VHF Band Plan Discussion
WSJT-X FT8

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VHF Band Plan Discussion
WSJT-X FT8

Introduction: What is WSJT-X FT8 ?

Current VHF Band Plan.

Band Plan Proposals.

Discussion/suggestions.

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What is WSJT-X FT8 ?

FT8 is one of the 8 digital modes in the suite of programs called WSJT-X.

FT8 is relatively new in comparison to original WSJT modes of JT65 and FSK441 - the predecessor to MSK144.

FT8 was designed specifically for slow fading conditions that are typical of multi-hop sporadic E signals.

As the case with most of the WSJT-X modes operation is “channelized.”

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Few important FT8 technical details:

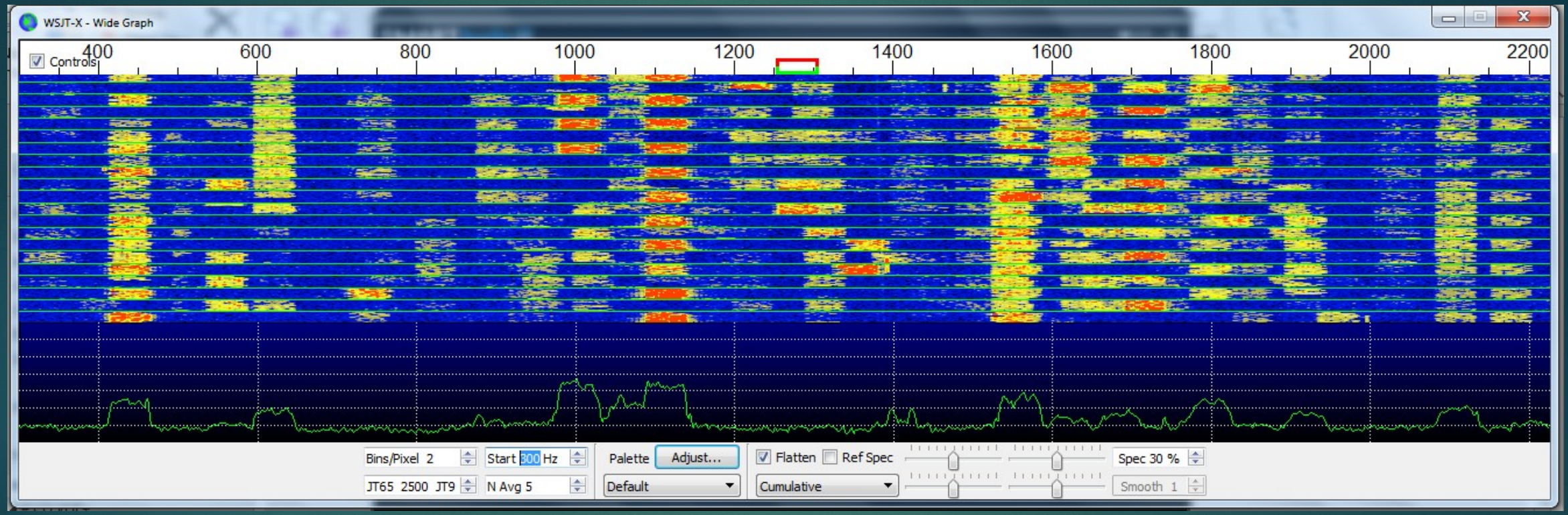
An FT8 signal is 50 Hz wide.

The typical SSB transceiver bandwidth is 2.4 KHz to 2.7 KHz.

Theoretically 50 QSOs can take place within the transceiver's passband.

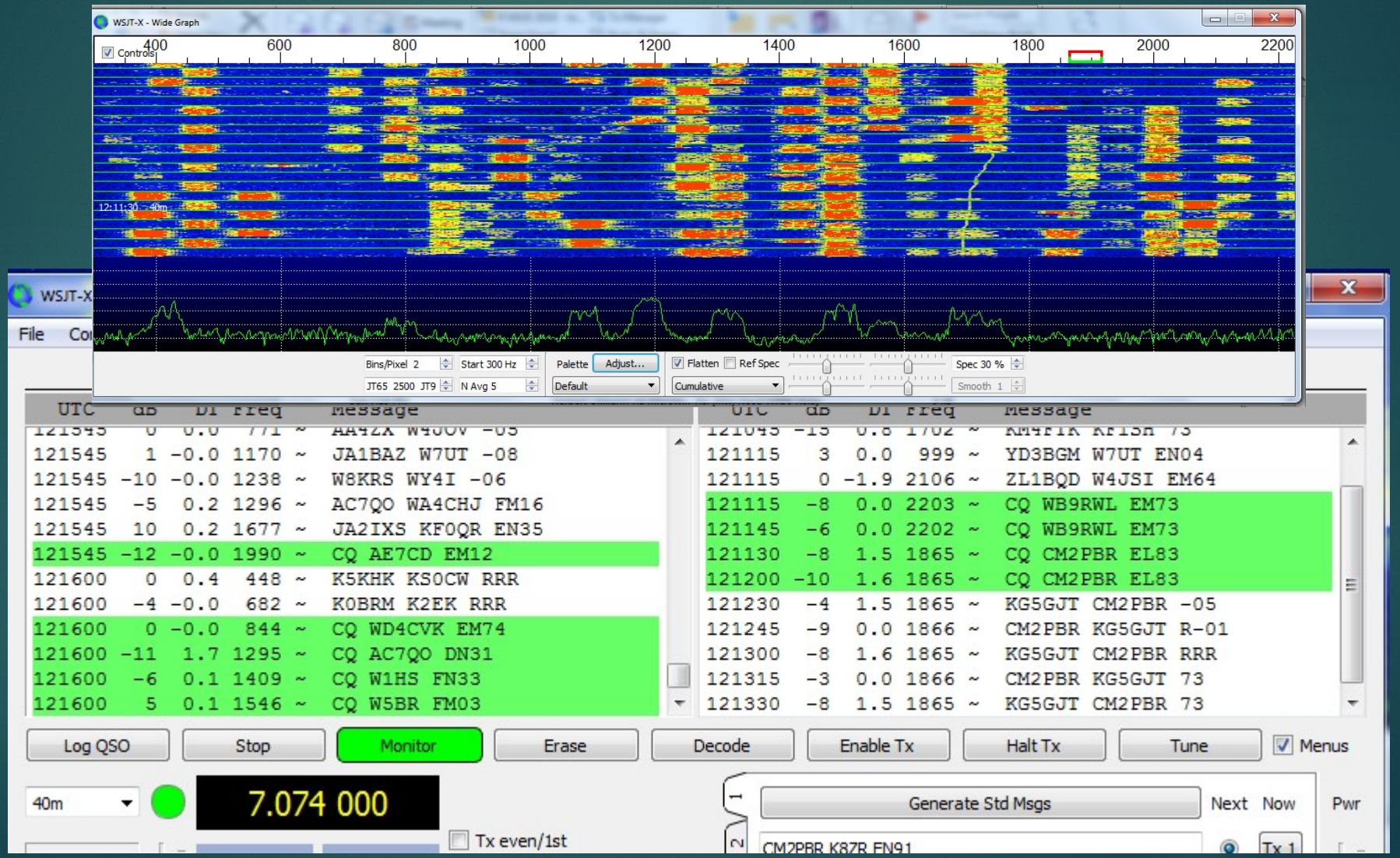
(2,500 Hz/50 Hz) = 50

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40 Meter FT8 frequency of 7040 KHz.
At least 25 QSOs in progress !

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As of April 2018 WSJT-X Modes Calling Frequencies:

- 50.260 MHz: MSK144 Meteor Scatter
- 50.276 MHz: JT65 Multi-hop/Long Haul DX
- 50.313 MHz: FT8
- 144.150 MHz: MSK144
- 222.070 MHz: MSK144

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At the W6JKV/K5AND 6M BBQ September 2017 in Austin, TX those gathered proposed an Intercontinental FT8 Calling Frequency of 50.303 MHz.

Others have proposed an FT8 DX Window** of 50.301 MHz to 50.306 MHz with 50.323 MHz as the alternate intercontinental frequency.

The JAs have proposed 50.303 MHz for "all FT8 DX" and 50.323 for “Intercontinental long distance FT8 DX." Example of intercontinental:
JA to the Midwest or East Coast of the U.S.A. With coordination via ON4KST chat page.

**Similar idea to the current SSB/CW DX Window of 50.100 MHz to 50.125 MHz.

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Proposed or de facto* frequencies as of April 2018:

50.260 MHz: MSK144 Meteor Scatter*

50.276 MHz: JT65 Multi-hop/Long Haul DX*

50.301 MHz to 50.306 MHz: FT8 DX Window.

50.303 MHz: FT8 Intercontinental long haul DX frequency.

50.313 MHz: FT8 Domestic.*

50.323 MHz: FT8 Intercontinental long haul DX frequency.

Yikes…!!!!!

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50 MHz FT8 operating frequencies.

Discussion & Suggestions.

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2 Meter Band Plan.

144.000 MHz to 144.100 MHz **CW only**

144.115 MHz to 144.145 MHz **Digital EME**

144.150 MHz **MSK144** calling frequency for much of North America.

144.150 MHz to 144.275 MHz **Weak Signal**

144.200 MHz General **Calling Frequency**

144.275 MHz to 144.300 MHz **Beacon band**

144.300 MHz to 144.500 MHz New **OSCAR sub-band** per ARRL.

FT8 Frequency ???

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144 MHz FT8 operating frequency.

Discussion & Suggestions.