# DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A1NM Revision 39 BOEING 767-200 Series 767-300 Series 767-400ER Series 767-40 Series 767-2C Series February 18, 2022

# TYPE CERTIFICATE DATA SHEET A1NM

This data sheet, which is part of Type Certificate No. A1NM, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: The Boeing Company

737 Logan Ave N Renton, WA 98057-0000

### I - Model 767-200 (Approved July 30, 1982)

**Fuel:** 

Engines: 2 Pratt and Whitney JT9D-7R4D, JT9D-7R4E, JT9D-7R4E4, PW4052, PW4056, PW4060A, or 2 General Electric CF6-80A, CF6-80A2, CF6-80C2-B2, -B4, -B6 or CF6-80C2B4F, -B6F, -B7F.

**WARNING**: To prevent unsafe airplane handling characteristics, PW4000 series engines with electronic engine control (EEC) part number 791100-14-102 (Pratt & Whitney part number 54D043) must not be installed on the

same airplane as PW4000 series engines that have the ring case compressor configuration. This combination of engine configurations is not approved because of a significant difference in engine acceleration rates and the effect of that difference on airplane handling characteristics. Ring case compressor equipped engines were approved with the same engine model number as previously approved PW4000 configurations, and must be identified by the presence of a "/A5" marked at the end of the "INSTL ARR" block on the engine data plate.

The General Electric CF6-80A engines may be intermixed with CF6-8 0A2 engines with appropriate limitations as noted in the FAA-Approved Airplane Flight Manual.

Pratt and Whitney Engines: Fuels conforming to the latest version of Pratt & Whitney Service Bulletin 2016

General Electric Engines: Fuel conforming to GE Specification D50TF2. (See Note 14)

All Engines: ASTM D-1655 grades Jet A or Jet A1. (See Note 14)

ASTM D 6615 grades Jet B (see Note 14)

MIL-T-5624 grades JP-4 or JP-5. (See Note 14) MIL-T-83133 grades JP-8.

Refer to the FAA approved Airplane Flight Manual listed in Note 2 for fuel limitations

Engine Ratings & For engine ratings and operating limits see engine TC Data Sheet No. E3NE for the P&W JT9D-7R4D, -7R4E, or **Operating Limits:** 7R4E4; TC Data Sheet E13NE for the GE CF6-80A, CF6-80A2, or CF6-80C2; TC Data Sheet E24NE for the

PW4000, or the FAA-Approved Airplane Flight Manual.

Airspeed Limits: VD = 420 KCAS to 17,854 ft/.91M above 23,000 ft, linear variation between these points.

VFC = 390 KCAS to 17,600 ft/382 KCAS at 23,000 ft/.87M above 26,000 ft, linear variation between these points.

VMO = 360 KCAS/.86M VLE = 270 KCAS/.82M VLO = 270 KCAS/.82M

For other airspeed limits, see the appropriate FAA-Approved Airplane Flight Manual.

**CG Range:** See the appropriate FAA-Approved Flight Manual.

Page No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Rev. No.	39	36	37	39	37	36	39	36	37	39	36	39	38	36	39	36
Page No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Rev. No.	36	36	39	37	36	37	36	37	38	37	39	37	39	38	38	38

# I. Model 767-200 (cont'd):

Maximum Weights:See the appropriate FAA-Approved FlightManual.Maximum255 with 2 pairs of Type A plus 1 pair of Type III exits.Passengers:290 with 2 pairs of Type A plus 2 pairs of Type III exits.

<u>Model</u> 767-201	Eligible Serial Numbers 23897-23902
767-201 767-204	22980, 22981, 23072, 23250, 23807, 24013, 24239, 24457, 24736, 24757, 25058, 25139
767-20 <del>4</del> 767-205	23057, 23058
767-203 767-209	23037, 23038 22681, 22682
767-209	28525
767-212 767-216	
767-216 767-219	23623, 23624, 24973 23326-23328, 24150
767-219	21862-21880
767-222	22307-22336, 30256
767-223 767-224	30430-30439
767-224	22564-22573
767-231 767-232	22213-22227
767-232 767-233	22517-22528, 24142-24145, 24323-24325
767-238	23304-23306, 23309, 23402, 23403, 23896
767-241	23801-23806
767-246	23212-23214
767-258	22972-22975
767-259	24618, 24835
767-260	23106, 23107, 23916
767-266	23178-23180
767-269	23280-23282
767-275	22683, 22684
767-277	22692-22696
767-281	22785-22790, 23016-23022, 23140-23147, 23431-23434
767-283	24727, 24728
767-284	24716, 24742, 24762
767-23B	23973, 23974
767-24Q	28270
767-25D	24733, 24734
767-25E	27192-27195
767-27C	27385, 27391, 28016, 28017
767-27E	24832, 24854
767-27G	25537, 27048, 27049
767-2B1	25421, 26471
767-2B7	24764, 24765, 24894, 25225, 25257, 26847
767-2AX	33685
767-2DX	32954
767-2EY	33686-33689
767-2FK	33844, 33958, 34433, 35498
767-2J6	23307, 23308, 23744, 23745, 24007, 24157
767-2N0	24713, 24867
767-2Q4	22921-22923
767-2Q8	24448
767-2S1	23494

# **Certification Basis:**

Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-37, except where superseded by the following sections of Part 25 as amended by Amendments 25-1 through:

<u>Amendment</u>	<u>Sections</u>
25-38	25.101, 25.161, 25.397, 25.603, 25.675, 25.685, 25.775, 25.787, 25.815, 25.841, 25.941, 25.951, 25.979(a), (b), (c), 25.999, 25.1027, 25.1041, 25.1093(b), 25.1125, 25.1143(a), (b), (c), (d), 25.1167, 25.1303, 25.1305, 25.1322, 25.1355, 25.1385, 25.1403, 25.1439, 25.1515, 25.1533, 25.1557
25-39	25.807
25-40	25.901(a), (b)(1)(ii), (b)(2), (b)(3), (b)(4), (c), 25.903, 25.933, 25.939, 25.943, 25.945, 25.952, 25.959, 25.963, 25.965, 25.973, 25.995, 25.1091(a), (b), (c), (d), 25.1093(a), (c), 25.1121, 25.1123, 25.1141, 25.1145, 25.1197, 25.1199, 25.1207, 25.1337, 25.1549
25-41	25.831, 25.1309, 25.1321, 25.1325, 25.1331, 25.1333, 25.1335, 25.1351, 25.1401, 25.1421, 25.1435, 25.1447, 25.1450, 25.1457, 25.1459, 25.1461
25-42	25.21, 25.29, 25.107, 25.111, 25.143, 25.147, 25.149, 25.177, 25.181, 25.201, 25.207, 25.233, 25.237, 25.255, 25.703, 25.729, 25.1043, 25.1353, 25.1501, 25.1521, 25.1581, 25.1583, 25.1585, 25.1587

# I. Model 767-200 (cont'd):

# Certification Basis (cont'd):

<u>Amendment</u>	Sections
25-43	25.1326
25-44	25.1413
25-45	25.571, and 25.573
25-46	25.345, 25.351(a), 25.629, 25.697, 25.803, 25.901(d), 25.1103(a), (b)(2), (d), (e), (f), 25.1142, and 25.1522
25-49	25.733
25-54	25.365 (e)(1), (2)

Compliance with the following optional requirements has been established with respect to the following sections of 14 CFR Part 25: §25.801 - Ditching Provisions (Over- water operation can be approved when the aircraft has been equipped and installation has been approved according to 14 CFR 25.801)

§25.1419 - Ice Protection Provisions

14 CFR §26: (Based on 14 CFR §21.101(g) for changes made to TCs applicable provisions of 14 CFR part 26 are included in the certificationbasis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections). Compliance has been found for the following regulations at Amendment 26-0: 26.11 and Amendment 26-1: 26.43, 26.45, 26.47, and 26.49

14 CFR part 36 of the Federal Aviation Regulations with Amendments 36-1 through 36-12, effective August 1, 1981. See the appropriate FAA Approved Airplane Flight Manual listed in Note (2) for applicability of Stage 4 Noise Recertification through Amendment 36-28.

Special Federal Aviation Regulation 27

# **Exemption** from Part 25:

Exemption	<u>Title</u>	Issued Date	Expiration Date
4725	Exemption from 25.785(h) -Allows one seat for a required flight attendant to be located near the overwing Type III exits.	3 November, 1986	Permanent
8119	Partial Exemption from §25.901(c), Single Failures resulting in Uncontrollable High Thrust Conditions	11 June, 2003	Permanent
9749A	Exemption from 14 CFR 25.785(j), 25.807(d), 25.807(g)(1), 25.807(i)(1), 25.810(a)(1), 25.812(e), 25.813(b), 25.857(e), and 25.1447(c)(1) for 767-200 series airplanes converted from passenger to freighter with provisions for the carriage of mixed cargo/live animal operation	24 July, 2009	Permanent
9791C	Partial Time-Limited Exemption from 14 CFR §25.853(a), appendix F, paragraph (a)(1)(i), Testing on Large Interior Panels (Expired Exemption No. 9791, November 28, 2010, Exemption No. 9791B, 28 February, 2011)	28 November, 2008	28 November, 2011
10767C	Time-limited exemption from 14 CFR 25.901(c) and 25.981(a)(3), fuel tank ignition prevention associated with the FQIS is limited to the replacement of the ARINC 429 chip within the fuel quantity processer unit's IOC cards and the BITE card (Expired Exemption No. 10767, 17 May, 2016, Exemption No. 10767A, 17 May, 2016)	17 December, 2015	17 May, 2016
14593	Exemption from SFAR 88, and §§ 25.901(c) and 25.981(a)(3), as they pertain to fuel-tank-ignition prevention associated with the fuel-quantity indication system and fuel-overfill-shutoff surge tank wiring installation, limited to in-service 767-200 (freighter only)	25 January, 2016	Permanent

# Equivalent Safety Findings (ESF's) exist with respect to the following sections of 14 CFR Part 25:

ELOS IP	<u>Title</u>	<u>14 CFR</u>
ANM-100S-0811-CI-2	Pressurized Cabin Loads (Crew Rest)	25.365(e)(2)
ANM-100S-1727-CI-1	Cross Aisle Between Type III Exits	25.807, 25.813
ANM-100S-2332-CI-1	Pressurized Cabin Loads (Crew Rest)	25.365(e)(2)
ANW-212:8110-5	Test Subjects for Emergency Evacuation Demonstration	25.803(c)(8)
AT0328ST-T-C-5	"No Smoking" limitation in the passenger compartment	25.791,25.853, CAR 4b.3 81
AT1736SE-T-C-14	Door Sill Reflectance	25.811

I. Model 767-200 (cont'd):
Certification Basis (cont'd):
Equivalent Safety Findings (Cont'd)

AT2251SE-T-F-1	Use of the 1-g Stall Speed Instead of Minimum Speed in the Stall as a Basis for Determining Compliance (Non-Structural Sections)	1.2, 25.21(b), 25.103(a),(a)(1),(a)(3-6),(b)(c), 25.107(b)(1),(b)(2),(c)(3),(g 25.111(a), 25.119(b), 25.121(c),(d),(d)(3), 25.125(a)(2),	
		25.143(g), 25.145(a),(a)(1),(b)(1-4),(b)(6),(c), 25.147 (a),(a)(2),(c),(d), 25.149 (c), 25.161(b),(c)(1),(c)(2),(c)(3)(d),(e)(3) 25.175(a)(2),(b)(1),(b)(2),(b)(2)(ii),(b (3),(c),(c)(4),(d),(d)(5), 25.177(c), 25.181(a),(b), 25.201(a)(2),(b)(4), 25.207(b),(c),(d),(e),(f), 25.231(a)(2), 25.233(a), 25.237(a),(b)(1),(b)(2), 25.735(f)(2),(g), 25.773(b)(1)(i), 25.1001(c)(1),(c)(3), 25.1323(c)(1),(c)(2), 25.1325(e), 25.1587(b)(2)	
AT6937SE-T-S-1	Hydraulic System Proof Pressure Test	25.1435 (25-45)	
CT1180NW-D-A-5	Emergency Exit Arrangement	25.807, 25.809, 25.813	
CT1180NW-D-A-7	Type A Exit Passageway Dimensions	25.807, 25.811	
CT1180NW-D-P-10	Engine Fan Cowl Compartment Fire Zone	25.1181(a)(6), 25.1182	
CT1180NW-D-P-9	Induction System Deicing and Anti-icing Protection	25.1093(b)(1)	
CT1180NW-D-S-20	Forward Position Light Intensity in the Vertical Plane and Overlap	25.1393, 25.1395	
PS05-0123-P-1	Ground Fault Interrupter Relays	25.981(a)(3)	
PS05-0177-P-2	Fuel Tank Flammability Rule (see Note 17)	25.981 (25-125)	
PS06-0496-F-18	Engine and Auxiliary Power Unit (APU) Fire Switch Handle Design	25.1555(d)(1)	
PS08-0670-C-1	Adhesives Used in Interior Panel Bent Joint Potting Applications	25.853(a)	
PS13-0901-ES-1	Oxygen Quantity Indication of the Lavatory Supplemental Oxygen System	25.1441(c)	
PS13-1000-C-5	Flammability Testing Hierarchy	25.853(a)(d), part 25 appendix F parts I and IV	
SA06091WI-T-P-1	Powerplant Instrumentation for RCI LDS-2100 installation on Boeing 767-200 series aircraft equipped with General Electric CF6-80A2 engines	25.1305 & 25.1549	
TC6918SE-T- G-8	Formatting of Boeing Instructions for Continued Airworthiness Manuals - Airworthiness Limitations	25.1529 (25-54), 25.1729(25-123), H25(25-132)	
TD1990SE-T-C-1	Emergency Locator Transmitter (ELT)	25.1415(d)	
TD2695SE-T-C-1	Exterior Exit Markings	25.811(f)	
TD7075SE-T-C-1	Type III Exit Accessibility	25.803, 25.807(c), 25.813(c	
TS13-0005-S-1	Determination of Minimum Oxygen Flow for the Lavatory Oxygen System	25.1443(c)	
<b>Special Conditions</b> w	rith respect to the following subjects apply:		
Special Condition	<u>Title</u>	Effective Date	
25-ANM-18	Lightning Protection, Protection from Unwanted Effects of Radio Frequence (RF)Energy and Propulsion Control System for Pratt and Whitney PW4000 series engines, General Electric CF6-80C2 FADEC engine, and Rolls Roya RB211-524H-36 engine installations	o -	
25-ANM-20	Installation of a longitudinal partition in the cabins	23 August, 1988	
25-369-SC	Seats with Non-Traditional, Large, Non-MetallicPanels	17 March, 2008	
25-630-SC	Non-Rechargeable Lithium Batteries	22 April, 2017	

### II - 767-200SF Major Design Change

A 767-200SF (Special Freighter) is a 767-200 series passenger airplane that has been modified in accordance with FAA-approved Boeing Service Bulletin(s) 767-00-0038 to operate in a freighter configuration. These aircraft remain 767-200 series aircraft for documentation purposes on this TCDS and with regard to the applicability of airworthiness directives. Because of the magnitude of thisdesign change, the certification basis for the changed aspects was required to be established and documented in accordance with section 21.101 (Changed Product Rule)

All general information in TCDS A1NM for the 767-200 Series remains applicable to an airplane operating in the 767-200SFconfiguration, with the following exceptions:

Maximum Passengers: There are no provisions for the carriage of passengers. A maximum of four supernumeraries canoccupy the flight deck as given in Exemption 9749A.

The 767-200SF certification basis was established according to the requirements given in § 21.101 and AC 21.101-1, and was determined in accordance with FAA Order 8110.48. The 767-200SF consists of the following product level change which is considered significant per AC 21.101-1:

Significant Product Level Change: Passenger to Freighter Conversion

Certification basis: Part 36: Unchanged under the "No Acoustical Change" Provisions of § 21.93(b)

SFAR 27: Unchanged from 767-200 Series

Part 26, Amendments 26-0 through 26-1

Part 25 of the FAR, effective February 1, 1965, as amended by Amendments 25-1 through 25-115 with the following exceptions per section 21.101(b):

SECTION NO.	<u>TITLE</u>	<u>AT AMDT. 25-</u>
25.365(e)(2)	Pressurized Compartment Loads	25-54 (for compartments outside
		of the pressurized area)
25.561(c)(2)	General	25-64
25.571	Damage-tolerance and fatigue evaluation of	25-54
	structure	
25.831(g)	Ventilation	25-41
25.841(a)	Pressurized cabins	25-38

**Changed Areas:** The following is a high level description of the listing of changes incorporated as part of the passenger to SF conversion:

- Installed strengthened floor beams and fuselage frames
- Installed main deck cargo door
- Installed rigid cargo barrier/smoke barrier
- Revised cargo ventilation system
- Removal of passenger windows and installation of window plugs
- Installed main deck cargo fire protection system and smoke detection system
- Installed aural and visual alerts in the main deck Class E cargo compartment
- Installation of seats and provisions to the flight deck for four supernumeraries

The certification basis for the following changes incorporated as part of the passenger to SF conversion remains at the original certification basis for the Model 767-200 shown on TCDS A1NM:

- Rerouting and some minor changes to hardware associated with flight controls, landing gear, and wheel brake cables
- Rerouting of air data tubing, hydraulic tubing, certain electrical wiring
- Changes to performance characteristics associated with static and dynamic loads
- · Forward lavatory with recirculating waste system, including flush motor and related timer and circuit breaker
- Re-use of passenger airplane interior mounting hardware and attach points to accommodate cargo compartment equipment like sidewall panels and ceilings.
- Installation of a floor-mounted first observer seat
- Revision to the Ditching and Flotation analysis document as affected by the SF modification
- Revision of the EICAS to the 767-200SF configuration
- Revision of Door 1L counterbalance associated with the slide removal

The certification basis for areas not affected by the change will remain at the original certification basis for the Model 767-200.

**Special Conditions:** Special conditions that are part of the certification basis for the 767-200 Series apply to the airplane operating in the 767-200SF configuration.

# II - 767-200SF Major Design Change (cont'd)

**Exemptions:** All exemptions from 14 CFR Part 25 listed in TCDS A1NM for the 767-200 Series apply to the 767-200SF configuration, except those listed below:

Exemption No. 4725 - Exemption from 25.785(h) -Allows one seat for a required flight attendant to be located near the overwing Type III exits. Does not apply.

Exemption 9749A, dated 07/24/09, provides relief from the requirements of Sections 25.785(j); 25.807(d), (g)(1), (i)(1); 25.810(a)(1); 25.812(e); 25.813(b); 25.857(e); and 25.1447(c)(1) to allow for the carriage of supernumeraries on the 767-200SF.

**Equivalent Safety Findings:** All existing Equivalent Safety Findings listed in TCDS A1NM for the 767-200 Series apply to the 767-200 operated in the 767-200SF configuration, except those listed below:

- Test Subjects for Emergency Evacuation Demonstration, Section 25.803(c)(8). Does not apply.
- Passenger Emergency Exits, Section 25.807(a)(7)(iv) and (c). Does not apply.
- Type III Exit Access, 25.803, 25,807(c) and 25.813(c). Does not apply.
- Emergency Exit Access, 25.807, 25.809 and 25.813. Does not apply.
- Exterior Exit Markings, 25.811(f)(2). Does not apply.
- "No Smoking" limitation in passenger compartment, 25.791 and 25.853(c). Does not apply.
- Type A Exit Passageway Dimensions, 25.807 and 25.811. Does not apply.
- Cross-Aisle between Type III Exits, 25.807 and 25.813. Does not apply

TCDS Notes: All Notes in TCDS A1NM that apply to the 767-200 Series also apply to an airplane operated in the 767-200SF configuration

**Optional** All optional requirements applicable to 767-200 Series also apply to aircraft operated in the 767-200SF **Requirements:** configuration.

### III - Model 767-300 (Approved September 22, 1986)

**Engines:** 2 Pratt and Whitney JT9D-7R4D, JT9D-7R4E, JT9D-7R4E4, PW4056, PW4060, PW4060C, or PW4062; or 2

General Electric CF6-80A2, or CF6-80C2-B2, -B4, or -B6, or CF6-80C2-B2F, B4F, B6F, or -B7F; or 2 Rolls Royce

RB211-524H-36, or RB211-524H-T-36.

WARNING: To prevent unsafe airplane handling characteristics, PW4000 series engines with electronic engine control (EEC) part number 791100-14-102 (Pratt & Whitney part number 54D043) must not be installed on the same airplane as PW4000 series engines that have the ring case compressor configuration. This combination of engine configurations is not approved because of a significant difference in engine acceleration rates and the effect of that difference on airplane handling characteristics. Ring case compressor equipped engines were approved with the same engine model number as previously approved PW4000 configurations, and must be identified by the presence of a "/A5 marked at the end of the "INSTL ARR" block on the engine data plate.

Fuel: Pratt and Whitney Engines: Fuels conforming to the latest version of P&W Service Bulletin 2016

General Electric Engines: Fuel conforming to GE Specification D50TF2. (See Note 14)

Rolls Royce Engines: See Rolls Royce "Operating Instructions RB211-524H on the Boeing 767-300. (See Note 15)

All Engines: ASTM D-1655 grades Jet A or Jet A1. (See Note 14, 15)

ASTM D 6615 grades Jet B (see Note 14)

MIL-T-5624 grades JP-4 or JP-5. (See Note 14, 15)

MIL-T-83133 grades JP-8.

Refer to the FAA approved Airplane Flight Manual listed in Note 2 for fuel limitations

Engine Ratings & Operating Limits: For engine ratings and operating limits see engine TC Data Sheet No. E3NE for the P&W JT9D-7R4D, -7R4E, or -7R4E4; TC Data Sheet E13NE for the GE CF6-80A2, or CF6-80C2; TC Data Sheet E24NE for the PW4000, TC Data Sheet E30NE for the Rolls Royce RB211-524H-36, or RB211-524H-T-36; or the FAA-Approved Airplane Flight Manual.

Airspeed Limits: VD = 420 KCAS to 17,854 ft/.91M above 23,000 ft, linear variation between these points.

VFC = 390 KCAS to 17,600 ft/382 KCAS at 23,000 ft/.87M above 26,000 ft, linear variation between these points.

VMO = 360 KCAS/.86M VLE = 270 KCAS/.82M VLO = 270 KCAS/.82M

For other airspeed limits, see the appropriate FAA-Approved Airplane Flight Manual.

**CG Range:** See the appropriate FAA-Approved Flight Manual.

Maximum Weights: See the appropriate FAA-Approved Flight Manual.

767-3CB

33466-33469

HII - Model 767-300 (Cont'd)

Maximum
Passengers:
290 with 2 pairs of Type A plus 2 pairs of Type III exits
290 with 3 pairs of Type A plus 1 pair of Type III exits. (See Note 6 for Type III Exit requirements.)
351 with 3 pairs of Type A plus 1 pair of Type I exits.

Model	Eligible Serial Numbers
767-304	28039-28042, 28208, 28883, 28979, 29137, 29138, 29384
767-306	26263, 27610-27612, 27614, 27957-27960, 28098, 28884, 30393
767-316	26327, 26329, 27597, 27613, 27615, 29227-29229, 34626, 34628, 34629, 35229-35231, 35696-35698, 36710-36712,
	37800-37802, 40590-40593,40798, 40799, 41746-41748, 41993-41997, 42213, 42214
767-319	24875, 24876, 26264, 26912, 26913, 26915, 26971, 28745, 29388, 30586
767-322	25091-25094, 25280, 25283-25287, 25389-25394, 27112-27115, 27158-27160, 29236-29243, 30024-30029
767-323	24032-24046, 25193-25202, 25445-25451, 26995, 26996, 27059, 27060, 27184, 27448-27451, 29429-29432, 29603-
	29606, 33081-33089
767-324	27392-27394, 27568, 27569
767-328	27135, 27136, 27212, 27427, 27428
767-330	25137, 25208, 25209, 26983-26988, 26991, 26992
767-332	23275-23279, 23435-23438, 24075-24080, 24759, 24775, 24800, 24802, 24803, 24852, 24981, 24982, 25061, 25122,
	25123, 25143-25146, 25306, 25409, 25984-25991, 27110, 27111, 27582-27584, 27961, 27962, 28447-28458, 29689-
	29698, 30180, 30198, 30199, 30388, 30573-30575, 30594-30597, 32776
767-333	25583-25588, 30846, 30850-30852
767-336	24333-24343, 25203, 25204, 25442-25444, 25732, 25733, 25826, 25828, 25829, 25831, 25832, 25834, 27140, 29230-
<b>7</b> ( <b>7</b> 220	29232
767-338	24146, 24316, 24317, 24407, 24531, 24853, 24929, 24930, 25246, 25274, 25316, 25363, 25575-25577, 28153, 28154,
	28724, 28725, 29117, 29118, 30186
767-341	24752, 24753, 24843, 24844, 30341, 30342
767-343	30008, 30009
767-346	23215-23217, 23645, 23961-23966, 24498, 24782, 24783, 27311-27313, 27658, 27659, 28553, 28837, 28838, 29863,
7.7.252	32886-32888, 33493-33497, 33845-33851, 35813-35815, 36131, 37547-37550, 40363-40569
767-352	26261, 26262
767-360	33767-33769
767-366	24541, 24542
767-375 767-381	24082-24087, 24306, 24307, 24574, 24575, 25120, 25121, 25864, 25865, 30108, 30112 23756-23759, 24002-24006, 24350, 24351, 24400, 24415-24417, 24632, 24755, 24756, 24880, 25055, 25136, 25293,
/0/-381	25/36-25/39, 24002-24006, 24330, 24331, 24400, 24413-24417, 24632, 24735, 24736, 24880, 23033, 23136, 23293, 25616-25619, 25654-25662, 27050, 27339, 27444, 27445, 27942, 27943, 27944, 32972-32980, 33506-33508, 35876,
	23010-23019, 23034-23002, 27030, 27339, 27444, 27443, 27942, 27943, 27944, 32972-32980, 33300-33308, 33876, 35877, 37719, 37720, 37872, 40564-40567, 40894-40898
767-383	24318, 24357, 24358, 24475-24477, 24729, 24846-24849, 25088, 25365, 26544
767-383 767-31A	24316, 24337, 24336, 24473-24477, 24729, 24640-24649, 23066, 23303, 20344
767-31B	25170, 26259, 26265
767-31K	27205, 27206, 28865
767-32K	33968
767-32L	40342, 40343, 41063
767-33A	25346, 25403, 25530-25536, 27189, 27310, 27376, 27377, 27468, 27476, 27477, 27908, 27909, 27918, 28043,
707 5511	28138-28141, 28147, 28159, 28495, 33421-33425
767-34G	41519
767-33P	28370, 28392, 33078, 35796, 40533, 40534-40536
767-34P	33047-33049
767-35D	24865, 27902, 28656
767-35E	26063, 26064
767-35H	26387-26389
767-36D	27309, 27684, 27685, 27941, 35155, 35156
767-36N	29898, 30107, 30109-30111, 30115, 30841, 30843, 30847, 30853, 30854
767-37D	26328
767-37E	25077
767-38A	29617, 29618
767-38E	24797, 24798, 25132, 25347, 25404, 25757-25760, 25762, 25763, 29129, 30840
767-39H	26256, 26257
767-3BG	30564-30566
767-3D6	24766-24768
767-3G5	24257-24259, 28111, 29435
767-3J6	25875-25878
767-3KY	42220, 42221, 42223
767-3P6	23764, 24349, 24484, 24485, 24495, 24496, 24983-24985, 25241, 25269, 25354, 26233-26238, 27254, 27255
767-3Q8	24745, 24746, 27600, 27616-27618, 27686, 27993, 28132, 28206, 28207, 29390, 29383, 29386, 29387, 30048, 30301
767-3S1	25221, 26608 2507(-25117
767-3T7	25076, 25117
767-3W0	28148, 28149, 28264
767-3X2	26260 24047 24048 24052 24053 24000 25000 25411 26200 26204 26208
767-3Y0	24947, 24948, 24952, 24953, 24999, 25000, 25411, 26200, 26204-26208 23765, 24628, 26417, 27095, 29867, 30331, 30383
767-3Z9 767-3BG	23/65, 24628, 26417, 27095, 29867, 30331, 30383 30563
/0/-3BG	30303

# III - Model 767-300 (Cont'd)

### **Certification Basis:**

Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-37, except where superseded by the following sections of Part 25 as amended by Amendments 25-1 through:

<u>Amendment</u>	Sections
25-38	25.101, 25.161, 25.397, 25.603, 25.675, 25.685, 25.775, 25.787, 25.815, 25.841, 25.941, 25.951, 25.979(a), (b), (c), 25.999, 25.1027, 25.1041, 25.1093(b), 25.1125, 25.1143(a), (b), (c), (d), 25.1167, 25.1303, 25.1305, 25.1322, 25.1355, 25.1385, 25.1403, 25.1439, 25.1515, 25.1533, 25.1557
25-39	25.807
25-40	25.901(a), (b)(1)(ii), (b)(2), (b)(3), (b)(4), (c), 25.903, 25.933, 25.939, 25.943, 25.945, 25.952, 25.959, 25.963, 25.965, 25.973, 25.995, 25.1091(a), (b), (c), (d), 25.1093(a), (c), 25.1121, 25.1123, 25.1141, 25.1145, 25.1197, 25.1199, 25.1207, 25.1337, 25.1549
25-41	25.831, 25.1309, 25.1321, 25.1325, 25.1331, 25.1333, 25.1335, 25.1351, 25.1401, 25.1421, 25.1435, 25.1447, 25.1450, 25.1457, 25.1459, 25.1461
25-42	25.21, 25.29, 25.107, 25.111, 25.143, 25.147, 25.149, 25.177, 25.181, 25.201, 25.207, 25.233, 25.237, 25.255, 25.703, 25.729, 25.1043, 25.1353, 25.1501, 25.1521, 25.1581, 25.1583, 25.1585, 25.1587
25-43	25.1326
25-44	25.1413
25-45	25.571, and 25.573
25-46	25.345, 25.351(a), 25.629, 25.697, 25.803, 25.901(d), 25.1103(a), (b)(2), (d), (e), (f), 25.1142, and 25.1522
25-49	25.733
25-54	25.365 (e)(1), (2)

Compliance with the following optional requirements has been established with respect to the following sections of 14 CFR Part 25: §25.801 - Ditching Provisions (Over- water operation can be approved when the aircraft has been equipped and installation has been approved according to 14 CFR 25.801)

§25.1419 - Ice Protection Provisions

14 CFR §26: (Based on 14 CFR §21.101(g) for changes made to TCs applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections). Compliance has been found for the following regulations at Amendment 26-0: 26.11 and Amendment 26-1: 26.43, 26.45, 26.47, 26.49 and Amendment 26-3: 26.39

14 CFR part 36 of the Federal Aviation Regulations with Amendments 36-1 through 36-12, effective August 1, 1981. See the appropriate FAA Approved Airplane Flight Manual listed in Note (2) for applicability of Stage 4 Noise Recertification through Amendment 36-28.

Special Federal Aviation Regulation 27

### **Exemption** from Part 25:

Exemption	<u>Title</u>	Issued Date	Expiration Date
4725	Exemption from 25.785(h) -Allows one seat for a required flight attendant to be located near the overwing Type III exits.	3 November, 1986	Permanent
8119	Partial Exemption from §25.901(c), Single Failures resulting in Uncontrollable High Thrust Conditions	11 June, 2003	Permanent
9791C	Partial Time-Limited Exemption from 14 CFR §25.853(a), appendix F, paragraph (a)(1)(i), Testing on Large Interior Panels (Expired Exemption No. 9791, November 28, 2010, Exemption No. 9791B, 28 February, 2011)	28 November, 2008	28 November, 2011
10069	Exemption from 14 CFR 25.779(b)(1), 25.1301(d), and 25.1309(a), 767-300 with Rolls Royce RB211- 524G/H engines installed with Full Authority Fuel Control Software "Issue 17" software.	25 May, 2010	Permanent
10767C	Time-limited exemption from 14 CFR 25.901(c) and 25.981(a)(3), fuel tank ignition prevention associated with the FQIS is limited to the replacement of the ARINC 429 chip within the fuel quantity processer unit's IOC cards and the BITE card (Expired Exemption No. 10767, 17 May, 2016, Exemption No. 10767A, 17 May, 2016)	17 December, 2015	17 May, 2016
14593	Exemption from SFAR 88, and §§ 25.901(c) and 25.981(a)(3), as they pertain to fuel-tank-ignition prevention associated with the fuel-quantity indication system and fuel-overfill-shutoff surge tank wiring installation, limited to in-service 767-300 (freighter only)	25 January, 2016	Permanent

25.813(c)

25.1443(c)

### III - Model 767-300 (Cont'd)

TS13-0005-S-1

System

# Certification Basis (Cont'd):

<b>Equivalent Safet</b>	y Findings (ESF	s) exist with respect to the following sections of 14 CFR Part 25:
ELOS IP	Title	14

14 CFR AT00010BA-T-S-1 Powerplant And Auxiliary Power Unit Instruments 25.1549(b) AT0328ST-T-C-5 "No Smoking" limitation in the passenger compartment 25.791,25.853, CAR 4b.3 81 AT1736SE-T-C-14 Door Sill Reflectance 25.811 AT2251SE-T-F-1 Use of the 1-g Stall Speed Instead of Minimum Speed in the Stall as a 1.2, 25.21(b), 25.103(a),(a)(1),(a)(3-Basis for Determining Compliance (Non-Structural Sections) 6), (b), (c), (c), (d), (25.111(a), 25.119(b), 25.121(c),(d),(d)(3), 25.125(a)(2), 25.143(g), 25.145(a),(a)(1),(b)(1-4),(b)(6),(c), 25.147 (a),(a)(2),(c),(d), 25.149 (c), 25.161(b),(c)(1),(c)(2),(c)(3)(d),(e)(3),25.175(a)(2),(b)(1),(b)(2),(b)(2)(ii),(b) (3),(c),(c)(4),(d),(d)(5), 25.177(c),25.181(a),(b), 25.201(a)(2),(b)(4), 25.207(b),(c),(d),(e),(f), 25.231(a)(2), 25.233(a), 25.237(a),(b)(1),(b)(2), 25.735(f)(2),(g), 25.773(b)(1)(i), 25.1001(c)(1),(c)(3), 25.1323(c)(1),(c)(2), 25.1325(e), 25.1587(b)(2) AT4965SE-T-P-1 RB211-524H-T Engine Fire Detection Provisions 25.1203 AT4965SE-T-P-2 RB211-524H-T Engine Zone 2 Pressure Relief Provisions 25.1103(d) PS05-0177-P-2 Fuel Tank Flammability Rule (see Note 17) 25.981 (25-125) PS05-0123-P-1 Ground Fault Interrupter Relays 25.981(a)(3) PS06-0496-F-18 Engine and Auxiliary Power Unit (APU) Fire Switch Handle Design 25.1555(d)(1) PS08-0670-C-1 Adhesives Used in Interior Panel Bent Joint Potting Applications 25.853(a) PS13-0901-ES-1 Oxygen Quantity Indication of the Lavatory Supplemental Oxygen 25.1441(c) System PS13-1000-C-5 Flammability Testing Hierarchy 25.853(a)(d), part 25 appendix F parts I and SA06091WI-T-P-1 Power plant and Auxiliary Power Unit Instruments 25.1549(b), (c) T4173NM-DS-C-1 Emergency Exit Arrangement and Cross Aisle Proximity 25.813 T4173NM-DS-CI-1 **Emergency Exit Arrangement** 25.807, 25.809 and 25.813 T4173NM-DS-CI-2 **Emergency Exit Access** 25.813(c) TC6918SE-T- G-8 Formatting of Boeing Instructions for Continued Airworthiness 25.1529 (25-54) Manuals - Airworthiness Limitations 25.1729(25-123) Appendix H (25-132) TC6918SE-T-F-6 Minimum Unstick Speed (VMU) 25.107(e)(1)(iv) TD1637SE-T-C-1 Folding Waste Trolley 25.853(d) TD1990SE-T-C-1 Emergency Locator Transmitter (ELT) 25.1415(d) TD2695SE-T-C-1 **Exterior Exit Markings** 25.811(f) 25.803, 25.807(c), TD7075SE-T-C-1 Type III Exit Accessibility

Determination of Minimum Oxygen Flow for the Lavatory Oxygen

### III - Model 767-300 (Cont'd)

### Certification Basis (Cont'd):

**Special Conditions** with respect to the following subjects apply:

	Special Condition	<u>Title</u>	Effective Date
	25-ANM-18	Lightning Protection, Protection from Unwanted Effects of Radio Frequency (RF)Energy and Propulsion Control System for Pratt and Whitney PW4000 series engines, General Electric CF6-80C2 FADEC engine, and Rolls Royce RB211-524H-36 engine installations	29 April, 1988
ú	25-ANM-20	Installation of a longitudinal partition in the cabins	23 August, 1988
	25-369-SC	Seats with Non-Traditional, Large, Non-MetallicPanels	17 March, 2008
	25-454-SC	Seats with Inflatable Lapbelts	5 January, 2012
	25-630-SC	Non-Rechargeable Lithium Batteries	22 April, 2017

### IV - 767-300BCF Major Design Change

The 767-300BCF (Boeing Converted Freighter) is a 767-300 series passenger airplane that has been modified in accordance with FAA- approved Boeing Service Bulletin(s) 767-00-0039 to operate in a freighter configuration. These aircraft remain 767-300 series aircraft for documentation purposes on this TCDS and with regard to the applicability of airworthiness directives. Because of the magnitude of this design change, the certification basis for the changed aspects was required to be established and documented in accordance with section 21.101 (Changed Product Rule).

All general information in TCDS A1NM for the 767-300 Series remains applicable to an airplane operating in the 767-300BCF configuration, with the following exceptions:

Maximum Passengers: There are no provisions for the carriage of passengers. A maximum of four supernumeraries can occupy the flight deck as given in Exemption 9696A

A 767-300BCF certification basis was established according to the requirements given in § 21.101 and AC 21.101-1, and was determined in accordance with FAA Order 8110.48. The 767-300BCF consists of the following product level change which is considered significant per AC 21.101-1:

Significant Product Level Change - Passenger to Freighter Conversion:

Certification basis: Part 36: Unchanged under the "No Acoustical Change" Provisions of § 21.93(b)

SFAR 27: Unchanged from 767-300 Series

Part 26, Amendments 26-0 through 26-1

Part 25 of the FAR, effective February 1, 1965, as amended by Amendments 25-1 through 25-117 with the following exceptions per section 21.101(b):

SECTION NO.	TITLE	AT AMDT. 25-
25.365(e)(2)	Pressurized Compartment Loads	25-54 (for compartments
		outside of the pressurized area)
25.561(c)(2)	General	25-64
25.571	Damage-tolerance and fatigue evaluation of structure	25-54
25.831(g)	Ventilation	25-41
25.841(a)	Pressurized cabins	25-38

**Changed Areas:** The following is a high level description of the listing of changes incorporated as part of the passenger to BCF conversion:

- Installed strengthened floor beams and fuselage frames
- Installed main deck cargo door
- Installed rigid cargo/smoke barrier
- Revised cargo ventilation system
- Removal of passenger windows and installation of window plugs
- Installed main deck cargo fire protection system and smoke detection system
- Installed aural and visual alerts in the main deck Class E cargo compartment
- Installation of seats and provisions to the flight deck for four supernumeraries

### IV - 767-300BCF (cont'd)

# Changed Areas (cont'd)

The certification basis for the following changes incorporated as part of the passenger to BCF conversion remains at the original certification basis for the Model 767-300 shown on TCDS A1NM:

- Rerouting and some minor changes to hardware associated with flight controls, landing gear, and wheel brake cables
- Rerouting of air data tubing, hydraulic tubing, certain electrical wiring
- Changes to performance characteristics associated with static and dynamic loads
- Forward lavatory with recirculating waste system, including flush motor and related timer and circuit breaker
- Re-use of passenger airplane interior mounting hardware and attach points to accommodate cargo compartment equipment like sidewall panels and ceilings.
- Installation of a floor-mounted first observer seat
- Revision to the Ditching and Flotation analysis document as affected by the BCF modification
- Revision of the EICAS to the 767-300BCF configuration
- Incorporation of the 767-300 production stabilizer electric alternate trim control system
- Optional installation of English and foreign language placards in appropriate exterior and interior locations
- Optional modification of lower lobe air conditioning
- Strengthening of landing gear to accommodate differences in weight and CG
- Revision of Door 1L counterbalance associated with slide removal

The certification basis for areas not affected by the change will remain at the original certification basis for the Model 767-300 shown on TCDS A1NM.

**Special Conditions:** Special conditions that are part of the certification basis for the 767-300 Series apply to the airplane operating in the 767-300BCF configuration.

### **Exemptions:**

All exemptions from 14 CFR Part 25 listed in TCDS A1NM for the 767-300 Series apply to the 767-300BCF configuration, except those listed below:

Exemption No. 4725 - Exemption from 25.785(h) -Allows one seat for a required flight attendant to be located near the over wing Type III exits. Does not apply.

Exemption 9696, dated May 14, 2008 and corrected on May 22, 2008 provides relief from the requirements of Sections 25.785(j), 25.807(d), 25.807(g)(1), 25.807(i)(1), 25.809(a), 25.810(a)(1), 25.812(e), 25.813(b), 25.857(e), and 25.1447(c)(1) to allow for the carriage of supernumeraries on the 767-300BCF.

Exemption 9696A, dated November 14, 2008 provides relief from the requirements of Sections 25.785(j); 25.807(d), (g)(1), (i)(1); 25.809(a); 25.810(a)(1); 25.812(e); 25.813(b); 25.857(e); and 25.1447(c)(1) to allow for the carriage of supernumeraries on the 767-300BCF.

**Equivalent Safety Findings:** All existing Equivalent Safety Findings listed in TCDS A1NM for the 767-300 Series apply to the 767-300 operated in the 767-300BCF configuration, except those listed below:

- Test Subjects for Emergency Evacuation Demonstration, Section 25.803(c)(8). Does not apply
- Passenger Emergency Exits, Section 25.807(a)(7)(iv) and (c). Does not apply
- Type III Exit Access, 25.803, 25,807(c) and 25.813(c). Does not apply
- Emergency Exit Access, 25.807, 25.809 and 25.813. Does not apply
- Exterior + Markings, 25.811(f)(2). Does not apply
- "No Smoking" limitation in passenger compartment, 25.791 and 25.853(c). Does not apply
- Type A Exit Passageway Dimensions, 25.807 and 25.811. Does not apply
- Cross-Aisle between Type III Exits, 25.807 and 25.813. Does not apply
- Oxygen Quantity Indication of the Lavatory Supplemental Oxygen System, 25.1441(c). Does not apply

Equivalent Safety Findings (ESF's) exist with respect to the following sections of 14 CFR Part 25: § 25.855(e) - Cargo Compartment Smoke Detection

**TCDS Notes:** 

All Notes in TCDS A1NM that apply to the 767-300 Series also apply to an airplane operated in the 767-300BCF configuration.

Optional Requirements:

All optional requirements in TCDS A1NM that apply to the 767-300 Series also apply to an airplane operated in the 767-300BCF configuration.

# V - Model 767-300F (Freighter) (Approved October 12, 1995)

**Engines:** 2 General Electric CF6-80C2B6F or B7F

Fuel: General Electric Engines: Fuel conforming to GE Specification D50TF2

All Engines: ASTM D-1655 grades Jet A or Jet A1, or Jet B

ASTM D 6615 grades Jet B

MIL-T-5624 grades JP-4 or JP-5 MIL-T-83133 grades JP-8

Refer to the FAA approved Airplane Flight Manual listed in Note 2 for fuel limitations.

### **Engine Ratings &**

Operating Limits: For engine ratings and operating limits see engine TC Data Sheet E13NE for the GE CF6-80C2.

Airspeed Limits: VD = 420 KCAS to 17,854 ft/.91M above 23,000 ft, linear variation between these points

VFC = 390 KCAS to 17,600 ft/.382 KCAS at 23,000 ft/.87M above 26,000 ft, linear variation between these points

VMO = 360 KCAS/.86M VLE = 270 KCAS/.82M VLO = 270 KCAS/.82M

For other airspeed limits, see the appropriate FAA-Approved Airplane Flight Manual.

**CG Range:** See the appropriate FAA-Approved Airplane Flight Manual.

Maximum Weights: See the appropriate FAA-Approved Airplane Flight Manual.

**Maximum** 0 passengers (767-300F) 2 crew, 4 persons with one floor level exit equipped with inertia reels and right hand flightcrew exit operable from outside. (Exemption No. 5993A)

	Model 767-300F 767-32LF 767-34AF 767-38EF 767-316F 767-346F 767-381F	Eligible Serial Numbers 63110-63129, 64058-64060, 65791, 65907-65909, 66240-66247, 66249-66253, 66809-66812, 66864 41063, 41068, 41069 27239-27243, 27740-27764, 32843, 32844, 37856-37865, 37866-37878, 37944-37947, 65788-65790 25756, 25761, 29129 29881, 30780, 30842, 32572, 32573, 34245, 34246, 34627 35816, 35817, 35818 33404, 33509, 33510, 35709 37805-37810	
	767-3S2F	42706-42732, 43538, 43541-43554, 43630-43633, 44377-44380, 61205, 61206, 62497-62500, 63094-63109, 64055-64057	

### **Certification Basis:**

Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-37, except where superseded by the following sections of Part 25 as amended by Amendments 25-1 through:

<u>Amendment</u>	Sections
25-38	25.101, 25.161, 25.397, 25.603, 25.675, 25.685, 25.775, 25.787, 25.815, 25.841, 25.941, 25.951, 25.979(a), (b), (c), 25.999, 25.1027, 25.1041, 25.1093(b), 25.1125, 25.1143(a), (b), (c), (d), 25.1167, 25.1303, 25.1305, 25.1322, 25.1355, 25.1385, 25.1403, 25.1439, 25.1515, 25.1533, 25.1557
25-39	25.807
25-40	25.901(a), (b)(1)(ii), (b)(2), (b)(3), (b)(4), (c), 25.903, 25.933, 25.939, 25.943, 25.945, 25.952, 25.959, 25.963, 25.965, 25.973, 25.995, 25.1091(a), (b), (c), (d), 25.1093(a), (c), 25.1121, 25.1123, 25.1141, 25.1145, 25.1197, 25.1199, 25.1207, 25.1337, 25.1549
25-41	25.831, 25.1309, 25.1321, 25.1325, 25.1331, 25.1333, 25.1335, 25.1351, 25.1401, 25.1421, 25.1435, 25.1447, 25.1450, 25.1457, 25.1459, 25.1461
25-42	25.21, 25.29, 25.107, 25.111, 25.143, 25.147, 25.149, 25.177, 25.181, 25.201, 25.207, 25.233, 25.237, 25.255, 25.703, 25.729, 25.1043, 25.1353, 25.1501, 25.1521, 25.1581, 25.1583, 25.1585, 25.1587
25-43	25.1326
25-44	25.1413
25-45	25.571, and 25.573
25-46	25.345, 25.351(a), 25.629, 25.697, 25.803, 25.901(d), 25.1103(a), (b)(2), (d), (e), (f), 25.1142, and 25.1522
25-49	25.733
25-54	25.365 (e)(1), (2)
25-64	25.561 Applies to seats for supernumeraries, galley and rigid barrier
25-72	25.783 Applies to main deck cargo door

# V - Model 767-300F (Freighter) (cont'd)

# Certification Basis (Cont'd)

Compliance with the following optional requirements has been established with respect to the following sections of 14 CFR Part 25: §25.801 - Ditching Provisions (Over- water operation can be approved when the aircraft has been equipped and installation has been approved according to 14 CFR 25.801)

§25.1419 - Ice Protection Provisions

14 CFR §26: (Based on 14 CFR §21.101(g) for changes made to TCs applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections). Compliance has been found for the following regulations at Amendment 26-0: 26.11 and Amendment 26-1: 26.43, 26.45, 26.47, 26.49 and Amendment 26-3: 26.39

14 CFR part 36 of the Federal Aviation Regulations with Amendments 36-1 through 36-12, effective August 1, 1981. See the appropriate FAA Approved Airplane Flight Manual listed in Note (2) for applicability of Stage 4 Noise Recertification through Amendment 36-28.

Special Federal Aviation Regulation 27

# **Exemption** from Part 25:

Exemption	<u>Title</u>	<u>Issued Date</u>	Expiration Date
5993	Partial Exemption from 25.807(c)(1) and 25.857(e) - Allows for the carriage of up to seven persons including the flight crew members, when	23 November 1994	Permanent
5993A	the airplane is equipped with a floor level exit with escape slide, and a right hand flight crew window emergency exit that is operable from the outside Partial Exemption from 25.809(f)(1) - Allows for the carriage of persons other than flight crew members. In lieu of an escape slide, the emergency evacuation assist means at the entry door shall be an inertial reel descent device andharness provided for each occupant. See Note 12	9 August 1995	Permanent
8119	Partial Exemption from §25.901(c), Single Failures resulting in Uncontrollable High Thrust Conditions	11 June, 2003	Permanent
9791C	Partial Time-Limited Exemption from 14 CFR §25.853(a), appendix F, paragraph (a)(1)(i), Testing on Large Interior Panels (Expired Exemption No. 9791, November 28, 2010, Exemption No. 9791B, 28 February, 2011)	28 November, 2008	28 November, 2011
10767D	Time-limited exemption from 14 CFR 25.901(c) and 25.981(a)(3), fuel tank ignition prevention associated with to the latent-plus-single failures for the FQIS processor, and fuel-quantity-system wiring that is co-routed with airplane wiring carrying electrical power exceeding intrinsically safe levels. (Expired Exemption No. 10767, 17 May, 2016, Exemption No. 10767A, 17 May, 2016, Exemption 10767C, 31 December, 2019)	17 December, 2015	31 December, 2027
14593	Exemption from SFAR 88, and §§ 25.901(c) and 25.981(a)(3), as they pertain to fuel-tank-ignition prevention associated with the fuel-quantity indication system and fuel-overfill-shutoff surge tank wiring installation, limited to in-service 767-300 (freighter only)	25 January, 2016	Permanent

# **Equivalent Safety Findings (ESF's)** exist with respect to the following sections of 14 CFR Part 25:

ELOS IP	<u>Title</u>	<u>14 CFR</u>
AT00010BA-T-S-1	Powerplant And Auxiliary Power Unit Instruments	25.1549(b)
AT0141SE-T-S-1	Supplemental Oxygen Equipment	25.1447(c)(1) and (3)
AT0328ST-T-C-5	"No Smoking" limitation in the passenger compartment	25.791,25.853, CAR 4b.3 81
AT1736SE-T-C-14	Door Sill Reflectance	25.811
PS05-0123-P-1	Ground Fault Interrupter Relays	25.981(a)(3)
PS05-0177-P-2	Fuel Tank Flammability Rule (see Note 17)	25.981 (25-125)
PS06-0496-F-18	Engine and Auxiliary Power Unit (APU) Fire Switch Handle Design	25.1555(d)(1)
PS08-0670-C-1	Adhesives Used in Interior Panel Bent Joint Potting Applications	25.853(a)

# V - Model 767-300F (Freighter) (cont'd)

Certification Basis (Cont'd)

**Equivalent Safety Findings (cont'd)** 

ELOS IP	<u>Title</u>	<u>14 CFR</u>
PS13-1000-C-5	Flammability Testing Hierarchy	25.853(a)(d), part 25 appendix F parts I and IV
ST06344WI-T_P-1	Powerplant Instrumentation for RCI LDS-2100 Installation on Boeing 767-300F Series Aircraft	25.1549(b), (c)
TC6918SE-T- G-8	Formatting of Boeing Instructions for Continued Airworthiness Manuals - Airworthiness Limitations	25.1529 (25-54) 25.1729(25-123) Appendix H (25-132)
TD1990SE-T-C-1	Emergency Locator Transmitter (ELT)	25.1415(d)
TD2695SE-T-C-1	Exterior Exit Markings	25.811(f)
TS13-0005-S-1	Determination of Minimum Oxygen Flow for the Lavatory Oxygen System	25.1443(c)
Special Conditions w	rith respect to the following subjects apply:	
Special Condition	<u>Title</u>	Effective Date
25-ANM-18	Lightning Protection, Protection from Unwanted Effects of Radio Frequency (RF)Energy and Propulsion Control System for Pratt and Whitney PW4000 series engines, General Electric CF6-80C2 FADEC engine, and Rolls Royce RB211-524H-36 engine installations	-
25-630-SC	Non-Rechargeable Lithium Batteries	22 April, 2017

# VI - 767-300F Major Design Change - Large Format Display System

The aircraft listed below were produced with a Rockwell Collins, Inc. STC number ST01750WI installed in production. As a result, the certification basis for these aircraft has been advanced for the areas associated with the STC as identified below. Section V (767-300F)of this TCDS remains applicable for all regulatory aspects not discussed below. Certification Basis: The certification basis is advanced for the following regulations for the areas listed below:

SECTION NO.	<u>TITLE</u>	AT AMDT. 25-
25.143(b)	General – Controllability and Maneuverability	129
25.305(a)(b)(c)	Strength and Deformation	86
25.307(a)	Proof of Structure	72
25.561	General – Emergency Landing Conditions	91
25.603	Materials	46
25.605(a)	Fabrication Methods	46
25.611	Accessibility Provisions	123
25.613(a)(b)(c)	Material Strength Properties and Material Design Values	112
25.625(a)(b)(c)	Fitting Factors	72
25.773(a)	Pilot Compartment View	136
25.777(a)(b)(c)	Cockpit controls	46
25.831(d)	Ventilation	89
25.853(a)	Compartment Interiors	116
25.869(a)	Fire Protection System	72
25.899	Electrical Bonding and Protection Against Static Electricity	123
25.1301(a)	Function and Installation	123
25.1303	Flight and Navigation Instruments	90
25.1305(a)(3-6),(c)(1-3),(d)(1)(3)	Powerplant Instruments	115
25.1307(e)	Miscellaneous Equipment	72
25.1309(a)(b)(c)(d)(e)	Equipment Systems and Installations	123
25.1310(a)(1)(2)(3)(i)	Power Source Capacity and Distribution	123

# VI - 767-300F Major Design Change - Large Format Display System (Cont'd)

# Certification Basis (Cont'd)

SECTION NO.	TITLE	AT AMDT. 25-
25.1316	System lightning protection 134	134
25.1317(a)(b)(c)	High-intensity Radiated Fields (HIRF) Protection	122
25.1322	Warning, Caution, and Advisory Lights	131
25.1323(a)(f)(g)	Airspeed Indicating System	109
25.1329(i)(j)(k)	Flight Guidance System	119
25.1351(a)	General - Electrical Systems and Equipment	72
25.1353(a)(c)	Electrical Equipment and Installations	123
25.1360(b)	Precautions Against Injury	123
25.1381(a)(b)	Instrument Systems	72
25.1431	Electronic Equipment	113
25.1438(b)	Pressurization and Pneumatic Systems	41
25.1459(c)	Flight Recorders	124
25.1535 Appx. K25.1.1	ETOPS Approval	120
25.1535 Appx. K25.1.2	ETOPS Approval	120
25.1551	Oil Quantity Indicator	72
25.1581(a)(2)	Airplane Flight Manual	72
25.1583(c)(1)	Operating Limitations	130
25.1585(a)(b)	Operating Procedures	105

Changed Areas: The following is a high level description of the listing of changes incorporated as part of the installation of the Rockwell Collins LDS Amended STC ST01750WI:

- Installed new forward instrument panel to accept new line-replaceable units (LRU)
- Installed graphics generator units (3 GGUs)
- Installed adaptive flight displays (3 AFDs)
- Installed display control panels (2 DCPs)
- Installed display dimming panels (2 DDPs)
- Installed operational software for the GGU

Equivalent Safety Findings which apply only to the Model 767-300F series with incorporation of STC exist with respect to the following sections of 14 CFR Part 25:

§25.1549(b) & (c) - Powerplant [and auxiliary power unit instruments] (ELOS Memo SA06180WI-T-P-1).

Model	Eligible Serial Numbers
767-300F	63110-63129, 64058-64060, 65791, 65907-65909, 66240-66247, 66249-66253, 66809-66812, 66864
767-34AF	65788-65790
767-3S2F	42720-42732, 43538, 43541, 43547-43554, 43630-43633, 61205, 61206, 62497-62500, 63094-63109,
	64055- 64057

## VII - Model 767-400ER (Approved July 20, 2000)

**Engines:** 2 General Electric CF6-80C2B8F

**Fuel:** General Electric Engines: Fuel conforming to GE Specification D50TF2

ASTM-D-1655 grades Jet A or Jet A1

ASTM D6615 grades Jet B

MIL-T-5624 grades JP-4 or JP-5 MIL-T-83133 grades JP-8

Refer to the FAA approved Airplane Flight Manual listed in Note 2 for fuel limitations

# **Engine Ratings &**

Operating Limits: For engine ratings and operating limits see engine TC Data Sheet E13NE for the GE CF6-80C2.

Airspeed Limits: VD = 420 KCAS to 17,854 ft/. 91M above 23,000 ft., linear variation between these points

VFC = 390 KCAS to 17,600 ft/. 382 KCAS at 23,000 ft/. 87M above 26,000 ft, linear variation between these points

VMO = 360 KCAS/. 86M VLE = 270 KCAS/. 82M VLO = 270 KCAS/. 82M

For other airspeed limits, see the appropriate FAA-Approved Airplane Flight Manual.

# VII - Model 767-400ER (cont'd)

Certification Basis (Cont'd)

**CG Range:** See the appropriate FAA-Approved Airplane Flight Manual.

Maximum Weights: See the appropriate FAA-Approved Airplane Flight Manual.

**Maximum** 375 with the as designed exit configuration

Passengers:

Model Eligible Serial Numbers

767-424ER 29446-29461 767-432ER 29699-29719 767-4FSER 34205

### **Certification Basis:**

Title 14 Code of Federal Regulations (CFR) Part 25 as amended by Amendments 25-1 through 25-89 for the complete airplane with the exceptions listed below:

TITLE	AT AMDT. 25-
Performance - General	92
Takeoff	92
Takeoff Speeds	92
Accelerate-Stop Distance	92
Takeoff Distance and Takeoff run	92
Takeoff Flight Path	92
Gust Loads	$86^{1}$
Pressurized Compartment Loads	71
Pressurized Compartment Loads	$54^{6}$
Nose Wheel Yaw	91
Jacking and Tie-down Provisions	not part of the TC basis
Emergency Landing Dynamic Conditions	$64^{3}$
Damage - Tolerance and Fatigue Evaluation of Structure	45
Takeoff Warning System	42 <sup>4</sup>
Brakes	92
Doors	235
Doors	not part of the TC basis
Ventilation	41
Ventilation	41
Ventilation	not part of the TC basis
Pressurization	38
Compartment Interiors	72
Cargo or Baggage Compartments	$72^2$ , 32
Cargo Compartment Fire Detection Systems	not part of the TC basis
Engines	40
Engines	73 <sup>4</sup>
System Lightning Protection	$80^{7}$
Ice Protection	23
Rough Air Speed for Turbulence Penetration Speed	not part of the TC basis
Additional Operating Limitations	92
	TITLE Performance - General Takeoff Takeoff Speeds Accelerate-Stop Distance Takeoff Distance and Takeoff run Takeoff Flight Path Gust Loads Pressurized Compartment Loads Pressurized Compartment Loads Nose Wheel Yaw Jacking and Tie-down Provisions Emergency Landing Dynamic Conditions Damage - Tolerance and Fatigue Evaluation of Structure Takeoff Warning System Brakes Doors Doors Ventilation Ventilation Ventilation Pressurization Compartment Interiors Cargo or Baggage Compartments Cargo Compartment Fire Detection Systems Engines Engines System Lightning Protection Ice Protection Rough Air Speed for Turbulence Penetration Speed

# 767-400ER Exception Notes:

- 1. For damage tolerance analysis, to be compatible with the requested reversion to Amendment 25-45 for §25.571, Boeing proposes to comply with Amendment 25-0 for static strength (fail-safe) analysis resulting from single element failures of the strut towing attachment interfaces.
- 2. Applicable to systems, equipment installations, and structures that are new and significantly modified, or significantly affected by other changes. Where two amendment levels are shown for the same paragraph, the amendment level without the superscript (2) applies to structures, systems and portions of the airplane, which are not new or significantly modified.
- 3. Pilot/Co-Pilot Seats: Pilot/co-pilot seats will comply with Amendment 25-64 except paragraph (c)(5), (c)(6). Passenger Seats: Passenger seats will comply with Amendment 25-64 except for Front Row Head Impact Criteria (HIC) per paragraph (c)(5). Stretchers for transporting non-ambulatory occupants are not required to comply with §25.562. Flight Deck Observer Seats: Flight Deck Observer seats will comply with Amendment 25-64 except paragraph (c)(6). Flight Attendant seats: Flight Attendant seats will comply with Amendment 25-64.

### VII - Model 767-400ER (cont'd)

### Certification Basis (Cont'd)

767-400ER Exception Notes (Cont'd):

- 4. Boeing intends to comply with the amendment level indicated for this rule, however, Boeing requests an exception to the latest policy and prefers to revert to the earlier policy.
- 5. The equivalent regulation to §25.783(g) at Amendment 25-88 is §25.783(f) at Amendment 25-23. The equivalent regulation to §25.783(g) at Amendment 25-23 is §25.783(h) and (i) at Amendment 25-88. Unchanged doors will comply with §25.783(e) and (f) at Amendment 25-23. Any new doors will comply with §25.783(e)-(g) at Amendment 25-88.
- 6. Reversion is requested for sub-paragraph (2) only. That is, Boeing will comply with paragraph (e) at Amendment 25-87, combined with (2) at Amendment 25-54.
- 7. For §25.1316, Applicable to new and significantly modified structure and systems and portions of the airplane affected by these changes.

### 14 CFR §26:

Based on 14 CFR §21.101(g) for changes made to TCs applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections.

Compliance has been found for the following regulations at Amendment 26-0: 26.11

Compliance has been found for the following regulations at Amendment 26-1: 26.43, 26.45, 26.47, and 26.49

Part 34 as amended at the time of certification.

Part 36, as amended at the time of certification.

Part 121 is sometimes amended to require compliance with newly adopted standards of Part 25 on retroactive basis. If not already included in the above type-certification basis, Boeing will be requested to voluntarily accept the corresponding Part 25 standards as part of the type-certification basis for these derivative airplanes in order to facilitate operators' compliance with any such newly adopted Part 121 requirements.

### **Exemption** from Part 25:

<b>Exemption</b>	<u>Title</u>	Issued Date	Expiration Date
6886	Exemption from §25.1435(b)(1), Hydraulic Proof Pressure Test	8 April, 1999	Permanent
6935	Exemption from §25.562(b)(2), Floor Warpage for Flight Deck Seats	4 August, 1999	Permanent
8119	Partial Exemption from §25.901(c), Single Failures resulting in Uncontrollable High Thrust Conditions	11 June, 2003	Permanent
9791C	Partial Time-Limited Exemption from 14 CFR §25.853(a), appendix F, paragraph (a)(1)(i), Testing on Large Interior Panels (Expired Exemption No. 9791, November 28, 2010, Exemption No. 9791B, 28 February, 2011)	28 November, 2008	28 November, 2011
10767C	Time-limited exemption from 14 CFR 25.901(c) and 25.981(a)(3), fuel tank ignition prevention associated with the FQIS is limited to the replacement of the ARINC 429 chip within the fuel quantity processer unit's IOC cards and the BITE card (Expired Exemption No. 10767, 17 May, 2016, Exemption No. 10767A, 17 May, 2016)	17 December, 2015	17 May, 2016

### Equivalent Safety Findings (ESF's) exist with respect to the following sections of 14 CFR Part 25:

ELOS IP	<u>Title</u>	<u>14 CFR</u>
AT00010BA-T-S-1	Powerplant And Auxiliary Power Unit Instruments	25.1549(b)
AT0328ST-T-C-5	"No Smoking" limitation in the passenger compartment	25.791,25.853, CAR 4b.3 81
AT1736SE-T-C-14	Door Sill Reflectance	25.811
AT2251SE-T-A-2	Material Design Values	25.613
AT2251SE-T-C-2	Escape Slide Inflation Times	25.809(b)(2), 25.810(a)(1)

# VII – Model 767-400ER (cont'd) Certification Basis (Cont'd)

Equivalent Safety Findings (Cont'd)
ELOS IP Title

ELOS IP	Title	<u>14 CFR</u>
AT2251SE-T-F-1	Use of the 1-g Stall Speed Instead of Minimum Speed in the Stall as a Basis for Determining Compliance (Non-Structural Sections)	1.2, 25.21(b), 25.103(a),(a)(1),(a)(3-6),(b)(c), 25.107(b)(1),(b)(2),(c)(3),(g), 25.111(a), 25.119(b), 25.121(c),(d),(d)(3), 25.125(a)(2), 25.143(g), 25.145(a),(a)(1),(b)(1-4),(b)(6),(c), 25.147 (a),(a)(2),(c),(d), 25.149 (c), 25.161(b),(c)(1),(c)(2),(c)(3)(d),(e)(3), 25.175(a)(2),(b)(1),(b)(2),(b)(2)(ii),(b) (3),(c),(c)(4),(d),(d)(5), 25.177(c), 25.181(a),(b), 25.201(a)(2),(b)(4), 25.207(b),(c),(d),(e),(f), 25.231(a)(2), 25.233(a), 25.237(a),(b)(1),(b)(2), 25.735(f)(2),(g), 25.773(b)(1)(i), 25.1001(c)(1),(c)(3), 25.1323(c)(1),(c)(2), 25.1325(e), 25.1587(b)(2)
AT2251SE-T-P-3	Flight Critical Thrust Reversers	25.933(a)(1)(ii)
AT2251SE-T-P-4	Auxiliary Power Unit Induction System	25.1103(e)
AT2251SE-T-P-5	Auxiliary Power Unit (APU) Instrumentation and Monitoring Requirements and Operation as an Alternate Electrical Power Source	25.1305(a)(3-6), (c)(l), (c)(3), (c)(4) and (c)(6)
AT2251SE-T-P-6	Auxiliary Power Unit (APU) Operating Limitations	25.1522 and 25.1549
AT2251SE-T-S-1	Overspeed Aural Warning	25.1303(c)(1)
AT2251SE-T-S-4	Airplane Operation with Air Conditioning Packs Off During Takeoff	25.831(a)
AT4965SE-T-A-2	Material Design Values	25.613
PS05-0123-P-1	Ground Fault Interrupter Relays	25.981(a)(3)
PS05-0177-P-2	Fuel Tank Flammability Rule (see Note 17)	25.981 (25-125)
PS06-0496-F-18	Engine and Auxiliary Power Unit (APU) Fire Switch Handle Design	25.1555(d)(1)
PS08-0670-C-1	Adhesives Used in Interior Panel Bent Joint Potting Applications	25.853(a)
PS13-0901-ES-1	Oxygen Quantity Indication of the Lavatory Supplemental Oxygen System	25.1441(c)
PS13-1000-C-5	Flammability Testing Hierarchy	25.853(a)(d), part 25 appendix F parts I and IV
TC6918SE-T- G-8	Formatting of Boeing Instructions for Continued Airworthiness Manuals Airworthiness Limitations	25.1529 (25-54) 25.1729(25-123) Appendix H (25-132)
TD2695SE-T-C-1	Exterior Exit Markings	25.811(f)
TD7075SE-T-C-1	Type III Exit Accessibility	25.803, 25.807(c), 25.813(c)
TS13-0005-S-1	Determination of Minimum Oxygen Flow for the Lavatory Oxygen System	25.1443(c)

### <u>VII – Model 767-400ER (cont'd)</u>

### Certification Basis (Cont'd)

**Special Conditions** with respect to the following subjects apply:

Special Con	ndition <u>Title</u>	Effective Date
25-149-SC	Sudden Engine Stoppage	16 September, 1999
25-152-SC	High Intensity Radiated Fields (HIRF)	3 January, 2000
25-369-SC	Seats with Non-Traditional, Large, Non-Metallic	Panels 17 March, 2008
25-448-SC	Seats with Inflatable Lapbelts	6 October, 2011
25-630-SC	Non-Rechargeable Lithium Batteries	22 April, 2017

### VIII - Model 767-2C (Approved December 21, 2017)

Engines: Two Pratt and Whitney PW4062, Reference Engine Type Certificate No. E24NE

Refer to the FAA approved Airplane Flight Manual identified in Note 2 for engine limitations.

Fuel: Jet A and Jet A-1 as specified in ASTM D1655

JP-5 as specified in MIL-DTL-5624 JP-8 as specified in MIL-DTL-83133

Any other fuel specified in Pratt and Whitney Service Bulletin 2016

Refer to the FAA approved Airplane Flight Manual listed in Note 2 for fuel limitations

# **Engine Ratings & Operating Limits:**

For engine ratings and operating limits see engine TC Data Sheet E24NE or the FAA Approved Airplane Flight Manual

Airspeed Limits: VD = 420 KCAS to 17,854 ft/.91M above 23,000 ft, linear variation between these points.

VFC = 390 KCAS to 17,600 ft/382 KCAS at 23,000 ft/.87M above 26,000 ft, linear variation between these points.

VMO = 360 KCAS / .86M VLE = 270 KCAS / .82M VLO = 270 KCAS / .82M

For other airspeed limits, see the appropriate FAA-Approved Airplane Flight Manual

C. G. Range: See appropriate FAA approved Airplane Flight Manual.

Maximum Weights: See appropriate FAA approved Airplane Flight Manual.

**Pilot Type Rating:** The Boeing 767-2C has not been evaluated by the Flight Standards Board. No pilot type rating or training, checking and currency requirement determinations have been made.

**Maximum** 14 (767-2C) 4 flight crew members in the flight deck and 10 supernumeraries in the aircrew member compartment **Passengers:** 

Model Serial Numbers (See Note 19)
767-2C 34052, 34077, 34086-34092, 34105-34115, 34121, 34124, 34126, 34127, 34134-34141, 41858, 41860, 41861, 41863- 41868, 41870, 41873, 41874, 41878, 41879, 41881, 41883-41886, 41888, 41889, 41984, 41985, 66585, 66622

# **Certification Basis:**

Title 14, Code of Federal Regulations (14 CFR) part 25 as amended by Amendments 25-0 through 25-136 with exceptions permitted by 14 CFR 21.101

SECTION No.	TITLE	AT AMDT	EXCEPTION APPLIES TO:
		<u>25-</u>	
25.21	Proof of compliance.	72	Entire Airplane
25.103	Stall speed.	108	Entire Airplane
25.105	Takeoff.	92	Entire Airplane
25.107	Takeoff speeds.	108	Entire Airplane
25.111	Takeoff path.	115	Entire Airplane
25.119	Landing climb: All-engines- operating.	108.94	Entire Airplane
25.121	Climb: One-engine-inoperative.	108	Entire Airplane
25.123	En route flight paths.	0	Entire Airplane

SECTION	TITLE	AT AMDT	EXCEPTION APPLIES TO:
<u>No.</u> 25.125	Landing	<u>25-</u> 108	Entire Aimlers
	Landing. General.		Entire Airplane
25.143		108	Entire Airplane
25.207	Stall warning. Wind velocities.	108	Entire Airplane
25.237		108	Entire Airplane
25.253(c)	High-speed characteristics.	N/A	Entire Airplane
25.335(b)(2)	Design airspeeds.	23	Loads: Design Dive Speeds
25.365(e)(2)	Pressurized cabin loads.	54*	Section 41 and Underwing Structures * See paragraph below, "Additional Design Requirements and Conditions," for information on required design features.
25.519(b)(2)	Jacking & tie-down provisions.	N/A*	Primary Jacking Points  * See paragraph below, "Additional Design Requirements and Conditions," for information on required design features.
25.571(a) and (b), except (b)(1) through (b)(6)	Damage-tolerance and fatigue evaluation of structure.	86*	Structures <sup>1</sup> * See paragraph below, "Additional Design Requirements and Conditions," for information on required design features.
25.603	Materials.	38	Empennage:  Fin and Rudder (except wire brackets/installation on rear spar and fixed trailing edge panels between Rudder Sta. 230.97 and 305.87)  Horizontal Stabilizer Elevators and Fix Engine Nacelle:  Engine Nacelle Fan Cowl Panel Engine Pylon: Pylon Forward, Underwing, and Nacelle Fairings and all related fairing support structure
25.613	Material strength properties and design values.		Fuselage:  Nose Landing Gear Doors and support structure  Empennage:  Fin and Rudder (except wire brackets/installation on rear spar and fixed trailing edge panels between Rudder Sta. 230.97 and 305.87)  Horizontal Stabilizer Elevators and Fixed TE  Engine Nacelle:  Engine Nacelle Fan Cowl Panel Engine Pylon:  Pylon Forward, Underwing, and Nacelle Fairings and all related fairing support structure  Flight Control Systems:  Primary Flight Control hydraulic equipment (except Elevator Feel Computer, and Elevator Feel Shift Module)  Landing Gear Systems:  Landing Gear Actuation System (except for gear extension/retractioncommand, alternate extend cable load limiter, and flight deck indication)  Brake Control System (except for right brake control cable and antiskidlight and brake temperature indication)

SECTION No.	TITLE	AT AMDT 25-	EXCEPTION APPLIES TO:
25.615	Design properties.	23	Fuselage:  Nose Landing Gear Doors and support structure  Empennage:  Fin and Rudder (except wire brackets/installation on rear spar and fixed trailing edge panels between Rudder Sta. 230.97 and 305.87)  Horizontal Stabilizer Elevators and Fixed TE  Engine Nacelle:  Engine Nacelle:  Engine Nacelle Fan Cowl Panel  Engine Pylon:  Pylon Forward, Underwing, and Nacelle Fairings and all related fairing support structure  Flight Control Systems:  Primary Flight Control hydraulic equipment (except Elevator Feel Computer, and Elevator Feel Shift Module)  Landing Gear Systems:  Landing Gear Actuation System (except for gear extension/retraction command, alternate extend cable load limiter, and flight deck indication)  Brake Control System (except for right brake control cable and antiskid light and brake temperature indication)  Nose Wheel Steering System
25.729	Retracting mechanism.	42	Landing Gear Systems: Electrical Subsystems Landing Gear Position Indication
25.735	Brakes.	23	Landing Gear Systems: Brake Control System (except for right brake control cable and antiskid light and brake temperature indication)
25.735(a), (f)(1), (f)(2), (g), (h)(1) and (h)(2)	Brakes.	92	Landing Gear Systems: Tires, Wheels, and Brakes
25.773(b)(2)	Pilot compartment view.	23	Flight Crew Operations: Pilot Compartment View
25.777	Cockpit controls.	0	Landing Gear Systems: Brake Control System (except for right brake control cable and antiskid light and brake temperature indication)

SECTION No.	TITLE	AT AMDT 25-	EXCEPTION APPLIES TO:
25.783	Doors.	23	Fuselage:
			■ Wing-to-Body Fairing Access Door
			Assy - ADP, Aft Fairing <sup>3</sup>
			■ Wing-to-Body Fairing Access Door
			Assy - Hydraulic Reservoir Fill, Aft Fairing <sup>3</sup>
			Wing-to-Body Fairing Access Door
			Assy - Pressure Bottle, Aft Fairing <sup>3</sup>
			■ Wing-to-Body Fairing Panel Assy -
			Pressure Relief Door, Aft Fairing <sup>3</sup>
			Wing-to-Body Fairing Door Assy -
			RAT, Aft Fairing <sup>3</sup>
			<ul> <li>Wing-to-Body Fairing Underwing Fairing Access Panels/Doors<sup>3</sup></li> </ul>
			Fuselage Doors:
			Fwd Access Door
			■ EE Access Door
			■ Lower Fwd Small Cargo Door
			■ Lower Aft Small Cargo Door
			<ul> <li>Aft Entry and Service Doors</li> </ul>
			■ Overwing Exit Doors
			Electrical Subsystems Door Control and
			Indication Flight Deck Windows:
			Flight Deck Windows: Flight Deck No. 2 Openable Window <sup>3</sup>
25.783(c)(2)	Doors.	N/A*	Fuselage Doors:
23.703(0)(2)	Doors.	1071	• Fwd Entry and Service Doors <sup>2</sup>
			* See paragraph below, "Additional
			Design Requirements and Conditions," for
			information on required design features.
25.795(b)(1)	Security considerations	106	Entire Airplane
25.795(c)(2)	Security considerations.	106*	Entire Airplane <sup>4</sup>
25.809(a)	Emergency Exit Arrangement.	34	Escape Systems:
			• Flight Deck Window Egress Viewing
			Means
			Overwing Exit and Aft Exit Windows
25.863	Flammable fluid fire protection.	23	Viewing Means Landing Gear Systems:
23.803	Transmable fluid fire protection.	23	■ Landing Gear Actuation System (except
			for gear extension/retraction command,
			alternate extend cable load limiter, and
			flight deck indication)
			Brake Control System (except for right
			brake control cable and antiskid light and
			brake temperature indication)
25.869	Fire protection: Systems.	N/A	Landing Gear Systems:
			Landing Gear Actuation System (except
			for gear extension/retraction command,
			alternate extend cable load limiter, and flight deck indication)
			Brake Control System (except for right
			brake control system (except for right brake control cable and antiskid light and
			brake temperature indication)
25.1021	Oil drains.	0	Engine Systems:
			Engine Oil System (drainage hardware)
25.1091(e)	Air induction.	N/A	Engine Systems:
			Engine Inlet Probe
25.1093(b)	Induction system deicing and anti-icing	38	Engine Systems:
05.11.60(.)	provisions.		Engine Operability
25.1163(a)	Powerplant accessories.	0	Engine Systems:
25 1192	Flammable fluid comming common sut-	57	Engine Air Turbine Starter Oil System Engine Systems:
25.1183	Flammable fluid-carrying components.	57	Engine Systems: Engine Air/Vent System (hardware)
25.1301	Function and installation.	0	Entire Airplane
25.1501			
		i .	•

SECTION No.	<u>TITLE</u>	AT AMDT 25-	EXCEPTION APPLIES TO:
25.1309	Equipment systems and installations.	41	Entire Airplane
25.1310	Power source capacity and distribution.	N/A	Entire Airplane
25.1316	System lightning protection.	N/A*	Avionics:  Thrust Management Computer Flight Control Systems: Spoiler Control System Electronics Unit Spoiler Control Module High Lift System Landing Gear Systems: Brake Control System (except for right brake control cable and antiskid light and brake temperature indication) Environmental Control Systems: Ice and Rain Protection Systems (Window Heat System only) See paragraph below, "Additional Design Requirements and Conditions," for information on required design features.
25.1317	High-intensity radiated fields (HIRF) protection.	N/A*	Avionics:  Thrust Management Computer Flight Control Systems:  Spoiler Control System Electronics Unit  Spoiler Control Module  High Lift System Landing Gear Systems:  Brake Control System (except for right brake control cable and antiskid light and brake temperature indication) Environmental Control Systems:  Ice and Rain Protection Systems (Window Heat System only) Engine Systems:  Engine Control System  See paragraph below, "Additional Design Requirements and Conditions," for information on required design features.
25.1353.	Electrical equipment and installations.	42	Landing Gear Systems:  Landing Gear Actuation System (except for gear extension/retraction command, alternate extend cable load limiter, and flight deck indication)  Brake Control System (except for right brake control cable and antiskid light and brake temperature indication)
25.1360	Precautions against injury.	N/A	Landing Gear Systems:  Landing Gear Actuation System (except for gear extension/retraction command, alternate extend cable load limiter, and flight deck indication)  Brake Control System (except for right brake control cable and antiskid light and brake temperature indication)
25.1365(d) 25.1419	Electrical appliances, motors and transformers  Ice protection.	N/A 23	Primary Flight Controls  Aileron lockout actuator  Lateral trim actuator  Rudder trim actuator  Autospeed brake actuator  Stabilizer trim control module motor motor-operated valve  Avionics  High frequency transceiver equipment  Entire Airplane <sup>5</sup>
4J.1717	ree protection.	23	Entire Allphane

### VIII - Model 767-2C (Cont'd)

### Certification Basis (Cont'd)

SECTION No.	TITLE	AT AMDT 25-	EXCEPTION APPLIES TO:	
25.1431	Electronic equipment.	0	Landing Gear Systems:	
			Brake Control System (except for right	
			brake control cable and antiskid light and	
			brake temperature indication)	
25.1435	Hydraulic systems.	41	Flight Control Systems:	
			<ul> <li>Primary Flight Control hydraulic</li> </ul>	
			equipment (except Elevator Feel	
			Computer, and Elevator Feel Shift	
			Module)	
			<ul><li>High Lift System</li></ul>	
			Landing Gear Systems:	
			■ Landing Gear Actuation System (except	
			for gear extension/retraction command,	
		alternate extend cable load limiter, an		
			flight deck indication)	
			<ul> <li>Brake Control System (except for right</li> </ul>	
			brake control cable and antiskid light	
			and brake temperature indication)	
			Nose Wheel Steering System	
25.1435	Hydraulic systems.	72	Flight Control Systems:	
			■ Elevator Control System Feel Shift	
			Module	
			Elevator Control System Feel Computer	

### **Exception Notes:**

- 1. The certification requirement for § 25.571(a) and (b) is Amendment 25-86. The certification requirement for § 25.571(b)(1), (b)(2), (b)(3), (b)(4), (b)(5) and (b)(6) is Amendment 25-132.
- 2. The certification requirement for the Forward Entry and Service Doors is § 25.783 Amendment 25-114, except that the self-latching requirement of § 25.783(c)(2) does not apply; the self-latching requirement of subparagraph (c)(2) did not exist prior to Amendment 25-114.
- 3. Section 25.783 is not applicable to this area at Amendment 25-23.
- 4. Compliance is not required (for the entire airplane) for the following regulations: §§ 25.795(c)(2), (c)(2)(i), and (c)(2)(ii)
- 5. Compliance with the ice protection requirements of § 25.1419 at Amendment 25-23 includes compliance with part 25 appendix C at Amendment 25-0.

### Optional Design Requirements:

Ditching: §§ 25.801; 25.1411(d), (e), (f), and (g); and 25.1415

Ice Protection: § 25.1419

### 14 CFR §26:

14 CFR part 26 as amended by Amendment 26-1 through 26-6. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections.

Compliance has been found for the following regulations:

§26.11 at Amendment 26-0

§26.49 at Amendment 26-1

§§26.33 and 26.39 at Amendment 26-3

§§26.43 and 26.45 at Amendment 26-4

§26.21 at Amendment 26-6

14 CFR part 34 as amended by Amendments 34-1 through 34-5A

14 CFR part 36 as amended by Amendments 36-1 through 36-30

# Additional Design Requirements and Conditions (ADRC) for 767-2C:

- 14 CFR 21.35(a), (b)(2) and (f)(2) All model 767-2C aircraft must be flown with a Boeing pilot in command prior to the completion of that aircraft model's F&R testing.
- 14 CFR 25.365(e)(2) Pressurized Compartment Loads for the Flight Deck Compartment, E/E Bay and Nose Wheel Well volumes of Section 41 and the Underwing Keel Beam Cavity.

When evaluating these compartments for compliance with §25.365(e)(2) Amendment 25-54, the compartments must be analyzed in accordance with the conditions identified below. In lieu of the following, compliance with §25.365 at Amendment 25-87, may be shown:

- 1. Flight deck compartment 840 in<sup>2</sup> hole in the fuselage.
- 2. E/E Bay / Nose Wheel Well Compartment 415 in<sup>2</sup> hole in the fuselage.
- 3. Underwing Keel Beam Cavity 115 in<sup>2</sup> hole in the front spar bulkhead.

### VIII - Model 767-2C (Cont'd)

### **Certification Basis (Cont'd)**

### Additional Design Requirements and Conditions (Cont'd)

# 14 CFR 25.519(b)(2) – Jacking and tie-down provisions

The following design features must be incorporated in the type design (reference § 25.519, Amendment N/A). In lieu of incorporating the following design features, compliance with § 25.519 at Amendment 25-81, may be shown:

The primary jacking points on the body and wing shall be designed for the following ultimate conditions with the maximum jacking loads prescribed in the Maintenance Manual:

- a) Vertical 2.5 factor
- b) Vertical 2.0 factor and side 0.50 factor (acting singularly)
- c) Vertical 2.0 factor and longitudinal 0.50 factor (acting singularly)

# 14 CFR 25.571(a) and (b) [excluding (b)(1) through (b)(6)] – Damage-tolerance and fatigue evaluation of structure, Model 767-2C Airplane Structures.

The following design features must be incorporated in the type design (reference §25.571(a) and (b), Amendment 25-86). In lieu of incorporating the following design features, compliance with §25.571(a) and (b), Amendment 25-132, may be shown:

- 1. For the Model 767-2C structure, an evaluation of the existing damage tolerance analysis (DTA) maintenanceactions must be performed to determine if any changes are required due to changes in loads, geometry, material, etc. New or changed maintenance actions for the 767-2C must be included in the Airworthiness Limitations Document D011T030-01-01 in accordance with §25.571(a)(3) at Amendment 25-86.
- 2. The above evaluation must include loading magnitudes and loading spectra which are developed in accordance with § 25.571 at Amendment 25-96. This includes usage of the 1.15 factor for pressure acting alone in accordance with § 25.571(b)(5) at Amendment 25-96.
- Maintenance instructions must be based on in-service data and fatigue testing to ensure freedom from widespread fatigue damage.

# 14 CFR 25.783(c)(2) – Doors. Forward Entry and Service Doors

The following design features must be incorporated in the type design (reference § 25.783(c)(2), Amendment N/A). In lieu of incorporating the following design features, compliance with § 25.783(c)(2) at Amendment 25-114, may be shown:

These doors must remain open to the extent necessary to prevent pressurization or safely close (but not latch) as pressurization takes place.

### 14 CFR 25.1316 – System Lightning Protection

The following design features must be incorporated in the type design (reference § 25.1316, Amendment N/A). In lieu of incorporating the following design features, compliance with § 25.1316 at Amendment 25-134, may be shown:

- 1. Thrust Management Computer (TMC). The following design features are required to minimize exposure of the TMC to coupled lightning transients:
  - a. TMC wiring routed to the Electronic Engine Control (inside the pressure vessel) must incorporate enhanced shielding, i.e. have a single, braided shield, grounded at every break.
  - b. TMC wiring routed to the Electronic Engine Control (outside the pressure vessel) must incorporate enhanced shielding, i.e., have a second layer of shielding (typically overbraid) applied to it, and the majority of this shielding must be terminated peripherally at pressure hull, at outboard equipment, and all disconnects between the outboard equipment and pressure hull.
- 2. Window Heat System. The following design features are required to minimize exposure of the Window Heat System to coupled lightning transients:
  - The power and sensor wiring between the Window Heat Control Unit and the No. 1 flight deck window must be shielded.

# 14 CFR 25.1317 High-intensity Radiated Fields (HIRF) Protection

The following design features must be incorporated in the type design (reference § 25.1317, Amendment N/A). In lieu of the following, compliance with § 25.1317 at Amendment 25-122, may be shown:

- 1. Electronic Engine Control System (EECS). The following design features are required to minimize exposure of the EECS to internal HIRF fields.
  - a. The EECS must comply with Special Condition 25-ANM-18, dated April 29, 1988.
  - b. All on-engine EECs wiring must incorporate enhanced shielding, i.e., have a second layer of shielding (typically overbraid) applied to it, and the majority of this shielding must be terminated peripherally, rather than with multi-inch long jumper wires.
  - c. RF shielding of the EECS is required as part of the engine nacelle type design as follows:
    - i. The fan cowl shall have a ply of BMS8-336 expanded aluminum foil or equivalent on the OML surfaces
    - The fan cowl and its access doors shall have a ply of BMS8-289 aluminum foil or equivalent on their IML which shall be in electrical physical contact with the adjacent nacelle components when closed.
    - iii. An aluminum foil layer must be incorporated on the forward strut fairing panels.

### VIII - Model 767-2C (Cont'd)

### **Certification Basis (Cont'd)**

### Additional Design Requirements and Conditions (Cont'd)

2. Thrust Management Computer (TMC). The following design features are required to minimize exposure of the TMC to internal HIRF fields:

- a. TMC wiring routed to the Electronic Engine Control (inside the pressure vessel) must incorporate enhanced shielding, i.e. have a single, braided shield, grounded at every break.
- b. TMC wiring routed to the Electronic Engine Control (outside the pressure vessel) must incorporate enhanced shielding, i.e., have a second layer of shielding (typically overbraid) applied to it, and the majority of this shielding must be terminated peripherally at pressure hull, at outboard equipment, and all disconnects between the outboard equipment and pressure hull.
- Window Heat System. The following design features are required to minimize exposure of the Window Heat System to internal HIRF fields:
  - a. The power and sensor wiring between the Window Heat Control Unit and the No. 1 flight deck window must be shielded.

# Ignition System

The engine in-flight start demonstration flight test conditions should be performed using the most critical single ignition configuration. The configuration(s) selected should be based on a consideration of the most critical igniter position, the most critical applicable ignition power configuration, and the most critical igniter plug adjustment.

### In-Flight All-Engines Restart

A minimum restart capability after an all-engines-out scenario must be established under the following conditions using procedures provided in the airplane flight manual (AFM):

- a. During the take-off and the initial climb-out portion of the flight, the airplane should have the capability for the flight crew to restore engine power immediately following an all-engine-out scenario and when the fuel source to the engine is restored.
- b. During the high altitude portion of the flight at cruise speed and maximum altitude, the airplane should have the capability for the flight crew to restart engines from a stabilized windmill speed prior to descending below an altitude of 15,000 feet, by showing either or both:
  - 1) All but one engine should be restarted and accelerated to produce maximum continuous thrust/power, or
  - 2) The engine(s) should be restarted, and the necessary thrust/power achieved, to enable the airplane to maintain level flight.
- c. During flight at speeds greater than the minimum flaps-up "holding speed" and at altitudes below 20,000 feet, the airplane should have the capability for the flight crew to restart engines from a stabilized windmill speed prior to descending 5000 feet from the initiation of the restart procedure and prior to exceeding an airspeed of 300 knots, by showing either or both:
  - 1) All but one engine should be restarted and accelerated to produce maximum continuous thrust/power, or
  - 2) The engine(s) should be restarted, and the necessary thrust/power achieved, to enable the airplane to maintain level flight.

Protection of Critical Systems Located in or in the Vicinity of the Main Deck Class E Cargo Compartment from the Effects of a Cargo Fire

- 1. Following fire/smoke detection, the crew must follow the AFM procedure to depressurize the cabin and ascend or descend the airplane to an altitude of 25,000 feet until final descent to a suitable airport is possible.
- A main deck stationary smoke barrier must be installed between the occupied areas and the main deck cargo
  compartment. The barrier and associated joints will be tested to meet the requirements of 14 CFR part 25 appendix F
  part III (refer to Amendment 25-60).
- 3. Class E cargo compartment liners will be tested to meet the requirements of 14 CFR part 25 appendix F part III (refer to Amendment 25-60), except at the locations identified below:
  - a) Dado Panels (Vented and Non-Vented) located along the sidewall at the floor of the main deck cargo compartment.
  - b) Door Liner and Doorway Liner Materials and Joints (Main Deck Cargo Door, Aft Passenger and Service Doors, Emergency Escape Hatch), including joints covering door operating mechanisms, latches, door tracks and hinges.
  - c) Aft Lowered Ceiling Area, STA 1459 to the Aft Pressure Dome.
- 4. Critical systems and wiring located behind, or in close proximity to features excluded in section 3, must be protected with any one, or combination of the methods listed in section 5.
- 5. Protection of critical systems and the electrical interconnection wiring systems (EWIS) components required for continued safe flight and landing, located in, or in close proximity to the Class E compartment must be accomplished by any one, or combination of the following:
  - a) Routing below the main deck floor and outside of the cargo compartment;
  - Routing behind fire resistant liners that meet the requirements of 14 CFR part 25 appendix F part III (refer to Amendment 25-60);
  - c) Use of fire hardened EWIS components or insulation where required to protect wire in locations subject to potential high temperatures on the backside of cargo liners and above ceiling panels;

# VIII - Model 767-2C (Cont'd) Certification Basis (Cont'd)

## Additional Design Requirements and Conditions (Cont'd)

- d) Routing redundant EWIS on opposite sides of the main deck floor and/or opposite sides of the crown area, and/or with a minimum separation of 6 feet;
- Routing redundant control cables to meet separation requirements; e)
- Placement of air dams or fire stops behind cargo liners as required to prevent propagation of fire behind the liner; f)
- Placement of special fire resistant covers behind air return grilles, decompression vents, and dados as required.

# **Exemptions:** The following Exemptions are applicable to the 767-2C:

Exemption Number	Applicable Section	<u>Title</u>	<u>Date Issued</u>	Comments
12920A <sup>1</sup>	21.35(a),(b)(2) and (f)(2)	Conduct Function and ReliabilityTesting After TC	3/9/2017	Time Limited Exemption: Termination Date April 24, 2018.
10861	25.562(b)(2)	Floor Warpage - Testing Requirement for Flight Deck Seats	9/8/2013	•
11068	25.777(a) 25.1301(a)(b)(d) 25.1309(a)(c)	Flight Deck Provisions	9/19/2014	
10691	25.785(j) 25.795(b)(2), (c)(1),(c)(3) 25.809(a) 25.810(a)(1) 25.857(e) 25.1447(c)(1)	Carriage of Supernumeraries with Main Deck Class E In-Flight Accessand No Auto-Presenting Oxygen Dispensing Units and 10% Overage in the Aircrew and CargoCompartments	1/28/2013	
10866	25.841(a)(2)(i), (a)(2)(ii)	Pressurized Cabins – UncontainedEngine Failure	9/11/2013	Partial Exemption
8119	25.901(c)	No Single Failure	6/11/2003	Partial Exemption
11086A	25.961(a)(5)	Fuel System Hot Weather Operations with JP-4	3/10/2016	
10884A	25.981(a)(3)	Fuel Tank Structural Lightning Ignition Protection	12/15/2017	
17591	25.1329(j)	Autopilot Disconnect	10/17/2017	Time Limited Exemption: Termination Date: December 31, 2019
17631	25.1322(d)(1)	Windshear Detection andWarning System	11/2/2017	Time Limited Exemption: Termination Date: December 31, 2019
17633 <sup>2</sup>	25.903(d)(1)	Minimization of Hazards fromEngine Rotor Failure	11/3/2017	Line-Limited
17667 <sup>3</sup>	25.863(a) 25.1191(b)(1)	APU Forward Firewall	11/28/2017	Line Limited
17651	25.959 25.1322(d)(1)	Center Tank Fuel Management	11/17/2017	Time Limited Exemption: Termination Date: December 31, 2019
17658	25.1301(a), (d)	Altitude Callouts	11/22/2017	Time Limited Exemption: Termination Date: December 31, 2019
17686	25.995(b)	Fuel Valve Installations	12/15/2017	

# 767-2C Exemptions Notes:

- 1. Function and Reliability Testing completed on 1/31/2018.
- Exemption is limited to the first 32 767-2C model airplanes produced (through production Line Number 1145)
- 3. Exemption is limited to the first 41 767-2C model airplanes produced (through production Line Number 1164)

•	ngs (ESF's) exist with respect to the following sections of 14 CFR Part 25:	
ELOS IP	<u>Title</u>	<u>14 CFR</u>
PS05-0212-F-4	Longitudinal Trim	25.161(a),(c)(3),
		25.1301(a), 25.1309(a)
PS09-0863-A-2	Flight Flutter Test Requirement	25.629(e)
PS05-0212-SF-1	Wing Flap Control Lever	25.777(e)
PS09-0863-C-2	Other Exits in the Cargo Compartment	25.807(h)(2)
AT2251SE-T-C-2	Escape Slide Inflation Times	25.810(a)(1)(ii)
PS05-0020-ES-3	Acceptable High Temperature Physiological EnvironmentDuring Failure Conditions	25.831(g)
PS09-0863-P-11	Display of Powerplant Instruments	25.1549(b)
PS09-0863-P-5	Flammability Exposure Evaluation Time	25.981(b)
		Appendix N25.3
AT2251SE-T-P-4	Auxiliary Power Unit Induction System	25.1103(e)
PS09-0863-P-9	Fire Safety Requirements for PW4062 Fan Compartment	25.1181(b)
		25.1182(a)
PS09-0863-P-8	Engine Aft Fairing and Main Strut Fire Safety Requirements	25.1183(a)
		25.1189(a),(d)
PS05-0212-P-16	Fireproof Cowling and Nacelle Skin	25.1193(e)(3)
PS09-0863-P-4	Auxiliary Power Unit (APU) Compartment Fireproof Skin Requirements	25.1193(e)(3)
PS09-0863-P-12	Pressure Fueling System	25.979(b)(1)
TC6918SE-T-SA-11	Overspeed Aural Warning	25.1303(c)(1)
AT2251SE-T-P-5	Auxiliary Power Unit (APU) Instrumentation and Monitoring Requirements and Operation as an AlternateElectrical Power Source	25.1305(a)(3),(a)(4), (a)(5),(a)(6),(c)(1),(c)(3), (c)(4),(c)(6)
PS09-0863-SE-1	Forward Position and Anti-Collision Lights	25.1387(b),(c)
		25.1401(b)
PS09-0863-SE-3	Forward and Rear Position Light Distribution and Intensities	25.1389(b)(3)
PS09-0863-SE-8	Engine Electrical Wiring Interconnection System (EWIS) –	25.1713(c)
	Fire Protection	
TC6918SE-T-F-4	Rough Air Speed (V <sub>RA</sub> )	25.1517
AT2251SE-T-P-6	Auxiliary Power Unit (APU) Operating Limitations	25.1522
		25.1549
TC6918SE-T-G-8	Formatting of Boeing Instructions for Continued Airworthiness	25.1529
	Manuals - Airworthiness Limitations	25.1729
		Appendix H25.4
PS06-0496-F-18	Engine and Auxiliary Power Unit (APU) Fire	25.1555(d)(1)
	Switch Handle Design	
PS09-0863-EE-3	Early Extended Operations (ETOPS) Method AuxiliaryPower Unit (APU) Validation Test	25.1535 K25.2.2((f)
PS09-0863-P-19	Fuel Tank Ignition Prevention – Hot Surface Ignition Temperature	25.981(a)
PS09-0863-P-37	Fuel Pump Control and Indication	25.901(c)
	•	25.981(a)(3)
PS17-0570-EE-2	Engine- Condition Monitoring, Early Extended Operations (ETOPS) Method Propulsion System Design and ValidationTest	Appendices K25.1.5, K25.2.2(b)(1) & (d)

### VIII - Model 767-2C (Cont'd)

### **Certification Basis (Cont'd)**

**Special Conditions:** The following Special Conditions are applicable to the Model 767-2C:

Special Condition	<u>Title</u>	Effective Date
25-ANM-18	Boeing Model 767 Series Airplanes With Pratt & Whitney PW4000 Series Engines:Lightning Protection, Protection from Unwanted Effects of Radio Frequency (RF) Energy, and Propulsion Control System	4/29/1988
25-149-SC	Sudden Engine Stoppage	9/16/1999
25-571-SC	Interaction of Fuel Systems and Structures	11/24/2014
25-574-SC	Isolation of Aircraft Electronic System Security Protection from Unauthorized Internal Access	2/26/2015
25-575-SC	Aircraft Electronic System Security Protection from Unauthorized External Access	2/26/2015
25-630-SC	Non-Rechargeable Lithium Batteries and Battery Systems	4/22/2017

Production Basis: Production Certificate No. 700 has been issued to The Boeing Company See Note 13.

Required Equipment: The basic required equipment as prescribed in the applicable Federal Aviation Regulations must be installed in the

aircraft.

Service Information: Boeing Document D634T201 (D634T245 for 767-2C) "Structural Repair Manual" is FAA-approved. Service Bulletins

and other service information when FAA-approved shall carry a statement to that effect.

### **DATA PERTINENT TO ALL MODELS**

Maximum Baggage/Cargo: See appropriate Weight and Balance Manual.

Fuel and Oil Capacities: See appropriate Weight and Balance Manual.

Minimum Crew: Two (2); pilot and copilot

Minimum Required Fuel: See appropriate FAA-Approved Flight Manual.

Maximum 43,100 feet

Operating Altitude: 40,100 feet (767-2C)

Leveling Means: Two inclinometers, plumb bob support and target (scale), left main gear well.

**Datum:** Sta 0.0, located 92.5 in forward of airplane nose (B.S. 92.5).

MAC: 237.5 inches

Control Surface Control surfaces must be rigged in accordance with Boeing Drawings 251T1001, 251T2001, 251T3001, 251T4001,

**Movements:** 254T7001, 257T4001, 256T1001, 256T2001, 256T3001.

### NOTES:

Note 1. A current Weight & Balance Report must be in each aircraft at the time of original airworthiness certification and at all timesthereafter except in the case of an operator having an FAA approved loading system for weight and balance control.

Note 2. Airplane operation must be in accordance with the FAA-Approved Airplane Flight Manual. All placards required by either FAA- Approved Airplane Flight Manual, the applicable operating rules, or the Certification Basis must be installed in the airplane.

Boeing Document No. D6T11320 is the basic FAA Approved Airplane Flight Manual for Pratt and Whitney powered Model767-200/-300/-2C airplanes.

Boeing Document No. D6T11321 is the basic FAA Approved Airplane Flight Manual for GE powered Model 767-200/-300 airplanes.

Boeing Document No. D631T001 is the basic FAA Approved Airplane Flight Manual for Model 767-400ER airplanes.

Note 3. The FAA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness are referenced in Maintenance Planning Data Document (MPD) Section 9 - Airworthiness Limitations and Certification Maintenance Requirements; Boeing Document D622T001-9. The Airworthiness Limitations section is FAA-approved and specifies maintenance required under 14 CFR §§ 43.16 and 91.403, unless an alternative program has been FAA approved.

## **DATA PERTINENT TO ALL MODELS (Cont'd)**

### NOTES (Cont'd)

The operational limitations and maintenance tasks set forth in the following documents constitute the Airworthiness Limitations of the Boeing 767-200/300/300F/400ER model airplanes. For airplanes delivered after April 5, 2019, the applicable revision level of each of these documents is listed on the airplane-specific Revision Effectivity Report (RER) MPE-RER-767-LNXXXX letter of each airplane. Airplane operators are required to observe the limitations and perform the maintenance tasks per the specified revision level or a later FAA-approved revision of the documents.

The following documents are the FAA approved requirements to comply with 14 CFR §§ 25.571, 25.981, 25.1529, 43.16 and 91.403:

Boeing Document	<u>Title</u>	<u>Description</u>
D622T001-9-01	767-200/300/300F/	Contains required structural inspections and the retirement times
	400ER Airworthiness	for structural safe-life and life-limited parts. Also contains
	Limitations (AWLs)	required retirement times for systems life-limited parts and other
		systems limitations.
D622T001-9-02	767-200/300/300F/	Existing structures AWLs that were impacted by airplane
	400ER Airworthiness	production non-conformances may result in airplane specific
	Limitations – Line	revised inspection requirements and/or inspection intervals.
	Number Specific	
D622T001-9-03	767-200/300/300F/	Required periodic tasks to specific Systems installations.
	400ER Certification	
	Maintenance	
	Requirements (CMRs)	
D622T001-9-04	767-200/300/300F/	This document lists and provides instructions for Airworthiness
	400ER Special	Limitation Instructions (ALIs) and Critical Design Configuration
	Compliance Items/	Control Limitations (CDCCLs) required to comply with 14 CFR
	Airworthiness	Part 25.981
	Limitations	
D622T001-DTR	767-200/300/300F/	This document contains completed (filled) DTR Check Forms.
	400ER Damage	These forms were used to develop a suggested Supplemental
	Tolerance Rating (DTR)	Structural Inspection Program (SSIP) which is part of the SSIP in
	Check Form Document	the Maintenance Planning Data document D622T001. These
		completed DTR Check Forms also serve as examples to assist
		operators while completing their own DTR Check Forms.

### 767-2C

The FAA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness are referenced in Maintenance Planning Data Document (MPD) Section 9 - Airworthiness Limitations and Certification Maintenance Requirements; Boeing Document D011T030-01. The Airworthiness Limitations section is FAA-approved and specifies maintenance required under 14 CFR 43.16 and 91.403 of the Federal Aviation Regulations, unless an alternative program has been FAA approved.

The operational limitations and maintenance tasks set forth in the following documents constitute the Airworthiness Limitations of the Boeing 767-2C model airplanes. For airplanes delivered after December 2, 2019, the applicable revision level of each of the MPD Section 9 sub-tier documents (D011T030-01-01, D011T030-01-02, D011T030-01-03, D011T030-01-04) and the 767-2C Damage Tolerance Rating (DTR) Check Form Document (D011T030-04) is listed on the airplane-specific Revision Effectivity Report (RER) MPE-RER-7672C-LNXXXX letter of each airplane. Airplane operators are required to observe the limitations and perform the maintenance tasks per the specified revision level or a later FAA-approved revision of the documents.

The following documents are the FAA approved requirements to comply with 14 CFR 25.571, 25.981, 25.1529, 25.1729, 43.16 and 91.403:

Boeing Document	<u>Title</u>	<u>Description</u>
D011T030-01-01	767-2C Airworthiness Limitations (AWLs)	Contains required structural inspections and the retirement times for structural safe-life and life-limited parts. Also contains required retirement times for systems life-limited parts and other systems limitations.
D011T030-01-02	767-2C Airworthiness Limitations (AWLs) – Line Number Specific	Existing structures AWLs that were impacted by airplane production non-conformances may result in airplane specific revised inspection requirements and/or inspection intervals.
D011T030-01-03	767-2C Certification Maintenance Requirements (CMRs)	Required periodic tasks to specific Systems installations.

## **DATA PERTINENT TO ALL MODELS (Cont'd)**

### NOTES (Cont'd)

Boeing Document	<u>Title</u>	<u>Description</u>
D011T030-01-04	767-2C Special Compliance Items (SCIs) /Airworthiness Limitations	This document lists and provides instructions for Airworthiness Limitation Instructions (ALIs) and Critical Design Configuration Control Limitations (CDCCLs) required to comply with 14 CFR Part 25.981
D011T030-01-05	767-2C Electrical Wiring Interconnection Systems (EWIS) Document	This document contains the EWIS Instructions for Continued Airworthiness tasks and procedures in compliance with Title 14 CFR 25.1729 that must be incorporated into the operator's EWIS maintenance program.
D011T030-04	767-2C Damage Tolerance Rating (DTR) Check Form Document	This document contains completed (filled) DTR Check Forms. These forms were used to develop a suggested Supplemental Structural Inspection Program (SSIP) which is part of the SSIP in the Maintenance Planning Data document D011T030. These completed DTR Check Forms also serve as examples to assist operators while completing their own DTR Check Forms.

- Note 4. Systems and Powerplant Certification Maintenance Requirements (CMR): The CMRs are listed in either the FAA-approved Certification Maintenance Requirements (CMRs) Document D622T001-9-03 (D011T013-01-03 for 767-2C) or the applicable engine Type Certificate Data Sheet. The more restrictive requirement from these two documents shall be in force.
- Note 5. Crew procedures identified as required by engineering failure analyses in Boeing Document D230T405 must not be changed unless approved by FAA Seattle Aircraft Certification Office.
- Note 6. The following requirements apply to the design features at the required Type III overwing emergency exits:
  - With one pair of Type III exits there must be an unobstructed cross-aisle at least 20 inches wide between main aisles in closeproximity to the overwing exit pair. With two pair of Type III exits, the cross-aisle must be in close proximity to both exit pairs.
  - 2. Emergency lighting for the cross aisle must be provided in accordance with FAR 25.812.
  - 3. The seat pitch at the seat row that provides access to each overwing exit from the main-aisle must be not less than 36 Inches.
  - 4. A maximum of two inches of seat cushion may encroach into the actual projected opening of the exit, provided that the cushion can be readily compressed
- Note 7. The type design reliability and performance of this airplane has been evaluated in accordance with FAA Advisory Circular 120- 42A and found suitable for extended operations when configured in accordance with Boeing Document D6T11604 "CONFIGURATION, MAINTENANCE AND PROCEDURES FOR EXTENDED RANGE(ER) OPERATION". This finding does not constitute approval to conduct extended operations.

The type-design reliability and performance of the Models 767-300BCF and 767-200SF have been evaluated under 14 CFR§25.1535 and found suitable for up to 180 minutes extended operations (ETOPS) when the configuration, maintenance, and procedures standard contained in Boeing Document D6T11604 "CONFIGURATION, MAINTENANCE AND PROCEDURES FOR EXTENDED RANGE (ER) OPERATION" are met. The actual maximum approved diversion time for this airplane may be less based on its most limiting system time capability. This finding does not constitute operational approval to conduct ETOPS.

The type-design reliability and performance of the Model 767-2C have been evaluated under 14 CFR 25.3(b)(1) and 25.1535 and found suitable for up to 180 minutes extended operations (ETOPS) when the configuration, maintenance, and procedures standard contained in Boeing Document D922T010-01 "767-2C Configuration, Maintenance and Procedures" are met. The actual maximum approved diversion time for this airplane may be less based on its most limiting system time capability. This finding does not constitute operational approval to conduct ETOPS.

- Note 8. There are service bulletins which call for modifications which do not comply with the Type Certification Basis. These service bulletins are listed in Boeing Document D624T001 "Service Bulletin 767". The records of airplanes imported into the USA should be reviewed to be sure that further modifications are accomplished to ensure compliance, if the non FAA-approved service bulletins modifications have been installed.
- Note 9. The Engine Indication and Crew Alerting System (EICAS) provides displays of engine parameters, crew messages of non-normal conditions, system status maintenance data. EICAS messages are divided into the following categories:

# DATA PERTINENT TO ALL MODELS (Cont'd)

### NOTES (Cont'd)

WARNING - Red message, immediate crew action required.

**CAUTION** - Amber message, subsequent crew action required.

ADVISORY - Indented amber message, possible subsequent crew action required.

STATUS - White message appears on EICAS Status page, provides readiness for dispatch information which require crew awareness prior to dispatch.

MAINTENANCE - White message appears on ECS/MSG page of EICAS, for use of maintenance personnel only.

- Note 10. Airplane line numbers 231 and subsequent were manufactured after August 20, 1988, and Airplane line numbers 322 and subsequent were manufactured after August 20, 1990 (Reference FAR 121.312(a)(1) and (2), Amendment 121-198). Airplanes 322 through 326 are exempt (Exemption No. 5176A). See Boeing Service Bulletin Index, D6-30300, for cross reference of line number to serial number to block number.
- Note 11. The Pratt and Whitney PW4000 series, General Electric CF6-80C2 FADEC series, and Rolls Royce RB211-524H-36 or RB211-524H-T-36 series engine type certificate data sheets define allowable dispatch criteria with certain faults present in the engine control system. The three fault categories defined in the engine type data sheets correspond to the following Boeing EICAS messages.

Engine Fault Level			
RB-211-524H, T	PW4000	CF6-80C2 FADEC	EICAS Boeing Message Category
C	A	C	ENG CONTROL-ADVISORY
C1	В	C1	ENG EEC C1 – STATUS
C2	C	C2	ENG EEC C2 - MAINTENANCE

- Note 12. Exemption 5993A for the 767-300F requires that the procedures found to be acceptable during the emergency evacuation demonstration be incorporated into the approved operator's procedures. Any deviation requires coordination with FAA Seattle Aircraft Certification Office.
- Note 13. The following Serial Number was produced under Type Certificate only: 27240
- Note 14. CF6-80C2 series engines incorporating Dribble Flow Fuel Nozzles PN 9331M72P33, P34 and P41 are prohibited from the use of JP-4 and Jet B (wide cut) fuel.
- Note 15. Use of JP-4 and Jet B (wide cut) fuel is prohibited when one or two Rolls-Royce RB211-524H-T-36 series engines are installed.
- Note 16. Mandatory replacement times, inspection intervals, related inspection procedures and all critical design configuration control limitation for the fuel tank system determined during the Special Federal Aviation Regulation No. 88 program and for compliance with 14 CFR 25.981 are listed in the FAA-approved Special Compliance Items (SCls)/Airworthiness Limitations Document D622T001-9-04 (D011T030-01-04 for 767-2C).
- Note 17. An Equivalent Safety Finding for the Flammability Reduction System (FRS), 14 CFR 25.981 at Amendment 25-125 is applied if fuel tank inerting is installed in new airplane production (starting with line # 993) or as a modification on existing in service aircraft per Boeing Service Bulletin 767-47-0001. Airworthiness Limitations for the FRS are contained in Section 9 of the applicable Maintenance Planning Document.
- Note 18. The FAA has concluded that the occurrence of any uncontrollable high thrust failure condition, or any of the associated causal failures listed within Boeing Document D332N402, "may endanger the safe operation of an airplane" and hence are reportable under §§ 121.703 (c), 125.409 (c), and 135.415(c).
- Note 19. KC-46A airplanes are tanker/cargo versions of the Model 767-2C. Prior to operation as a commercial aircraft, the following must be accomplished:
  - a) The maintenance, overhaul and modification records of each aircraft must be reviewed for changes made by the military services that may affect the airworthiness of the aircraft. Modifications, changes of equipment and repairs, which affect the safety or performance of the aircraft, must be approved by the FAA
  - b) All aircraft returned to civil operations must comply with all applicable Airworthiness Directives
  - All items that are not FAA approved must be removed from the aircraft if they affect the safety or performance of the aircraft.
  - d) Each deviation from the FAA approved type design as listed on FAA Form 8130-31 "Conformity Certificate Military Aircraft" that is required for civil certification must be corrected per FAA approved data.

The following serial numbers were produced as part of the ATC project and have not been reworked to the type design configuration to be eligible for a Standard Airworthiness Certificate: 34054, 41273-41275, 41852, 41855, 41856, 41983