UNIVERSAL™ *AVIONICS*

*an **Elbit Systems** Company*

FAA ACTION
West Certification Branch

☐ Approve	☐ Concur	☐ CFRs
☐ Reject	☒ Accept	☐ EASA CS
☐ Acknowledge		☐ CARs

TSO/Project #s: LOA0016LA and LOA(

Comments:

Revised documents to LOA0016LA
and LOA0017LA. Ref. CAL-11309-0

Response Number: 776-26-00184

File Code:

for
WCB Manager

SVS Periodic and Terrain

Databases

Type 2 FAA Letter of Acceptance

LOA0016LA and LOA0017LA

Appendices A and B

LOG OF REVISIONS

Rev:	00	Released:	9-Sep-2019	Author: Wayne Fisch
All Pages:	Original Release			

Rev:	01 - 23	Released:	Various Dates	Revised by: Wayne Fisch
	See appropriate document revision for details			

Rev:	24	Released:	25-Jun-2025	Revised by: Wayne Fisch
Table 1	Updated DPRP-200001 from Rev. A to B			

Rev:	25	Released:	17-Sep-2025	Revised by: Wayne Fisch
Table 1	Updated DPRP-200002 from Rev. B to C			

Rev:	26	Released:	2-Feb-2026	Revised by: Wayne Fisch
Table 1	Updated 035647E-01 from Rev. K to L			
	Updated DPRP-200001 from Rev. B to C			
Table 3	Updated 035647E-01 from Rev. K to L			

Rev:	27	Released:	10-Feb-2026	Revised by: Wayne Fisch
Table 1	Updated DQR-200006 from Rev. A to B			
Table 3	Updated DQR-200006 from Rev. A to B			

All changes incorporated in this revision are <mark>highlighted</mark>.

LOA0016LA - Appendix A:

Acceptance of Universal Avionics Systems Corporation aeronautical data process is provided based on the specification and control of the documentation provided in Table 1, compliance with AC 20-153B Section 3.1 "*Alternate Means of Compliance*" and RTCA/DO-200A, and the compatibility of the delivered data with the equipment listed in Table 2.

Note: The Periodic Navigation and Obstacle Databases are distributed as one database. The database functionality is enabled/disabled at the system level as shown in Table 2.

Document Number	Description
External Database Documents	
Q907-ESG Version A, Rev. 04, June-2018	*Configuration Management*
ASI-QA-2018-0017 Rev. J, 21-Nov-2024	*Database Distribution Work Instructions*
ASI-QA-2022-0001 Rev. A, 23-Nov-2023	*DB End User Support Work Instruction*
T676-AERO Version A, August-2019	*Compliance with Aeronautical Database Approval Process*
035647E-01 Rev. L, 29-Jan-2026	*Plan for Databases Aspects of Certification (PDBAC)*
033902E-00 Rev. D, 23-Jun-2019	*Synthetic Vision System Functional Requirements Specification*
045252E-00 Rev. --, 23-Jan-2019	*Loader Functional Requirements Specification*
045251E-00 Rev. A, 26-May-2019	*Maintenance Function Segment Specification*
057761E-00 Rev. A, 6-Jul-2022	*Data Quality Requirements ADS*
039035E-00 Rev. C, 26-May-2021	*DQR of EFVS DB for Jeppesen*
059062E-00 Rev. A, 5-Sep-2024	*DA EFVS Target DQR*
UASC Database Documents	
DQR-100012 Rev A, 14-Apr-2025	*Target Data Quality Requirements for the ClearVision Synthetic Vision System Database*
DQR-200006 Rev. B, 2-Feb-2026	*Data Quality Requirements for the Jeppesen Supplier Data for the Universal Avionics Systems Corporation Helionix Databases*
DPRP-200001 Rev. C, 27-Jan-2026	*Data Processing Procedures for the Helionix Cyclic Databases*
DPRP-200002 Rev. C, 17-Apr-2025	*Data Processing Procedures for the Synthetic Vision Systems Periodic Databases*

Table 1 – SVS Navigation and Obstacle Periodic Database Procedural Documents

Document Number	Description
BMS Documents	
SOP-ENG-DB-07.01 Rev. 03, 1-Nov-2021	*Aeronautical Database Development and Sustainment*
SOP-ENG-CM-03.04 Rev. 04, 9-Nov-2020	*Aeronautical Databases Configuration Management Plan*
SOP-ENG-DB-03.01 Rev. 03, 19-Aug-2016	*Aeronautical Database Support Procedures*

Table 1 – SVS Navigation and Obstacle Periodic Database Procedural Documents

Nomenclature	Manufacturer's Part Number	OEM's Part Number	Database Description	Database Part Number	OEM Database Part Number	Enabled/ Disabled
HUD Computer Unit (HUD-CU)	1277-000001-00	N/A	Navigation Data	Part of Periodic DB 902-60-02-00-12 902-60-03-00-12 902-60-04-00-12 902-60-05-00-12 ARINC 615: UNSCC-2AXR-YYCC UNSCC-2AXR-VVWW	N/A	Enabled
HUD Computer Unit (HUD-CU)	1277-000001-00	N/A	Obstacle Data	Part of Periodic DB 902-60-02-00-12 902-60-03-00-12 902-60-04-00-12 902-60-05-00-12 ARINC 615: UNSCC-2BSR-YYCC	N/A	Enabled
HUD Computer Unit (HUD-CU)	MB1277J-01 MB1277J-02 MB1277J-30	N/A	Navigation Data	Part of Periodic DB 6293AXX-YY ARINC 665: ESLCC-DA1R-XXYY ESLCC-DA2R-VVWW	N/A	Enabled
HUD Computer Unit (HUD-CU)	MB1277J-01 MB1277J-02 MB1277J-30	N/A	Obstacle Data	Part of Periodic DB 6293AXX-YY ARINC 665: ESLCC-DBSR-XXYY	N/A	Enabled
HUD Computer Unit (HUD-CU)	MB1277J-40	N/A	Navigation Data	Part of Periodic DB 6293CXX-YY ARINC 665: ESLCC-DPDR-XXYY	N/A	Enabled
HUD Computer Unit (HUD-CU)	MB1277J-40	N/A	Obstacle Data	Part of Periodic DB 6293CXX-YY ARINC 665: ESLCC-DPDR-XXYY	N/A	Enabled
HUD Computer Unit (HUD-CU)	MB1277N-00	N/A	Navigation Data	Part of Periodic DB 6293BXX-YY ARINC 615: ESLCC-AA1R-XXYY ESLCC-AA2R-XXYY	N/A	Enabled
HUD Computer Unit (HUD-CU)	MB1277N-00	N/A	Obstacle Data	Part of Periodic DB 6293BXX-YY ARINC 615: ESLCC-ABSR-XXYY	N/A	Disabled

Table 2 – Compatible Components

Nomenclature	Manufacturer's Part Number	OEM's Part Number	Database Description	Database Part Number	OEM Database Part Number	Enabled/ Disabled
Multi-Function Display	**HW P/Ns:** MB0808C-XX MB0808T-XX **SW:** 1237A05-28	**HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C01S0501 **HW P/Ns:** X423C10A1005 X423C10A1007 X423C10A1008 X423C10A1013 X423C10B1003 **SW:** E463C01S0510 E463C03S0510	**Step 2** Navigation Data	**Part of Cyclic DB PNs:** Helionix-Cyclic-01 Helionix-Cyclic-02 Helionix-Cyclic-03 Helionix-Cyclic-04 Helionix-Cyclic-05 Helionix-Cyclic-06 Helionix-Cyclic-07 Helionix-Cyclic-08 Helionix-Cyclic-09	SSSSSS3F_AACC_BB	Enabled
Multi-Function Display	**HW P/Ns:** MB0808C-XX MB0808T-XX **SW:** 1237A06-43	**HW P/Ns:** X423C10A1005 X423C10A1006 **SW:** M463C02S0600 **HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C01S0600 **HW P/Ns:** X423C10A1005 X423C10A1007 X423C10A1008 X423C10B1003 **SW:** E463C01S0700 E463C01S0710 E463C01S0711 E463C03S0700 E463C03S0710 E463C03S0711 **HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C01S0800	**Step 3** Navigation Data	**Part of Cyclic DB PNs:** Helionix-Cyclic-01 Helionix-Cyclic-02 Helionix-Cyclic-03 Helionix-Cyclic-04 Helionix-Cyclic-05 Helionix-Cyclic-06 Helionix-Cyclic-07 Helionix-Cyclic-08 Helionix-Cyclic-09	SSSSSS4F_AACC_BB	Enabled

Table 2 – Compatible Components

Nomenclature	Manufacturer's Part Number	OEM's Part Number	Database Description	Database Part Number	OEM Database Part Number	Enabled/ Disabled
Multi-Function Display (Continued)	**HW P/Ns:** MB0808C-XX MB0808T-XX **SW:** 1237A06-43	**HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 **SW:** M463C02S0800 M463C02S0801 **HW P/Ns:** X423C10A1005 X423C10A1007 X423C10A1008 **SW:** U463C02S0900 **HW P/Ns:** X423C10A1005 X423C10A1008 X423C10A1013 X423C10B1008 **SW:** U463C02S0910 **HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C06S1000 **HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1008 X423C10A1011 X423C10A1012 X423C10A1013 X423C10B1003 X423C10B1008 **SW:** D463C05S1000 D463C06S1000 **HW P/Ns:** X423C10A1011 X423C10A1012 X423C10A1013 **SW:** D463C06S1010	**Step 3** Navigation Data (Continued)	**Part of Cyclic DB PNs:** Helionix-Cyclic-01 Helionix-Cyclic-02 Helionix-Cyclic-03 Helionix-Cyclic-04 Helionix-Cyclic-05 Helionix-Cyclic-06 Helionix-Cyclic-07 Helionix-Cyclic-08 Helionix-Cyclic-09	SSSSSS4F_AACC_BB	Enabled

Table 2 – Compatible Components

Nomenclature	Manufacturer's Part Number	OEM's Part Number	Database Description	Database Part Number	OEM Database Part Number	Enabled/ Disabled
Multi-Function Display	**HW P/Ns:** MB0808C-XX MB0808T-XX **SW:** 1237A05-28	**HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C01S0501 **HW P/Ns:** X423C10A1005 X423C10A1007 X423C10A1008 X423C10B1003 **SW:** E463C03S0510 E463C01S0510	**Step 2** Obstacle Data	Part of Cyclic DB PNs: Helionix-Cyclic-01 Helionix-Cyclic-02 Helionix-Cyclic-03 Helionix-Cyclic-04 Helionix-Cyclic-05 Helionix-Cyclic-06 Helionix-Cyclic-07 Helionix-Cyclic-08 Helionix-Cyclic-09	SSSSSS3F_AACC_BB	Enabled
Multi-Function Display	**HW P/Ns:** MB0808C-XX MB0808T-XX **SW:** 1237A06-43	**HW P/Ns:** X423C10A1005 X423C10A1006 **SW:** M463C02S0600 **HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C01S0600 **HW P/Ns:** X423C10A1005 X423C10A1007 X423C10A1008 X423C10B1003 **SW:** E463C01S0700 E463C01S0710 E463C01S0711 E463C03S0700 E463C03S0710 E463C03S0711 **HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C01S0800	**Step 3** Obstacle Data	**Part of Cyclic DB PNs:** Helionix-Cyclic-01 Helionix-Cyclic-02 Helionix-Cyclic-03 Helionix-Cyclic-04 Helionix-Cyclic-05 Helionix-Cyclic-06 Helionix-Cyclic-07 Helionix-Cyclic-08 Helionix-Cyclic-09	SSSSSS4F_AACC_BB	Enabled

Table 2 – Compatible Components

Nomenclature	Manufacturer's Part Number	OEM's Part Number	Database Description	Database Part Number	OEM Database Part Number	Enabled/ Disabled
Multi-Function Display (Continued)	**HW P/Ns:** MB0808C-XX MB0808T-XX **SW:** 1237A06-43	**HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 **SW:** M463C02S0800 M463C02S0801 **HW P/Ns:** X423C10A1005 X423C10A1007 X423C10A1008 **SW:** U463C02S0900 **HW P/Ns:** X423C10A1005 X423C10A1008 X423C10A1013 X423C10B1008 **SW:** U463C02S0910 **HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C06S1000 **HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1008 X423C10A1011 X423C10A1012 X423C10A1013 X423C10B1003 X423C10B1008 **SW:** D463C05S1000 D463C06S1000 **HW P/Ns:** X423C10A1011 X423C10A1012 X423C10A1013 **SW:** D463C06S1010	**Step 3** Obstacle Data	**Part of Cyclic DB PNs:** Helionix-Cyclic-01 Helionix-Cyclic-02 Helionix-Cyclic-03 Helionix-Cyclic-04 Helionix-Cyclic-05 Helionix-Cyclic-06 Helionix-Cyclic-07 Helionix-Cyclic-08 Helionix-Cyclic-09	SSSSSS4F_AACC_BB	Enabled

Table 2 – Compatible Components

LOA0017LA - Appendix B:

Acceptance of Universal Avionics Systems Corporation aeronautical data process is provided based on the specification and control of the documentation provided in Table 3, compliance with AC 20-153B Section 3.1 "*Alternate Means of Compliance*" and RTCA/DO-200A, and the compatibility of the delivered data with the equipment listed in Table 4.

Document Number	Description
External Database Documents	
Q907-ESG Version A, Rev. 04, June-2018	*Configuration Management*
ASI-QA-2018-0017 Rev. J, 21-Nov-2024	*Database Distribution Work Instructions*
ASI-QA-2022-0001 Rev. A, 23-Nov-2023	*DB End User Support Work Instruction*
T676-AERO Version A, Aug-2019	*Compliance with Aeronautical Database Approval Process*
035647E-01 Rev. L, 29-Jan-2026	*Plan for Databases Aspects of Certification (PDBAC)*
057761E-00 Rev. A, 6-Jul-2022	*Data Quality Requirements ADS*
UASC Database Documents	
EP3401 19-Jul-2010	*Configuration Management Plan for the Geodatabases*
EP3420F 9-Jul-2024	*Database Processing Procedures for the Terrain Geodatabases*
DQR-100012 Rev A 14-Apr-2025	*Target Data Quality Requirements for the ClearVision Synthetic Vision System Database*
DQR-200006 Rev. B, 2-Feb-2026	*Data Quality Requirements for the Jeppesen Supplier Data for the Universal Avionics Systems Corporation Helionix Databases*
DPRP-200000 Rev. A, 6-Sep-2022	*Data Processing Procedures for the Helionix Terrain Databases*
DPRP-200003 Rev. -, 11-Jul-2024	*Data Processing Procedures for the ClearVision Terrain Database*
BMS Documents	
SOP-ENG-DB-07.01 Rev. 03, 1-Nov-2021	*Aeronautical Database Development and Sustainment*
SOP-ENG-CM-03.04 Rev. 04, 9-Nov-2020	*Aeronautical Databases Configuration Management Plan*
SOP-ENG-DB-03.01 Rev. 03, 19-Aug-2016	*Aeronautical Database Support Procedures*

Table 3 – Terrain Database Procedural Documents

Nomenclature	Manufacturer's Part Number	OEM's Part Number	Database Description	Database Part Number	OEM Database Part Number	Enabled/ Disabled
HUD Computer Unit (HUD-CU)	1277-000001-00	N/A	Terrain Data	Part of Periodic DB 902-30-01-00-11 ARINC 615: UNSCC-2TPC-YYNN UNSCC-2TEC-YYNN UNSCC-2TRN-YYNN	N/A	Enabled
Multi-Function Display	**HW P/Ns:** MB0808C-XX MB0808T-XX **SW:** 1237A05-28	**HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C01S0501 **HW P/Ns:** X423C10A1005 X423C10A1007 X423C10A1008 X423C10B1003 **SW:** E463C01S0510 E463C03S0510	**Step 2** Terrain Elevation and Cultural Data	**Part of Noncyclic DB PNs:** Helionix-Noncyclic-01 Helionix-Noncyclic-02 Helionix-Noncyclic-03 Helionix-Noncyclic-04 Helionix-Noncyclic-05 Helionix-Noncyclic-06 Helionix-Noncyclic-07 Helionix-Noncyclic-08 Helionix-Noncyclic-09	SSSSSS3F_01CC_BB SSSSSS3F_02CC_BB SSSSSS3F_03CC_BB	Enabled
Multi-Function Display	**HW P/Ns:** MB0808C-XX MB0808T-XX **SW:** 1237A06-43	**HW P/Ns:** X423C10A1005 X423C10A1006 **SW:** M463C02S0600 **HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C01S0600 **HW P/Ns:** X423C10A1005 X423C10A1007 X423C10A1008 X423C10B1003 **SW:** E463C01S0700 E463C01S0710 E463C01S0711 E463C03S0700 E463C03S0710 E463C03S0711	**Step 3** Terrain Elevation and Cultural Data	**Part of Noncyclic DB PNs**: Helionix-Noncyclic-01 Helionix-Noncyclic-02 Helionix-Noncyclic-03 Helionix-Noncyclic-04 Helionix-Noncyclic-05 Helionix-Noncyclic-06 Helionix-Noncyclic-07 Helionix-Noncyclic-08 Helionix-Noncyclic-09	SSSSSS4F_0400_BB SSSSSS4F_0500_BB SSSSSS4F_0600_BB …* SSSSSS4F_9900_BB	Enabled

(*) Note: The Step 3 Terrain Elevation and Cultural Databases have 95 parts numbers starting at SSSSSS4F_0400_BB to SSSSSS4F_9900_BB. Rather than listing all part numbers, the … in Table 4 is a representation of a continuation of all database part numbers in between those shown. Each part number database steps in 100 increments.

Table 4 – Compatible Components

Nomenclature	Manufacturer's Part Number	OEM's Part Number	Database Description	Database Part Number	OEM Database Part Number	Enabled/ Disabled
Multi-Function Display (Continued)	**HW P/Ns:** MB0808C-XX MB0808T-XX **SW:** 1237A06-43	**HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C01S0800 **HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1007 X423C10A1008 **SW:** M463C02S0800 M463C02S0801 **HW P/Ns:** X423C10A1005 X423C10A1007 X423C10A1008 **SW:** U463C02S0900 **HW P/Ns:** X423C10A1005 X423C10A1008 X423C10A1013 X423C10B1008 **SW:** U463C02S0910 **HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1008 X423C10B1003 X423C10B1008 **SW:** D463C06S1000	**Step 3** Terrain Elevation and Cultural Data	**Part of Noncyclic DB PNs**: Helionix-Noncyclic-01 Helionix-Noncyclic-02 Helionix-Noncyclic-03 Helionix-Noncyclic-04 Helionix-Noncyclic-05 Helionix-Noncyclic-06 Helionix-Noncyclic-07 Helionix-Noncyclic-08 Helionix-Noncyclic-09	SSSSSS4F_0400_BB SSSSSS4F_0500_BB SSSSSS4F_0600_BB ...* SSSSSS4F_9900_BB	Enabled

(*) Note: The Step 3 Terrain Elevation and Cultural Databases have 95 parts numbers starting at SSSSSS4F_0400_BB to SSSSSS4F_9900_BB. Rather than listing all part numbers, the ... in Table 4 is a representation of a continuation of all database part numbers in between those shown. Each part number database steps in 100 increments.

Table 4 – Compatible Components

Nomenclature	Manufacturer's Part Number	OEM's Part Number	Database Description	Database Part Number	OEM Database Part Number	Enabled/ Disabled
Multi-Function Display (Continued)	**HW P/Ns:** MB0808C-XX MB0808T-XX **SW:** 1237A06-43	**HW P/Ns:** X423C10A1005 X423C10A1006 X423C10A1008 X423C10A1011 X423C10A1012 X423C10A1013 X423C10B1003 X423C10B1008 **SW:** D463C05S1000 D463C06S1000 **HW P/Ns:** X423C10A1011 X423C10A1012 X423C10A1013 **SW:** D463C06S1010	**Step 3** Terrain Elevation and Cultural Data	**Part of Noncyclic DB PNs:** Helionix-Noncyclic-01 Helionix-Noncyclic-02 Helionix-Noncyclic-03 Helionix-Noncyclic-04 Helionix-Noncyclic-05 Helionix-Noncyclic-06 Helionix-Noncyclic-07 Helionix-Noncyclic-08 Helionix-Noncyclic-09	SSSSSS4F_0400_BB SSSSSS4F_0500_BB SSSSSS4F_0600_BB ...* SSSSSS4F_9900_BB	Enabled

(*****) Note: The Step 3 Terrain Elevation and Cultural Databases have 95 parts numbers starting at SSSSSS4F_0400_BB to SSSSSS4F_9900_BB. Rather than listing all part numbers, the ... in Table 4 is a representation of a continuation of all database part numbers in between those shown. Each part number database steps in 100 increments.

Table 4 – Compatible Components