

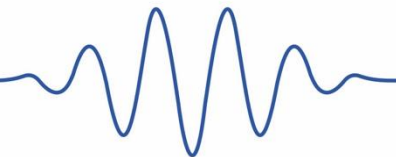
What's so special about VHF/UHF?

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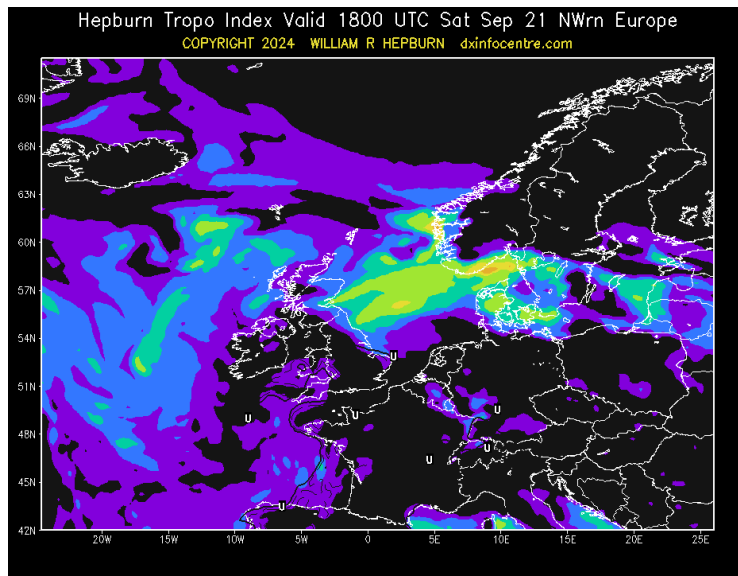
What's so special about VHF/UHF?

- VHF/UHF is more than for local chats – though it's great for that
- Tonight we will look at some things to try to and get more from your VHF/UHF station. There's loads you can do with a simple vertical aerial – let alone if you have a beam!
- I'll try and convince you not to listen to the people that say 'there's no activity on VHF'.



The mystery of propagation!

- VHF is NOT always line of sight!
- How is it that some days, signals from somewhere are S9 and yet other days, there is nothing! This fascinated me from early on as well as learning about the different modes of propagation; tropo, Es, meteor scatter, aircraft scatter etc.



50MHz (6M)

- Main Es season: May to early August
- 27/28MHz may give you a clue about Es, particularly 27MHz (shock!). Look for loud signals over a short distance.
- G7IZU website (<https://www.tvcomm.co.uk/g7izu/>) and Propquest (<http://www.propquest.co.uk/map.php>) will give graphical clues
- Digital modes give you a great advantage as well as being where the predominant activity is but you will find some SSB and CW
- Don't forget the Winter Es season
- TEP and F2 possibilities at solar maximum (particularly Oct and March)
- Simple gear will work well for single hop Es and Europe

50MHz (6M) – Summer season

- Multi-hop openings to US (East Coast and West Coast), Middle East and very occasionally Australia!
- Short Path Summer Solstice Propagation
- Meteor Scatter in August (Perseids)
- Openings have started in 2026. Some European openings, short openings to North America and the Caribbean and even an opening to Australia last week.



2m/70cm DX: on FM?

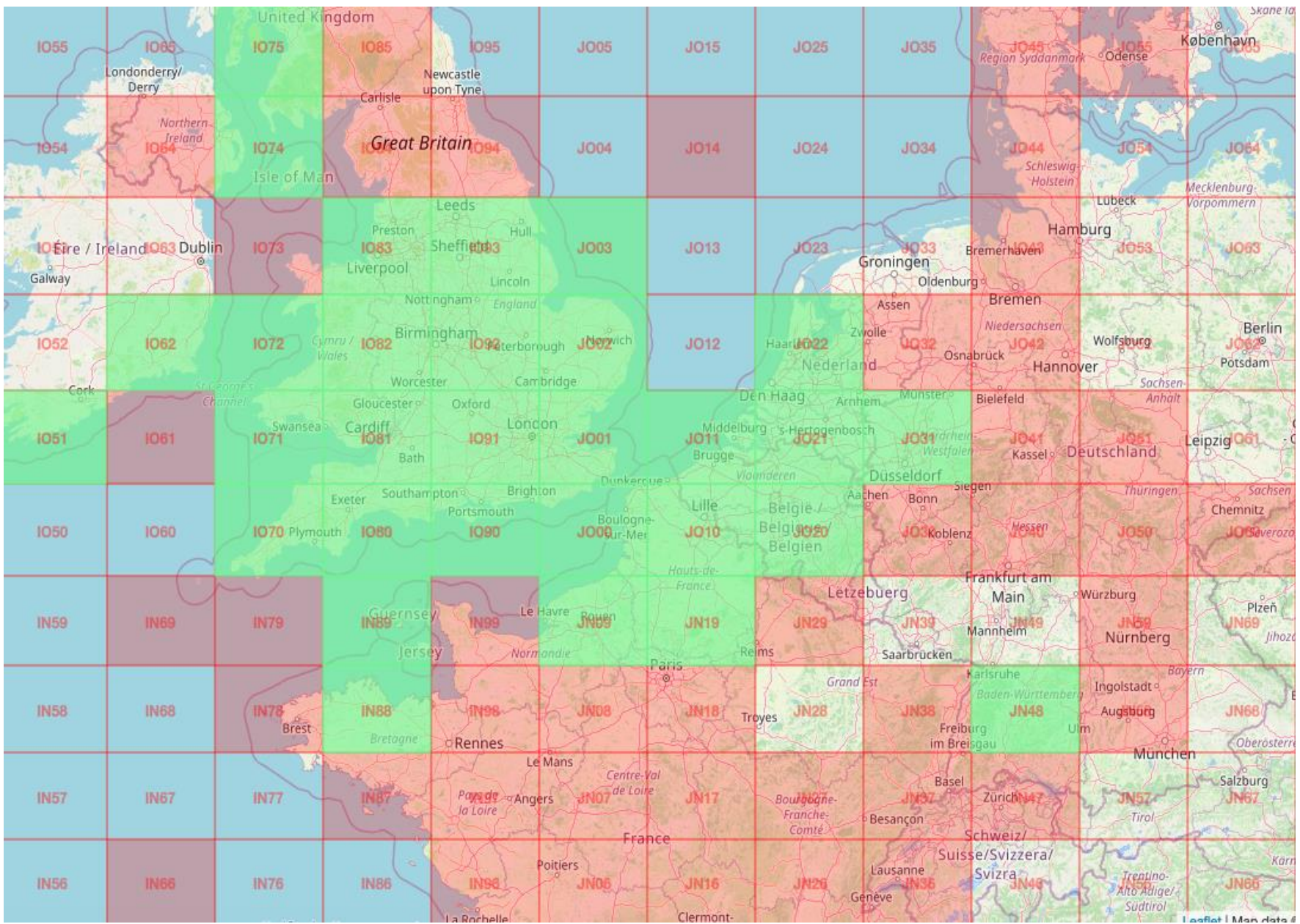
- What if you have FM equipment and would like to find out more about VHF/UHF propagation? No problem!
- If you have a 2m or 2m/70cm FM rig and a vertical antenna, preferably outside, but loft mounted will work too, you're in business!
- Program in ALL the repeater and simplex channels to your rig. Not just the UK ones, but also the France, Spain, Ireland etc (2m is the same as us, but 70cm repeater schemes tend to be different elsewhere).
- Channels which are normally quiet are the best ones!
- When you are in the shack, place the rig on scan and prepare to be surprised! Fleeting openings are quite frequent.

VHF/UHF FT8 with a simple station

- You don't like FT8? Humour me....because there are some great possibilities
- Do you have a 50W 144/432MHz rig and vertical antenna? You can work VHF/UHF DX too. Of course, it's even better if you have a horizontal beam (or both)
- If you love finding out about propagation then this will keep you busy for months, years.... PSK Reporter website is your friend
- One of the advantages of FT8 is that there are SO many people monitoring the same frequency. If a tree falls over in the forest and no-one sees or hears it, did it fall?
- Tropo openings (long and short), aircraft scatter, Es, meteor scatter all very feasible
- The mindset: Listen more than you transmit! Be patient, it's not like HF, some contacts can take 15 minutes in difficult conditions. Split your TX/RX frequencies...

Two years on 2m FT8 with a simple station

- The simple station was a happy accident – my beam was broken...
- Located in Oxfordshire (100m asl) with a V-2000 aerial and an FT-847
- Over 2000 QSOs with > 500 individual stations (no contests)
- Best DX: SV2JL (KN10)
- Regular QSOs with GW1JFV (IO71) and others using similar systems – signals varied between +5 and more often -21 or so. It was actually more interesting when we couldn't work and we would look at weather patterns.
- How would these signals work on SSB?
- Transient openings along a front – I'd often see F6APE (IN97) as an Atlantic front came in.



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 YouTube

Some final thoughts on 'simple' VHF/UHF FT8!

- This approach works best if you are in a centre of activity – but you also have aircraft scatter on your side. Having lots of people monitoring the same frequency really helps.
- I am not saying you should throw your VHF/UHF beams away – but I am saying you don't necessarily need them to make some fascinating contacts
- Don't be put off by 'nay-sayers'!
- Be a good neighbour – look at which period your locals are using to transmit and do the same if you can.
- 70cm FT8 works too – but it's harder work! (432.174)
- Some people are trying FT8 on 1296MHz too with encouraging results (although on the higher bands, dispersion may mean 'wider' modes are more successful)

No need to spend a fortune....!

Making unusual or exceptional contacts is still hugely satisfying.

How about working over 2000km with a £20 handheld and a whip? Or using the same handheld to decode FT8 on 28, 50, 70, 144 and 432MHz with your mobile phone?. Or having a completely pocket 2m/70cm CW/SSB/ FT8 transceiver



Recommend the IJV firmware – although F4HWN gets good reviews too.

CW paddles available for a tenner on eBay!
CEC firmware has built in iambic keyer



Quansheng UV-5K and FT8



Bit of a surprise,
but it works!
Perhaps the
simplest way to
get on 2m and
70cm FT8!

Finding activity and things to try!

- Do call CQ!
- UK Activity Contests
- FT8 Activity Sessions
- Two metre CW Tuesdays, Six metre CW Wednesdays, Four metre CW Thursdays and Seventy Cems CW Fridays (1830-1930z)
- SOTA – lots of 2m FM activity – you're well placed to hear the Exmoor/Dartmoor/South Wales
- 145 Alive, 433 Alive and 1296MHz Alive sessions
- Local and Club nets on 2m/70cm/23cm/repeaters are important because they are OBVIOUS activity to someone with an FM rig or a scanner. Try and support them!.

In summary

- VHF/UHF is great for local chats, but I hope I have encouraged you to look at it as so much more.
- Propagation at VHF is fascinating and we have some great tools available now to help us understand it.
- Digital modes may not be everyone's cup of tea, but you ignore them at your peril. They are an ENORMOUS advantage to a small station. And, of course, you can still use non-digital modes when you want to.
- You don't need lots and lots of fancy equipment to make some fascinating contacts (although fancy equipment is always fun)



See you on the air!

The image displays a screenshot of the WSJT-X software interface, showing multiple windows and a control panel. The main window displays a list of band activity logs with columns for UTC, dB, DT, Freq, and Message. The logs show various stations and their call signs, such as CQ G8GON IO, F6DJL CR5Q -17, and EASRU IK2TDM +14. The interface also includes a control panel with buttons for CQ/73, BP, Log QSO, Stop, Monitor, Erase, Decode, Enable Tx, Halt Tx, and Tune. A frequency display shows 144.174 000 and 50.313 000. The interface is running on a Windows operating system, as indicated by the taskbar and search bar at the bottom.

UTC	dB	DT	Freq	Message
132830	-18	0.4	1003	~ CQ G8GON IO
132900	-15	0.4	916	~ CQ G8GON IO
133500	-14	0.2	916	~ CQ G8GON IO
133530	-15	0.2	916	~ CQ G8GON IO
133600	-15	0.2	915	~ CQ G8GON IO
133630	-16	0.2	916	~ CQ G8GON IO
133730	-17	0.2	918	~ CQ G8GON IO
142515	-12	-0.0	1960	~ F6DJL CR5Q -17
142545	-8	-0.0	1962	~ F6DJL CR5Q RR73
142545	-18	0.1	1529	~ CQ HI3T FK49
142600	-17	0.1	810	~ EASRU IK2TDM +14
142600	-16	0.1	868	~ K2PL G4BHD IO70
142630	-15	0.1	809	~ EASRU IK2TDM 73
142630	-15	0.1	869	~ K2PL G4BHD IO70
142645	-22	-0.0	1954	~ OE5DRP CR5Q -16
142645	-9	0.1	746	~ IZ0FZM EALI0K IN62
142715	-18	0.1	745	~ IZ0FZM EALI0K IN62
142745	-17	-0.0	1952	~ CQ CR5Q IM67
142745	-19	0.1	1530	~ CQ HI3T FK49
142030	2	0.1	2149	~ CQ EC7R IM67
142046	Tx		2527	~ EC7R GW4VXE IO71
142100	2	0.2	2149	~ GW4VXE EC7R -20
142115	Tx		2527	~ EC7R GW4VXE R+02
142130	-1	0.1	2148	~ GW4VXE EC7R RR73
142145	Tx		2527	~ EC7R GW4VXE 73
142200	-6	0.1	2147	~ CQ EC7R IM67
142230	-8	0.1	2148	~ CQ EC7R IM67
142300	-7	0.1	2148	~ CQ EC7R IM67
142345	2	0.0	1959	~ CQ CR5Q IM67
142400	Tx		2527	~ CR5Q GW4VXE IO71
142415	-2	0.0	1961	~ GW4VXE CR5Q -14
142430	Tx		2527	~ CR5Q GW4VXE R-02
142445	-9	-0.0	1961	~ GW4VXE CR5Q RR73
142500	Tx		2527	~ CR5Q GW4VXE 73
142515	-12	-0.0	1960	~ F6DJL CR5Q -17
142545	-8	-0.0	1962	~ F6DJL CR5Q RR73
142645	-22	-0.0	1954	~ OE5DRP CR5Q -16
142745	-17	-0.0	1952	~ CQ CR5Q IM67

Questions? I may not know the
answer but I bet I know someone
who does...

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