

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

Number **ST02287LA**

This Certificate issued to **SEVEN Q SEVEN, LTD.
10315 Wetmore Road
San Antonio, Texas 78216**

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, 34*, and 36* of the Federal Aviation Regulations. *Certification basis is set forth in Type Certificate Data Sheet 4A26 and continuation sheet of this certificate.*

Original Product Type Certificate Number: 4A26

Make: Boeing

Model: 707-300C Series

Description of Type Design Change: Replacement of Pratt & Whitney JT3D series engine with Pratt & Whitney JT8D-219 engine and associated systems in all positions in accordance with Seven Q Seven, Ltd. Master Drawing List No. S633-10130-2, Revision Z, dated April 9, 2010, or later FAA approved revisions, and FAA Approved Airplane Flight Manual Supplement (AFM) Document No. SQFF-SD-0170 July 15, 2010, or later FAA approved revisions.

Limitations and Conditions The operation of the aircraft is limited in engine thrust to the same thrust level as the original engine: 19,000 lb-thrust. The engine de-rated thrust settings and limitations are provided in the FAA Approved AFM. The installation should not be incorporated in any airplane unless it is determined that the interrelationship between this installation and any previously approved configuration will not introduce any adverse effect upon the airworthiness of the airplane. A copy of this certificate must be maintained as part of the permanent records of the modified airplane. If the holder agrees to permit another person to use this certificate to alter their airplane, the holder shall give the other person written evidence of that permission. See Continuation Sheet.

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: July 23, 2007

Date reissued: November 17, 2012

Date of issuance: July 20, 2010

Date amended:

By direction of the Administrator



(Signature)

Thomas A. Enyart
Manager, Propulsion 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.

Supplemental Type Certificate

(Continuation Sheet)

Number ST02287LA

NOTE:

DO NOT DELETE THIS PAGE.

DO NOT ADD ANY DATA TO THIS PAGE.

THIS PAGE IS FOR PAGE NUMBERING PURPOSES,
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Supplemental Type Certificate

(Continuation Sheet)

Number ST02287LA

Instructions for Continued Airworthiness (ICA) Document No. SQSAR-SD-0286, Revision A, dated May 28, 2010, or later FAA approved revisions, must be made available to the operator at the time of installation.

Certification Basis for this modification:

Airworthiness and Environmental Standards for components and areas not affected by the change:

The original certification basis for Boeing Model 707-300C series airplanes identified on TCDS 4A26, Revision 11, dated July 30, 1984: CAR 4b December 1953, Amendment 4b-1, 4b-2, and 4b-3.

Ditching Provisions – 4b.361 (see Note 11 of TCDS No. 4A26)
Ice Protection Provisions – 4b.640

Airworthiness Environmental standards for components and areas affected by the change:

Subpart A – General (25-120): §§ 25.1, 25.5.

Subpart B Flight (25-120): §§ 25.21, 25.31, 25.101, 25.105, 25.111, 25.117, 25.123, 25.171, 25.173, 25.203, 25.235, 25.251, 25.253.

Regulations at an intermediate amendment:

<u>Regulation</u>	<u>Amendment Level</u>	<u>Regulation</u>	<u>Amendment Level</u>
§§ 25.103	25-0	25.161	25-38
25.107	25-94	25.175	25-7
25.109	25-0	25.177	25-72
25.119	25-94	25.181	25-72
25.121	25-84	25.201	25-84
25.125	25-84	25.207	25-42
25.143	25-84	25-231	25-0
25.145	25-98	25.233	25-94
25.147	25-72	25.237	25-42
25.149	25-84		

Subpart C – Structure (25-120): §§ 25.301, 25.303, 25.307, 25.321, 25.337, 25.361, 25.363, 25.367, 25.393, 25.395, 25.399, 25.405-25.409, 25.459, 25.471, 25.477, 25.479, 25.481, 25.483, 25.487, 25.495, 25.503, 25.507, 25.511, 25.563, 25.581.

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Supplemental Type Certificate

(Continuation Sheet)

Number **ST02287LA**

Regulations at an intermediate amendment:

<u>Regulation</u>	<u>Amendment Level</u>	<u>Regulation</u>	<u>Amendment Level</u>
§§ 25.305(d)	25-0	25.391	25-0
25.331(a)(b)(c)	25-23	25.397(c)	25-0
25.331(d)	25-72	25.415(a)	25-0
25.333(c)	25-0	25.427(a)(b)(c)	25-0
25.335(a)(b)(c)	25-72	25.457	25-0
25.335(d)(e)	25-23	25.473	25-0
25.341	25-72	25.485	25-0
25.343(b)(I)(ii)	25-72	25.489	25-0
25.345(a)(b)	25-72	25.491	25-0
25.345(c)	25-0	25.493(b)	25-0
25.349(b)	25-23	25.499(e)	25-0
25.351(a)	25-23	25.509	25-0
25.351(b)	25-72	25.561(b)	25-0
25.365(c)	25-0	25.571(a)(b)(c)(d)	25-72
25.371	25-0	25.571(e)	25-45
25.373	25-0		

Subpart D – Design and Construction (25-120): §§ 25.601-25.625, 25.631, 25.655, 25.679, 25.681, 25.689, 25.801, 25.831, 25.832, 25.841, 25.863-25.869.

Regulations at an intermediate amendment:

<u>Regulation</u>	<u>Amendment Level</u>	<u>Regulation</u>	<u>Amendment Level</u>
§§ 25.629	25-23	25.699	25-0
25.651	25-0	25.701	25-0
25.657	25-0	25.703	25-0
25.671	25-0	25.721	25-0
25.672	25-0	25.723	25-0
25.675	25-0	25.729	25-0
25.677	25-0	25.731	25-0
25.683	25-0	25.733	25-0
25.685	25-0	25.735	25-0
25.693	25-0	25.801	25-0
25.697	25-0		

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Supplemental Type Certificate

(Continuation Sheet)

Number **ST02287LA**

Subpart E – Powerplant (25-120): §§ 25.901, 25.903, *25.933, 25.934, 25.939, 25.941, 25.943, 25.951, 25.952, 25.955, 25.961, 25.981 (with limitation), 25.993, 25.994, 25.997, 25.1011, 25.1019, 25.1021, 25.1023, 25.1041-25.1045, 25.1091, 25.1093, 25.1103, 25.1121, 25.1123, 25.1141, 25.1143, 25.1155, 25.1163, 25.1181-25.1191, 25.1193-25.1201, *25.1203, 25.1207

*25.933(a)(1)(ii) “Reversing Systems” Equivalent Level of Safety (ELOS) ST7065LA-T-P-2 dated July 8, 2010

*25.1203(a) “Fire Detection System” Equivalent Level of Safety (ELOS) ST7065LA-T-P-1 dated August 9, 2004

Subpart F – Equipment (25-120): §§ 25.1301, 25.1305, 25.1307, 25.1309-25.1322, 25.1337, 25.1351, 25.1353, 25.1357, 25.1363, 25.1381, 25.1419, 25.1431, 25.1435, 25.1438, 25.1461.

Subpart G – Operating Limitations and Information (25-120): §§ 25.1501, 25.1516, 25.1519, 25.1521, 25.1527, 25.1529, 25.1533, 25.1541, 25.1543, 25.1549, 25.1551, 25.1555, 25.1557, 25.1581-25.1585.

Regulation at an intermediate amendment:

Regulation	Amendment Level
§ 25.1587	25-105

14 CFR part 34 (34-3)

14 CFR part 36 (36-28): Stage 3

The following Seven Q Seven Continued Airworthiness Supplements are applicable to airplanes modified in accordance with this STC:

- Maintenance Program Supplement Document No. SQSAR-SD-0172
- Aircraft Maintenance Manual Supplement Document No. SQSAR-SD-0173
- Supplemental Structural Inspection Document No. SQSAR-SD-0174
- Structural Repair Manual Document No. SQSAR-SD-0283
- Illustrated Parts Catalog –Struts/Cowling Document No. SQSAR-SD-0284
- Instructions for Continued Airworthiness Document No. SQSAR-SD-0286
- Weight and Balance Manual Supplemental Document SQSSR-ST-0012

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(Continuation Sheet)
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Limitations and Conditions continued:

Thrust Limitations:

- The JT8D-219 sea level static thrust is limited to 19,000 lb. rating.

Weight Limitations:

- The maximum takeoff brakes release gross weight is 325,000 lb.

Flap Limitations:

- The maximum landing flap setting is 40 degrees. Flaps Full DN (50 degrees) is not approved for use during normal operations. The following placard must be installed in view of the flight crew.

**Selection of Flaps 50 degrees is Approved for Emergency
Operations Only**

-END-

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