



United States of America
Department of Transportation
Federal Aviation Administration

Supplemental Type Certificate

Number **ST9767SC**

This Certificate issued to L-3 Communications Integrated Systems, L.P.
7500 Maehr Rd, PO Box 154580
Waco, Texas 76715-4580

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.

Original Product – Type Certificate Number: A20WE

Make: Boeing

Model: 747-8

Description of Type Design Change:

Installation of a KU SATCOM antenna and radome in accordance with L-3 Communications Integrated Systems L.P. Sealed Drawing List 34118K004-000, Revision B, dated December 15, 2015, or later FAA approved revision.

Limitations and Conditions:

This design change is valid only for Boeing 747-8 series airplanes.

(Limitations and Conditions continued on page 2 of 4)

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

Date of application: July 24, 2012

Date reissued:

Date of issuance: December 21, 2015

Date amended:

By direction of the Administrator

Signature _____

Loyd R. Hamilton

Title ODA-750154-SW Administrator

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Amdt			

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both. This certificate may be transferred or made available to third persons by licensing agreements in accordance with 14 CFR 21.47. Possession of this Supplemental Type Certificate (STC) document by persons other than the STC holder does not constitute rights to the design data nor to alter an aircraft, aircraft engine, or propeller. The STC's supporting documentation (drawings, instructions, specifications, flight manual supplements, etc.) is the property of the STC holder. An STC holder who allows a person to use the STC to alter an aircraft, aircraft engine, or propeller must provide that person with written permission acceptable to the FAA. (Ref. 14 CFR 21.120).



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Supplemental Type Certificate

(Continuation Sheet)

Number: **ST9767SC**
Date of Issuance: **December 21, 2015**

Description of Type Design Change: (Continued)

FAA Approved Airplane Flight Manual Supplements:

L-3 Communications Integrated Systems L.P. Document No. WTP-34118-KU-AFMS, Revision A, approved December 21, 2015 or later FAA approved revisions are a required part of this STC when the applicable item is installed.

FAA Approved Instructions for Continued Airworthiness (ICA):

L-3 Communications Integrated Systems L.P. Document No. WTP-W33968-MMSP2, Revision A, dated May 1, 2014 or later FAA accepted revisions are a required part of this STC when the applicable item is installed.

Limitations and Conditions: (Continued)

Equivalent level of safety findings have been made for the following regulation: 14 CFR 25.251 Vibration and buffeting (documented in TAD ELOS Memo P-11-004-F-1).

The Installer is responsible for verifying that the FAA requirements for internal cybersecurity and external cyber security are met with respect to how other systems are connected to this KU system

The installer must determine whether this design change is compatible with previously approved modifications, including, but not limited to, the aerodynamic effects of other antennas, radomes, or other external modifications which could alter the air flow over this installation.

If the holder agrees to permit another person to use this certificate to alter a product, the holder must give the other person written evidence of that permission.

Certification Basis:

Based on 14 CFR §§ 21.115 and 21.101, and the FAA policy for significant changes in FAA Order 8110.48, the certification basis for the 747-8 series airplane is as follows:

- a. The type certification basis for 747-8 airplanes is shown on TCDS A20WE 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 application, July 24, 2012, is as shown in TCDS A20WE plus later amendment levels for the following paragraphs:

(Certification Basis continued on page 3 of 4)

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Certification Basis: (Continued)

Regulations at the latest amendment 25-0 through 25-141

25.23, 25.29, 25.101, 25.113, 25.115, 25.117, 25.147, 25.251, 25.301, 25.303, 25.305, 25.307, 25.321, 25.337, 25.341, 25.349, 25.351, 25.365, 25.581, 25.601, 25.603, 25.605, 25.607, 25.609, 25.611, 25.613, 25.619, 25.625, 25.629, 25.841, 25.869, 25.899, 25.1307, 25.1351, 25.1353, 25.1355, 25.1357, 25.1401, 25.1431, 25.1501, 25.1529, 25.1541, 25.1581, 25.1585, 25.1587, 25.1703, 25.1707, 25.1709, 25.1711, 25.1713, 25.1715, 25.1717, 25.1719, 25.1721 and 25.1729.

Regulations at an intermediate amendment

None.

Regulations at the amendment level in TCDS A20WE

25.21, 25.105, 25.111, 25.119, 25.121, 25.123, 25.143, 25.177, 25.331, 25.571, 25.981, 25.1301, 25.1309, 25.1359, 25.1419, and 25.1533.

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**SUPPLEMENTAL TYPE CERTIFICATE, FAA FORM 8110-2
(CONTINUED)**

INSTRUCTIONS: The transfer endorsement below may be used to notify the appropriate FAA Aircraft Certification Office of the transfer of this Supplemental Type Certificate. The FAA will reissue the certificate in the name of the transferee and forward it to him.

TRANSFER ENDORSEMENT

Transfer the ownership of Supplemental Type Certificate Number:

To (Name of transferee)

(Address of transferee)

(Number and street)

(City, State, and ZIP Code)

From (Name of grantor)

(Address of grantor)

(Number and street)

(City, State, and ZIP Code)

Extent of Authority (if licensing agreement):

Date of Transfer:

Signature of grantor: