

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

Number **ST02459LA**

This Certificate issued to
Thales Avionics Inc.
58 Discovery
Irvine, California 92618-3105

*certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part *25 of the Federal Aviation Regulations. (*Certification basis is set forth in Type Certificate Data Sheet A28NM)*

Original Product Type Certificate Number: A28NM
Make: Airbus
Model: A320-200 Series

Description of Type Design Change: Installation of Provisions for Thales Avionics IFS Wireless Content Distribution (WCD) In-flight Entertainment (IFE) System in accordance with FAA Approved Thales Avionics Index List, Drawing No. 255424, Revision "A", dated May 17, 2013, or later FAA approved revision. FAA Approved Airplane Flight Manual Supplement, Document No. 44-26-77, Revision "Original", dated "06/17/2013", or later FAA approved revision is part of this installation.

The Instructions for Continued Airworthiness is called out in its associated Master Drawing Lists (MDL) defined in the above referenced Index List.

Limitations and Conditions: This approval should not be incorporated in any aircraft unless it is determined that the interrelationship between this installation and any previous approved configuration will not introduce any adverse effect upon the airworthiness of the aircraft.

Limitations and Conditions continued on Page 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

Date of application: September 10, 2012

Date reissued:

Date of issuance: June 21, 2013

Date amended:



By direction of the Administrator

(Signature)

Manager, Systems & Equipment Branch, Los Angeles Aircraft Certification Office

(Title)

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

INSTRUCTIONS: The transfer endorsement below may be used to notify the appropriate FAA Regional 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 the Supplemental Type Certificate Number _____

to *(Name of transferee)* _____

(Address of transfer) _____

(Number and street)

(City, State, and Zip code)

from *(Name of grantor) (Print or type)* _____

(Address of grantor) _____

(Number and street)

(City, State, and Zip code)

Extent of Authority (if licensing agreement): _____

Date of Transfer: _____

Signature of grantor *(In ink)*: _____

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Limitations and Conditions (Continued)

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.

1. Thales Avionics, Inc. STC# ST02461LA must be installed prior to or in conjunction with this installation.
2. This STC must be installed in conjunction with Delta Engineering STC #ST02921NY-D; and is only for T-PED technologies as listed in Delta Engineering "T-PED Compatibility List" Document 2264-08171-2332 as listed in the Approved Model List 0164-08167-2322.
 - a. Installer is responsible to ensure aircraft equipment is listed in the above specified Delta Engineering "T-PED Compatibility List" as listed in Approved Model List.
 - b. The operator is responsible to ensure changes to the aircraft equipment remain T-PED tolerant; one method would be the new equipment is listed in the above specified Delta Engineering "T-PED Compatibility List" Document as listed in Approved Model List.

Certification Basis

Based on 14 CFR §§ 21.115 and 21.101, and FAA order 8110.48, the type certification basis for the Airbus A320-200 Series modification of In-flight Entertainment System is in accordance with Type Certificate Data Sheet, A28NM, with the following exceptions:

Regulations at the latest amendment 25-0 through 25-116

25.29, 25.301(a), 25.303, 25.305(a),(b), 25.307(a), 25.561(b)(3),(c), 25.601, 25.603(a),(b),(c), 25.605(a), 25.607(b), 25.609(a), 25.611, 25.613(a),(b),(c), 25.619, 25.623, 25.625, 25.787(a),(b), 25.789(a), 25.853(a), 25.869(a)(4), 25.1301(a),(b),(c), 25.1309(a),(g), 25.1351(a)(1), 25.1357(a), 25.1529, 25.1541(a)(1)(2),(b)(1)(2), 25.1561(b),(c),(e), Appendix F, Appendix H

Regulations at an intermediate amendment

None

Regulation at the amendment level in TCDS A28NM

25.855(b)(1)(2),(d), 25.1353(a),(b), 25.1411(a)(1),(b)(1)(2), 25.1431(c)

Based on 14 CFR § 21.101(g), applicable provision of 14 CFR part 26 is included in the certification basis. For any future 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, (Amdt. No. 26-0).

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

In reply refer to: 130L-13-129

Thales Avionics Inc
Attn.: Jack Lindsey – Director, Certification
58 Discovery
Irvine, California 92618-3105

Dear Mr. Lindsey:

Supplemental Type Certificate (STC) No. ST02459LA
Installation of Provision for Thales Avionics WCD IFE System on LAN
Airbus A320-200 Series Aircraft, Project No. ST15412LA-T

We have completed our evaluation of the subject change in type design and are enclosing your Supplemental Type Certificate No. ST02459LA; a copy of FAA Approved Thales Avionics Index List, Drawing No. 255424, Revision "A", dated May 17, 2013, Master Drawing List, Drawing No. 500830-105MDL, Revision "E", dated May 2, 2013, and Reference Data List, Drawing No. 500830-105RDL, Revision "F", dated May 2, 2013.

The Los Angeles Aircraft Certification Office concurs with the statement contained in your Electrical Wiring Interconnecting System (EWIS) Instruction for Continued Airworthiness Evaluation, Drawing No. 500830-EWIS Revision "A", dated March 21, 2013, as called out in Reference Data List, Drawing No. 500830-105RDL, Revision "F", dated May 2, 2013, that the modification as defined in Thales Avionics, Inc. Master Drawing List, 500830-105MDL, Revision "E", dated May 2, 2013, does not necessitate a revision to EWIS ICA that were required to be developed by 14 CFR § 26.11(b). Therefore, enclosed STC ST02459LA has been issued with compliance to 14 CFR § 26.11.

Should STC ST02459LA be amended in the future to incorporate design changes or to add additional eligible airplane model number, per § 26.11(c), you are required to evaluate whether the design change (or existing approved modification on new airplane models) necessitates a revision to the ICA that were required to be developed by § 26.11(b). If so, you must develop and submit the necessary revisions for review and approval by the FAA Oversight Office. In addition, you must ensure that any revised EWIS ICA remain compatible with any fuel tank system ICA previously developed to comply with Special Federal Aviation Regulations 88 and any redundant requirements between them are minimized.

This certificate signifies approval of the type design change and authorizes modification of the aircraft model listed on the certificate. A copy must be included with each kit you issue or each time you make the data available to other persons who intend to make the subject alteration. The certificate may be transferred or made available to others by means such as a licensing agreement in accordance with Title 14 Code of Federal Regulations (CFR) part 21.47.

For your information, you are required to maintain an updated file related to this STC. If you plan to manufacture replacement or modification parts for sale in conformance with approved data listed on the certificate, you are required to comply with the 14 CFR §§ 21.303 and 45.15. Application for Parts Manufacturer Approval (PMA) should be made in writing with reference to this STC and addressed to: Los Angeles Manufacturing Inspection District Office, 3960 Paramount Blvd, Suite 100, Lakewood, CA. 90712. Please note that § 21.309(a) specifies that the FAA does not issue a PMA if the manufacturing facility for the part is located outside of the United States, unless a determination is made that the location of the manufacturing facility places no undue burden on the FAA in administering the applicable airworthiness requirements.

In accordance with § 21.3, and as a recipient of this certificate, you are required to report any failure, malfunction, or defect, except as provided in § 21.3(d), in any product or part manufactured by you or your contracted suppliers, and which you have determined has resulted or could result in any occurrences listed in § 21.3(c). The report must be communicated initially by telephone to the Manager, ANM-130L Branch, Los Angeles Aircraft Certification Office, phone number (562) 627-5330 within 24 hours after it has been determined that the failure, malfunction, or defect required to be reported has occurred and followed up with a written notice to the address shown above. FAA Form 8010-4 (Malfunction or Defect Report) or other appropriate format is acceptable in transmitting the required details.

You, as the STC holder, are responsible for any design changes necessary to correct unsafe conditions as well as for submitting those design changes to this office for approval. This requirement is contained in § 21.99. In addition, you are required to advise this office of any change in address.

Also, CFR 21.50 requires that Instructions For Continued Airworthiness, called out in the associated Master Drawing Lists listed in the above referenced FAA-approved Thales Avionics Index List, be made available to the operator at the time the aircraft is returned to service.

By accepting this certificate, you acknowledge that you have read and understand your responsibilities as an STC holder.

Sincerely,

Alan T. Shinseki
Manager, Systems and Equipment Branch
Los Angeles Aircraft Certification Office

Enclosures (5)