

United States of America  
Department of Transportation -- Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* ST00112MC

*This certificate, issued to:* ARINC Aerospace  
6015 South Portland Ave.  
Oklahoma City, OK 73159

*certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of Part 25\* of the Federal Aviation Regulations.* \*See Page 3 of 3 for complete certification Basis

*Original Product—Type Certificate Number:* A22WE  
*Make:* Boeing  
*Model:* DC-10-30F (KC-10A)

*Description of the Type Design Change:*

The installation of an avionics upgrade consisting of: replacement of the existing ADI(s) to an EADI, install new SATCOM, VHF Datalink, Printer, Inertial Navigation Unit with digital to analog converter and battery backup, two civil GPS receivers, one military GPS receiver, three Control Display Units (CDU-7000F), two radio interface units (RIU) and modify the ADLP per ARINC Aerospace Master Data List 11A-00-D000, Rev C, dated June 16, 2014 or later FAA approved revision.

*Limitations and Conditions:*

1. A copy of this certificate and FAA Approved Airplane Flight Manual Supplement No. 11A-00-D700, Rev IR, Dated June 16, 2014, or later FAA approved revisions must be maintained as part of the permanent records for the modified aircraft.
2. Instructions for Continued Airworthiness (ICA), Document Number 11A-00-D005, Revision C, dated June 11, 2014 or later FAA accepted revision shall be made available to the operator at the time of installation.
3. Approval of this change in type design applies to the above model of airplane only.

(Limitations and Conditions continued on Page 3 of 3)

*This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.*

*Date of application :* January 23, 2012

*Date reissued :*

*Date of issuance :* June 16, 2014

*Date amended :*



*By direction of the Administrator*

  
(Signature)

John May  
ODA Administrator  
ODA-636304-NM, ARINC Aerospace  
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

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# Supplemental Type Certificate

(Continuation Sheet)

*Number* ST00112MC

(Date of Issuance: June 16, 2014)

## Limitations and Conditions (Cont'd)

4. This approval should not be extended to other aircraft of this model on which other previously approved modifications are incorporated, unless it is determined by the installer that the interrelationship between this change and any other previously approved modifications will produce no adverse effect upon the airworthiness of that airplane.
5. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of the permission.
6. Installation of Rockwell – Collins FMS-800 and MFD-255 must have been previously accomplished per STC ST00648WI. Installation of Airborne Data Link Processor (ADLP) must have been previously accomplished per STC ST00926LA-D. This approval is for KC-10A aircraft operated by the United States Air Force.

## Certification Basis:

It was determined that there is no acoustical change in accordance with § 21.93(b)(3)(iii) as a result of this modification. Based on 14 CFR Part 21.115 and 21.101, and the FAA policy for significant changes in FAA Order 8110.48, the certification basis for the Boeing Model DC-10-30F (KC-10A) avionics upgrade is as follows:

- a) The type certification basis for Boeing DC-10-30F (KC-10A) is shown on A22WE for parts **not changed or not affected** by the change.
- b) The certification basis for parts **changed or affected** by the change since the reference date of the application, 01/23/2012, is based upon part 25 as amended by Amendment 25-134. Based on 14 CFR §21.115 and §21.101, and the FAA policy for significant changes in the FAA Order 8110.48, the certification basis for this modification was determined to be:

### Regulations at the latest amendment 25-0 through 25-134

25.117, 25.571(a)(b), 25.581(a)(b)(c), 25.601, 25.609(a)(b), 25.856(a), 25.863(a)(b)(c)(d), 25.899(a)(b), 25.1307(b)(c)(e), 25.1310(a)(b), 25.1316(a)(b), 25.1317(a)(b)(c), 25.1321(a)(b1)(b4)(e), 25.1327(a)(b), 25.1331(a)(b), 25.1333(a)(b)(c), 25.1351(a1)(a2)(b)(d), 25.1353(a)(b1)(b2)(b3)(b4)(c), 25.1355(c), 25.1357(a)(b)(c)(d)(e)(f)(g), 25.1360(a)(b), 25.1381(a)(b), 25.1431(a)(b)(c)(d), 25.1457(a6), 25.1519, 25.1529, 25.1541(a)(b), 25.1547(a)(b)(c)(d), 25.1555(a), Appendix F, Part VI.

### Regulations at an intermediate amendment

25.307(a), 25.853(a), 25.855(d), 25.869(a4), 25.981(a)(b), 25.1303(b4)(b5)(b6), 25.1309(a)(b)(c)(d)(g), 25.1322(a)(b)(c)(d), 25.1329(a)(b)(c)(d)(e)(f)(g)(h), Appendix F, Part 1.

### Regulations at the amendment level in TCDS A22WE

25.29(a)(b), 25.301(a)(b), 25.303, 25.305(a)(b)(c), 25.603(a), 25.605, 25.607, 25.611, 25.613(a)(b)(d), 25.625(a)(b)(c), 25.771(a)(c)(f), 25.773(a2), 25.777(a)(b)(c)(h), 25.1301(a)(b)(c)(d), 25.1419(a)(b)(c)(d), 25.1501(a)(b)(c), 25.1581(a), 25.1583(h), 25.1585(a).

### 14 CFR Part 26 regulations

Based on 14 CFR §21.101 (g), applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this STC must demonstrate compliance with the applicable sections. As of the issuance date of this STC, compliance has been found for the following regulations 14 CFR §26.11(b) and §26.47(c), (Amdt. No. 26-0 through 26-1).