

Supplemental Type Certificate

Number: ST04482AT

This certificate issued to:

Delta Flight Products, LLC 3980 Tradeport Blvd, Bldg. 1200 Atlanta, GA 30354

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 <u>25</u> of the Federal Aviation Regulations.

Original Product – Type Certificate Number: T00001SE

Make: The Boeing Company

Model: 777-200

Description of Type Design Change: Provisioning of aircraft for zero passengers and no cargo on the passenger compartment floor in Boeing 777-200 series aircraft in accordance with Delta Flight Products Master Data List 20D29MDL001, Revision A, dated July 1, 2020, or later FAA Approved revision. Delta Flight Products Airplane Flight Manual Supplement (AFMS), 20D29R006, Rev -, dated July 10, 2020 and Instructions for Continued Airworthiness (ICA) 20D29R009, Rev -, dated June 25, 2020, or later FAA approved revisions, are a required part of this STC.

Limitations and Conditions:

- 1) This installation must not be incorporated in any aircraft unless it is determined that the interrelationship between it and any FAA previously approved configuration will not introduce any adverse effect upon the airworthiness of the aircraft.
- 2) A copy of this Supplemental Type Certificate (STC) must be included in the permanent record of the modified aircraft.
- 3) The installer must determine whether this design change is compatible with previously approved modifications.

(See Continuation Sheet 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: May 19, 2020		Date Reissued:	
Date of Issuance:	July 15, 2020	Date Amended:	
		By Direction of the Administrator	
		Signature	
		Title Christina M. Underwood, Manager	
		Atlanta Aircraft Certification Office Bra	nch

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 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

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 and address of transferee)	
From (Name and address of grantor)	
Extent of Authority (if licensing agreement):	
	Date of transfer:
	Sianature of arantor:

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Supplemental Type Certificate

(Continuation Sheet)
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Limitations and Conditions: (Cont'd)

- 4) For Instructions for Continued Airworthiness, refer to Company document and Instructions for Continued Airworthiness (ICA) 20D29R009, Rev -, dated June 25, 2020, or later FAA approved revisions. This document must be made available to the operator at the time of installation.
- 5) Carriage of passengers and/or cargo in the cabin area is not authorized except as provided for in an exemption to the applicable operating rules. Delta Flight Products Airplane Flight Manual Supplement (AFMS), 20D29R006, Rev -, dated July 10, 2020, or later FAA approved revision.
- 6) If the holder agrees to permit a person to use this certificate to alter a product, the holder must give this person written evidence of that permission.
- 7) Aircraft Configuration must be in accordance with FAA STCs ST04429AT Mid-Life Reconfiguration, ST02657NY PAC Passenger Entertainment System, ST03435NY Bruce Aerospace Lighting, ST02554SE JAMCO Lavatory & Galley Installation prior to applying this STC.

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 Company 777-200 is as follows:

- a. The type certification basis for Boeing Model 777-200 series airplane is shown on TCDS T00001SE 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, May 19, 2020, is based upon 14 CFR Part 25 amended level as specified in TCDS T00001SE, except for those regulations listed below, for which compliance was demonstrated to a later amendment level than specified in TCDS T00001SE. Based on 14CFR §§ 21.115 and 21.101, and the FAA policy for significant changes in FAA Order 8110.48, the certification basis for this modification was determined to be:

Regulations at the latest amendment 25-0 through 25-146

25.561(a)(b)(c)(d), 25.785(a)(c)(j)(k), 25.853(a), 25.1360(a), H25.5(a)(1)(i)(ii)(2)(3)(4)(5)

Regulations at an intermediate amendment

None.

Regulations at the amendment level in TCDS T00001SE

25.29(b), 25.301(a)(b)(c), 25.303, 25.307(a), 25.562(c)(7)(8), 25.601, 25.603(a)(b), 25.605, 25.609(a)(b), 25.625(a)(b)(c)(d), 25.787(a)(b), 25.789(a), 25.807(a)(7), 25.812(a)(1)(e)(i), 25.813(a)(b)(d)(e), 25.815, 25.1301(a)(b)(c)(d), 25.1309(a), 25.1447(c)(1)(4), 25.1529, 25.1541(a)(1)(b), 25.1581(a)(1), 25.1583(e)

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 changes to the STC, the holder of this STC must demonstrate compliance with the applicable sections. The cargo conversion must be evaluated to determine any impact to the original FAA approved EWIS ICAs. Any impact must be submitted to the FAA for review and approval. As of the issuance date of this STC, compliance has been found for the following regulations (Amdt 26-0 through 26-6): 26.11(c), 26.47(c)

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Supplemental Type Certificate

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Item #5 in the Limitations and Conditions section of this STC prohibits the carriage of passengers and/or cargo in the cabin area. Some, but not necessarily all, areas that may need to be addressed to carry cargo in the cabin area are:

- 1) Fire detection and suppression
- a. Cargo or baggage compartments, § 25.855 [cargo design, includes liners which have specific oil burner flam requirements]
- b. Cargo or baggage compartment smoke or fire detection systems, § 25.858
- c. Cargo compartment classification, § 25.857
- d. Operating limitations, § 25.1583(c), (d), (e), (h), (i) [weight and load distribution, not part of the data of this STC]
- e. Kinds of operation, § 25.1525 [kind of operation, set up for cargo but not specified in this STC]

Some, but not necessarily all, areas that may need to be addressed to carry passengers in the cabin area are:

- 1) Passenger Information Signs and Placards, § 25.791 [assuming lighted signs are deactivated]
- 2) Emergency Lighting, § 25.812 [assuming floor illumination may be obstructed or removed]
- 3) Width of Aisle, § 25.815 [as there are no aisles]
- 4) Maximum Number of Seats Abreast, § 25.817
- 5) Oxygen Equipment and Supply and Minimum Mass Flow of Supplemental Oxygen
 - a. § 25.1441 [assuming oxygen equipment and supply will be inactivated]
 - b. § 25.1443 [oxygen mass flow partial compliance]
- 6) Electrical wiring interconnection systems (EWIS) maintenance program,
 - a. § 26.11 [EWIS ICA compliance]

Additional Data

The cargo loading data and placarding data must be provided for incorporation if an exemption is granted that permits carriage of cargo in of the cabin.
END

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