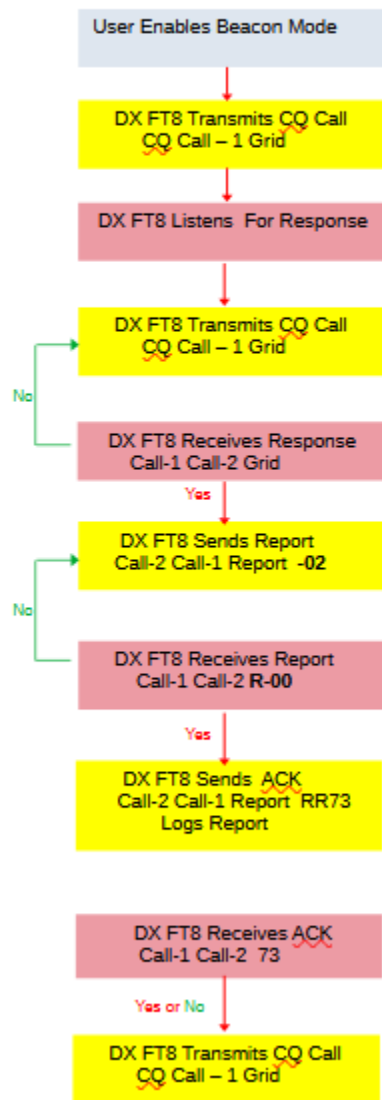**DX FT8 Project Firmware Version 1.9 Release Notes: 26 January 2025**

This version of the firmware was written to make six changes:

1) The logging of contacts in the ADIF Log File has been changed so that all data items entered are first checked for "Leading Spaces" When leading spaces are found they are removed. It is noted that some Contact Log Applications do not like leading spaces in data entries.

2) The rules for validation of Station Data on the SD Card have been modified to be "Not So Picky'.

3) Received CQ messages are now displayed with the Received Signal Level (RSL) appended onto the message to help users decide which CQ they want to pursue.

4) Modified the Cursor shown in Waterfall so that two vertical red lines are shown bracketing the selected FT8 channel of the transmitted FT8 signal making it easier to find a blank channel.

5) The project files have been extensively refactored to provide more efficient execution.

6) The project has been ported to build from the command line where a recent 'arm-none-eabi-gcc compiler' is available using your favourite editor. > 'build.cmd' and 'build.sh' are sample build scripts that demonstrate the process. As ever YMMV.

DX FT8 Auto Sequence Process Operation

DX FT8 Beacon Mode

DX FT8 QSO Mode

User Enables Beacon Mode

DX FT8 Transmits CQ Call
CQ Call – 1 Grid

DX FT8 Receives & Displays
CQ Call

DX FT8 Listens For Response

User Selects CQ Call

DX FT8 Transmits CQ Call
CQ Call – 1 Grid

DX FT8 Waits For
Next FT8 Slot

No

DX FT8 Receives Response
Call-1 Call-2 Grid

DX FT8 Sends Response
Call-1 Call-2 Grid

No

Yes

DX FT8 Sends Report
Call-2 Call-1 Report -02

DX FT8 Receives Report
Call-2 Call-1 -02

No

Yes

DX FT8 Receives Report
Call-1 Call-2 R-00

DX FT8 Sends Report
Call-1 Call-2 R-00

No

Yes

DX FT8 Sends ACK
Call-2 Call-1 Report RR73
Logs Report

DX FT8 Receives ACK
Call-2 Call-1 – RR73

Yes

DX FT8 Receives ACK
Call-1 Call-2 73

DX FT8 Sends ACK
Call-1 Call-2 -73
Logs Report

Yes or No

DX FT8 Transmits CQ Call
CQ Call – 1 Grid

DX FT8 Stops