



United States of America
Department of Transportation
Federal Aviation Administration

Supplemental Type Certificate

Number: ST04375AT

This certificate issued to: Archeion Holdings, L.L.C.
9941 West Jessamine Street
Miami, FL 33157

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: 747-100/-200/-300/-400/400F/SP/SR/-8/-8F series

Description of Type Design Change: Installation of Avionics satLINK MAX with optional Personality Module (avPM) in the Cabin Compartment overhead, and optional avRDC MAX QAR in the EE Bay in accordance with Master Data List 160910-MDL Revision C, dated June 07, 2019 or later FAA approved revision, to provide 2 Iridium SATCOM ATS Voice channels, 1 Iridium SATCOM ATS Datalink FANS 1/A+ Data channel for Flight Deck use (CPDLC at RCP240 & ADS-C at RSP180), & 1 optional AOC Voice channel for cabin crew use. Existing aircraft systems optional interface/integration include the Flight Deck Audio System (i.e. Pilot Crew Headsets), MCDUs [or IDUs], ACARS CMU & CMU Printer, FDR (Key Event recording), in addition to other Archeion STC installations. In Configuration 1, the satLINK MAX unit is installed with avRDC MAX QAR unit, & the aircraft systems are interfaced with the avRDC MAX QAR unit. In Configuration 2, the satLINK MAX unit is installed as a standalone & provides independent aircraft systems interface.

Limitations and Conditions: " FAA approved Airplane Flight Manual Supplement for Archeion Holdings LLC, 160910-AFMS Revision A, dated July 19, 2019, or later FAA approved revisions, is a required part of this STC." ...
(See continuation sheet 3 of 3)

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 19, 2016

Date Reissued:

Date of Issuance: June 27, 2017

Date Amended: July 23, 2019

By Direction of the Administrator

Signature

Title (for) Christina M. Underwood
Manager, Atlanta ACO Branch

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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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: **ST04375AT**

To (Name and address of transferee)

From (Name and address of grantor)

Extent of Authority (if licensing agreement):

Date of transfer:

Signature of grantor: _____

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Supplemental Type Certificate

(Continuation Sheet)

Number: ST04375AT

Date of Issuance: June 27, 2017

Date Amended: July 19, 2019

Limitations and Conditions (Continued): " For maintenance and inspections, apply the following Archeion Holdings Instructions for Continued Airworthiness:

- 160910-ICA, Rev-A, dated February 22, 2019, Installation of an Avionics satLINK MAX System.
- 160915-ICA, Rev IR, dated December 01, 2016, Upgrade Installation of an Avionics satLINK MAX System.
- 181630-ICA-1, Rev-IR, dated August 08 2018, Installation of an Avionics satLINK MAX System per MDL section 3.0.
- 181635-ICA-1, Rev IR, dated August 08 2018, Removal of an Avionics satLINK MAX System Iridium Antenna.
- 181635-ICA-2, Rev IR, dated August 08 2018, Removal of an Inmarsat Antenna Satcom System.

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, including integration to other Archeion STC's, will produce no adverse effect upon the airworthiness of that airplane. 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 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 Boeing 747 Series is as follows:

- a. The type certification basis for Boeing 747 series airplanes is shown on TCDS A20WE for parts not changed or affected by the change.
- b. The certification basis for parts changed or affected by the change since the reference date of application July 19, 2016, is based upon 14 CFR Part 25 as amended by Amendment 25-142. Based on Order 8110.48, the certification basis for this modification was determined to be:

Regulations at the latest amendment 25-0 through 25-142

§§25.21 (a)(1), Amdt. 25-140	§§25.609, Orig.	§§25.1322 (e)(1), Amdt. 25-131
§§25.301, Amdt. 25-23	§§25.611 (a), Amdt. 25-125	§§25.1351 (a)(1), Amdt. 25-72
§§25.303, Amdt. 25-23	§§25.613, Amdt. 25-112	§§25.1353 (a)(c), Amdt. 25-123
§§25.305 (a)(b), Amdt. 25-86	§§25.771 (a), Amdt. 25-4	§§25.1357 (a)(c), Amdt. 25-123
§§25.307 (a), Amdt. 25-139	§§25.789 (a), Amdt. 25-46	§§25.1360 (a), Amdt. 25-123
§§25.561 (c)(d), Amdt. 25-91	§§25.853 (a), Amdt. 25-116	§§25.1363 (a)(b), Orig.
§§25.571 (a)(b), Amdt. 25-132	§§25.869 (a)(1,3), Amdt. 25-123	§§25.1381 (a)(b), Amdt. 25-72
§§25.581, Amdt. 25-23	§§25.869 (a)(4), Amdt. 25-72	§§25.1431 (a)(c)(d), Amdt. 25-113
§§25.601, Orig.	§§25.899 (a)(1,3)(b), Amdt. 25-123	§§25.1529, Amdt. 25-54
§§25.603, Amdt. 25-46	§§25.981 (a)(3)(d), Amdt. 25-125	§§25.1541, Orig.
§§25.605 (e), Amdt. 25-46	§§25.1301 (a)(1,2,3,4), Amdt. 25-123	§§25.1581, Amdt. 25-72.
§§25.607, Amdt. 25-23	§§25.1309 (a)(b)(c)(d)(e)(f), Amdt. 25-123	Appendix H

14 CFR Part 36 regulations: Based on 14 CFR § 21.93(b)(1) (Amd 21-97), No Acoustical Change has been found for the 14 CFR Part 36 noise levels regulations.

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 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 (Amdt 26-0), 26.47 (Amdt 26-1).

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