Navpilot Software Update Procedures

Notes:
1) Confirm that dockside, seatrail, menu and compass settings are correct and not causing a failure before updating software.
2) New software will not correct improper setup or menu selections and may retain any incorrect data (See:**Software Notes:**)
3) Verify and note current software levels using the "Start-up" screen or press [MENU], select "TEST" and choose from list.
4) An authorized Furuno agent should assess the Navpilot to determine and complete an update of software as required.

Connections: Confirm that the computer has a 9-pin serial port or a fully functional USB to serial (9-pin) converter
Navpilot processor TB4 port (RS232)   PC (computer)DB9 (9-pin connector) Serial (COM1)
PIN 1 (TX) ◄─────────────► PIN 2 (RX)
PIN 2 (RX) ◄─────────────► PIN 3 (TX)   Jumper pins 7 and 8 together on 9pin connector.
PIN 3 (GND) ◄─────────────► PIN 5 (GND)

Software versions: ("x" denotes numerical revision)
Navpilot 500 Control: 6454002-02.0x
Navpilot 511 Control: 6454001-02.0x
Navpilot Processor: 6454001-02.0x
PG500/C500:   6454101-01.1x
Software Notes:
Version 3 (x=3) and PG500 ver.11 or higher retain all setups (no dockside, seatrail or menu settings required)
Confirm proper operations for version 3 or higher after upgrade to ensure all retained settings are correct
Otherwise master reset the system and accomplish all dockside, seatrial, menu setups and confirm proper operations

Preliminary Checklist and Notes:
1) Power Navpilot system "OFF"
2) Temporarily disconnect or power "OFF" all NMEA inputs and outputs connected to the processor ports.
3) **Navpilot 500 and 511 type control heads must be upgraded seperately.**
4) Connect only one type of control head(s) to the processor for initial software loading. Install terminator on last control in line.
5) **Failure to seperate the two types of control heads will allow incorrect software to load and render them unusable.**
6) Ensure cable is connected properly between TB4 of the Navpilot processor and the PC's serial 9-pin (DB9) port.

Update CD and file instructions:
1) Create a directory named "NavpilotSoftware" on the computers hard drive; copy all Navpilot software files to this location.
2) If files are compressed (.zip extension), open each "zip" file, and extract it to the "NavpilotSoftware" directory.
3) Each "zip" file will create its own sub-directory to store its extracted files into.

Processor update instructions: (Do not press any buttons during update procedure)
1) Open the "NavpilotSoftware" directory, then sub-directory with the processor software and locate the file named "UP.bat".
2) Double click or right click and open the "UP.dat" file, a "DOS" window will appear with the prompt "TARGET POWER ON."
3) Power "ON" the Navpilot system from any connected control head (See: **Preliminary Checklist and Notes steps 3-5**) for notes.
4) The computer will display "Now Erasing" followed by a numerical percentage (%) denoting software loading progress.
5) "Finish Version Up" will display when the update is complete.
6) Power "OFF" the Navpilot system, then power "ON" to complete the procedure.
7) NOTE: "NG" may appear when restarting Navpilot

PG500 / C500 update instructions: (Do not press any buttons during update procedure)
1) Open the sub-directory with the PG500 software and locate the file named "UP.bat".
2) Follow Processor update instructions; steps 2-7 above.

Control Head update instructions: (Do not press any buttons during update procedure)
1) Open the sub-directory with the aprropriate control head software (either 500 or 511) and locate the file named "UP.bat".
2) **Ensure that only the appropriate type of control head(s) are connected for the selected sofware update**
3) Follow Processor update instructions; steps 2-7 above.
   a) Note that each control head takes about 8 minutes to load, i.e two (2) would take a total of 16 minutes to complete.
   b) If three (3) or more are connected, power the Navpilot "OFF", then "ON" to continue updating remaining displays.