U.S. Department
of Transportation
**Federal Aviation
Administration**

Aviation Safety

**Compliance & Airworthiness Division
Los Angeles ACO Branch**
3960 Paramount Boulevard, Suite 100
Lakewood, CA 90712-4137

March 14, 2022

In reply refer to: 790-22-4597

Universal Avionics Systems Corporation
Attn: Mr. Wayne Fisch
3260 E. Universal Way
Tucson AZ 85756

TYPE 2 FAA LETTER OF ACCEPTANCE
LOA0018LA

Dear Mr. Fisch:

The Federal Aviation Administration (FAA) has verified Universal Avionics Systems Corporation (UASC) meets the objectives of AC 20-153B Section 3.1 for using an alternative means of compliance based on AC 20-153A and RTCA DO-200A regarding processing of Magnetic Variation (MagVar) data. Compatibility has been established with the Flight Management Systems listed in Table 2 in RPRT-10205, Revision 01, dated 12-Jan-2022, or latest FAA accepted revision.

The following terms and conditions are applicable to this letter of acceptance, are not transferrable, and are effective until surrendered or withdrawn by the holder, or terminated by the FAA:

1. UASC data quality requirements for the receipt of data from other sources, and for the delivery of data to its customers, are defined in Universal Avionics EP3729C, *Data Quality Requirements for the FMS MagVar Database.*
2. The UASC procedures for processing data are defined in EP3854A, *RTCA DO-200A Compliance Plan for the FMS MagVar Database* and EP3856A, *Data Processing Procedures for the FMS MagVar Database.*
3. Reporting of Failures, Malfunctions, and Defects. UASC must report to the FAA Los Angeles Aircraft Certification Office Branch (LA ACO Branch) any failure, malfunction, or defect of the aeronautical data produced under this LOA having a potential safety effect on operational use of the data.
4. Maintain a Quality Management System (QMS). UASC must maintain a QMS as described in RTCA DO-200A, Section 2.5. Changes to the QMS affecting the data quality objectives must be reported to the FAA LA ACO Branch for acceptance prior to implementation.

5. Design Changes

   a. UASC must submit minor changes to the data quality requirements, the data processing standards, or the QMS to the FAA LA ACO Branch in accordance with procedures described within UASC documents SOP-ENG-DB-07.01 *Aeronautical Database Development and Sustainment*, and EP3854A. All other changes are considered major and must be substantiated and accepted prior to implementation in the same manner as the original LOA.

   b. Upon receipt of notification by the FAA LA ACO Branch that an unsafe condition exists in a database product supplied under this LOA, UASC shall develop corrective action and submit it to the FAA LA ACO Branch for approval. UASC shall expedite distribution of the approved corrective action to customers and users.

6. UASC must perform periodic internal audits of AC 20-153B Section 3.1 alternative means of compliance, AC 20-153A, and RTCA DO-200A as described in RTCA DO-200A, Section 3, with a maximum time between audits of not more than one year. Audits may be total or conducted incrementally, as long as you audit all the objectives at least annually. Any major non-conformities as described in RTCA DO-200A, Section 3.4 must be reported to the FAA LA ACO Branch. Additionally, the FAA may perform periodic audits.

7. UASC must provide a release statement with each database distribution to broadcast LOA status, state their compliance, and provide information on known deviations and modifications.

8. UASC must advise its customers of the status of its LOA as well as the status of LOAs (or foreign acceptance, including designation of the foreign authority acknowledging the foreign source's compliance to RTCA DO-200A and the means of approval or acceptance) for all previous chain participants (up to, but not including, a Contracting State's AIP). The method must be timely to ensure that customers can react to changes in the status of its LOA.

If further information concerning this project is needed, please contact Mr. Thanh B. Tran, Project Manager of LA ACO Branch. Mr. Tran can be reached by telephone at 1-562-627-5304 or by email at Thanh.B.Tran@faa.gov.

Sincerely,

GREGORY S DI LIBERO

Digitally signed by GREGORY S DI LIBERO
Date: 2022.03.21 07:52:28 -07'00'

Greg DiLibero
Aviation Safety
Manager, Los Angeles ACO Branch

UNIVERSAL™ AVIONICS
an Elbit Systems Company

Type 2 FAA Letter of Acceptance

LOA0018LA – Appendix A

FMS MagVar Database

LOG OF REVISIONS

Rev: 00	**Released: 03-Sep-2019**	**Author: Wayne Fisch**
All Pages:	Original Release	

Rev: 01	**Released: 12-Jan-2022**	**Revised By: Wayne Fisch**
Table 1:	Updated document revision(s)	

Acceptance of UASC FMS MagVar aeronautical data process is provided based on the specifications 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 Flight Management System products listed in Table 2.

Document Number	Description
SOP-ENG-DB-03.01 Revision 03, 19-Aug-2016	*Aeronautical Database Support Procedures*
SOP-ENG-DB-07.01 Revision 03, 1-Nov-2021	*Aeronautical Database Development and Sustainment*
SOP-ENG-DB-07.02 Revision 04, 19-Aug-2016	*Tool Development and Qualification for Aeronautical Databases*
EP3729C Dated 04-Mar-2019	*Data Quality Requirements for the FMS MagVar Database*
EP3854A Dated 10-Jan-2022	*RTCA DO-200A Compliance Plan for the FMS MagVar Database*
EP3856A Dated 10-Jan-2022	*Data Processing Procedures for the FMS MagVar Database*
EP3889A Dated 10-Jan-2022	*Configuration Plan for the FMS MagVar Database*
EP4166A Dated 10-Jan-2022	*AC 20-153B Alternative Means Compliance Matrix Report for the FMS MagVar Database*

Table 1 – Database Documents

UASC has established compatibility with the following Flight Management Systems:

Part Number	Nomenclature	SCN	Approvals
10172-( )	UNS-1C+ FMS/MMMS	803.3, 903.3 and subsequent 803.X, 903.X	TSO-C115b TSO-C129a A1/B1/C1
10192-( )	UNS-1C/sp+ FMS/MMMS	803.3, 903.3 and subsequent 803.X, 903.X	TSO-C115b TSO-C129a A1/B1/C1
11162-( )	UNS-1K+ FMS/MMMS	803.3, 903.3 and subsequent 803.X, 903.X	TSO-C115b TSO-C129a A1/B1/C1
11922-( )	UNS-1D+ FMS/MMMS	803.3, 903.3 and subsequent 803.X, 903.X	TSO-C115b TSO-C129a A1/B1/C1
2017-( )	UNS-1E FMS/MMMS	803.3, 903.3 and subsequent 803.X, 903.X	TSO-C115b TSO-C129a A1/B1/C1
2019-( )	UNS-1E/Esp FMS/MMMS	803.3, 903.3 and subsequent 803.X, 903.X	TSO-C115b TSO-C129a A1/B1/C1
2116-( )	UNS-1L FMS/MMMS	803.3, 903.3 and subsequent 803.X, 903.X	TSO-C115b TSO-C129a A1/B1/C1
2192-( )	UNS-1F FMS/MMMS	803.3, 903.3 and subsequent 803.X, 903.X	TSO-C115b TSO-C129a A1/B1/C1
3017-( )	UNS-1Ew FMS/MMMS	1001.X, 1101.X, 1101.XM	TSO-C115c (Dev) TSO-C146c (Dev) Class B
3017-( )	UNS-1Ew FMS/MMMS	1002.X, 1102.X, 1102.XM	TSO-C115c (Dev) TSO-C146d (Dev) Class 3
3019-( )	UNS-1Espw FMS/MMMS	1001.X, 1101.X, 1101.XM	TSO-C115c (Dev) TSO-C146c (Dev) Class B
3019-( )	UNS-1Espw MMS/MMMS	1002.X, 1102.X, 1102.XM	TSO-C115c (Dev) TSO-C146d (Dev) Class 3
3116-( )	UNS-1Lw FMS/MMMS	1001.X, 1101.X, 1101.XM	TSO-C115c (Dev) TSO-C146c (Dev) Class B
3116-( )	UNS-1Lw FMS/MMMS	1002.X, 1102.X, 1102.XM	TSO-C115c (Dev) TSO-C146d (Dev) Class 3
3192-( )	UNS-1Fw FMS/MMMS	1001.X, 1101X, 1101.XM	TSO-C115c (Dev) TSO-C146c (Dev) Class B
3192-( )	UNS-1Fw FMS/MMMS	1002.X, 1102.X, 1102.XM	TSO-C115c (Dev) TSO-C146d (Dev) Class 3

Table 2 – Database/FMS Compatibility