

## **EFIS Equipment - Database Compatibility Matrix**

#### REVISION HISTORY FOLLOWS ON PAGE 2.

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APPROVAL	NAME		
AUTHOR	Dirk ter Veer	PURPOSE:	
CHECK	Dean Boston	This document identifies the EFIS equipment that utilizes navigation and obstacle databases, and specifies compatibility between equipment and database versions.	
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## **REVISION RECORD**

Rev	Notes	Date	Author
F	<ol> <li>Removed "Referenced Documents", "List of Acronyms", and "System Overview" sections.</li> <li>Removed software part numbers and consolidated hardware part numbers in "EFIS Software Revisions" section.</li> <li>Simplified "Database Compatibility by Software Revision" section by specifying 3 software revision ranges (7.0C and earlier, 7.0D-8.0C, 8.0D and later).</li> </ol>	See cover page	D. ter Veer
E	LOA documents are being reviewed for minor clarification changes, stream lining processes to reduced nonessential documentation, and update references for withdrawn documents.  1. On cover paged corrected name of quality personnel.  2. In section 2.1.1 removed withdrawn documents and added the replacement/equivalent SOP.	05/07/2017	D. LaRue
D	<ol> <li>Add §4.3 to describe obstruction database for part numbers in §5 that include the obstruction database. Add obstruction database documents to §2.1.1.</li> <li>Update §2.1.2 with new Pilot Guides</li> <li>§5 Compatibility Matrix changes:         <ul> <li>Added §5.1 to define database part number.</li> <li>Split compatibility matrix into §5.2 and §5.3. §5.2 defines the EFIS software versions for all equipment and §5.3 defines the compatible navigation database part numbers for each EFIS software version.</li> <li>Added experimental equipment to §5.2 to assist customer support and Jeppesen.</li> </ul> </li> <li>Add Appendix 1 to assist in identifying EFIS equipment, hardware part numbers, and EFIS software revisions.</li> </ol>	05/18/2016	D. Boston
С	1. Rebranding document update from Chelton Flight Systems to Genesys Aerosystems, Inc.  2. §5 Compatibility Matrix Changes: a. IDU-IV IDU-450 42-024001-0001 / -00002: 8.0D (pending) ~ Current Pending Version b. IDU-IV IDU-680P 42-006001-0001: 8.0C (pending) ~ Current Pending Version	11/05/2014	M. Johnston
В	<ol> <li>Correct formatting for PDF version.</li> <li>Sec 1.2: Add reference to DQR document, 20-000076.</li> <li>Sec 2.1: Add 20-000076. Update reference documents.</li> <li>Sec 5: Update pending software versions.</li> </ol>	09/12/2013	D. Boston
Α	Original Version	07/24/2013	D. Boston

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### 1 SCOPE

#### 1.1 DOCUMENT IDENTIFICATION AND OVERVIEW

This document identifies the EFIS equipment that utilizes navigation and obstacle databases, and specifies compatibility between equipment and database versions. This document addresses FAA Advisory Circular (AC) 20-153A, Appendix A Objective 3-2.

#### 1.2 RELATIONSHIP TO OTHER DOCUMENTS

This document is part of the Type 2 Letter of Authorization (LOA) process definition to meet the requirements of RTCA/DO-200A and FAA AC 20-153A for navigation databases used in the Integrated Display Unit (IDU) Electronic Flight Instrument System (EFIS). The intended functions for the navigation database as utilized in the EFIS equipment are described in document 20-000076, *Navigation Database – Data Quality Requirements* (DQRs).

This document is also part of the RTCA/DO-200A requirements for producing an aeronautical obstruction database as described in document 21-000005, *Obstruction Database Conversion – Software Requirements*. The obstruction database is not covered by the Type 2 LOA and is defined here because it may be bundled with the navigation database.

## 2 DATABASE COMPATIBILITY MATRIX

### 2.1 DATABASE PART NUMBER

The IDU navigation database can be delivered stand-alone or bundled with the obstruction database. The part number of the stand-alone or bundled database product is encoded as follows:

### Database Part Number = **CS[A][BBB]\_[xxxx]\_[wwwwwwwww]**

[A]	Description		
[A]	EFIS Software Revision	Database	
1	7.0D to 8.0C	NavData only	
2	7.0C and earlier	NavData only	
3	7.0D to 8.0C	NavData bundled with Obstacles	
4	7.0C and earlier	NavData bundled with Obstacles	
5	8.0D and later	NavData only	
6	8.0D and later	NavData bundled with Obstacles	

[BBB] <sup>[1]</sup>	Coverage		
001	World		
002	Americas		
003	International		
CAP	Capstone tailored World		
REG	Rega tailored World		
Notes: [1] [BBB] can be any 3-letter identifier to accommodate future tailored databases.			

Field	Description		
[xxxx]	Database cycle number (for example: 1604) per Update and Effectivity Schedule published by Jeppesen ( <a href="www.jeppesen.com">www.jeppesen.com</a> ). 8-character CRC value changes with each cycle based on the contents of the database file.		
[wwwwwwww]	8-character hexadecimal 32-bit CRC of database file. For example: EE9DB378.		

# Database Part Number Examples

Database Part Number	Decoding	
CS4002_1604_EE9DB378	Part Number Prefix:	CS4002
	Contents:	NavData bundled with Obstacles
	EFIS Software Revision:	7.0C and earlier
	Coverage:	Americas
	Cycle:	1604
	Filename:	CS4002_1604_EE9DB378.zip
CS3REG_1513_7445F065	Part Number Prefix:	CS3REG
	Contents:	NavData bundled with Obstacles
	EFIS Software Revision:	7.0D to 8.0C
	Coverage:	Rega tailored World
	Cycle:	1513
	Filename:	CS3REG_1513_7445F065.zip
CS5001_1608_2E5E0A8A	Part Number Prefix:	CS5001
	Contents:	NavData only
	EFIS Software Revision:	8.0D and later
	Coverage:	World
	Cycle:	1608
	Filename:	CS5001_1608_2E5E0A8A.zip

#### 2.2 EFIS SOFTWARE REVISIONS

The EFIS software revision defines the compatible database part numbers. Table 2.1 lists EFIS equipment hardware part numbers and compatible EFIS software revisions. EFIS equipment examples, identifying characteristics, hardware part number locations, and software revision identification are provided in Appendix 1.

**Table 2.1 EFIS Hardware and Software** 

Make [2]	Model [2]	Hardware Part Number	Software Revision
IDU-I	IDU-I	ID-A1 <sup>[3]</sup> IUA[ ][ ].I/P-SI <sup>[3]</sup> 42-023001-[ ] <sup>[3]</sup>	5.0C and later
IDU-III <sup>[1]</sup>	IDU-III [1]	EXP-045500-0101 <sup>[3]</sup> 401-045500-[ ]	5.0C and later
IDU-IV [2]	IDU-450	42-024001-[ ]	7.0A and later
IDU-IV [2]	IDU-680P	42-006001-[ ]	8.0A and later

Notes: [1] IDU-III is also called IDU-3.

<sup>[2] &</sup>quot;Series" parameter per AC 20-153A 9.b.(4)(c) is not applicable to this equipment.

<sup>[3]</sup> Experimental equipment.

### 2.3 DATABASE COMPATIBILITY BY SOFTWARE REVISION

Table 2.2 lists EFIS software revisions and compatible database part number prefixes.

**Table 2.2 Database Compatibility** 

FFIC Coffman	Jeppesen Database			
EFIS Software Revision	NavData	Obstacles [1]	NavData Coverage	Database Part Number Prefix <sup>[3]</sup>
			World	CS4001
	$\boxtimes$	$\boxtimes$	Americas	CS4002
			International	CS4003
			Capstone [2]	CS4CAP
7.0C and earlier			Rega <sup>[2]</sup>	CS4REG
7.00 and eanler			World	CS2001
			Americas	CS2002
	$\boxtimes$		International	CS2003
			Capstone [2]	CS2CAP
			Rega <sup>[2]</sup>	CS2REG
			World	CS3001
			Americas	CS3002
	$\boxtimes$	$\boxtimes$	International	CS3003
	_		Capstone [2]	CS3CAP
7.00 / 0.00			Rega <sup>[2]</sup>	CS3REG
7.0D to 8.0C			World	CS1001
			Americas	CS1002
	$\boxtimes$		International	CS1003
	<u> </u>		Capstone [2]	CS1CAP
			Rega <sup>[2]</sup>	CS1REG
	$\boxtimes$		World	CS6001
		$\boxtimes$	Americas	CS6002
			International	CS6003
			Capstone [2]	CS6CAP
0.00			Rega <sup>[2]</sup>	CS6REG
8.0D and later			World	CS5001
			Americas	CS5002
			International	CS5003
			Capstone [2]	CS5CAP
			Rega <sup>[2]</sup>	CS5REG

Notes: [1] Obstacle database coverage is always worldwide regardless of the NavData coverage selected.

<sup>[2]</sup> Capstone and Rega tailored NavData coverage contains World NavData coverage.

<sup>[3]</sup> Database part number must begin with the prefix to be compatible with the EFIS software revision.

### **APPENDIX 1: EQUIPMENT IDENTIFICATION**

# IDU-I 4x5 inch display. • 8 line-select keys and 2 rotary encoders knobs at bottom. • SmartMedia card slot at bottom near left rotary encoder knob. Identifying · SmartMedia card inserted with contacts facing down. Characteristics · Bezel cut at 45 degree angle at all corners. · Panel-mounted display. • D-sub connectors on rear. **Physical Features** & Hardware **Part Number** Location (highlighted here in red) **SmartMedia EFIS** Software Revision (shown on EFIS-SU REV 6.0B-2 Status Page, SOFTWARE OK (CPU NUMBER = 0) NAVIGATION DATA: COVERAGE = AMERICAS ( highlighted here in red) COVERAGE = AMERICAS (CYCLE1204) VALID DATE 04-05-2012 EXPIRE DATE 05-03-2012 DATE 05-03-2012 OBSTRUCTION DATA: TERRAIN DATA: COVERAGE = N20W140 - N55W060 VALID DATE 07-13-2004 PRESS ANY KEY TO CONTINUE

## IDU-III 4x5 inch display. 8 line-select keys and 2 rotary encoders knobs at bottom. SmartMedia card slot centered at the bottom between the rotary encoder knobs. Identifying **Characteristics** SmartMedia card inserted with contacts facing up. Square bezel. Tray-mounted display. **Physical** Features & Hardware **Part Number** Location (highlighted here in red) **SmartMedia EFIS** Software SYNTHETIC VISION EFIS Revision (shown on Status Page, FLIGHTLOGIC PFD REV 6.0B-10 highlighted SOFTWARE NAVIGATION DATA: C here in red) = WORLD (CYCLE1604) VALID DATE EXPIRE DATE OBSTRUCTION DATA: TERRAIN DATA: DATE 04 COVERAGE = N10W165 - N61W049 VALID DATE 09-06-2007 PRESS ANY KEY TO CONTINUE

## **IDU-450** 4x5 inch display. 8 line-select keys and 2 rotary encoder knobs at bottom. USB port centered at the bottom between the rotary encoder knobs. Identifying **Characteristics** USB port exposed when sliding the slip or non-slip housing upwards. Square bezel. Panel-mounted display. **Physical Features** & Hardware **Part Number** Location (highlighted here in red) **USB** REV 8.0D **EFIS** Software P/N: 25-EFIS80D-SW-0002 Revision SOFTWARE OK (CPU NUMBER 1) SOFTWARE CRC = 0X3B372426 AIRCRAFT TYPE GENERIC (shown on COVERAGE = WORLD (CYCLE1601) VALID DATE 01-07-2016 EXPIRE DATE 02-04-2016 Status Page NAVIGATION DATA: along with Software OBSTRUCTION DATA: DATE 02-04-2016 Part Number, COVERAGE = \$75W180 - N75E181 highlighted TERRAIN DATA: VALID DATE 05-26-2007 here in red) PRESS ANY KEY TO CONTINUE

# **IDU-680** 6x8 inch display. 16 line-select keys and 4 rotary encoder knobs at bottom. • USB port centered at the bottom between the inner rotary encoder knobs. Identifying **Characteristics** • USB port exposed when sliding the slip or non-slip housing upwards. Rectangular bezel. · Panel-mounted display. Physical **Features** & Hardware **Part Number** Location (highlighted here in red) **USB** REV 8.0D **EFIS** Software P/N: 25-EFIS80D-SW-0003 Revision SOFTWARE OK (CPU NUMBER 1) SOFTWARE CRC = 0X3B372426 AIRCRAFT TYPE GENERIC (shown on COVERAGE = WORLD (CYCLE1601) VALID DATE 01-07-2016 EXPIRE DATE 02-04-2016 NAVIGATION DATA: Status Page along with Software OBSTRUCTION DATA: DATE 02-04-2016 Part Number, COVERAGE = \$75 W180 - N75 E181TERRAIN DATA: highlighted VALID DATE 05-26-2007 here in red) PRESS ANY KEY TO CONTINUE