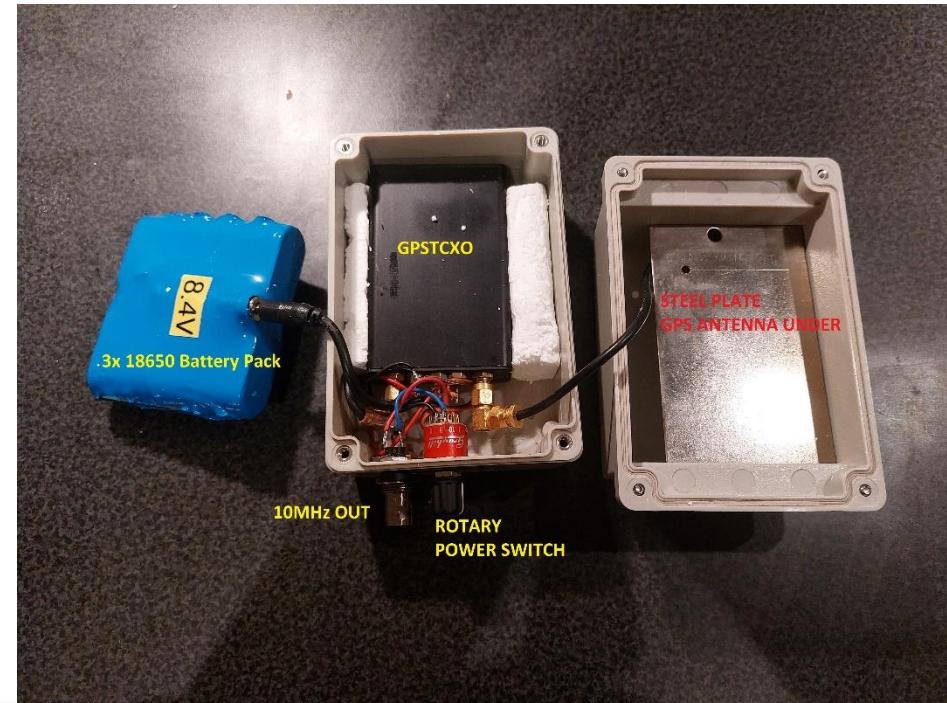




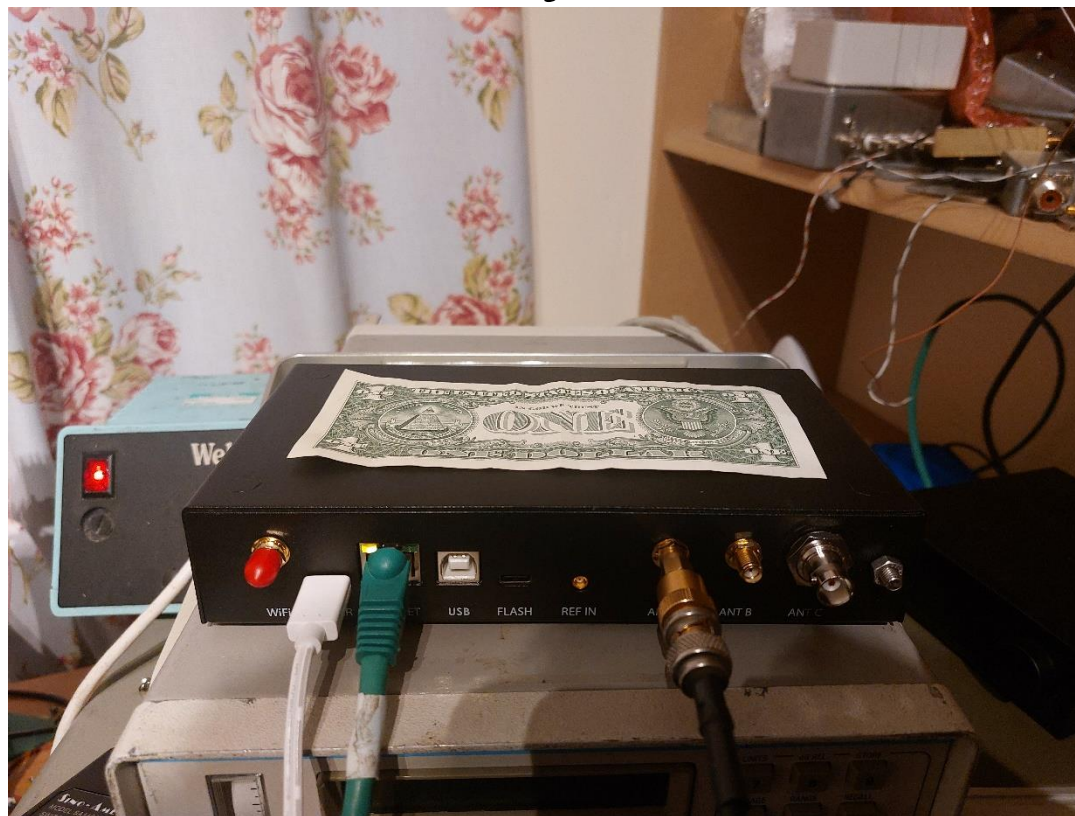
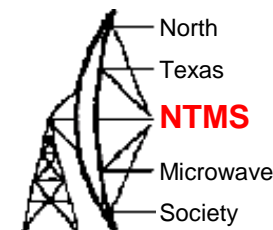
# Portable GPS 10 MHz



- Self contained (no cables to lose or damage)
- Jackson labs GPSTCXO(TAPR bulk buy 2012)

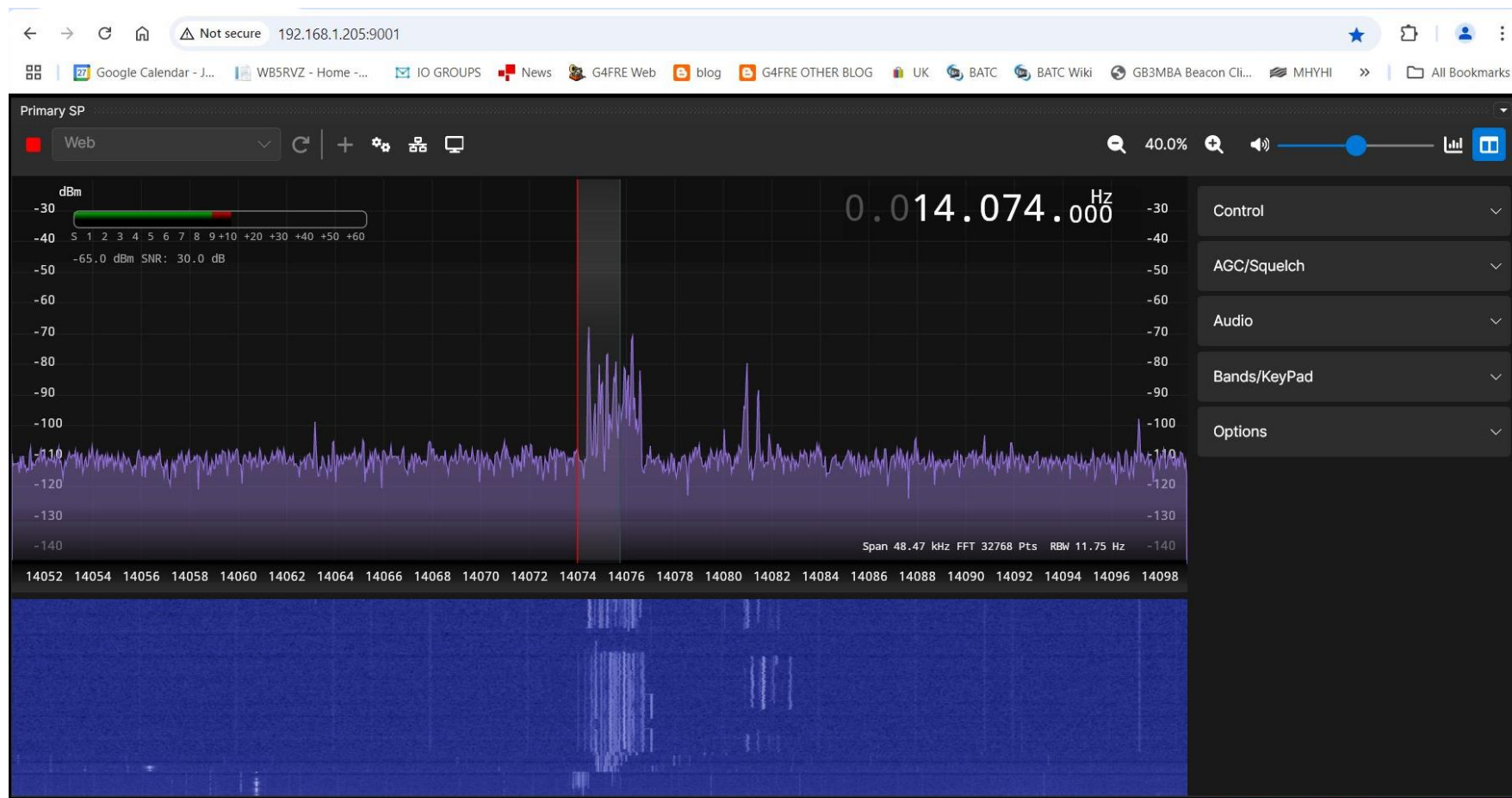
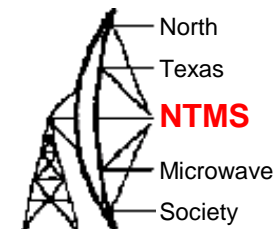


# Latest toy (arrived Yesterday) SDRPlay nRSP-ST

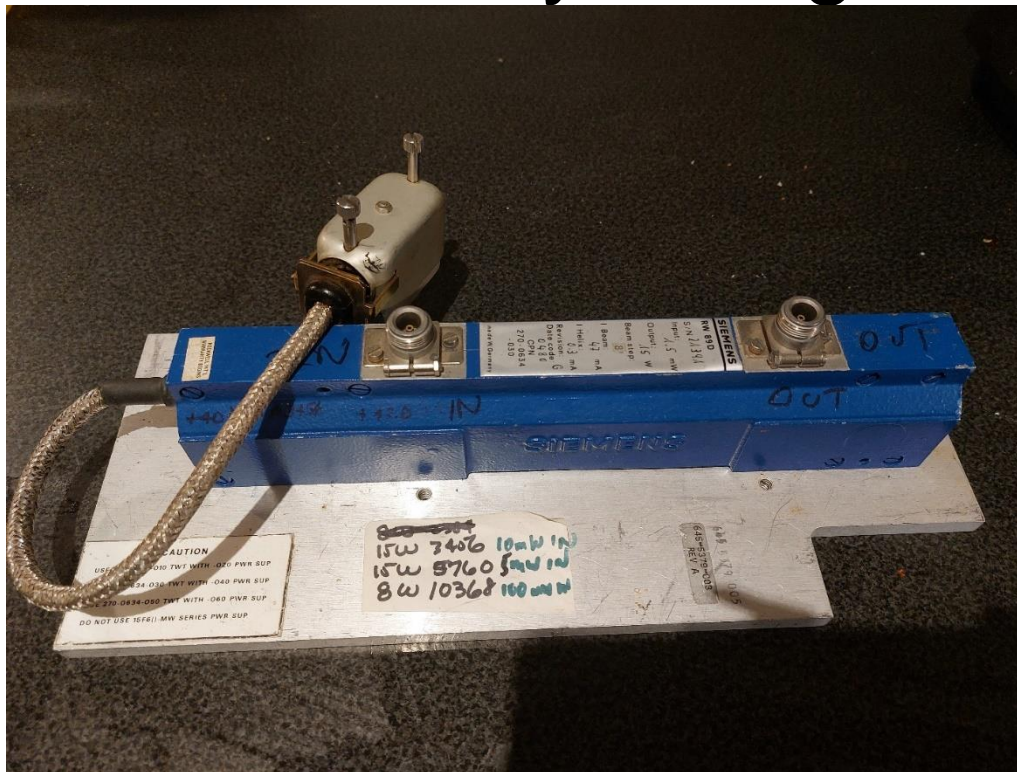
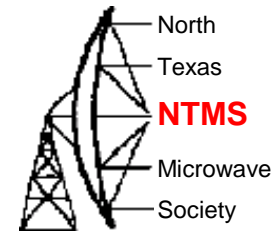


1kHz to 2 GHz, REMOTEABLE WITHOUT PC!

# Built in web interface







Still gives 12/10/7W after 15 years usage  
Apply 6V from DC Power supply for 24 hours to heaters if left unpowered for more than a month **or you WILL KILL the Siemens power supply on power up!**

# Questions?