

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A1NM Revision 16 BOEING 767-200 Series 767-300 Series 767-300F Series September 1, 1998

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
 PO Box 3707
 Seattle, WA 98124

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

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, or CF6-80C2B4F, -B6F.

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.

Fuel: 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, JET A1, OR JET B. (See Note 14)
 MIL-T-5624 grades JP-4 or JP-5. (See Note 14)
 MIL-T-83133 grades JP-8.

Engine Ratings & For engine ratings and operating limits see engine TC Data Sheet No. E3NE for the P&W JT9D-
Operating Limits: 7R4D, - 7R4E, or -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.

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

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Note: Significant changes and serial numbers added have been noted with a "Revision Bar" in the margin.
Any other changes are due to reformatting.

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

<u>Model</u>	<u>Eligible Serial Numbers</u>
767-201	23897-23902
767-204	22980, 22981, 23072, 23250, 23807, 24013, 24239, 24457, 24736, 24757, 25058, 25139
767-205	23057, 23058
767-209	22681, 22682
767-216	23623, 23624, 24973
767-219	23326-23328, 24150
767-222	21862-21880
767-223	22307-22336
767-231	22564-22573
767-232	22213-22227
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
767-2J6	23307, 23308, 23744, 23745, 24007, 24157
767-2N0	24713, 24867
767-2Q4	22921-22923
767-2Q8	24448
767-2S1	23494

II - Model 767-300 (Approved September 22, 1986)

Engines: 2 Pratt and Whitney JT9D-7R4D, JT9D-7R4E, JT9D-7R4E4, PW4056, PW4060 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.

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.
 Rolls Royce Engines: See Rolls Royce "Operating Instructions RB211-524H on the Boeing 767-300
 All Engines: ASTM D-1655 grades JET A, JET A1, OR JET B.
 MIL-T-5624 grades JP-4 or JP-5.
 MIL-T-83133 grades JP-8.

II. Model 767-300 (cont'd):**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 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 26,0 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.

<u>Model</u>	<u>Eligible Serial Numbers</u>
767-304	28039-28042, 28208, 28979
767-306	26263, 27610-27612, 27614, 27957-27960, 28098
767-316	26327, 26329, 27597, 27613, 27615, 29227, 29228
767-319	24875, 24876, 26264, 26912, 26913, 26915, 26971, 28745
767-322	25091-25094, 25280, 25283-25287, 25389-25394, 27112-27115, 27158-27160, 29236, 29237, 29238, 29239
767-323	24032-24046, 25193-25202, 25445-25451, 26995, 26996, 27059, 27060, 27184, 27448-27451, 29429-29432
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, 25984-25990, 27110, 27111, 27582, 27583, 27961, 27962, 28447-28458, 29689
767-333	25583-25588
767-336	24333-24343, 25203, 25204, 25442-25444, 25732, 25733, 25826, 25828, 25829, 25831, 25832, 25834, 27140, 29230-29232
767-338	24146, 24316, 24317, 24407, 24531, 24853, 24929, 24930, 25246, 25274, 25316, 25363, 25575-25577, 28153, 28154, 28724, 28725, 29117, 29118
767-341	24752, 24753, 24843, 24844
767-346	23215-23217, 23645, 23961-23966, 24498, 24782, 24783, 27311-27313, 27658, 27659, 28553, 28837, 28838
767-352	26261, 26262
767-366	24541, 24542
767-375	24082-24087, 24306, 24307, 24574, 24575, 25120, 25121, 25864, 25865
767-381	23756-23759, 24002-24006, 24350, 24351, 24400, 24415-24417, 24632, 24755, 24756, 24880, 25055, 25136, 25293, 25616-25619, 25654-25662, 27050, 27339, 27444, 27445, 27942, 27943, 27944
767-383	24318, 24357, 24358, 24475-24477, 24729, 24846-24849, 25088, 25365, 26544
767-31A	24428, 24429, 25273, 25312, 26469, 26470, 27619
767-31B	25170, 26259, 26265
767-31K	27205, 27206, 28865
767-33A	25346, 25403, 25530-25536, 27189, 27310, 27376, 27377, 27468, 27476, 27908, 27909, 27918, 28147, 28159, 28495
767-33P	28370, 28392
767-35D	24865, 27902, 28656
767-35E	26063, 26064
767-35H	26387-26389
767-36D	27309, 27685
767-37D	26328

II. Model 767-300 (cont'd):

<u>Model</u>	<u>Eligible Serial Numbers</u>
767-37E	25077
767-38E	24797, 24798, 25132, 25347, 25404, 25757-25760, 25762, 25763
767-39H	26256, 26257
767-3D6	24766-24768
767-3G5	24257-24259, 28111
767-3J6	25875-25878
767-3P6	23764, 24349, 24484, 24485, 24495, 24496, 24983-24985, 25241, 25269, 25354, 26233-26238, 27254, 27255
767-3Q8	24745, 24746, 27600, 27616, 27993, 28132, 28206, 28207
767-3S1	25221, 26608
767-3T7	25076, 25117
767-3W0	28148, 28149, 28264
767-3X2	26260
767-3Y0	24947, 24948, 24952, 24953, 24999, 25000, 25411, 26200, 26204-26208
767-3Z9	23765, 24628, 26417, 27095

III - 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, JET A1, or JET B MIL-T-5624 grades JP-4 or JP-5 MIL-T-83133 grades JP-8
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 26,0 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.

<u>Model</u>	<u>Eligible Serial Numbers</u>
767-34AF	27239-27243, 27740-27749, 27758-27764
767-38EF	25761

DATA PERTINENT TO ALL MODELS

Minimum Crew:	Two (2); pilot and copilot
Maximum Passengers:	255 (767-200) with 2 pairs of Type A plus 1 pair of Type III exits. 290 (767-200/300) with 2 pairs of Type A plus 2 pairs of Type III exits. 290 (767-300) with 3 pairs of Type A plus 1 pair of Type III exits. (See Note 6 for Type III Exit requirements.) 351 (767-300) with 3 pairs of Type A plus 1 pair of Type I exits. 0 passengers (767-300F) 2 crew, 4 persons with one floor level exit equipped with inertia reels and right hand flight crew exit operable from outside. (Exemption No. 5993A)

Data Pertinent to All Models (cont'd):

Maximum Baggage/Cargo:	See appropriate Weight and Balance Manual.
Fuel and Oil Capacities:	See appropriate Weight and Balance Manual.
Minimum Required Fuel:	See appropriate FAA-Approved Flight Manual.
Maximum Operating Altitude:	43,100 feet
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 Movements:	Control surfaces must be rigged in accordance with Boeing Drawings 251T1001, 251T2001, 251T3001, 251T4001, 254T7001, 257T4001, 256T1001, 256T2001, 256T3001.
Certification Basis:	<p><u>767-200/-300</u></p> <p>Part 25 of the Federal Aviation Regulations: Amendment 25-1 through 25-37.</p> <p>Part 36 of the Federal Aviation Regulations: Amendment 36-1 through 36-12. Special Federal Aviation Regulation 27.</p> <p>Part 25 of the Federal Aviation Regulations: Amendment 25-38 through 25-45, except portions of Amendment 25-38 (Section 25.979(d) and (e) and Section 25.1143(e)); Amendment 40 (Sections 25.901(b)(1)(i), 25.1091(e) and 25.1093(b)); Amendment 41 (Section 25.1438); and Amendment 42 (Section 25.109).</p> <p>25.629 Amendment 46, FAR 25.697 Amendment 46, FAR 25.733 Amendment 49, FAR 25.803 Amendment 46, FAR 25.901(d) Amendment 46, FAR 25.1103(a), (b)(2),(d), (e), (f) Amendment 46, FAR 25.1142 Amendment 46, FAR 25.1522 Amendment 46.</p> <p>Exemption from FAR 25: <u>767-200 and 767-300</u></p> <p>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.</p> <p>Equivalent Safety Findings exist with respect to the following regulations: FAR 25.1093(b)(1) - Induction System Deicing and Anti-icing Protection FAR 25.1103(d) - Induction System Ducts and Air Duct Systems FAR 25.1103(e) - Induction System Ducts and Air Duct Systems RB211-524H Installation only. FAR 25.1181(a)(6) - Designated Fire Zones; Regions Included FAR 25.1203 - Fire Detector System for Compartment Surrounding the Turbine and Jetpipe (Zone 4A/4B) RB211-524H Installation only. FAR 25.1305(a)(4), (a)(6), (c)(1) and (c)(3) - Powerplant Instruments FAR 25.1387(b) and (c) - Position Light System Dihedral Angles FAR 25.1393 - Minimum Intensities in Any Vertical Plan of Forward and Rear Position Lights FAR 25.1395 - Maximum Intensities in Overlapping Beams of Forward and Rear Position Lights FAR 25.1415(d) - Emergency Locator Transmitter (ELT) FAR 25.1549(b) - Powerplant and Auxiliary Power Unit Instruments FAR 25.365(e)(2) - Pressurized Cabin Loads FAR 25.803(c)(8) - Emergency Evacuation Demonstration FAR 25.807(a)(7)(iv) and (c) - Passenger Emergency Exits</p>

Data Pertinent to All Models (cont'd):

FAR 25.809 -	Emergency Exit Arrangement
FAR 25.813(c) -	Emergency Exit Access
FAR 25.811(f)(2)	Exit Band Contrast
FAR 25.853(c)	Compartment Interiors
FAR 25.791	Passenger Information Signs and Placards

Equivalent Safety Findings which apply only to the Model 767-300 series exist with respect to the following regulations:

FAR 25.107(d), (e)(1)(iv), (e)(4) - Minimum unstick speed

FAR 25.853(d), Amendment 23-32 Folding Waste Trolley

FAR 25 (Several) Use of 1-g stall speed (non-structural Sections) 767-300 and some increased gross weight 767-200 airplanes

Special Conditions with respect to the following subjects apply to the Model 767-200 and 767-300: Special Condition No. 25-ANM-18 on 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.

Special Condition No. 25-ANM-20 for installation of a longitudinal partition.

Compliance with the following optional requirements has been established:

Ditching Provisions	25.801	(Over- water operation can be approved when the aircraft has been equipped and installation has been approved according to FAR 25.801)
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Ice Protection Provisions	25.1419
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767-300F (Freighter)

The 767-300F Type Certification Basis includes the following requirements in addition to the 767-300 certification basis detailed above.

25.561 Amendment 25-64	Applies to seats for supernumeraries, galley and rigid barrier.
25.783 Amendment 25-72	Applies to main deck cargo door.

Exemption from FAR 25:

Exemption No. 5993 - 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 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.

Exemption No. 5993A - 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 and harness provided for each occupant. See Note 12.

Equivalent Safety Findings exist with respect to the following regulations:

FAR 25.1447(c)(1) and 25.1447(c)(3) - Equipment Standards for Oxygen Dispensing Units

Production Basis: Production Certificate 700. 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 "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 (cont'd):

- Note 1. A current Weight & Balance Report must be in each aircraft at the time of original airworthiness certification and at all times thereafter 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.
- Note 3. The FAA-approved Airworthiness Limitations Section (Section 9) of the Boeing Document D622T001-9 lists the required inspection thresholds for certain structural items, the retirement times for safe-life parts, and the Certification Maintenance Requirements. All Boeing Model 767 airplanes must fully comply with this section. However, regarding the damage tolerance structural inspections contained in Chapter (B) of this section, all Boeing 767's, production line number 669 and on, must comply with a particular revision of this section, namely Revision June 1997, or later FAA-approved revision. FAA intends to issue an Airworthiness Directive (AD) mandating compliance with the June 1997 Revision (or later FAA-approved revisions), applicable to all 767 aircraft with production line numbers lower than 669. In addition, all Boeing Model 767-300F (freighter) airplanes must also comply with the October 1995 Revision to Section 9 (or later FAA-approved revision), regardless of production line number
- Note 4. Systems and powerplant Certification Maintenance Requirements (CMR): The CMR's are listed in either the FAA approved Section 9 of Boeing Maintenance Planning Data Document D622T001 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:
1. With one pair of Type III exits there must be an unobstructed cross-aisle at least 20 inches wide between main aisles in close proximity 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 2 inches of seat cushion may encroach into the actual projected opening of the exit, provided that the cushion can be readily compressed to clear the opening.
- 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 range 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 range operations.
- 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:
- WARNING - Red message, immediate crew action required.
 - CAUTION - Amber message, immediate crew awareness and possible future crew action required.
 - ADVISORY - Indented amber message, crew awareness and possible future crew action required.

Data Pertinent to All Models (cont'd):

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 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.

<u>Engine Fault Level</u>			<u>EICAS Boeing Message - Category</u>
<u>RB-211-524H</u>	<u>PW4000</u>	<u>CF6-80C2 FADEC</u>	
C	A	C	ENG CONTROL-ADVISORY
C1	B	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.

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