

**INDICATING/RECORDING SYSTEMS - INSTALLATION OF G3000 LOAD 18.10 AVIONICS SOFTWARE AND
CMC LOAD V5.20**

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1. PLANNING INFORMATION**A. SB EFFECTIVITY**

Aircraft affected:

(1) GROUP 1

MODEL	SN
EMB-505 'Phenom 300'	50500123, 50500137, 50500138, 50500140, 50500141, 50500143, 50500147, 50500152, 50500153, 50500158, 50500161, 50500162, 50500164, 50500165, 50500167 thru 50500170, 50500172, 50500174 thru 50500176, 50500178 thru 50500181, 50500183 thru 50500195, 50500198 thru 50500203, 50500205, 50500207, 50500209 thru 50500211, 50500213 thru 50500215, 50500217 thru 50500228, 50500230 thru 50500232, 50500235, 50500237, 50500240, 50500241, 50500243 thru 50500245, 50500247 thru 50500252, 50500254 thru 50500260, 50500263 thru 50500266, 50500268, 50500270 thru 50500275, 50500277 thru 50500280, 50500282 thru 50500312, 50500314, 50500316 thru 50500327, 50500329, 50500330, 50500333 thru 50500335, 50500337 thru 50500340, 50500342, 50500344, 50500345, 50500347, and 50500348, without GUST LOCK ANNUNCIATION SYSTEM or PRE-MOD SB505-27-0023.

(2) GROUP 2

MODEL	SN
EMB-505 'Phenom 300'	50500123, 50500137, 50500138, 50500140, 50500141, 50500143, 50500147, 50500152, 50500153, 50500158, 50500161, 50500162, 50500164, 50500165, 50500167 thru 50500170, 50500172, 50500174 thru 50500176, 50500178 thru 50500181, 50500183 thru 50500195, 50500198 thru 50500203, 50500205, 50500207, 50500209 thru 50500211, 50500213 thru 50500215, 50500217 thru 50500228, 50500230 thru 50500232, 50500235, 50500237, 50500240, 50500241, 50500243 thru 50500245, 50500247 thru 50500252, 50500254 thru 50500260, 50500263 thru 50500266, 50500268, 50500270 thru 50500275, 50500277 thru 50500280, 50500282 thru 50500312, 50500314, 50500316 thru 50500340, 50500342 thru 50500353, 50500355 thru 50500365, 50500367, 50500369 thru 50500372, 50500374 thru 50500385, 50500387 thru 50500413, 50500415 thru 50500441, 50500443, 50500444, 50500446, and 50500447, with GUST LOCK ANNUNCIATION SYSTEM factory incorporated or POST-MOD SB505-27-0023.

Affected component:

None.

In-production effectivity:

EMB-505 "Phenom 300" aircraft 50500414, 50500442, 50500445, 50500448 and on, have an equivalent modification factory-incorporated.

B. CONCURRENT REQUIREMENTS

It is required that the aircraft have already been configured with G3000 Load 4.15 avionics software or a higher version.

C. REASON

(1) HISTORY

The aircraft avionics system software is being updated. The software modification consists of corrections and improvements to the system.

Embraer has received field reports related to loss of information about flap and pitch trim positions along with CAS messages "SWPS FAULT" and "SPOILER FAULT". In this situation, the FCE 1 cannot provide control of flaps leading the crew to a flap failure situation without "FLAP FAIL" CAS neither "PTRIM BKP FAIL" messages being displayed. Instances have also been observed in which the main pitch trim switch stops responding to commands and there is loss of pitch trim position indication along with loss of spoiler position. In this case, there is no CAS message and FCE 2 can no longer provide neither main pitch trim nor spoiler control.

The other issue reported by field and addressed in this software update is the barometric pressure setting inadvertently changed with no input from crew members. When synchronization of barometric pressure setting is enabled, there is an opportunity to change altimeter values on both primary flight displays. Depending on the resulting flight deck effects, crew members may be unaware of any incorrect barometric setting values. This condition, if not corrected, could lead to an erroneous flight altitude indication, possibly affecting continued safe flight and landing.

(2) OBJECTIVE

This service bulletin gives instructions to install the new G3000 Load 18.10 avionics software, CMC Load 5.20 and the Default Pilot Profile files.

(3) EXPECTED BENEFITS

The new G3000 Load 18.10 avionics software brings corrections and improvements. It implements a logic to display associated CAS messages after failure of FCE 1 or FCE 2. It also includes a robustness modification on BARO input software to prevent inadvertent BARO setting change and a logic to include STBY instrument as a source for BARO monitor comparison with associated CAS messages. This modification interrupts the applicability of OB 505-003/16 (Flight Controls Indication Failure) and 505-001/17 (Altimeter Barometric Pressure Setting).

(4) REVISION HISTORY**(a) Revision 01:**

This revision is issued to add aircraft SN 50500147 in the service bulletin effectivity.

(b) Revision 02:

This revision is issued to update the LRU SW version table, on the GDL 69 unit.

D. DESCRIPTION

The modification presented in this service bulletin consists of uploading the new G3000 Load 18.10 avionics, the CMC software Load 5.20 and default pilot profile.

(1) APPLICABLE TO GROUP I

- Download the configuration files (G3000 Load 18.10, CMC Load 5.20 and, default pilot profile) from FlyEmbraer website;
- Check the optional systems installed and;
- Installation of the Configuration files;
- Upload of gust lock system configuration files and;
- Check of the softwares version

(2) APPLICABLE TO GROUP II

- Download the configuration files (G3000 Load 18.10, CMC Load 5.20 and, default pilot profile) from FlyEmbraer website;
- Check the optional systems installed and;
- Installation of the Configuration files;
- Check of the softwares version

(3) APPLICABLE TO GROUP I and GROUP II**(a) Improvements:**

- 1 In Baro setting coloration logic to include standby;
- 2 GDU Baro knob input discretes robustness.

(b) New CAS message:

- 1 Caution CAS message: BARO MISCOMP;
 - 2 Advisory CAS message: STBY BARO NOCOMP.
- (c) Corrections:
- 1 In case of failure in FCE 1 communication to GIA 1, the CAS windows display messages: FLAP FAIL and PTRIM BKP FAIL;
 - 2 In case of failure in FCE 2 communication to GIA 2, the CAS windows display messages: PTRIM NML FAIL, GND SPOILER FAIL and SPOILER FAULT.

After uploading the new G3000 Load 18.10 avionics software, it is necessary to reload the applicable data of all optional systems previously installed on the aircraft.

- NOTE: – The modifications above are related to differences between Load 18.00 and Load 18.10. If you are installing Load 18.10 of a software load prior to Load 18.00, refer to the previous avionics Load Service Bulletin to know all the related modifications.
- If any optional item that is integrated with the G3000 Platform has been installed to the aircraft through a Supplemental Type Certificate (STC), then this optional item needs to be uploaded again after the basic avionics software load upload has been completed. Contact the Service Center that installed the STC (or STC Holder) for instructions on the reload of the optional equipment.

E. COMPLIANCE

Embraer recommends that this bulletin must be accomplished during the next schedule maintenance, not exceeding 12 months or 600 FH, whichever occurs first.

F. APPROVAL

The changes to the type design specified in this SB have been approved by ANAC - Agência Nacional de Aviação Civil.

This service bulletin was approved based on the airplane's original Embraer delivery configuration or as modified by other Embraer-approved documents.

G. ESTIMATED MANPOWER

This estimate is for direct labor only, performed by experienced personnel, and does not include the time to plan, prepare, or inspect the work.

It is assumed that all the tools, parts, and other means are promptly available when necessary.

This estimate does not include the sealant, paint, or adhesive curing time.

(1) APPLICABLE TO GROUP I

- Access opening: Not applicable.
- Modification: 8.0 man-hours.
- Access closure: Not applicable.
- Test: Not applicable.

NOTE: The estimates do not include the time necessary to accomplish SB505-27-0023.

(2) APPLICABLE TO GROUP II

- Access opening: Not applicable.
- Modification: 7.0 man-hours.
- Access closure: Not applicable.
- Test: Not applicable.

H. WEIGHT AND BALANCE**(1) APPLICABLE TO GROUPS I and II**

- Change in basic weight: None.
- Change in basic moment: None.

I. ELECTRICAL LOAD DATA

Not changed.

J. SOFTWARE ACCOMPLISHMENT SUMMARY

The Software Accomplishment Summary has been completed to meet the requirements of RTCA document DO-178B, Software Considerations in Airborne Systems and Equipment Certification.

K. REFERENCES

AMM 505/()	Aircraft Maintenance Manual PART II - 20-00-00 - STANDARD PRACTICES-AIRFRAME.
AMM 505/()	Aircraft Maintenance Manual PART II - 24-41-00 - ELECTRICAL POWER.
AMM 505/()	Aircraft Maintenance Manual PART II - 27-70-00 - FLIGHT CONTROLS.
AMM 505/()	Aircraft Maintenance Manual PART II - 31-61-00 - INDICATING/RECORDING SYSTEMS.
AMM 505/()	Aircraft Maintenance Manual PART II - 32-63-00 - LANDING GEAR.

L. PUBLICATIONS AFFECTED

AMM 505/()	Aircraft Maintenance Manual PART II - 31-61-00 and 31-61-01 - INDICATING/RECORDING SYSTEMS.
AMM 505/()	Aircraft Maintenance Manual PART II - 45-45-00 - CENTRAL MAINTENANCE SYSTEM.
FIM 505/()	Fault Isolation Manual.
ACFOG 505/()	Airplane Changes Flight Operations Guide.
OB 505-003/16	Flight Controls Indication Failure.
OB 505-001/17	Altimeter Barometric Pressure Setting.
AFM 505/()	Airplane Flight Manual.

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POH 505/()	Pilot's Operating Handbook.
QRH 505/()	Quick Reference Handbook.

2. MATERIAL INFORMATION**A. MATERIAL - PRICE AND AVAILABILITY**

None.

B. INDUSTRY SUPPORT INFORMATION**(1) WARRANTY COVERAGE****(a) Parts**

Not applicable.

(b) Labor**1 APPLICABLE TO GROUP I**

- Embraer will compensate 8.0 man-hours for the SB incorporation if it is performed in an Embraer-authorized service center.

2 APPLICABLE TO GROUP II

- Embraer will compensate 7.0 man-hours for the SB incorporation if it is performed in an Embraer-authorized service center.

(c) Expiration

The terms expressed in the warranty coverage will be valid for 24 months after the SB issue date.

C. MATERIAL NECESSARY FOR EACH AIRCRAFT

None.

D. MATERIAL NECESSARY FOR EACH SPARE

None.

E. REIDENTIFIED PARTS

None.

F. TOOLING - PRICE AND AVAILABILITY

The tooling presented below is required for the accomplishment of this bulletin.

DESCRIPTION	QTY	NOTES
SD card (512 Mb up to 16 Gb)	03	[1] and [2] and [3]

[1] Commercially available.

[2] The use of SanDisk SD cards is recommended for loading software and configuration files. Use of other cards is not recommended.

[3] The SD card must be formatted with the FAT file system. If not, the avionics platform cannot read it.

3. ACCOMPLISHMENT INSTRUCTIONS

- A. Make sure that the aircraft is safe for maintenance. Refer to [AMM TASK 20-00-00-910-801-A/200](#) - Aircraft Maintenance Safety Procedures.
- B. To download new software configuration files get access to the www.flyembraer.com website and enter with your "Login" and password.
- C. To download the G3000 Load 18.10 (PN 006-B1633-16) file, do as follows:

- (1) Select the "Maintenance" and "Download Center", "Executive Jets", "Maintenance", "Avionics Software", "PHENOM 300 NG" and "Avionics Software Load 18.1 (P/N 006-B1633-16)" hyperlinks, in this sequence.
- (2) Put an SD card into the personal computer SD card reader/writer.

NOTE: 1) This SD card is a tool and should be procured from the operator's inventories.

2) This SD card will be called "software loader SD Card" herein.

- (3) Click on the "006-B1633-16_0A.exe" file and follow on the screen process to save the file into the personal computer.
- (4) Execute the "006-B1633-16_0A.exe" file and follow on the screen process to pass its contents to the software loader SD card. Note that you may need to select the proper drive letter for the SD card reader/writer.

NOTE: All data already existing on the SD card will be erased during the extraction process.

- (5) After the extraction process is finished, remove the "software loader SD card" from the personal computer SD card reader/writer and make an appropriate identification on it.

- D. To download the CMC Load 5.20 configuration file, do as follows:

- (1) Select "Download Center", "Executive Jets", "Maintenance", "CMC", "PHENOM 300 NG", "CMC NG Load 5.20 (P/N 505-44876-251)" and "CMC Config File" hyperlinks, in this sequence.
- (2) Put an SD card into the personal computer SD card reader/writer.

NOTE: 1) This SD card is a tool and should be procured from the operator's inventories.

2) This SD card will be called "CMC config SD card" herein.

- (3) Click on the "avtn_cfg.gca" file and follow on the screen process to save the file into CMC config SD card.

NOTE: After downloading the file "avtn_cfg.gca" (CMC config file), if it comes with the extension ".zip", rename the "avtn_cfg.gca.zip" file to "avtn_cfg.gca" so that the aircraft avionics recognizes it.
It is not necessary to decompress the file.

- (4) After downloading the configuration file, remove the "CMC config SD card" from the personal computer SD card reader/writer and identify it properly.

- E. To download the default pilot profile of the flight display units to your SD Card, do as follows:

- (1) Select the "Download Center", "Executive Jets", "Maintenance", "Profile" and "Phenom 300 NG" hyperlinks, in this sequence.
- (2) For aircraft under FAA certification, do as follows:

- (a) Get access to the folder "DEFAULT (P/N: 505-44799-251)".
- (b) Click on the "profiles.zip" file and follow on the screen process to save the file into the personal computer.
- (c) Put the SD card into the computer SD card reader/writer.

NOTE: 1) This SD card is a tool and should be procured from the operator's inventories.

2) This SD card will be called "Default Pilot Profile SD card" herein.

- (d) Unzip the profiles.zip file saved in the personal computer into the SD Card.
- (e) Make sure that the directory "../profiles/DEFAULT" was created in the SD card.

(3) For aircraft under ANAC certification, do as follows:

- (a) Get access to the folder "DEFAULT (P/N: 505-44798-251)".
- (b) Click on the "profiles.zip" file and follow on the screen process to save the file into the personal computer.
- (c) Put the SD card into the personal computer SD card reader/writer.

NOTE: 1) This SD card is a tool and should be procured from the operator's inventories.

2) This SD card will be called "Default Pilot Profile SD card" herein.

- (d) Unzip the profiles.zip file saved in the personal computer into the SD Card.
- (e) Make sure that the directory "../profiles/DEFAULT" was created in the SD card.

(4) For aircraft under EASA certification and with International System of Units (SI) indication, do as follows:

NOTE: Make sure that the aircraft is configured to operate with International System of Units (SI) indication.

- (a) Get access to the folder "DEFAULT (P/N: 505-44798-251)".
- (b) Click on the "profiles.zip" file and follow on the screen process to save the file into the personal computer.
- (c) Put the SD card into the personal computer SD card reader/writer.

NOTE: 1) This SD card is a tool and should be procured from the operator's inventories.

2) This SD card will be called "Default Pilot Profile SD card" herein.

- (d) Unzip the profiles.zip file saved in the personal computer into the SD Card.
- (e) Make sure that the directory "../profiles/DEFAULT" was created in the SD card.

(5) For aircraft under EASA certification and with Imperial Units system indication, do as follows:

NOTE: Make sure that the aircraft is configured to operate with Imperial System Unit indication.

- (a) Get access to the folder "DEFAULT (P/N: 505-44800-251)".
- (b) Click on the "profiles.zip" file and follow on the screen process to save the file into the personal computer.
- (c) Put the SD card into the personal computer SD card reader/writer.

NOTE: 1) This SD card is a tool and should be procured from the operator's inventories.

2) This SD card will be called "Default Pilot Profile SD card" herein.

- (d) Unzip the profiles.zip file saved in the personal computer into the SD Card.
- (e) Make sure that the directory "../profiles/DEFAULT" was created in the SD card.

- (6) After downloading the default pilot profile file, remove the "Default Pilot Profile SD card" from the personal computer SD card reader/writer and identify it properly.

F. Energize the aircraft with an external Direct Current (DC) power supply [AMM TASK 24-41-00-860-801-A/200](#) - Energization of the Aircraft with an External DC Power Supply - Aircraft/System Configuration.

G. Make sure that these circuit breakers are closed:

- GIA 1 (EMERGENCY BUS/LHCBP)
- PFD 1 (EMERGENCY BUS/LHCBP - AVIONICS)
- GEA 1 (EMERGENCY BUS/LHCBP - AVIONICS)
- WX RADAR (DC BUS 1/LHCBP)
- GSD 1 (EMERGENCY BUS/LHCBP - AVIONICS)
- AHRS 1 (EMERGENCY BUS/LHCBP - NAV)
- AUDIO 1 (EMERGENCY BUS/LHCBP)
- VHF 2 (DC BUS 1/LHCBP)
- GUIDANCE PANEL (EMERGENCY BUS/LHCBP)
- XPDR 1 (EMERGENCY BUS/LHCBP - NAV)
- MFD PWR 1 (DC BUS 1/LHCBP - AVIONICS)
- GTC 1 (EMERGENCY BUS/LHCBP)
- IASP 1 (DC BUS 1/LHCBP)
- GTC 2 (DC BUS 2/RHCBP - AVIONICS)
- MFD PWR 2 (DC BUS 2/RHCBP - AVIONICS)
- GIA 2 (DC BUS 2/RHCBP - AVIONICS)
- PFD 2 (DC BUS 2/RHCBP - AVIONICS)
- GSD 2 (DC BUS 2/RHCBP - AVIONICS)
- GEA 2 (EMERGENCY BUS/RHCBP - AVIONICS)

- GEA 3 (DC BUS 2/RHCBP - AVIONICS)
- AHRS 2 (DC BUS 2/RHCBP - NAV)
- SAT WX/RADIO (DC BUS 2/RHCBP)
- AUDIO 2 (DC BUS 2/RHCBP)
- AFCS SERVO (DC BUS 2/RHCBP)
- VHF 1 PWR 2 (EMERGENCY BUS/RHCBP)
- DLK/IRIDIUM (DC BUS 2/RHCBP)
- IASP 2 (DC BUS 2/RHCBP)

H. Make sure that the aircraft is on the on-ground (Weight-on-Wheels (WOW)) configuration. Refer to [AMM TASK 32-63-00-860-802-A/200](#) - Air/Ground (Weight-on-Wheels) System - Ground Configuration.

I. On the main panel, set the PUMP 1 and PUMP 2 switches of the FUEL control panel to the OFF position.

NOTE: Due to the design of the fuel system, when the PFD 1 circuit breaker is open and the PUMP 1 and PUMP 2 switches of the FUEL control panel are in the AUTO position, the normal operation logic of the fuel pumps is overridden and the LH/RH V DC auxiliary pump starts to work.

J. Check to see if the following optional systems are installed on the aircraft and write down the result. After uploading the G3000 Load 18.10 avionics software, it is necessary to reload the applicable data of all optional systems previously installed in the aircraft.

- NOTE:**
- 1) If any optional item that is integrated with the G3000 Platform has been installed to the aircraft through a Supplemental Type Certificate (STC), then this optional item will need to be uploaded again after the basic avionics software load uploading has been completed. Contact the Service Center that installed the STC (or STC Holder) for instructions on the reloading of the optional equipment.
 - 2) The software uploading process cleans user profiles, user waypoints, and flight plan data. Such information shall be entered again after the uploading process.
 - 3) Airborne Broadband Internet System (ABIS) and Inmarsat Aviator 300 are not listed below and are configured during basic software loading.

SYSTEM	RESULT	
	YES	NO
Distance Measuring Equipment (DME) 1		
Distance Measuring Equipment (DME) 2		
Flitechart		
Chartview		
Automatic Direction Finder (ADF)		
High Frequency (HF) / Selective Call (SELCAL)		
Data Link Management System (DLMS)		

(Continued)

SYSTEM	RESULT	
	YES	NO
Synthetic Vision System (SVS)		
Class A Terrain Awareness and Warning System (TAWS)		
Traffic Alert and Collision Avoidance System (TCAS) II and XPDR		
Radar Altimeter		
Ice Detector		
Oxygen Cylinder 77 ft ³		
Controller Pilot Data Link Communication (CPDLC)		
Steep Approach		
Ground Clutter Suppression/Turbulence Detection (GCS/TD)		
Runway Incursion/Excursion Awareness And Avoidance System (SurfaceWatch™)		
Reactive Windshear Detection System		
DLMS – CONNEXT Position Report Activation		
FDR ICAO		
COM Audio to PAX ^[1]		
XPDR 2		

[1] Available for installation at operator discretion. This optional makes pilots communication audio available to passengers.

- K. Do the upload of the new software G3000 Load 18.10 configuration files, according to [AMM TASK 31-61-00-470-801-A/200](#) - Avionics Integrated System - Software/Configuration Uploading. Refer to [TABLE G3000 UPLOAD SOFTWARES](#).

TABLE G3000 UPLOAD SOFTWARES

SD Card Name	Figure	Software P/N			
		FAA	ANAC	EASA - International System of Units (SI)	EASA - Imperial System Units ^[1]
Software loader SD card	Figure 1	006-B1633-16			
CMC config SD card	Figure 2	505-44876-251			
Default Pilot Profile SD card	Figure 3	505-44799-251	505-44798-251	505-44800-251	

[1] EASA imperial units pilot profile can only be installed on aircraft that is configured to operate with Imperial System Unit indication.

L. APPLICABLE TO GROUP I

- (1) Do the uploading of gust lock system configuration files to inhibit the CAS message "RUD GUST LOCKED", according to [AMM TASK 27-70-00-470-801-A/200](#) - Gust Lock System - Configuration Uploading.

- (2) Check if software G3000 Load 18.10 (PN 006-B1633-16) has been correctly installed, as follows. Refer to [Figure 4](#):
 - (a) On the "Home" page of the touch screen controller 1, select "Utilities", "Setup" and "Avionics Status" in this sequence.
 - (b) On the "Avionics Status" page of the touch screen controller 1, select "Airframe" tab.
 - (c) On the touch screen controller 1, the number displayed in the SYS SW Vers. must be 1633-16.
- (3) Check if the Central Maintenance Computer (CMC) software NG Load 5.20 CMC has been correctly installed, as follows. Refer to [Figure 5](#):
 - (a) Open these circuit breakers:
 - MFD PWR 1 (DC BUS 1/LHCBP - AVIONICS)
 - GTC 1 (EMERGENCY BUS/LHCBP)
 - MFD PWR 2 (DC BUS 2/RHCBP - AVIONICS)
 - (b) Set the MFD to the configuration mode. To do this, close one MFD circuit breaker (MFD PWR 1 (DC BUS 1/LHCBP - AVIONICS)) and at the same time, push and hold momentarily the softkey 12 until the "INITIALIZING SYSTEM" message shows on the MFD. After that, close the other MFD circuit breaker (MFD PWR 2 (DC BUS 2/RHCBP - AVIONICS)).
 - (c) Set the touch screen controller 1 to the configuration mode. To do this, close the circuit breaker (GTC 1 (EMERGENCY BUS/LHCBP)) and, at the same time, push and hold momentarily the dual concentric knob until the "INITIALIZING SYSTEM" message shows on the touch screen controller 1.
 - (d) On the touch screen controller 1, in the "GDU Controls", select "MFD".
 - (e) On the touch screen controller 1, turn the outer knob of the dual concentric knob to select the "GDU" group.
 - (f) On the touch screen controller 1, turn the inner knob of the dual concentric knob to select the "ALERT CONFIGURATION" page on the MFD.
 - (g) On the MFD, push the "LOG" softkey.
 - (h) On the touch screen controller 1, push the dual concentric knob. Verify on the MFD that the alert 'O' is flashing in inverse video.
 - (i) On the touch screen controller 1, select the "Enter" option to get access to the alert 'O' information in the MFD.
 - (j) The CMC part number on the "DESCRIPTIVE TEXT" line must be equal to "NG CMC 5.20 (PN 505-44876-251)".
- (4) Check the software version of the LRUs, as follows:
 - (a) On the "Avionics Status" page of the touch screen controller 1, select the "LRU Info" tab and check the items according to the table below.

NOTE: The other items of the "LRU Info" field not displayed in the table are not affected by a change of software load.

LRU	SOFTWARE VERSION
GDL 59	2.30
GDL 59 RTR	2.31
GDL 69	4.02.00 (For GDL 69 unit PN 011-00987-00)
GDL 69	5.10 (For GDL 69 unit PN 011-03177-10)
GDR66	2.11
GEA 1	2.07
GEA 2	2.07
GEA 3	2.07
GIA 1	7.80.3
GIA 2	7.80.3
GMA 1 AUX	2.22
GMA 1	3.10
GMA 2 AUX	2.22
GMA 2	3.10
GMC	2.01
GMU 1	2.05
GMU 2	2.05
GPS 1	5.0
GPS 2	5.0
GRS 1	3.04
GRS 2	3.04
GSA 1	3.41
GSA 2	3.41
GSA 3	3.41
GSA 4	3.41
GSD 1	2.73
GSD 2	2.73
GTC 1	5.17
GTC 2	5.17
GWX	2.20
MFD	5.17
PFD 1	5.17
PFD 2	5.17

- (5) De-energize the aircraft ([AMM TASK 24-41-00-860-802-A/200](#) - Aircraft De-energization - Aircraft/System Configuration).
- (6) On the main panel, set the PUMP 1 and PUMP 2 switches of the FUEL control panel to the AUTO position.

M. APPLICABLE TO GROUP II

- (1) Check if software G3000 Load 18.10 (PN 006-B1633-16) has been correctly installed, as follows. Refer to [Figure 4](#):
 - (a) On the "Home" page of the touch screen controller 1, select "Utilities", "Setup" and "Avionics Status" in this sequence.
 - (b) On the "Avionics Status" page of the touch screen controller 1, select "Airframe" tab.
 - (c) On the touch screen controller 1, the number displayed in the SYS SW Vers. must be 1633-16.
- (2) Check if the Central Maintenance Computer (CMC) software NG Load 5.20 CMC has been correctly installed, as follows. Refer to [Figure 5](#):
 - (a) Open these circuit breakers:
 - MFD PWR 1 (DC BUS 1/LHCBP - AVIONICS)
 - GTC 1 (EMERGENCY BUS/LHCBP)
 - MFD PWR 2 (DC BUS 2/RHCBP - AVIONICS)
 - (b) Set the MFD to the configuration mode. To do this, close one MFD circuit breaker (MFD PWR 1 (DC BUS 1/LHCBP - AVIONICS)) and at the same time, push and hold momentarily the softkey 12 until the "INITIALIZING SYSTEM" message shows on the MFD. After that, close the other MFD circuit breaker (MFD PWR 2 (DC BUS 2/RHCBP - AVIONICS)).
 - (c) Set the touch screen controller 1 to the configuration mode. To do this, close the circuit breaker (GTC 1 (EMERGENCY BUS/LHCBP)) and, at the same time, push and hold momentarily the dual concentric knob until the "INITIALIZING SYSTEM" message shows on the touch screen controller 1.
 - (d) On the touch screen controller 1, in the "GDU Controls", select "MFD".
 - (e) On the touch screen controller 1, turn the outer knob of the dual concentric knob to select the "GDU" group.
 - (f) On the touch screen controller 1, turn the inner knob of the dual concentric knob to select the "ALERT CONFIGURATION" page on the MFD.
 - (g) On the MFD, push the "LOG" softkey.
 - (h) On the touch screen controller 1, push the dual concentric knob. Verify on the MFD that the alert 'O' is flashing in inverse video.
 - (i) On the touch screen controller 1, select the "Enter" option to get access to the alert 'O' information in the MFD.
 - (j) The CMC part number on the "DESCRIPTIVE TEXT" line must be equal to "NG CMC 5.20 (PN 505-44876-251)".
- (3) Check the software version of the LRUs, as follows:
 - (a) On the "Avionics Status" page of the touch screen controller 1, select the "LRU Info" tab and check the items according to the table below.

NOTE: The other items of the "LRU Info" field not displayed in the table are not affected by a change of software load.

LRU	SOFTWARE VERSION
GDL 59	2.30
GDL 59 RTR	2.31
GDL 69	4.02.00 (For GDL 69 unit PN 011-00987-00)
GDL 69	5.10 (For GDL 69 unit PN 011-03177-10)
GDR66	2.11
GEA 1	2.07
GEA 2	2.07
GEA 3	2.07
GIA 1	7.80.3
GIA 2	7.80.3
GMA 1 AUX	2.22
GMA 1	3.10
GMA 2 AUX	2.22
GMA 2	3.10
GMC	2.01
GMU 1	2.05
GMU 2	2.05
GPS 1	5.0
GPS 2	5.0
GRS 1	3.04
GRS 2	3.04
GSA 1	3.41
GSA 2	3.41
GSA 3	3.41
GSA 4	3.41
GSD 1	2.73
GSD 2	2.73
GTC 1	5.17
GTC 2	5.17
GWX	2.20
MFD	5.17
PFD 1	5.17
PFD 2	5.17

- (4) De-energize the aircraft ([AMM TASK 24-41-00-860-802-A/200](#) - Aircraft De-energization - Aircraft/System Configuration).
- (5) On the main panel, set the PUMP 1 and PUMP 2 switches of the FUEL control panel to the AUTO position.

- N. Restore the aircraft to its normal condition ([AMM TASK 20-00-00-910-801-A/200](#) - Aircraft Maintenance Safety Procedures).
- O. Enter the accomplishment of this service bulletin in the applicable documents.
- P. Fill out the "Service Bulletin Implementation and Evaluation" form and click on "Submit by Email" button. To find the form, log in to the FlyEmbraer portal (<http://www.flyembraer.com>) and go to: "Technical Publication > Technical Data > Service Bulletin > Front Matter > SB505 - SERVICE BULLETIN IMPLEMENTATION AND EVALUATION FORM".

You can also fill out the attached form and send it by mail or e-mail to the addresses given in this form.

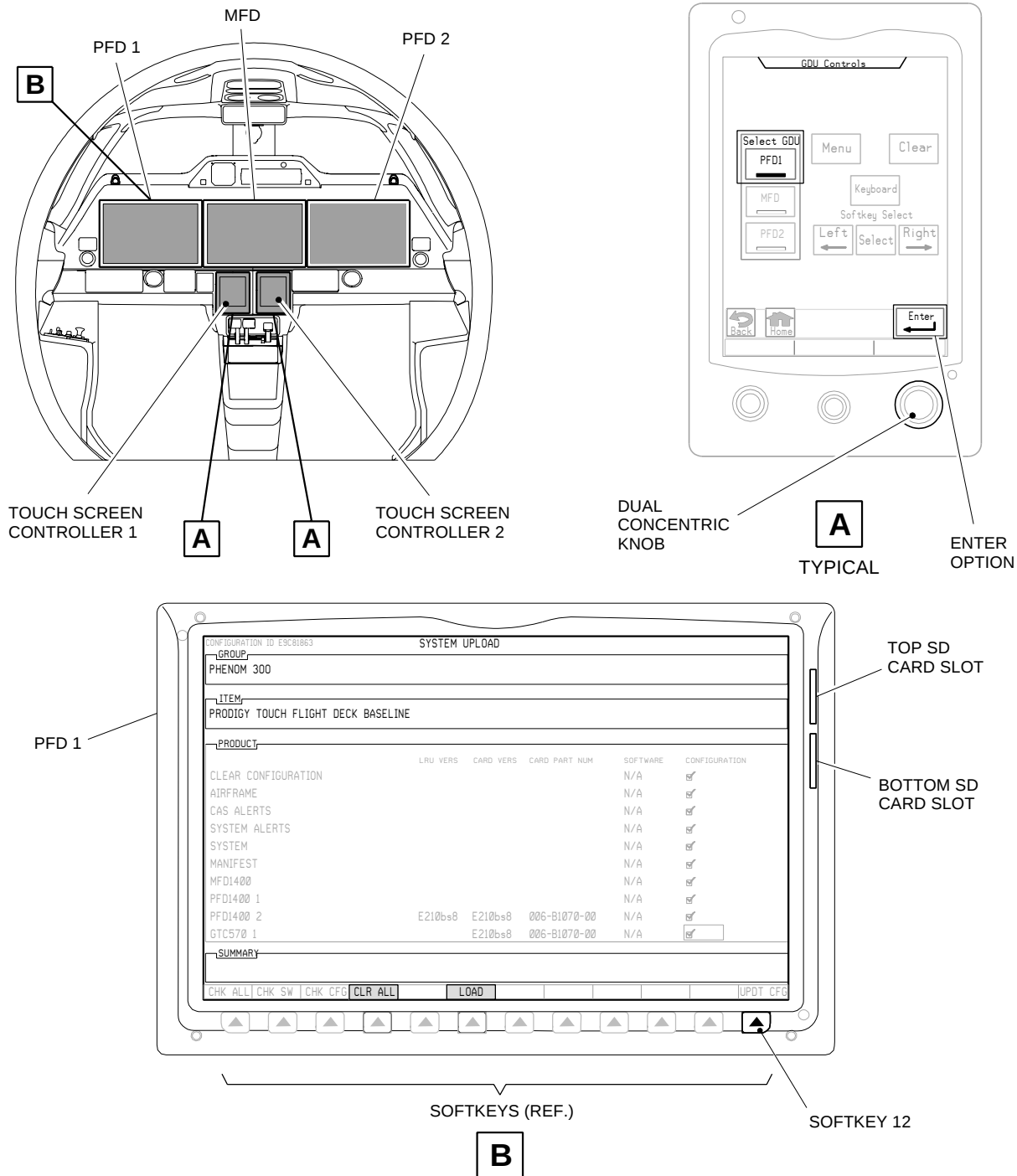


FIGURE 1 - G3000 - FLIGHT DISPLAY
(Sheet 1 of 1)

EM500ENSB310359A.DGN

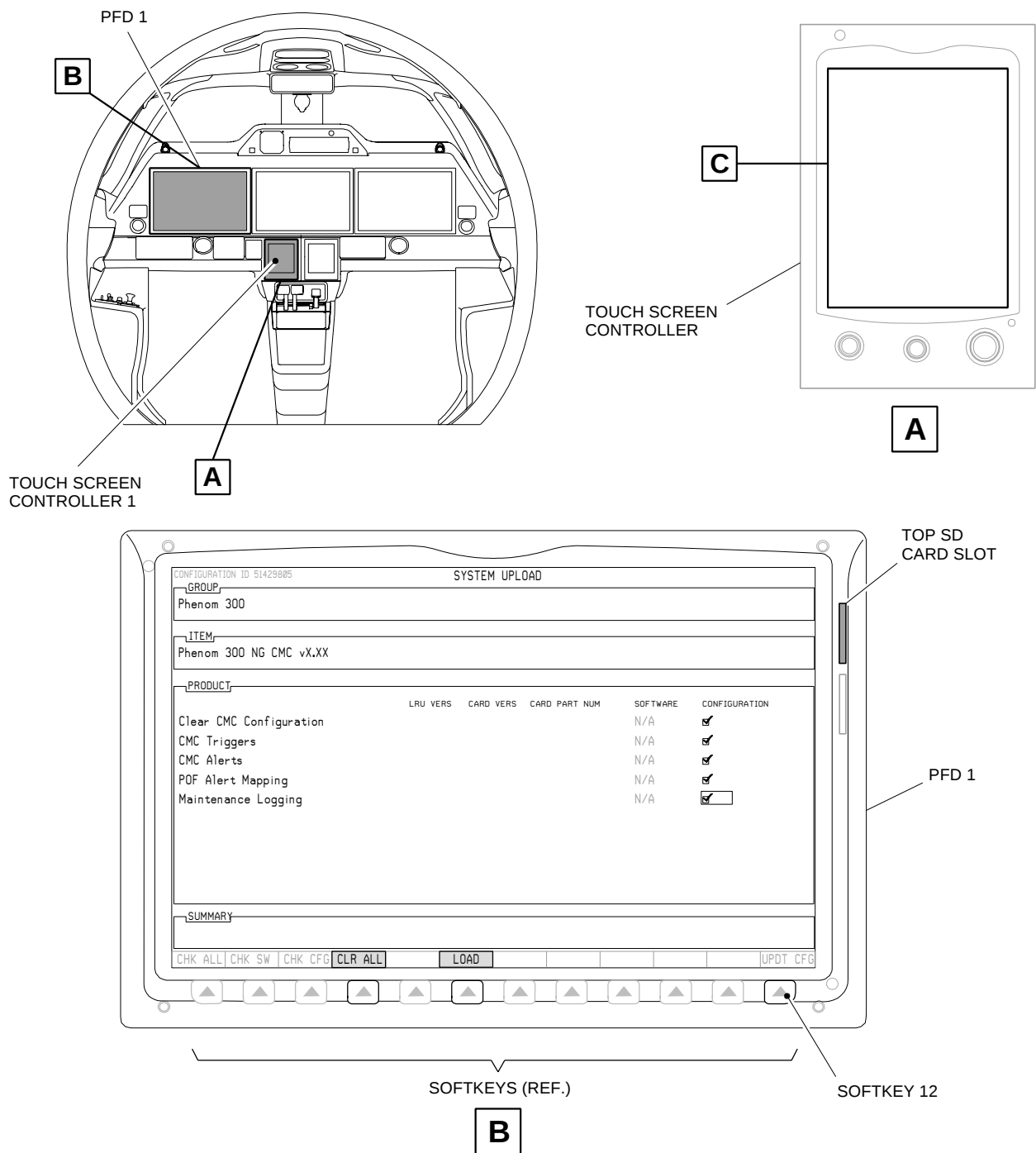


FIGURE 2 - G3000 - CMC LOAD 5.20 SOFTWARE UPLOAD
(Sheet 1 of 2)

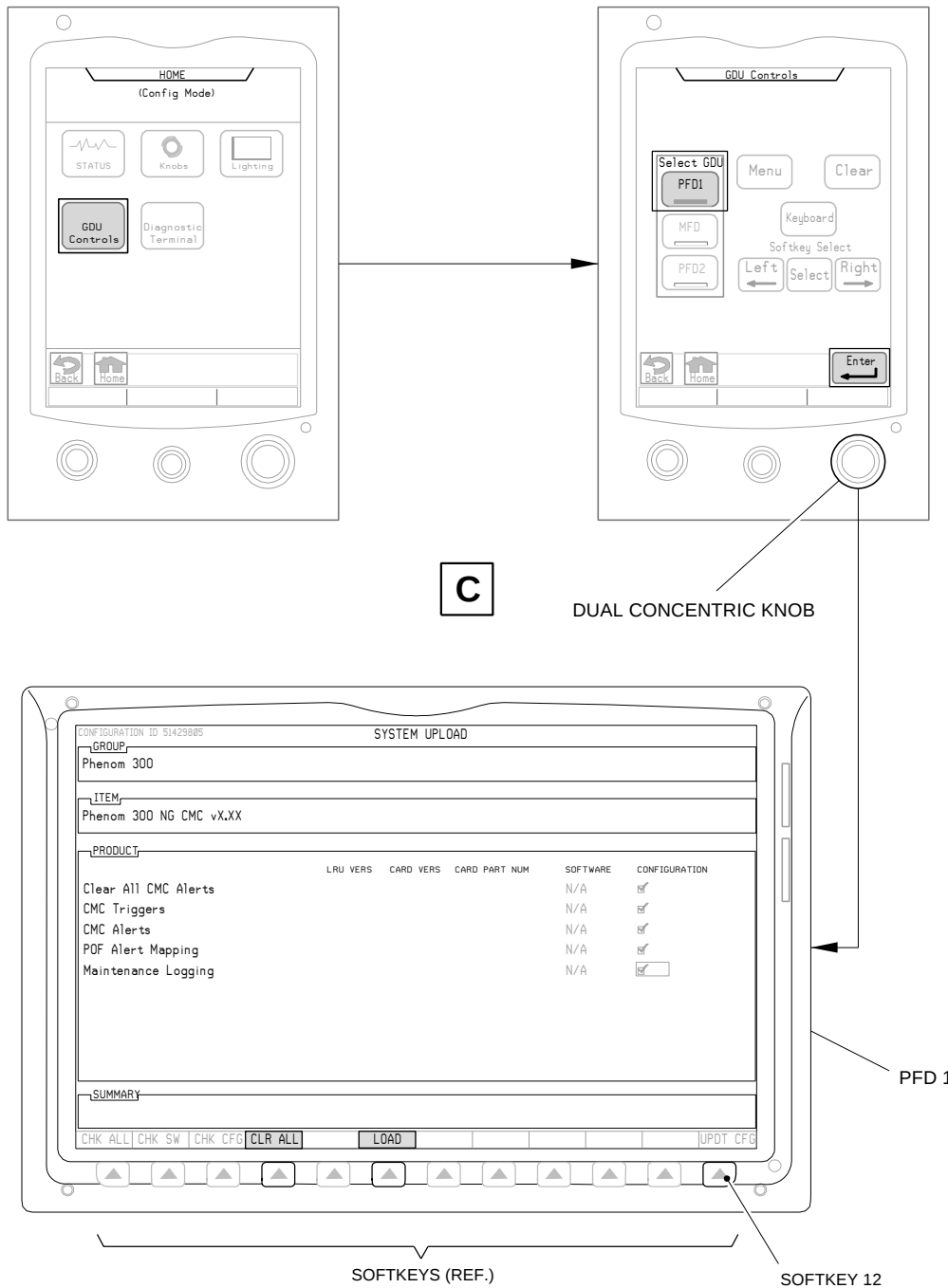
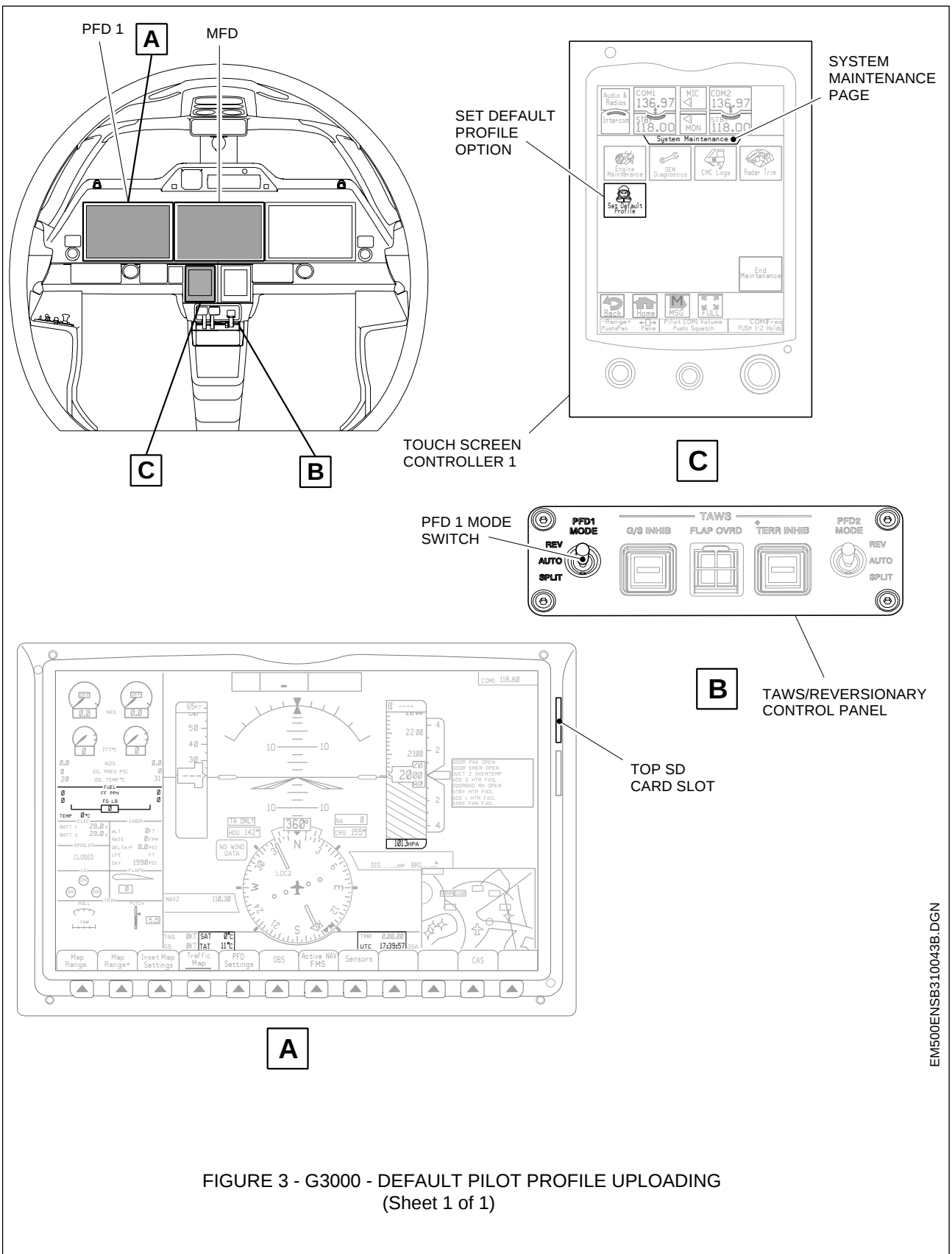
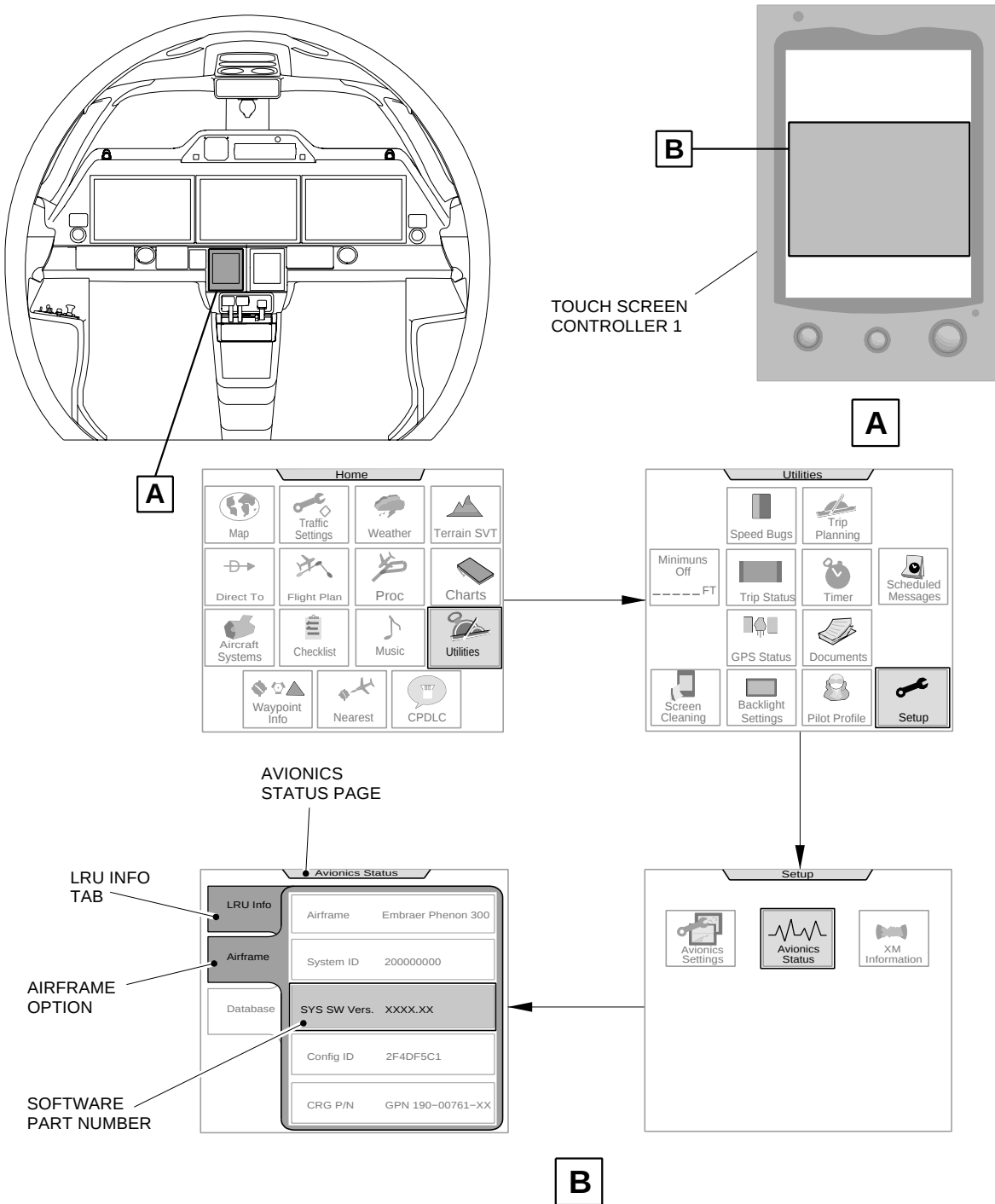


FIGURE 2 - G3000 - CMC LOAD 5.20 SOFTWARE UPLOAD
(Sheet 2 of 2)

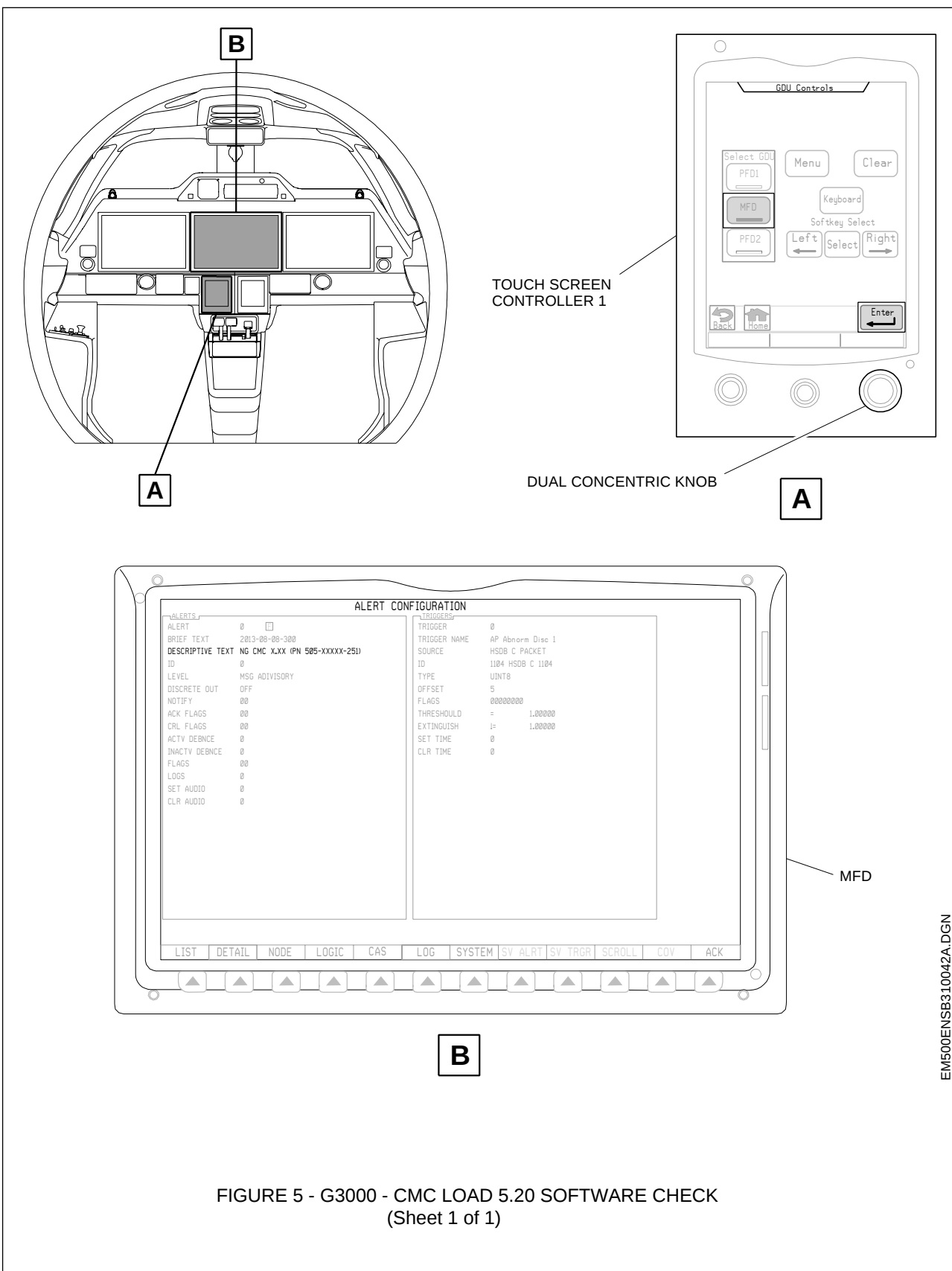
EM500ENSB310228C.DGN





EM500ENSB310045A.DGN

FIGURE 4 - G3000 - AVIONICS LOAD 18.10 SOFTWARE CHECK
(Sheet 1 of 1)



EM500ENSB310042A.DGN



SERVICE BULLETIN EVALUATION

The purpose of this form is to collect data that will be used to improve the quality of our Service Bulletins and Reliability Program.

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S.B.: (Number / Rev.)	S.B. Title:

SB Implementation Report	
Aircraft Serial Number or Registration Number:	Incorporation Date:
Aircraft Flight Hours:	Aircraft Landings:

SB Evaluation (Check applicable boxes below and use the space as required to provide any additional information)		
Estimated Manpower:	☐ OK	☐ NOT OK
Material & Kits:	☐ OK	☐ NOT OK
Accomplishment Instructions:	☐ OK	☐ NOT OK
Figures:	☐ OK	☐ NOT OK
SB General Evaluation:	☐ OK	☐ NOT OK

Comments: (Bulletin quality, difficulties found at the time of incorporation, suggested improvements, other)

Company/ Service Center:	E-mail:	Phone:
Address:		
Form filled by:	Work Order:	

