SERVICE BULLETIN 11

Service Bulletin #: SB11
Title: EX500 Satellite Communicator Software
Field Update

1. Planning Information

1.1 Effectivity/Compatibility

This Service Bulletin applies to all Avidyne EX500 units with the following hardware part number:

Part Number	Rev.
700-00007-00X	08, 09, 10

1.2 Concurrent Requirements

None

1.3 Reason

Installation of new satellite transceiver software in the FlightMax EX500.

1.4 Description

This service bulletin describes the procedure for updating the internal datalink transceiver software on the EX500. The procedure consists of connecting an Avidyne data loader (external ZIP drive) to the USB port located on the unit bezel and powering up the unit. This update may be performed without removing the unit from the aircraft.

1.5 Compliance

This Service Bulletin is applicable to the FlightMax EX500 and is accomplished on condition for the upgrade of transceiver software.

To determine the current version information of the transceiver, perform steps 11, 12 and 29 – 33 of Section 3.1 of this Service Bulletin. Proceed with Section 3 of this Service Bulletin if any of the following conditions apply:

"Quake Software Version" is either 10162 or 1173

"Custom Software Version" is either blank or is "Nov 6 2002"

1.6 Approval

The accomplishment instructions contained in Section 3 & 6 are FAA approved.

1.7 Manpower

Replacement of the software should take one person approximately 60 minutes.

1.8 Weight and Balance

No change.

1.9 Electrical Load Data

No change.

1.10 Software Accomplishment

Installation of new software.

1.11 Reference

None.

1.12 Publications affected

None.

2. Material – Cost and Availability

Service Bulletin #11 installation kit, part number 850-00010-209, maybe obtained by calling Avidyne at 1-800 AVIDYNE. Software may be downloaded by registered users from www.myavidyne.com.

NOTE: This modification must be performed by a FAA authorized Avionics Repair Station.
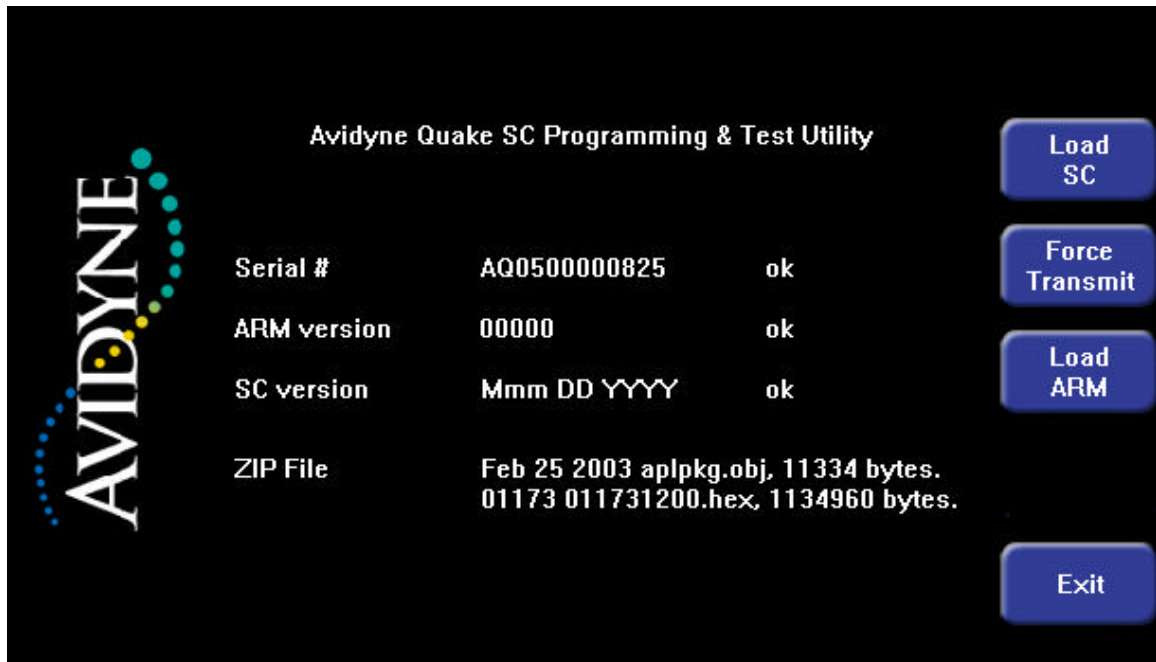
3. Accomplishment Instructions

3.1 Installing new datalink transceiver software

Required materials:

1. _____ Avidyne 700-00007-XXX-() MFD with 530-00120-000 Rev 01 software as displayed on splash screen after initial power-up.

2. _____ 1 Data loader (Zip) drive, Avidyne P/N 200-00029-000, connected to the FlightMax EX500

3. _____ 1 EX500 SC Loader Disk, Avidyne P/N 510-00085-000, Rev 02

3.1.1 Update procedures:

4. _____　　Power-up the FlightMax EX500 with the Zip drive attached and disk 510-00085-000 inserted in the zip drive.

5. _____　　Verify that after initialization, the following screen is displayed (ARM version may differ; SC version may differ or be dashed)

6. _____　　Press the Load ARM button

7. _____　　Verify that the loader proceeds through the following stages:

　　　　a. ____　　　Rebooting SC…

　　　　b. ____　　　Launching Loader…

　　　　c. ____　　　Loading ARM X% complete…

　　　　d. ____　　　Completed, waiting for result…

　　　　e. ____　　　Success, waiting for SC reboot…

　　　　f. ____　　　Screen returns to format shown above

8. _____ Verify ARM version and SC versions now match the following values.

      a. ____ SC version matches date Feb 25 2003

      b. ____ ARM version matches number 4213 if the SC number begins with "DQ" or matches 6273 if the SC number begins with "AQ".

9. _____ If the update procedure fails reattempt the process. If the procedure fails again, call Avidyne Technical Support at 1-888-723-7592

10. _____ Press Exit to close the loader and continue with EX500 start -up.
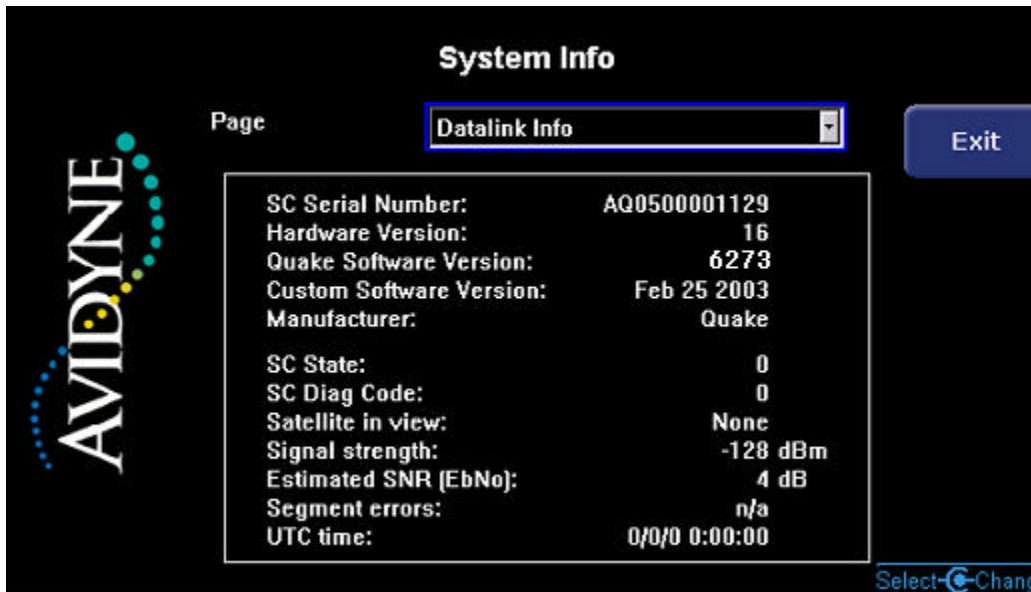
4. Update Validation

4.1 Software Updated

11. _____ Power on the FlightMax EX500

12. _____ Press any bezel key to clear the splash-screen.

13. _____ Verify that the BRT button shows a brightness window.

14. _____ On a system with dual-concentric knobs, press BRT to show the brightness window and verify that turning the knob varies brightness as follows:

15. _____ Right Outer Knob clockwise increases brightness in coarse steps

16. _____ Right Outer Knob counter-clockwise decreases brightness in coarse steps

17. _____ Right Inner Knob clockwise increases brightness in fine steps

18. _____ Right Inner Knob counter-clockwise decreases brightness in fine steps

On a system with single knobs, press BRT to show the brightness window and verify that turning the knobs varies brightness as follows:

19. _____ Left Knob clockwise increases brightness in coarse steps

20. _____ Left Knob counter-clockwise decreases brightness in coarse steps

21. _____ Right Knob clockwise increases brightness in fine steps

22. _____ Right Knob counter-clockwise decreases brightness in fine steps

23. _____ Change Page to Setup and back to Map

24. _____ Change Map range up and down

25. _____ Verify operation of each bezel key (you may need to change pages to find active buttons for each key). If no active button can be found to match a key, re-start the system and use the key to clear the splash screen.

26. _____ On a system with dual-concentric knobs, verify operation of the left knob by operating Radar bearing and tilt.

4.2 Datalink Operational Check

27. _____ Power on the FlightMax EX500

28. _____ Change page to" Setup Page".

29. _____ Depress and hold (for approximately 5 seconds) the upper most and middle buttons on the left side of the bezel to enter the "Maintenance Mode" page (press the "Cancel" button if a maintenance mode sub-page is displayed to return to the "Maintenance Page").

30. _____ Press the "System Info" button. The "Port Info" page will be displayed.

31. _____ Select "Datalink Info" with the change knob.

32. _____ Determine the Quake Software Version. Prior to accomplishment of this Service Bulletin, the Quake Software Version may be either "10162" or "1173." After completion of this Service Bulletin, verify that the Quake Software Version is:

        4213   if the SC Serial Number begins with "DQ"

        6273   if the SC Serial Number begins with "AQ"

33. _____ Determine the Custom Software Version. Prior to accomplishment of this Service Bulletin, the Custom Software Version is "Nov 6 2002". After completion of this Service Bulletin, verify that the Custom Software version is "Feb. 25, 2003."

34. _____ Verify that pressing and holding the PWR key brings up a countdown window and that, after 4 seconds, the system is powered off.

This Service Bulletin has now been successfully completed.