(11/3/10) a1

- fix: issue with display arrays fixed, very rare crash possibility when resizing window when pixels
- > 2048. Found when prototyping dockable/draggable code
- add: returned functionality of special display to panafall only. It will only display if a single RX is in use. Note: hover over waterfall text does not know that waterfall now starts lower down, consequently hover over scale etc will not work below half way down

(11/3/10) a2

- -fix: when using PTT IN to go into transmit in CW the PTT OUT does not activate
- -fix: resolved rare crash issue with seq error snapshot
- -add: time stamp on each seq error snapshot

(11/3/10) a3

-fix: important fix to new/current display arrays. Previously a crash would happen if display mode is changed repeatedly by using mousewheel for example

(11/3/10) a4

-add: added a status bar, and moved the clock panel over. A warning triangle will appear if there are any SEQ errors. Click triangle to bring up Seq log. Click clear in the seq log to clear the warning. Any -ve seq errors will show RED surround. RED surround is an important SEQ error, please screenshot the seq log window and report on forums if this happens.

(11/3/10) a5

- -add: display/screen icon added to status bar. Click for preset resolutions
- -change: added some info to seq log form
- -change: pulled try/catch from different drawing functions, and added one at overall render level
- -change: refactored initial section of timer1 Tick in PS form. No changes to state machine

(11/3/10) a5 1

-fix: fixed colour on PS label

(11/3/10) a6

- -add: when using single RX1 and when in panafall, the splitter between panadaptor and waterfall can be dragged up and down. Right click to recenter.
- -fix: untrapped exception on shut down caused by thread time outs in power off button not waiting long enough (display_volts_amps_thead)
- -change: thread time out for multimeter_thread(s) in power off button state now based on meter delay -add: ErrorLog.txt created if any untrapped .NET or DirectX issues
- (\Users\<user>\AppData\Roaming\OpenHPSDR\Thetis\ErrorLog.txt)
- -fix: rx2 waterfall bitmap resized correctly, this would only be noticeable if you switched from panafall to waterfall on rx2
- -change: grid scale numbers flip side away from passband filter for USB/LSB/DIGU/DIGL/CWU/CWL

(11/3/10) a6 1 + a6 2

-fix: fixes to some GDI drawing issues

(11/3/10) a7

-change: caching of directX string sizes

-change: DXGI ERROR WAS STILL DRAWING exception ignored in swapchain present

(11/3/10) a8

-fix: rework of the seq log UI retrieval of data

-change: can select up to 144fps for those with systems and screens that are able to do that -add: you can slide the edge of RX1 meter to resize it. The ratio between max and min is maintained when thetis window size is changed

(11/3/10) a8 1

-fix: btnBandHF/VHF/GEN functions were setting CTUN button when they shouldn't have been. Not only that they were basing that on the incorrect boolean. Code removed.

(11/19/19) b1

-add: WireShark and specifically DumpCap support added to SeqLog window -add: r and l sequence numbers presented in SeqLog. r=received l=last

-change: seqlog can be resized

(11/19/19) b2

-add(*): peak markers on the panadapter. Configure through Setup>Display>General. Note: this is a very simple algorithm and does not consider slope

-add: experimental accurate frame timing. This will probably have a substantial impact on cpu usage -change: if a timed waterfall update is 'late' the next update will be made 'early'

-change: now using hiperf timer in RunDisplay

(*) only implemented in DirectX atm

(11/19/19) b3

-change: frame timing improvements, and removed waterfall late changes made in b2

-add: cpu% can now show thetis/system cpu%, use the drop down on the cpu% in status bar

-add: option in SeqLog to only show status bar warning when -ve seq errors detected (default)

-add: rx signal history over two seconds shown on smeter. Options to turn on/off and set colour/alpha

(11/19/19) b3 1

-add: vsync option for directx screen updates, initial pass

-change: directX provided with fps setting during initialisation, was previously always maxed to 144

-fix: issue with PS NeedToRecalibrate check, did not consider existing TX attenuation if the sampled signal was too low. This was an error introduced in recent refactor

-add: peak hold delay on peak blobs, initial pass

(11/19/19) b4

-change: if wdsp.getpixels() returns no data available then data is not copied to display buffer

-add: peak blobs added to GDI+

-add: option to fade peak blobs when in hold mode

-fix: cw pitch shift code changed in vfoa/b lost focus so that multiple DDSFreq's are not set, hopefully removing the artefact noticed by Chris W2PA

(11/19/19) b5

-change: waterfall draw delay removed, now entirely based off FPS -fix: linAuto now displays in colour in DX engine, min/max bug -add: duration of smeter signal history

(11/19/19) b5 1

-fix: waterfall time at mouse pos now uses new frame interval to work out lapsed time

(11/19/19) b5 2

-add: a PTT de $\overline{\text{lay}}$ can be inserted before entering RX state (taken from PowerSdr. Requested by np2g. Default 0ms)

-change: can now play a recording. Bypass vox is used for the duration. There could be issues with this, please give findings. Changed for the wave file controls playback as well

(11/19/19) b5 3

-add: option to ignore vac bypass when playing recordings. A work around that prevented gain from being applied when not using vac

-fix: dx and dcmp returned to previous state after quick playback ends. Previously these were turned off and left off

(11/19/19) b6

-fix: mic gain issue when no vac used, introduced with changes in b5_3

(12/26/19) c1

-fix: disable QSK if receive and transmit antenna are not the same

(1/4/20) c2

-fix: TX profile was incorrectly being selected during saving/updating when modes use different profiles (thanks Ultimax for spotting this)

-add: spectral area gets surrounded in red if high swr

-change: statusbar clock updated once per second instead of 10 times per second

-add: QSO timer, left click start/stop, right click reset. When in Mox activation only mode left click is ignored. Flashing timer if elapsed, with optional sound played through default windows audio device

(1/4/20) c2_1

-add: qso timer auto reset + flash continuation, couple of bits tidied up

(1/4/20) c3

-change: qso audio playback started from own thread

-fix: rx filter drag when in CTUN for panascope now works as expected (note can still drag the area with the scope, this needs fixing at some point)

-change: combined CW break-in control with QSK control. QSK control is now tri-state and allows user to choose between Manual Break-In, Semi Break-In, and QSK when using compatible hardware/firmware

-add: CAT Command 'ZZQK'. Toggles between Semi Break-In and QSK modes

-add: <Right-click> shortcuts to Setup Form was added to various controls on the console

-fix: disable PA is now working for 7000DLE and 8000DLE. Must be using Thetis v2.6.9 and firmware v2.0a