DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A16WE Revision 57 **BOEING** 737-100 Series 737-200 Series 737-200C Series 737-300 Series 737-400 Series 737-500 Series 737-700 Series 737-800 Series 737-600 Series 737-700C Series 737-900 Series 737-900ER Series February 28, 2017 Date

TYPE CERTIFICATE DATA SHEET A16WE

This data sheet, which is part of Type Certificate No. A16WE, 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

1901 Oakesdale Ave SW Renton, WA 98057-2623

I - Model 737-100 (Approved December 15, 1967) Transport Aircraft

Engines: 2 Pratt and Whitney Turbofan Engines JT8D-7, JT8D-7A, JT8D-7B, JT8D-9, JT8D-9A, and JT8D-15;

refer to the FAA Approved Airplane Flight Manual for aircraft engine and engine intermix eligibility.

(Engine Type Certificate No. E2EA)

Fuel: See NOTE 4 for authorized types of fuel.

Engine Ratings: Takeoff static thrust Maximum continuous static

standard day, sea level thrust, standard day, conditions (5 min.) lb. sea level conditions lb.

 JT8D-7, -7A, -7B
 14,000
 12,600

 JT8D-9, -9A
 14,500
 12,600

 JT8D-15
 15,500
 13,700

Engine and Weight Limits:

For engine operating limits see engine Type Certificate Data Sheet No. E2EA or the FAA Approved

Airplane Flight Manual.

Thrust Setting: The appropriate EPR thrust setting curve (EPR or PT 7), in the FAA Approved Airplane Flight Manual of

AFM Appendices must be used for control of engine thrust.

Airspeed Limits: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

C.G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

Maximum Weights: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

Eligible Serial Numbers:

Model:

737-112 19768-19772

737-130 19013-19017, 19018 -19033, 19794, 19437

737-159 19679, 19680

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I - Model 737-100 (Cont'd)

NOTE 3.

NOTES FOR SECTION I (737-100):

NOTE 1. A current weight and balance report, including a list of equipment included in the certificated empty weight and loading instructions when necessary, must be provided for each aircraft at the time of original certification. For each Model the Weight and Balance Control and Loading Manual (Boeing Document

D6-15066-1) consists of the Basic Manual and a Supplement Aircraft Report. This is in accordance with 14 CFR 25.29 and 25.1519 which establishes operating limitations determined under 25.23 through 25.27.

NOTE 2. Airplane operation must be in accordance with the FAA Approved AFM, Boeing Document No. D6-8737. All placards required in either the FAA Approved AFM, the applicable operating rules or the Certification Basis must be installed in the airplane.

The FAA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness are referenced in Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), Document D6-38278-CMR. 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. Boeing 737-100/200C/300/400/500 Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D6-38278-CMR, is the FAA approved requirement to comply with 14 CFR 25.1529, 43.16 and 91.403. Each operator must incorporate

into their airline's FAA-Approved maintenance program the applicable requirements of this document.

NOTE 4. (a) JP-1, JP-4 and JP-5 fuels conforming to P & WA specification No. 522 and later revisions may be used separately or mixed in any proportions without adversely affecting the engine operation or power output. No fuel control adjustment is required when switching fuel types. See AFM specified in Note 2 for limitations on fuel use.

(b) Anti-icing fuel additive PFA-55MB may be used if concentration delivered to airplane does not exceed 0.15% by volume. No fuel system anti-icing credit is allowed. See AFM specified in Note 2 for limitations on fuel additive use.

NOTE 5. Model designation of the airplanes are identified by the "Dash No." suffix to "737". Consider, for example, the designation "737-105". The "1" represents the "-100 Series," and the "05" represents the customer's configuration for which initial approval was obtained.

NOTE 6. Not used.

NOTE 7. The Boeing Supplemental Structural Inspection Document (SSID), D6-37089 and D6-37089-1, are applicable to the 737-100, 737-200 and 737-200C (Sec ADs 98-11-04, Amendment 39-10531, 98-11-04 R1, Amendment 39-10984, and 2008-11-03, Amendment 39-15525).

NOTE 8. Except for trunnion pins described below, the life limit for 737-100 main and nose landing gear is 81,000 flight cycles when operated within the ranges of 95 – 111.2 KIPS for taxi weight and 89.7 – 103 KIPS for landing weight. The trunnion pins 65-46113-3 and -5 are to be replaced at 76,000 flight cycles. For detail components lives, see Boeing Service Letter 737-SL-32-21.

NOTE 9. Not used.

NOTE 10. Individual airplanes may be limited to weights different than those specified herein. Refer to the FAA Approved Airplane Flight Manual or the FAA Approved Weight and Balance Manual to determine maximum permissible operating weights and balance limitations.

NOTE 11. JT8D-15 engines equipped with MOD 10 exhaust mixer (Pratt & Whitney Aircraft Part No. 5004027) have same engine limits as JT8D-15 engines with splitter type exhaust system.

NOTE 12. Not used.

NOTE 13. 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 D6-19567 titled "Service Bulletin 737". 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 14. Not used.

NOTE 15. Not used.

NOTE 16. The FAA has determined that the occurrence of any uncontrollable high thrust failure condition "may endanger the safe operation of an airplane" and hence is reportable under §121.703, 125.409, and 135.415.

NOTE 17. 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 Airworthiness Limitations document, Boeing 737-100/200/200C/300/400/500 Airworthiness Limitations and Certification Maintenance Requirements, Document D6-38278-CMR, Revision May 2006 or later FAA-approved revision (see AD 2008-10-09R1, Amendment 39-16148).

II - Model 737-200 (Approved December 21, 1967) Transport Aircraft

Engines: 2 Pratt and Whitney Turbofan Engines JT8D-7, JT8D-7A, JT8D-7B, JT8D-9A, JT8D-9A, JT8D-15, JT8D-

15A, JT8D-17, and JT8D-17A; Refer to the FAA Approved Airplane Flight Manual for aircraft engine

and engine intermix eligibility. (Engine Type Certificate No. E2EA)

Fuel: See NOTE 4 for authorized types of fuel.

Engine Ratings: Takeoff static thrust, Maximum continuous static

standard day, sea level thrust, standard day, conditions (5 min) lb. sea level conditions lbs.

 JT8D-7, -7A, -7B
 14,000
 12,600

 JT8D-9, -9A
 14,500
 12,600

 JT8D-15, -15A
 15,500
 13,750

 JT8D-17, -17A
 16,000
 15,200

Engine and Weight Limits

Thrust Settings: The appropriate thrust setting curve (EPR or Pt7), in the FAA Approved Airplane Flight Manual or AFM

Appendices must be used for control of engine thrust.

Airspeed Limits: See the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

C.G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

Maximum Weights: See the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

Eligible Serial Numbers:

Model:	
737-201	19418-19423, 20211-20216, 21665-21667, 21815-21818, 22018, 22273-22275, 22352-22355, 22443-
	22445, 22751-22758, 22795-22799, 22806, 22866-22869, 22961, 22962
737-204	19707-19712, 20236, 20417, 20632, 20633, 20806-20808, 21335, 21336, 21693, 21694, 22057-22059,
	22364, 22365, 22638-22640, 22966, 22967
737-205	19408, 19409, 20412, 20711, 21184, 21219, 21445, 21729, 21765, 22022, 23464-23469
737-209	23795, 23796, 23913, 24197
737-210	21820
737-212	20492, 20521
737-214	19681, 19682, 19920, 19921, 20155-20160, 20368
737-217	19884-19888, 20196, 20197, 21716-21718, 22255-22260, 22341, 22342, 22658, 22659, 22728, 22729,
	22864, 22865
737-219	19929-19931, 20344, 21130, 21131, 21645, 22088, 22657, 23470-23475
737-222	19039-19078, 19547-19556, 19758, 19932-19956
737-228	23000-23011, 23349, 23503, 23504, 23792, 23793
737-229	20907-20912, 21135-21137, 21176, 21177, 21596, 21839, 21840
737-230	22113-22143, 22402, 22634-22637, 23153-23158
737-232	23073-23105
737-236	21790-21808, 22026-22034, 23159-23172, 23225, 23226
737-241	21000-21009
737-242	21186, 22074, 22075
737-244	19707, 19708, 20229, 20329-20331, 22580-22591, 22828
737-247	19598-19617, 20125-20134, 23184-23189, 23516-23521, 23602-23609
737-248	19424, 19425, 20221-20223, 21714, 21715
737-258	22856, 22857
737-260	23914, 23915
737-266	21191-21196, 21227
737-268	20576-20578, 20882, 20883, 21275-21277, 21280-21283, 21360-21362, 21653, 21654, 22050
737-269	21206
737-275	19742, 20142, 20588, 20670, 20785, 20922, 20958, 20959, 21115, 21639, 21712, 21713, 21819, 22086,
	22087, 22159, 22264-22266, 22807, 22873, 22874, 23283-23285
737-277	22645-22656
737-281	20226, 20227, 20276, 20277, 20413, 20414, 20449-20452, 20506-20508, 20561-20563, 21766-21771
737-282	23041-23046
737-284	21224, 21225, 21301, 21302, 21500, 21501, 22300, 22301, 22338, 22339, 22343, 22400, 22401
737-286	20498, 20499, 21317
737-287	20403-20406, 20523, 20537, 20768, 20964-20966
737-291	20361-20365, 21069, 21508, 21509, 21544-21546, 21640-21642, 21747-21751, 21980, 21981, 22089,
	22383, 22384, 22399, 22456, 22457, 22741-22744, 23023, 23024
737-293	19306-19309, 19713, 19714, 20334, 20335,

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II - 737-200 (Cont'd)

NOTES FOR SECTION II (737-200):

NOTE 1. A current weight and balance report, including a list of equipment included in the certificated empty

weight and loading instructions when necessary, must be provided for each aircraft at the time of original certification. For each Model the Weight and Balance Control and Loading Manual (Boeing Document D6-15066-2) consists of the Basic Manual and a Supplement Aircraft Report. This is in accordance with 14 CFR 25.29 and 25.1519 which establishes operating limitations determined under 25.23 through 25.27.

NOTE 2. Airplane operation must be in accordance with the FAA Approved AFM, Boeing Document No. D6-8737. All placards required in either the FAA Approved AFM, the applicable operating rules or the

Certification Basis must be installed in the airplane.

NOTE 3. The FAA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness are

referenced in Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), Document D6-38278-CMR. 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. Boeing 737-100/200/200C/300/400/500 Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D6-38278-CMR, is the FAA approved requirement to comply with 14 CFR 25.1529, 43.16 and 91.403. Each operator must incorporate into their airline's FAA-Approved maintenance program the applicable requirements of this document.

NOTE 4. (a) JP-1, JP-4 and JP-5 fuels conforming to P & WA specification No. 522 and later revisions may be used separately or mixed in any proportions without adversely affecting the engine operation or power output. No fuel control adjustment is required when switching fuel types. See AFM specified in Note 2 for limitations on fuel use.

(b) Anti-icing fuel additive PFA-55MB may be used if concentration delivered to airplane does not exceed 0.15% by volume. No fuel system anti-icing credit is allowed. See AFM specified in Note 2 for limitations on fuel additive use.

NOTE 5. Model designation of the airplanes are identified by the "Dash No." suffix to "737". Consider, for example, the designation "737-105". The "1" represents the "-100 Series," and the "05" represents the customer's configuration for which initial approval was obtained.

NOTE 6. Not used.

NOTE 7. The Boeing Supplemental Structural Inspection Document (SSID), D6-37089 and D6-37089-1, are applicable to the 737-100, 737-200 and 737-200C (Sec ADs 98-11-04, Amendment 39-10531, 98-11-04

R1, Amendment 39-10984, and 2008-11-03, Amendment 39-15525).

NOTE 8. All Model 737-200 series airplanes having serial numbers 20492 and on, are of the -200 advanced series

airplane. All earlier airplanes can be kit modified to the advanced configuration.

NOTE 9. The "Advanced" configuration (for aircraft with serial numbers before 20492) consists of the following performance modification kits to be operator installed in the following order, if desired:

(a) A stopping package, MC 3452, (S.B. 32-1051) plus a high lift package (MC-3400).

(b) The above (a) plus JT8D-15 engine (MC-3510).

NOTE 10. Individual airplanes may be limited to weights different than those specified herein. Refer to the FAA

Approved Airplane Flight Manual or the FAA Approved Weight and Balance Manual to determine

Approved Airplane Flight Manual or the FAA Approved Weight and Balance Manual to determine maximum permissible operating weights and balance limitations.

NOTE 11. JT8D-15 engines equipped with MOD 10 exhaust mixer (Pratt & Whitney Aircraft Part No. 5004027) have same engine limits as JT8D-15 engines with splitter type exhaust system.

NOTE 12. Reference Boeing Document D6-37349 for approved autoland equipment limitations for Model 737-200

series airplanes.

NOTE 13. 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 D6-19567 titled "Service Bulletin 737". 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 14. Airplanes line numbers 1591, 1593, 1595, and on, were manufactured on or after August 20, 1988, and

airplane line numbers 1718, 1903, 1907, and on, were manufactured on or after August 20, 1990. Reference §121.312(a)(1) and (2) Amendment 121-198. Airplanes 1718, 1907 through 1927 are exempt (Exemption No. 5176A). See Service Bulletin Index Part 3 for cross reference of line number to airplane

serial number.

II - 737-200 (Cont'd)

NOTE 15. The type design reliability and performance of the Model 737-200, -300, -400, and -500 airplanes have

been evaluated in accordance with FAA Advisory Circular 120-42A and found suitable for Extended Range Operations with Two-Engine Airplanes (ETOPS) when operated and maintained in accordance with Boeing Document D6-38091 "CONFIGURATION, MAINTENANCE, AND PROCEDURES FOR EXTENDED RANGE (ER) OPERATION" for the Model 737-200, and Boeing Document D6-38123 for

the Models 737-300, -400, and -500.

NOTE 16. The FAA has determined that the occurrence of any uncontrollable high thrust failure condition "may

endanger the safe operation of an airplane" and hence is reportable under §121.703, 125.409, and

135.415.

NOTE 17. 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 and Special Conditions 25-308-SC

are listed in the FAA-approved Airworthiness Limitations document, Boeing 737-

 $100/200/200C/300/400/500 \ Airworthiness \ Limitations \ and \ Certification \ Maintenance \ Requirements,$ Document D6-38278-CMR, Revision May 2006 or later FAA-approved revision (see AD 2008-10-09R1,

Amendment 39-16148).

NOTE 18. (a) For 737-200 airplanes operated within the ranges of 95 – 111.2 KIPS for taxi weight and 89.7 – 103 KIPS for landing weight: The life limit for main and nose landing gear is 81,000 flight cycles.

for landing weight: The life limit for main and nose landing gear is \$1,000 linght cycles

(b) For 737-200 High Gross Weight (HGW) airplanes, operated within 114 – 128.6 KIPS taxi weight and 103 – 107 KIPS landing weight: The life limit for main and nose gear is 100,000 and 90,000 flight cycles respectively

(c) Trunnion pins 65-46113-3 and -5 are to be replaced at 76,000 flight cycles and

(d) Forward trunnion fuse bolts 65-42196-4, -5 and 69-58854-2 are to be replaced at 83,000 flight cycles.

(e) For detail components lives, see Boeing Service Letter 737-SL-32-21.

III - Model 737-200C (Approved October 29, 1968) Transport Aircraft

Engines: 2 Pratt and Whitney Turbofan Engines JT8D-7, JT8D-7A, JT8D-9B, JT8D-9A, JT8D-15, JT8D-16, JT8D-17, JT8D-18, JT8D-19, JT8

15A, JT8D-17, and JT8D-17A; Refer to the FAA Approved Airplane Flight Manual for aircraft engine

and engine intermix eligibility. (Engine Type Certificate No. E2EA)

Fuel: See NOTE 4 for authorized types of fuel.

Engine Ratings: Takeoff static thrust, Maximum continuous standard day, sea level static thrust, standard

 JT8D-7, -7A, -7B
 conditions (5 min) lb.
 day, sea level conditions lb.

 JT8D9D-9, -9A
 14,000
 12,600

 JT8D-15, -15A
 15,500
 13,750

 JT8D-17, -17A
 16,000
 15,200

Engine and Weight Limits

For engine operating limits see engine TC Data Sheet No. E2EA or the FAA Approved Airplane Flight

Manual.

Thrust Settings: The appropriate thrust setting curve (EPR or Pt7), in the FAA Approved Airplane Flight Manual or AFM

Appendices must be used for control of engine thrust.

Airspeed Limits: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

C.G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

Maximum Weights: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

Eligible Serial Numbers:

Model:

737-202C 19426

737-204C 20282, 20389

III - 737-200C (cont'd)

737-205C	20458
737-210C	19594, 20138, 20440, 20917, 21066, 21067, 21821, 21822
737-219C	22994
737-229C	20914-20916, 21139, 21738
737-230C	20253-20258
737-242C	19847, 19848, 20455, 20496, 21728, 22877
737-248C	20218-20220, 21011
737-268C	20574, 20575
737-270C	20892, 20893, 21183
737-275C	19743, 21116, 21294, 22160, 22618
737-282C	23051
737-286C	20500, 20740
737-287C	20407, 20408
737-290C	22577, 22578, 23136
737-298C	20793-20795
737-2A1C	21187, 21188
737-2A8C	22473
737-2A9C	20205, 20206
737-2B1C	20536
737-2B6C	23049, 23050
737-2D6C	20650, 20758, 21287
737-2H3C	21974
737-2H4C	20346
737-2H6C	21109
737-2H7C	20590, 20591, 23386
737-2J8C	21169, 21170
737-2K2C	20836, 20943, 20944
737-2L7C	21073
737-2M2C	21173
737-2M6C	21809
737-2N9C	21499
737-2Q2C	21467
737-2Q5C	21538
737-2Q8C	21959
737-2R4C	21763, 23129, 23130
737-2R6C	22627
737-2R8C	21710, 21711
737-2S2C	21926-21929
737-2S5C	22148
737-2T2C	22056
737-2T4C	23065, 23066
737-2X6C	23121-23124, 23292

NOTES FOR SECTION III (737-200C):

NOTE 1. A current weight and balance report, including a list of equipment included in the certificated empty weight and loading instructions when necessary, must be provided for each aircraft at the time of original certification. For each Model the Weight and Balance Control and Loading Manual (Boeing Document

D6-15066-3) consists of the Basic Manual and a Supplement Aircraft Report. This is in accordance with 14 CFR 25.29 and 25.1519 which establishes operating limitations determined under 25.23 through 25.27.

NOTE 2. Airplane operation must be in accordance with the FAA Approved AFM, Boeing Document No. D6-8737. All placards required in either the FAA Approved AFM, the applicable operating rules or the Certification Basis must be installed in the airplane.

NOTE 3. The FAA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness are referenced in Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), Document D6-38278-CMR. 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. Boeing 737-100/200/200C/300/400/500 Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D6-38278-CMR, is the FAA approved requirement to comply with 14 CFR 25.1529, 43.16 and 91.403. Each operator must incorporate into their airline's FAA-Approved maintenance program the applicable requirements of this document.

III - 737-200C (cont'd)

NOTE 4. (a) JP-1, JP-4 and JP-5 fuels conforming to P & WA specification No. 522 and later revisions may be used separately or mixed in any proportions without adversely affecting the engine operation or power output. No fuel control adjustment is required when switching fuel types. See AFM specified in Note 2 for limitations on fuel use.

(b) Anti-icing fuel additive PFA-55MB may be used if concentration delivered to airplane does not exceed 0.15% by volume. No fuel system anti-icing credit is allowed. See AFM specified in Note 2 for limitations on fuel additive use.

NOTE 5. Model designation of the airplanes are identified by the "Dash No." suffix to the "737". Consider, for example, the model designation "737-105". The "1" represents the "-100 Series," and the "05" represents

NOTE 6. Not used

NOTE 14.

NOTE 7. The Boeing Supplemental Structural Inspection Document (SSID), D6-37089 and D6-37089-1, are applicable to the 737-100, 737-200 and 737-200C (Sec ADs 98-11-04, Amendment 39-10531, 98-11-04 R1, Amendment 39-10984, 2008-08-23, Amendment 39-15477 and 2008-11-03, Amendment 39-15525).

the customer's configuration for which initial approval was obtained.

NOTE 8. All Model 737-200 series airplanes having serial numbers 20492 and on, are of the -200 advanced series airplane. All earlier airplanes can be kit modified to the advanced configuration.

NOTE 9. The "Advanced" configuration (for aircraft with serial numbers before 20492) consists of the following performance modification kits to be operator installed in the following order, if desired:

- (a) A stopping package, MC 3452, (S.B. 32-1051) plus a high lift package (MC-3400).
- (b) The above (a) plus JT8D-15 engine (MC-3510).

NOTE 10. Individual airplanes may be limited to weights different than those specified herein. Refer to the FAA Approved Airplane Flight Manual or the FAA Approved Weight and Balance Manual to determine maximum permissible operating weights and balance limitations.

NOTE 11. JT8D-15 engines equipped with MOD 10 exhaust mixer (Pratt & Whitney Aircraft Part No. 5004027) have same engine limits as JT8D-15 engines with splitter type exhaust system.

NOTE 12. Reference Boeing Document D6-37349 for approved autoland equipment limitations.

NOTE 13. 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 D6-19567 titled "Service Bulletin 737". 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.

Airplanes line numbers 1591, 1593, 1595, and on, were manufactured on or after August 20, 1988, and airplane line numbers 1718, 1903, 1907, and on, were manufactured on or after August 20, 1990. Reference §121.312(a)(1) and (2) Amendment 121-198. Airplanes 1718, 1907 through 1927 are exempt (Exemption No. 5176A). See Service Bulletin Index Part 3 for cross reference of line number to airplane serial number.

NOTE 15. The type design reliability and performance of the Model 737-200, -300, -400, and -500 airplanes have been evaluated in accordance with FAA Advisory Circular 120-42A and found suitable for Extended Range Operations with Two-Engine Airplanes (ETOPS) when operated and maintained in accordance with Boeing Document D6-38091 "CONFIGURATION, MAINTENANCE, AND PROCEDURES FOR EXTENDED RANGE (ER) OPERATION" for the Model 737-200, and Boeing Document D6-38123 for the Models 737-300, -400, and -500.

NOTE 16. The FAA has determined that the occurrence of any uncontrollable high thrust failure condition "may endanger the safe operation of an airplane" and hence is reportable under §121.703, 125.409, and 135.415.

NOTE 17. 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 and Special Condition 25-308-SC are listed in the FAA-approved Airworthiness Limitations document, Boeing 737-100/200/200C/300/400/500 Airworthiness Limitations and Certification Maintenance Requirements, Document D6-38278-CMR, Revision May 2006 or later FAA-approved revision (see AD's 2008-10-09R1, Amendment 39-16148).

NOTE 18. (a) For 737-200 airplanes operated within the ranges of 95 – 111.2 KIPS for taxi weight and 89.7 – 103 KIPS for landing weight: The life limit for main and nose landing gear is 81,000 flight cycles.

- (b) For 737-200 High Gross Weight (HGW) airplanes, operated within 114 128.6 KIPS taxi weight and 103 107 KIPS landing weight: The life limit for main and nose gear is 100,000 and 90,000 flight cycles respectively
- (c) Trunnion pins 65-46113-3 and -5 are to be replaced at 76,000 flight cycles and
- (d) Forward trunnion fuse bolts 65-42196-4, -5 and 69-58854-2 are to be replaced at 83,000 flight cycles.
- (e) For detail components lives, see Boeing Service Letter 737-SL-32-21.

IV - Model 737-300 (Approved November 14, 1984) Transport Aircraft

Engines: 2 CFM-56-3-B1, CFM-56-3B-2 or CFM-56-3C-1 Turbofan Engines. Refer to the FAA Approved

Airplane Flight Manual for engine limitations. (Engine Type Certificate No. E3GL and E21EU)

Fuel: Fuel conforming to commercial jet fuel Specification ASTM-D-1655 or G.E. Specification D50TF2 Jet A,

Jet A1, and Jet B are authorized for unlimited use. Fuels conforming to MIL-T-5624 grades JP-4, P-5, and JP-8 are acceptable alternatives. The use of either JP-4 or Jet B is limited to non-revenue flights.

Consult flight manual for additional fuel usage limitations and additive use.

Engine Ratings: Takeoff static thrust, Maximum continuous static

standard day, sea level thrust, standard day, conditions (5 min) lb. sea level conditions lb.

 CFM 56-3C-1
 22,100
 20,500

 CFM 56-3-B1
 20,100
 18,900

 CFM 56-3B-2
 22,100
 20,500

*CFM 56-3C-1 Throttle limiter to limit full throttle thrust equivalent to 22,100

Engine and Weight Limits

For engine operating limits see engine TC Data Sheet No. E2GL or E21EU or the FAA Approved

Airplane Flight Manual.

Thrust Settings: The appropriate engine power setting curve (%N1), in the FAA Approved Airplane Flight Manual or

AFM Appendices must be used for control of engine thrust.

Airspeed Limits: VMO/MMO - 340/0.82 (KCAS)

For other airspeed limits see the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

C.G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

Maximum Weights: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

Eligible Serial Numbers:

Model:	
737-301	23228-23237, 23257-23261, 23510-23515, 23550-23560, 23739-23743, 23930-23937
737-306	23537-23546, 24261, 24262, 24404, 27420, 27421, 28719, 28720
737-317	23173-23177
737-319	25606-25609
737-322	23642-23644, 23665-23675, 23947-23957, 24147-24149, 24191-24193, 24228-24230, 24240-24253,
	24301, 24319-24321, 24360-24362, 24378, 24379, 24452-24455, 24532-24540, 24637-24642, 24653-
	24674, 24717-24718
737-329	23771-23775, 24355, 24356
737-330	23522-23531, 23833-23837, 23871-23875, 24280-24284, 24561-24565, 25148, 25149, 25215-25217,
	25242, 25359, 25414-25416, 26428-26432, 27903-27905
737-332	25994, 25995, 25996, 25997, 25998
737-340	23294-23299
737-341	24275-24279, 24935, 24936, 25048-25051, 26852-26857
737-347	23181-23183, 23345-23347, 23440-23442, 23596-23599
737-348	23809, 23810
737-375	23707, 23708, 23808
737-376	23477-23479, 23483-23491, 24295-24298
737-377	23653-23664, 24302-24305
737-382	24364-24366, 24449, 24450, 25161, 25162
737-31B	25895, 25897, 27151, 27272, 27275, 27287-27290, 27343, 27344, 27519, 27520
737-31L	27273, 27276, 27345, 27346
737-31S	29055-29060, 29099, 29100, 29116, 29264-29267
737-32Q	29130
737-33A	23625-23636, 23827-23832, 24025-24030, 24092-24098, 24460, 24461, 24789-24791, 25010, 25011,
	25032, 25033, 25056, 25057, 25118, 25119, 25138, 25401, 25402, 25426, 25502-25508, 25511, 25603,
	25743, 25744, 27267, 27284, 27285, 27452-27460, 27462, 27463, 27469, 27907, 27910
737-33R	28868-28871, 28873
737-33S	29072
737-33V	29331-29342
737-34N	28081, 28082
737-34S	29108, 29109

IV- Model 737-300 (cont'd) 737-35B 23970-23972, 24237, 24238, 24269, 25069 737-35N 28156-28158, 29315, 29316 737-36E 25159, 25256, 25263, 25264, 26315, 26317, 26322, 27626 737-36M 28332, 28333 737-36N 28554-28564, 28566-28573, 28586, 28590, 28594, 28596, 28599, 28602, 28606, 28668-28673, 28872 737-36Q 28657-28660, 28662, 28664, 28760, 28761, 29140, 29141, 29189, 29326, 29327, 29405, 30333-30335 737-36R 737-37K 27283, 27335, 27375, 29407, 29408 737-37O 28537, 28548 737-38B 25124 737-38J 27179-27183, 27395 737-39A 23800 737-39K 27274, 27362 737-39M 28898 737-39P 29410, 29411, 20412 737-3A1 28389 737-3A4 23251-23253, 23288-23291, 23505, 23752 737-3B3 24387, 24388, 26850, 26851 737-3B7 22950-22959, 23310-23319, 23376-23385, 23594, 23595, 23699-23706, 23856-23862, 24410-24412, 24478, 24479, 24515, 24516 737-3G7 23218, 23219, 23776-23785, 24008-24012, 24633, 24634, 24710-24712, 25400 737-3H4 22940-22949, 23333-23344, 23414, 23689-23697, 23938-23940, 23959, 23960, 24153, 24408, 24572, 24888, 24889, 25219, 25250, 25251, 26571-26602, 27378-27380, 27689-27722, 27926-27937, 27953-27956, 28033-28037, 28329-28331, 28398-28401 737-3H6 27125, 27347 737-3H9 23329, 23330, 23415, 23416, 23714-23716, 24140, 24141 23302, 23303, 25078-25081, 25891, 25892, 25893, 27045, 27128, 27361, 27372, 27518, 27523 737-3J6 737-3K2 23411, 23412, 23738, 23786, 24326-24329, 26318, 27635, 28085 737-3K9 23797, 23798, 24211-24214, 24864, 24869, 25210, 25239, 25787, 25788 737-3L9 27336, 27337, 27833, 27834, 27924, 27925 737-3M8 24020-24024, 24376, 24377, 24413, 24414, 25015-25017, 25039-25041, 25070, 25071 737-3Q4 24208-24210 737-3Q8 23254-23256, 23387, 23388, 23401, 23402, 23406, 23506, 23507, 23535, 23766, 24068, 24131, 24132, 2429, 24300, 24403, 24470, 24492, 24698-24702, 24961-24963, 24986-24988, 25373, 26282-26286, 26288, 26292-26296, 26301, 26303, 26305, 26307, 26309-26314, 26321, 26325, 26333, 27271, 27286, 27633, 28054, 28200 737-3S1 24834, 24856 737-3S3 23712, 23713, 23733, 23734, 23787, 23788, 23811, 24059, 24060, 29244, 29245 737-3T0 23352-23375, 23455-23460, 23569-23593, 23838-23841, 23941-23943 737-3T5 23060-23064 28731, 28732, 28733, 28734, 28735, 28736, 28737, 28738, 28739, 28740, 28741, 28742, 28742,737-3U3 737-3U8 28746, 28747, 29088, 29705 737-3W0 23396, 23397, 25090, 27127, 27139, 27522, 28972, 28973, 29068, 29069 23495 - 23500, 23684, 23685, 23747 - 23750, 23812, 23826, 23921 - 23927, 24255, 24256, 24462 - 24465, 23921 - 23927, 24255, 24256, 24462 - 24465, 24462 - 24465, 24462 - 24465, 24462 - 24462, 24462, 24462 - 24462, 24662, 24662, 24662, 24662, 24662, 24662, 24662, 24662, 24662, 24662737-3Y0 24546, 24547, 24676-24681, 24770, 24902, 24905, 24907-24910, 24913, 24914, 24916, 24918, 25172-25174, 25179, 25187, 26068, 26070, 26072, 26082-26084 737-3Y5 25613-25615 737-3Y9 25604 737-3Z0 23448-23451, 25089, 25896, 27046, 27047, 27126, 27138, 27176, 27373, 27374, 27521 737-3Z6 24480 737-3Z8 23152

NOTES FOR SECTION IV (737-300):

23601, 24081

737-3Z9

NOTE 1. A current weight and balance report, including a list of equipment included in the certificated empty weight and loading instructions when necessary, must be provided for each aircraft at the time of original certification. For each Model the Weight and Balance Control and Loading Manual (Boeing Document D043A530) consists of the Basic Manual and a Supplement Aircraft Report. This is in accordance with 14 CFR 25.29 and 25.1519 which establishes operating limitations determined under 25.23 through 25.27.

NOTE 2. Airplane operation must be in accordance with the FAA Approved AFM, Boeing Document No. D6-8730. All placards required in either the FAA Approved AFM, the applicable operating rules or the Certification Basis must be installed in the airplane.

IV- Model 737-300 (cont'd)

NOTE 3.

The FAA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness are referenced in Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), Document D6-38278-CMR. 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. Boeing 737-100/200/200C/300/400/500 Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D6-38278-CMR, is the FAA approved requirement to comply with 14 CFR 25.1529, 43.16 and 91.403. Each operator must incorporate into their airline's FAA-Approved maintenance program the applicable requirements of this document.

NOTE 4. (a)

JP-1, JP-4 and JP-5 fuels conforming to P & WA specification No. 522 and later revisions may be used separately or mixed in any proportions without adversely affecting the engine operation or power output. No fuel control adjustment is required when switching fuel types. See AFM specified in Note 2 for limitations on fuel use.

(b) Anti-icing fuel additive PFA-55MB may be used if concentration delivered to airplane does not exceed 0.15% by volume. No fuel system anti-icing credit is allowed. See AFM specified in Note 2 for limitations on fuel additive use.

NOTE 5.

Models designation of the 737-100, 737-200, 737-200C, 737-300, 737-400, and 737-500 Series airplanes are shown by the "Dash No." of the prefix "737," i.e. 737-105; the "1" represents the "-100 Series," and the "05" represents the customer's configuration for which initial approval was obtained.

NOTE 6. Not Used.

NOTE 7. The Boeing 737 Supplemental Structural Inspection Document (SSID), D6-82669 is applicable to the 737-300, 737-400 and 737-500 (See AD 2008-09-13, Amendment 39-15494).

NOTE 8. (a) For 737-300 airplanes operated within the ranges of 136.5 – 119 KIPS for taxi weight and 114 KIPS for landing weight: The life limit for main and nose landing gear is 75,000 flight cycles.

(b) For detail components lives, see Boeing Service Letter 737-SL-32-21.

NOTE 9. Not used.

NOTE 10. Individual airplanes may be limited to weights different than those specified herein. Refer to the FAA Approved Airplane Flight Manual or the FAA Approved Weight and Balance Manual to determine

Approved Airplane Fight Manual of the FAA Approved Weight and Balance Manual to determine

maximum permissible operating weights and balance limitations.

NOTE 11. Not used.

NOTE 12. Not used.

NOTE 13. 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 D6-19567 titled "Service Bulletin 737". 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 14. Airplanes line numbers 1591, 1593, 1595, and on, were manufactured on or after August 20, 1988, and

airplane line numbers 1718, 1903, 1907, and on, were manufactured on or after August 20, 1990. Reference §121.312(a)(1) and (2) Amendment 121-198. Airplanes 1718, 1907 through 1927 are exempt (Exemption No. 5176A). See Service Bulletin Index Part 3 for cross reference of line number to airplane

serial number.

NOTE 15. The type design reliability and performance of the Model 737-200, -300, -400, and -500 airplanes have

been evaluated in accordance with FAA Advisory Circular 120-42A and found suitable for Extended Range Operations with Two-Engine Airplanes (ETOPS) when operated and maintained in accordance with Boeing Document D6-38091 "CONFIGURATION, MAINTENANCE, AND PROCEDURES FOR EXTENDED RANGE (ER) OPERATION" for the Model 737-200, and Boeing Document D6-38123 for

the Models 737-300, -400, and -500.

NOTE 16. The FAA has determined that the occurrence of any uncontrollable high thrust failure condition "may

endanger the safe operation of an airplane" and hence is reportable under §121.703, 125.409, and

135.415.

NOTE 17. 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 and Special Condition 25-308-SC are listed in the FAA-approved Airworthiness Limitations document, Boeing 737-100/200/200C/300/400/500 Airworthiness Limitations and Certification Maintenance Requirements, Document D6-38278-CMR, Revision May 2006 or later FAA-approved revision (see AD's 2008-10-09R1, Amendment 39-16148).

V - Model 737-400 (Approved September 2, 1988) Transport Category.

Engines: 2 CFM International, S.A. CFM-56-3C-1 or CFM-56-3B-2 Turbofan Engines. Refer to the FAA

Approved Airplane Flight Manual for engine limitations. (Engine Type Certificate No. E3GL and

E21EU)

Fuel: Fuel conforming to commercial jet fuel Specification ASTM-D-1655 or G.E. Specification D50PF2 Jet A,

Jet A1, and Jet B are authorized for unlimited use. Fuels conforming to MIL-T-5624 grades JP-4, JP-5, and JP-8 are acceptable alternatives. Consult flight manual for fuel usage limitations and additive use.

Engine Ratings: Takeoff static thrust Maximum continuous static

standard day, sea level thrust, standard day, conditions (5 min) lb. sea level conditions lbs.

CFM-56-3C-1 23,500 21,860 CFM-56-3B-2 22,100 20,500

For engine operating limits see engine TC Data Sheet No. E2GL or E21EU or the FAA Approved

Airplane Flight Manual.

Thrust Settings: The appropriate engine power setting curve (%N1), in the FAA Approved Airplane Flight Manual or

AFM Appendices must be used for control of engine thrust.

Airspeed Limits: VMO/MMO - 340/0.82 (KCAS)

For other airspeed limits see the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

C.G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

Maximum Weights: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

Eligible Serial Numbers:

<u>Model</u>	
737-401	23876-23886, 23984-23992
737-405	24270, 24271, 24643, 24644, 25303, 25348, 25795
737-406	24514, 24529, 24530, 24857, 24858, 24959, 25355, 25412, 25423, 25424, 27232, 27233
737-408	24352, 24353, 24804, 25063
737-429	25226, 25247, 25248, 25729
737-430	27000-27005, 27007
737-436	24052, 24053, 25267, 25304, 25305, 25349, 25350 25407, 25408, 25428, 25839-25844, 25848-25860
737-446	27916, 27917, 28087, 28097, 28831, 28832, 28994, 29864
737-448	24474, 24521, 24773, 24866, 25052, 25736
737-476	24430-24446, 28150-28152
737-484	25313, 25314, 25361, 25362, 25417, 25430, 27149
737-490	27081, 27082, 28885-28896, 29270, 29318, 29858, 30161
737-497	25663, 25664
737-42C	24231, 24232, 24813, 24814
737-42J	27143
737-42R	29107
737-43Q	28489-28494
737-44P	29914, 29915
737-45D	27131, 27156, 27157, 27256, 27914, 28752, 28753
737-45R	29032-29035
737-45S	28473, 28474, 28476-28478
737-46B	24123, 24124, 24573, 25262
737-46J	27171, 27213, 27826, 28038, 28271, 28334, 28867
737-46M	28549, 28550
737-46N	28723
737-46Q	28661, 28663, 28758, 28759, 29000, 29001
737-48E	25764-25766, 25771-25776, 26334, 27630, 27632, 28053, 28198
737-49R	28881, 28882
737-4B3	24750, 24751
737-4B6	24807, 24808, 26526, 26529-26531, 27678
737-4B7	24548-24560, 24781, 24811, 24812, 24841, 24842, 24862, 24863, 24873, 24874, 24892, 24893, 24933,
	24934, 24979, 24980, 24996, 24997, 25020-25024
737-4C9	25429, 26437
737-4D7	24830, 24831, 25321, 26611-26614, 28701-28704

737-4H6	26443, 26444, 26447, 26449, 26451-26453, 26455, 26457-26468, 27083-27087, 27096, 27097, 27166-
	27170, 27190, 27191, 27306, 27352, 27353, 27383, 27384, 27673, 27674
737-4K5	24125-24130, 24769, 24901, 26316, 27074, 27102, 27830, 27831
737-4L7	26960, 26961
737-4M0	29201-29210
737-4Q3	26603-26606, 27660, 29485-29487
737-4Q8	24069, 24070, 24234, 24332, 24703-24709, 25095-25114, 25163, 25164, 25168, 25169, 25371-25378,
	25740, 26279-26281, 26285, 26289-26291, 26298-26300, 26302, 26306, 26308, 26320, 26334, 26335,
	26337, 27628, 28199, 28202
737-4S3	24163-24167, 24795, 24796, 25116, 25134, 25594-25596
737-4U3	25713-25719
737-4Y0	23865-23870, 23976-23981, 24314, 24344, 24345, 24467-24469, 24493, 24494, 24511-24513, 24519,
	24520, 24545, 24682-24693, 24903, 24904, 24906, 24911, 24912, 24915, 24917, 25177, 25178, 25180,
	25181, 25184, 25190, 25261, 26065, 26066, 26069, 26071, 26073, 26074, 26077, 26078, 26081, 26085,
	26086, 26088
737-4Z6	27906
737-4 Z 9	25147, 27094

NOTES FOR SECTION V (737-400):

V - Model 737-400 (cont'd)

NOTE 1. A current weight and balance report, including a list of equipment included in the certificated empty weight and loading instructions when necessary, must be provided for each aircraft at the time of original certification. For each Model the Weight and Balance Control and Loading Manual (Boeing Document D043A540) consists of the Basic Manual and a Supplement Aircraft Report. This is in accordance with 14 CFR 25.29 and 25.1519 which establishes operating limitations determined under 25.23 through 25.27.

NOTE 2. Airplane operation must be in accordance with the FAA Approved AFM, Boeing Document No. D6-8730. All placards required in either the FAA Approved AFM, the applicable operating rules or the Certification Basis must be installed in the airplane.

NOTE 3. The FAA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness are referenced in Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), Document D6-38278-CMR. 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. Boeing 737-100/200/200C/300/400/500 Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D6-38278-CMR, is the FAA approved requirement to comply with 14 CFR 25.1529, 43.16 and 91.403. Each operator must incorporate into their airline's FAA-Approved maintenance program the applicable requirements of this document.

NOTE 4. (a) JP-1, JP-4 and JP-5 fuels conforming to P & WA specification No. 522 and later revisions may be used separately or mixed in any proportions without adversely affecting the engine operation or power output. No fuel control adjustment is required when switching fuel types. See AFM specified in Note 2 for limitations on fuel use.

(b) Anti-icing fuel additive PFA-55MB may be used if concentration delivered to airplane does not exceed 0.15% by volume. No fuel system anti-icing credit is allowed. See AFM specified in Note 2 for limitations on fuel additive use.

NOTE 5. Model designation of the airplanes are identified by the "Dash No." suffix of the "737. Consider, for example "737-105". The "1" represents the "-100 Series," and the "05" represents the customer's configuration for which initial approval was obtained.

NOTE 6. Not Used.

NOTE 7. The Boeing 737 Supplemental Structural Inspection Document (SSID), D6-82669 is applicable to the 737-300, 737-400 and 737-500 (See AD 2008-09-13, Amendment 39-15494).

NOTE 8. (a) For 737-300 airplanes operated within the ranges of 136.5 – 119 KIPS for taxi weight and 114 KIPS for landing weight: The life limit for main and nose landing gear is 75,000 flight cycles.

(b) For detail components lives, see Boeing Service Letter 737-SL-32-21.

NOTE 9. Not used.

NOTE 10. Individual airplanes may be limited to weights different than those specified herein. Refer to the FAA Approved Airplane Flight Manual or the FAA Approved Weight and Balance Manual to determine maximum permissible operating weights and balance limitations.

NOTE 11. Not used.

NOTE 12. Not Used.

V - Model 737-400 (cont'd)

NOTE 13. 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 D6-19567 titled "Service Bulletin 737". 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 14. Airplanes line numbers 1591, 1593, 1595, and on, were manufactured on or after August 20, 1988, and

airplane line numbers 1718, 1903, 1907, and on, were manufactured on or after August 20, 1990. Reference §121.312(a)(1) and (2) Amendment 121-198. Airplanes 1718, 1907 through 1927 are exempt (Exemption No. 5176A). See Service Bulletin Index Part 3 for cross reference of line number to airplane

serial number.

NOTE 15. The type design reliability and performance of the Model 737-200, -300, -400, and -500 airplanes have

been evaluated in accordance with FAA Advisory Circular 120-42A and found suitable for Extended Range Operations with Two-Engine Airplanes (ETOPS) when operated and maintained in accordance with Boeing Document D6-38091 "CONFIGURATION, MAINTENANCE, AND PROCEDURES FOR EXTENDED RANGE (ER) OPERATION" for the Model 737-200, and Boeing Document D6-38123 for

the Models 737-300, -400, and -500.

NOTE 16. The FAA has determined that the occurrence of any uncontrollable high thrust failure condition "may

endanger the safe operation of an airplane" and hence is reportable under §121.703, 125.409, and

135.415.

NOTE 17. 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 and Special Condition 25-308-SC are listed in the FAA-approved Airworthiness Limitations document, Boeing 737-100/200/200C/300/400/500 Airworthiness Limitations and Certification Maintenance Requirements, Document D6-38278-CMR, Revision May 2006 or later FAA-approved revision (see AD's 2008-10-09R1, Amendment 39-16148)

VI - Model 737-500 (Approved February 12, 1990) Transport Aircraft

Engines: 2 CFM International, S.A. CFM-56-3C-1 or CFM-56-3-B1 Turbofan Engines. Refer to the FAA

Approved Airplane Flight Manual for engine limitations. (Engine Type Certificate No. E3GL and

E21EU)

Fuel: Fuel conforming to commercial jet fuel Specification ASTM-D-1655 or G.E. Specification D50PF2 Jet A,

Jet A1, and Jet B are authorized for unlimited use. Fuels conforming to MIL-T-5624 grades JP-4, JP-5, and JP-8 are acceptable alternatives. Consult flight manual for limitations on fuel usage and additive use.

Engine Ratings: Takeoff static thrust Maximum continuous static

standard day, sea level thrust, standard day, conditions (5 min) lb. sea level conditions lb.

CFM-56-3C-1 20,100 18,900* CFM-56-3-B1 20,100 18,900

*CFM 56-3C-1 throttle limiter to limit full throttle thrust equivalent to 20,100.

Engine and Weight Limits

For engine operating limits see engine TC Data Sheet No. E2GL or E21EU or the FAA Approved

Airplane Flight Manual.

26338, 27627, 27631

Thrust Settings: The appropriate engine power setting curve (%N1), in the FAA Approved Airplane Flight Manual or

AFM Appendices must be used for control of engine thrust.

Airspeed Limits: VMO/MMO - 340/0.82 (KCAS)

For other airspeed limits see the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

C.G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

Maximum Weights: See the appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

Eligible Serial Numbers:

<u>Model</u> 737-505 24272-24274, 24645-24652, 24828, 25789-25792, 25797, 26297, 27153, 27155, 26304, 25794, 26336,

737-522 25001-25009, 25254, 25255, 25290, 25291, 25381-25388, 26642, 26643, 26645, 26646, 26648, 26649,

26651-26653, 26655-26659, 26662, 26663, 26667, 26668, 26671, 26672, 26675, 26676, 26679, 26680, 26683, 26684, 26687, 26688, 26690-26692, 26695, 26696, 26700, 26703, 26704, 26707, 26739, 26699

737-524 27314-27334, 27526-27535, 27540, 27900, 27901, 26319, 26339, 26340, 28899-28928

<u>V1 - Model 737-3</u>	SOU (cont'a)
737-528	25206, 25227-25237, 27304, 27305, 27424-27426
737-529	25218, 25249, 25418, 25419, 26537, 26538
737-530	24815-24824, 24937-24946, 25243, 25244, 25270-25272, 25309-25311, 25357, 25358
737-548	24878, 24919, 24968, 24989, 25115, 25165, 25737-25739, 26287
737-566	25051, 25084, 25307, 25352, 26051, 26052
737-5B6	26527, 25317, 25364, 26525, 27679, 27680
737-5C9	26438, 26439
737-5H3	26639, 26640, 27257, 27912
737-5H4	24178-24190, 25153, 25154, 25318-25320, 26564-26570
737-5H6	26445, 26446, 26448, 26450, 26454, 26456, 27354-27356
737-5K5	24776, 24926, 24927, 25037, 25062
737-5L9	24778, 24805, 24859, 24928, 25066, 28083, 28084, 28128-28131, 28721, 28722, 28995-28997, 29234,
	29235
737-5Q8	25160, 25166, 25167, 26323, 26324, 27629, 27634, 28052, 28055, 28201
737-5U3	28726, 28727, 28728, 28729, 28730
737-5Y0	24696, 24897-24900, 25175, 25176, 25182, 25183, 25185, 25186, 25188, 25189, 25191, 25192, 25288,
	25289, 26067, 26075, 26097, 26100, 26101, 26104, 26105
737-53A	24754, 24785-24788, 24877, 24878, 24881, 24921, 24922, 24970,25425
737-53C	24825-24827
737-53S	29073-29075
737-54K	27381, 27430-27435, 27966, 28461, 28462, 28990-28993, 29794, 29795
737-55D	27130, 27368, 27416-27419
737-55S	26539-26543, 28469-28472, 28475
737-56N	28565
737-58E	25767-25769, 29122
737-58N	28866
737-59D	24694, 24695, 25038, 25065, 26419, 26421, 26422, 27268

NOTES FOR SECTION VI (737-500):

VI - Model 737-500 (cont'd)

NOTE 1. A current weight and balance report, including a list of equipment included in the certificated empty weight and loading instructions when necessary, must be provided for each aircraft at the time of original certification. For each Model the Weight and Balance Control and Loading Manual (Boeing Document D043A550) consists of the Basic Manual and a Supplement Aircraft Report. This is in accordance with 14 CFR 25.29 and 25.1519 which establishes operating limitations determined under 25.23 through 25.27.

NOTE 2. Airplane operation must be in accordance with the FAA Approved AFM, Boeing Document No. D6-8735. All placards required in either the FAA Approved AFM, the applicable operating rules or the Certification Basis must be installed in the airplane.

NOTE 3. The FAA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness are referenced in Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), Document D6-38278-CMR. 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. Boeing 737-100/200/200C/300/400/500 Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D6-38278-CMR, is the FAA approved requirement to comply with 14 CFR 25.1529, 43.16 and 91.403. Each operator must incorporate into their airline's FAA-Approved maintenance program the applicable requirements of this document.

- NOTE 4. (a) JP-1, JP-4 and JP-5 fuels conforming to P & WA specification No. 522 and later revisions may be used separately or mixed in any proportions without adversely affecting the engine operation or power output. No fuel control adjustment is required when switching fuel types. See AFM specified in Note 2 for limitations on fuel use.
 - (b) Anti-icing fuel additive PFA-55MB may be used if concentration delivered to airplane does not exceed 0.15% by volume. No fuel system anti-icing credit is allowed. See AFM specified in Note 2 for limitations on fuel additive use.
- NOTE 5. Models designation of the airplanes are shown by the "Dash No." suffix of "737". Consider, for example, the designator "737-105". The "1" represents the "-100 Series," and the "05" represents the customer's configuration for which initial approval was obtained.
- NOTE 6. Not used.
- NOTE 7. The Boeing 737 Supplemental Structural Inspection Document (SSID) D6-82669 is applicable to the 737-300, 737-400 and 737-500 (See AD 2008-09-13, Amendment 39-15494).
- NOTE 8. (a) For 737-500 airplanes operated within the ranges of 134-139 KIPS for taxi weight and 110 KIPS for landing weight: The life limit for main and nose landing gear is 75,000 flight cycles.
 - (b) For detail components lives, see Boeing Service Letter 737-SL-32-21.
- NOTE 9. Not Used.

VI - Model 737-500 (cont'd)

NOTE 10. Individual airplanes may be limited to weights different than those specified herein. Refer to the FAA

Approved Airplane Flight Manual or the FAA Approved Weight and Balance Manual to determine

maximum permissible operating weights and balance limitations.

NOTE 11. Not used. NOTE 12. Not Used

NOTE 13. 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 D6-19567 titled "Service Bulletin 737". 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 14. Airplanes line numbers 1591, 1593, 1595, and on, were manufactured on or after August 20, 1988, and

airplane line numbers 1718, 1903, 1907, and on, were manufactured on or after August 20, 1990. Reference §121.312(a)(1) and (2) Amendment 121-198. Airplanes 1718, 1907 through 1927 are exempt (Exemption No. 5176A). See Service Bulletin Index Part 3 for cross reference of line number to airplane

serial number.

NOTE 15. The type design reliability and performance of the Model 737-200, -300, -400, and -500 airplanes have

been evaluated in accordance with FAA Advisory Circular 120-42A and found suitable for Extended Range Operations with Two-Engine Airplanes (ETOPS) when operated and maintained in accordance with Boeing Document D6-38091 "CONFIGURATION, MAINTENANCE, AND PROCEDURES FOR EXTENDED RANGE (ER) OPERATION" for the Model 737-200, and Boeing Document D6-38123 for

the Models 737-300, -400, and -500.

NOTE 16. The FAA has determined that the occurrence of any uncontrollable high thrust failure condition "may

endanger the safe operation of an airplane" and hence is reportable under §121.703, 125.409, and

135.415.

NOTE 17. 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 and Special Condition 25-308-SC are listed in the FAA-approved Airworthiness Limitations document, Boeing 737-100/200/200C/300/400/500 Airworthiness Limitations and Certification Maintenance Requirements, Document D6-38278-CMR, Revision May 2006 or later FAA-approved revision (see AD's 2008-10-09R1, Amendment 39-16148).

DATA PERTINENT TO MODELS 737 Original Series -100, -200, -200C and 737 Classic Series -300, -400, -500:

Airframe Limits Capacities & Rigging

Minimum Crew for All Flights: 2 (Pilot and Copilot)

Maximum Passengers: 113 (737-100 Series Airplanes), 124 if compliance with FAR 25.2(b), (c), & (d) at Amendment

25.20 is shown.

119 (737-200/200C Series Airplanes), 136 if compliance with FAR 25.2(b), (c), & (d) is shown.

149 (737-300 Series Airplanes)

188 (737-400 Series Airplanes), limited by FAR 25.803(c) 140 (737-500 Series Airplanes), limited by FAR 25.807(d)

Maximum Baggage Cargo: See appropriate Weight and Balance Manual, listed in Note 1.

Fuel & Oil Capacities: See appropriate Weight and Balance Manual, listed in Note 1.

Minimum Required Fuel: See appropriate FAA Approved Airplane Flight Manual listed in NOTE 2.

Maximum Operating

Altitude: 35,000 ft. 37,000 ft. if authorized by Flight Manual. (737-100 and 737-200 Series Airplanes).

37,000 ft. (737-300, 737-400, and 737-500 Series Airplanes)

Datum: The airplane reference origin of coordinates is a point located 540 inches forward of the center

section wing front spar centerline, at buttock line zero, (i.e., aircraft fore/aft centerline as viewed in

plane view) and at water line zero. (737-100 Series) All production body stations coincide

numerically with moment arms. Horizontal distance of datum to nose gear jack point is 286 inches for the 737-100 Series, 250 inches for the 737-200 Series, and 207.7 inches for the 737-300 Series,

135.7 inches for the 737-400 Series, 261.7 inches for the 737-500 Series.

MAC: 134.5 inches (L.E. of MAC is 625.59 inches aft of the aircraft datum).

Other Operating

Limitations: See FAA Approved Airplane Flight Manual Appendices listed In NOTE 2. See NOTE 12 of

Section II for 737-200 and Section III for 737-200C for autoland limitations.

DATA PERTINENT TO MODELS 737 Original Series -100, -200, -200C and 737 Classic Series -300, -400, -500 (Cont'd):

Control Surface Movements: To ensure proper operation of the airplane, the movements of the various control surfaces must be carefully controlled by proper rigging of the flight control systems. The airplanes must, therefore, be rigged according to the following FAA Approved data: Boeing Drawings No.

65-45101 Control Installation, Aileron Spoiler
65-45102 Control Installation, Elevator
65-45103 Control Installation, Rudder
65-45104 Control Installation, Stabilizer Trim
65-45105 Control Installation, Aileron Trim
65-45106 Control Installation, Rudder Trim
65-45116 Control Installation, Speed Brake

Certification Basis:

Type Certification Basis, (737-100 & 737-200 Series Airplanes).

14 CFR Part 25, Amendments 25-1 through 25-3, 25-7, 25-8, 25-15, 14 CFR §21, 14 CFR Part 1: and special conditions attached to FAA letter to Boeing dated October 15, 1965, and modified in letters dated December 23, 1966 and February 14, 1967,

Special Conditions:

25-89-NW-5, Special Conditions for the Boeing Models 737-200 Series Airplanes Automatic Takeoff Thrust Control System, published in the Federal Register on March 16, 1979

25-308-SC, Special Conditions: Boeing Model 737-200/200C/300/400/500/600/700/700C/800/900 Series Airplanes; Flammability Reduction Means (Fuel Tank Inerting) published in the Federal Register on December 5, 2005 (not applicable to 737-100)

25-632-SC, Special Conditions: The Boeing Company, Boeing Model 737-8 Airplane; Non-Rechargeable Lithium Battery Installations, published in the Federal Register on August 19, 2016 (contains applicability that extends across all 737 model series), Effective April 22, 2017

Equivalency safety findings exist with respect to the following regulations for Boeing 737-100 and 200 airplanes:

200 an planes.	
§25.811(f)	Exterior Exit Marking
§25.853(a)	Compartment Interiors (documented in TAD ELOS memo PS-08-0670-C-1)
§25.981(a)(3)	Equivalent Level of Safety (ELOS) Finding for Ground Fault Interrupter
	Relays on Boeing Models 707, 727, 737CL, 737NG, 747CL, 747-400, 747-8/-
	8F, 757, 767, and 777 (documented in TAD ELOS memo PS-05-0123-P-1)
§25.1415(d)	Emergency Locator Transmitter
§25.1441(c)	Crew Determination of the Quantity of Oxygen Available in the Lavatory
	Passenger Service Units Bottles (ES-1) (not applicable to 737-100)
§25.1443(c)	Determination of Minimum Oxygen Flow for the Lavatory Oxygen System
	(S-1) (not applicable to 737-100)

Exemptions from 14 CFR Part 25:

- \$25.1001 allow takeoff weight 115% of maximum landing weight (Exemption No. 575), (non-advanced airplanes only. See Note 8 of Section II provides information about advanced airplanes.)
- \$25.1203(a) allows deletion of fire detector system in the extended nacelle tailpipe section of the engines (Exemption No. 2072).
- \$25.901(c) Partial Exemption No single powerplant or auxiliary power unit failure will
 jeopardize the safe operation of the airplane. (Exemption No. 7968, February 4, 2003) See
 NOTE 16 of sections I thru VI for information about high thrust failure.
- §25.853(a), appendix F, paragraph (a)(1)(i) Partial Time-Limited Exemption from, Testing on Large Interior Panels, granted through November 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010, Exemption No. 9791C, February 4, 2011)

14 CFR Part 26

Based on 14 CFR §21.101(g) for changes made to TCs applicable provisions of 14 CFR Part 26 subpart B and subpart E 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

14 CFR Part 36 of the Federal Aviation Regulations.

Special Federal Aviation Regulation 27-5.

DATA PERTINENT TO MODELS 737 Original Series -100, -200, -200C and 737 Classic Series -300, -400, -500 (Cont'd):

Certification Basis(Cont'd):

Type Certification Basis, (737-300 Series Airplanes)

7, 25-8, and 25-15, except where superseded by the following sections of 14 CFR Part 25 as amended by Amendments 25-1 through: 25-11 (§ 25.939, 25.977, 25.1141); 25-16 (§ 25.1457); 25-17 (§ 25.813); 25-20 (§ 25.785); 25-23 (§ 25.701, 25.723, 25.729, 25.863, 25.1103, 25.1143, 25.1331, 25.1333, 25.1435); 25-31 (§ 25.1459); 25-32 (§ 25.787, 25.809, 25.811, 25.853, 25.1557); 25-36 (§ 25.1305(a), (c), (d)(1), and (d)(2)); 25-40 (§ 25.1585); 25-51 (§ 25.2, 25.101, 25.107, 25.111, 25.113, 25.143, 25.343, *25.571(a) and (b), 25.571(d), 25.581, 25.629, *25.671, *25.672, 25.677, 25.683, *25.699, 25.703, 25.735, 25.771, 25.772, 25.773, 25.789, 25.791, 25.803, 25.812, 25.855, 25.865, 25.903, 25.933, 25.934, 25.979, 25.993, 25.994, 25.1001, 25.1019, 25.1041, 25.1043, 25.1093, 25.1183, 25.1203, 25.1303, **25.1305(d)(3), 25.1307, *25.1309, 25.1325(a) through (f), 25.1326, 25.1351(d), 25.1359,

25.1387, 25.1413, 25.1415, 25.1419, 25.1447, 25.1450, 25.1561, 25.1581, 25.1583, 25.1587);

14 CFR Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-3, 25-

*Applicable only to new or major modified structure or to new systems and components unique to the 737-300 series airplane with respect to the existing Model 737-200 Series airplane. For unmodified areas of Power Operated Control Systems, the original amendment level of 14 CFR §25.695 remains in effect.

**Compliance with §25.1305(d)(3) has been mandated by the FAA in accordance with the provisions of 14 CFR § 21.101(b).

14 CFR Part 26:

25-53 (§25.1411).

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

Compliance has been found for the following regulations at Amendment 26-3: §26.33

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 27-5.

Special Conditions:

25-308-SC, Special Condition: Boeing Model 737-200/200C/300/400/500/600/700/700C/800/900 Series Airplanes; Flammability Reduction Means (Fuel Tank Inerting)

25-632-SC, Special Conditions: The Boeing Company, Boeing Model 737-8 Airplane; Non-Rechargeable Lithium Battery Installations, published in the Federal Register on August 19, 2016 (contains applicability that extends across all 737 model series), Effective April 22, 2017

Exemptions from 14 CFR Part 25:

§25.901(c) Partial Exemption – No single powerplant or auxiliary power unit failure will jeopardize the safe operation of the airplane. (Exemption No. 7968, February 4, 2003) See NOTE 16 of sections I thru VI for information about high thrust failure.

§25.853(a), appendix F, paragraph (a)(1)(i) – Partial Time-Limited Exemption from, Testing on Large Interior Panels, granted through November 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010, Exemption No. 9791C, February 4, 2011)

Equivalency safety findings exist with respect to the following regulations: For 737-300 only: \$25.723(a) Shock Absorption Tests \$25.791 Passenger Information Signs and Placards \$25.803(c)(8) Emergency Evacuation

DATA PERTINENT TO MODELS 737 Original Series -100, -200, -200C and 737 Classic Series -300, -400, -500 (Cont'd):

§25.809(f)(1)(ii) Escape Slides

§ 25.853(a) Compartment Interiors (documented in TAD ELOS memo PS-08-0670-C-1)

§25.853(c) Compartment Interiors

§25.811(e)(3) Emergency Handle Illumination

§25.812(b)(1)(i) Emergency Exit Signs

§25.1093(b)(1) Induction System Deicing and Anti-Icing provisions.

§25.811(f) Exterior Exit Markings

§25.981(a)(3) Equivalent Level of Safety (ELOS) Finding for Ground Fault Interrupter Relays on Boeing Models 707, 727, 737CL, 737NG, 747CL, 747-400, 747-8/-8F, 757, 767, and 777 (documented in TAD ELOS memo PS-05-0123-P-1)

§25.1415(d) Emergency Locator Transmitter (ELT)

§25.1441(c) Crew Determination of the Quantity of Oxygen Available in the Lavatory Passenger Service Units Bottles (ES-1)

§25.1443(c) Determination of Minimum Oxygen Flow for the Lavatory Oxygen System (S-1)

Type Certification Basis, (737-400 and 737-500 Series Airplanes)

14 CFR Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-3, 25-7, 25-8, and 25-15, except where superseded by the following sections of 14 CFR Part 25 as amended by Amendments 25-1 through:

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25-11 (§ 25.939, 25.977, 25.1141);
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25-16 (§ 25.1457);

25-17 (§ 25.813);

25-20 (§ 25.785);

25-23 (§ 25.701, 25.723, 25.729, 25.863, 25.1103, 25.1143, 25.1331, 25.1333, 25.1435);

25-31 (§ 25.1459);

25-32 (§ 25.787, 25.809, 25.811, 25.853, 25.1557);

25-33 (§ 25.772);

25-36 (§ 25.1305(a), (c), (d)(1), and (d)(2));

25-40 (§ 25.1585);

25-51 (§ 25.2, 25.101, 25.107, 25.111, 25.113, 25.143, 25.145, 25.147, 25.149, 25.177, 25.181, 25.201, 25.207, 25.233, 25.237, 25.253, 25.255, *25.305, 25.343, *25.571(a) and (b), 25.571(d), 25.581, 25.629, *25.671, *25.672, 25.677, 25.683, *25.699. 25.703, 25.735, 25.771, 25.773, 25.789, 25.791, 25.803, 25.812, 25.855, 25.865, 25.903, 25.933, 25.934, 25.979, 25.993, 25.994, 25.1001, 25.1019, 25.1041, 25.1093, 25.1183, 25.1203, 25.1303, **25.1305(d)(3), 25.1307, *25.1309, 25.1325(a) through (f), 25.1326, 25.1351(d), 25.1359, 25.1387, 25.1413, 25.1415, 25.1419, 25.1447, 25.1450, 25.1561, 25.1581, 25.1583, 25.1587);

25-53 (§25.1411).

*Applicable only to new or major modified structure or to new systems and components unique to the 737-400, and 737-500 series airplane with respect to the existing Model 737-200 Series airplane.

For unmodified areas of Power Operated Control Systems, the original amendment level of 14 CFR §25.695 remains in effect.

**Compliance with §25.1305(d)(3) has been mandated by the FAA in accordance with the provisions of 14 CFR §21.101(b).

14 CFR Part 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

Compliance has been found for the following regulations at Amendment 26-3: §26.33

14 CFR Part 36 of the Federal Aviation Regulations Amendments 36-1 through 36-15, effective May 6, 1988. 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 27-5.

DATA PERTINENT TO MODELS 737 Original Series -100, -200, -200C and 737 Classic Series -300, -400, -500 (Cont'd):

Special Conditions:

25-308-SC, Special Condition: Boeing Model 737-200/200C/300/400/500/600/700/700C/800/900 Series Airplanes; Flammability Reduction Means (Fuel Tank Inerting) published in the Federal Register on December 5, 2005

25-632-SC, Special Conditions: The Boeing Company, Boeing Model 737-8 Airplane; Non-Rechargeable Lithium Battery Installations, published in the Federal Register on August 19, 2016 (contains applicability that extends across all 737 model series), Effective April 22, 2017

Exemptions from 14 CFR Part 25:

§25.901(c) Partial Exemption – No single powerplant or auxiliary power unit failure will jeopardize the safe operation of the airplane. (Exemption No. 7968, February 4, 2003) See NOTE 16 of sections I thru VI for information about high thrust failure events.

§25.853(a), appendix F, paragraph (a)(1)(i) – Partial Time-Limited Exemption, Testing on Large Interior Panels, granted through November 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010, Exemption No. 9791C, February 4, 2011)

<u>Equivalent safety findings</u> exist with respect to the following regulations: For 737-100/-200/-200C/-300/-400/-500:

14 CFR §25.1415(d) Emergency Locator Transmitter

An <u>equivalent safety finding</u> exists, with respect to incorporation of Boeing Service Bulletin 737-28A1141, for the following regulation: For 737-200/-200C/-300/-400/-500:

14 CFR §25.901(c) Single Failures

<u>Equivalency safety findings</u> exist with respect to the following regulations: For 737-400 and 737-500 only:

- 14 CFR §1.2 Abbreviations and symbols
- 14 CFR §25.21 Proof of compliance
- 14 CFR §25.103 Stalling Speed
- 14 CFR §25.107 Takeoff Speeds
- 14 CFR §25.119 Landing Climb: All-engine- operating
- 14 CFR §25.121 Climb One engine-operative
- 14 CFR §25.125 Landing
- 14 CFR §25.145 Longitudinal Control
- 14 CFR §25.147 Directional and lateral control
- 14 CFR §25.149 Minimum Control Speed
- 14 CFR §25.161 Trim
- 14 CFR §25.175 Demonstration of static longitudinal stability
- 14 CFR §25.177 Static directional and lateral stability
- 14 CFR §25.201 Stall demonstration
- 14 CFR §25.207 Stall Warning
- 14 CFR §25.723(a) Shock Absorption Tests
- 14 CFR §25.735 Brakes
- 14 CFR §25.773 Pilot compartment view
- 14 CFR §25.803(c)(8) Emergency evacuation
- 14 CFR §25.809(f)(1)(ii) Escape slides
- 14 CFR §25.811(e)(3) Emergency handle illumination
- 14 CFR §25.811(f) Exterior Exit Markings
- 14 CFR §25.812(b)(1)(i) Emergency exit signs
- 14 CFR §25.853(a) Compartment Interiors (documented in TAD ELOS memo PS-08-0670-C-1)
- 14 CFR §25.981(a)(3) Equivalent Level of Safety (ELOS) Finding for Ground Fault Interrupter Relays on Boeing Models 707, 727, 737CL, 737NG, 747CL, 747-400, 747-8/-8F, 757, 767, and 777 (documented in TAD ELOS memo PS-05-0123-P-1)
- 14 CFR §25.1323 Airspeed indicating system
- 14 CFR §25.1325 Static pressure systems
- 14 CFR §25.1415(d) Emergency Locator Transmitter (ELT)
- 14 CFR §25.1441(c) Crew Determination of the Quantity of Oxygen Available in the Lavatory Passenger Service Units Bottles (ES-1)
- 14 CFR §25.1443(c) Determination of Minimum Oxygen Flow for the Lavatory Oxygen System (S-1)
- 14 CFR §36 Appendix C Use of the 1g Stall Speed instead of minimum speed in the stall as a basis for determining compliance.

DATA PERTINENT TO MODELS 737 Original Series -100, -200, -200C and 737 Classic Series -300, -400, -500 (cont'd):

Compliance with the following optional requirements has been established for all Models:

Ditching Provisions \$25.801 (Overwater operation can be approved when the

aircraft has been equipped and has been approved according to FAR 25.801. The 56-person life raft is not approved for use on 737-100/200/300/400 airplanes due to ditching evacuation capability).

Ice Protection Provisions §25.1419

Production Basis: Production Certificate No. 700

Required Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see

Certification Basis) must be installed in the aircraft for certification. The required equipment is

noted in the Type Design Data.

Service Information: Boeing Document D6-15565 (For 737-100/200), D6-37635 (For 737-300), D6-38246 (For 737-

400), D6-38441 (For 737-500), "Structural Repair Manual" is FAA-approved. Service Bulletins and other service information, when FAA-approved, will carry a statement to that effect.

C.G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

VII - Model 737-600 (Approved August 12, 1998), 737-700 (Approved November 7, 1997), 737-800 (Approved March 13, 1998), Transport Aircraft.

Engines: Two CFM International, S.A. CFM56-7B2x, -7B2x/2, -7B2x/3, or -7B2xE Series Turbofan Engines. Refer

to the FAA Approved Airplane Flight Manual for engine limitations. The CFM56-7B2x/2 series have double annular combustors and provide the same thrust as the CFM56-7B series engines at the respective engine ratings and are approved for all models. The CFM56-7B2x/3 series have single annular combustors and provide the same thrust as the CFM56-72xB series engines at the respective engine ratings. The CFM56-7B2xE series have single annular combustors and provide the same thrust as the CFM56-7B2x series engines

at the respective engine ratings. (Engine Type Certificate No. E00055EN or E00056EN)

Fuel: Fuels meeting the following specifications and mixtures thereof are approved for use:

* Jet A, Jet A-1 as specified in ASTM-D1655

* JP-5 as specified in MIL-T-5624

JP-8 as specified in MIL-T-83133

Fuels conforming to G.E. Specification D50TF2 (Class A, C, D and E) or fuels produced or certified to other specifications <u>and having properties meeting the requirements of the above specifications</u> are acceptable for use. Consult Flight Manual for additive use.

Engine Ratings:	Model 737-600	Takeoff static thrust standard day, sea level conditions (5 min) lb.	Maximum continuous static thrust, standard day, sea level conditions lb		
	CFM56-7B20	20,600	19,400		
	CFM56-7B20/2*	20,600	19,400		
	CFM56-7B20/3	20,600	19,400		
	CFM56-7B20E	20,600	19,400		
	CFM56-7B22	22,700	22,300		
	CFM56-7B22/2*	22,700	22,300		
	CFM56-7B22/3	22,700	22,300		
	CFM56-7B22E	22,700	22,300		

VII - 737-600, 700, -800 (Cont'd.)

Engine Ratings:	Model 737-700	Takeoff static thrust standard day, sea level conditions (5 min) lb.	Maximum continuous static thrust, standard day, sea level conditions lb			
	CEM56 7D24	* * * * * * * * * * * * * * * * * * * *				
	CFM56-7B24 CFM56-7B24/2*	24,200 24,200	22,800 22,800			
			*			
	CFM56-7B24/3	24,200	22,800			
	CFM56-7B24E	24,200	22,800			
	CFM56-7B24/B1**	24,200	22,800			
	CFM56-7B24/3B1**	24,200	22,800			
	CFM56-7B24E/B1**	24,200	22,800			
	CFM56-7B22	22,700	22,300			
	CFM56-7B22/2*	22,700	22,300			
	CFM56-7B22/3	22,700	22,300			
	CFM56-7B22E	22,700	22,300			
	CFM56-7B20	20,600	19,400			
	CFM56-7B20/2*	20,600	19,400			
	CFM56-7B20/3	20,600	19,400			
	CFM56-7B20E	20,600	19,400			
	CFM56-7B26	26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26/3	26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26E	26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26/3B2	26,300	22,800			
	CFM56-7B26E/B2	26,300	22,800			
	CFM56-7B26/3B2F	26,300	22,800			
	CFM56-7B26E/B2F	26,300	22,800			
	CFM56-7B26/3F	26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26E/F	26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26/2*	26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26/B2	26,300	22,800			
Engine Ratings:	Model 737-700 Increased Gross Weight (IGW)					
	CFM56-7B24	24,200	22,800			
	CFM56-7B24/2*	24,200	22,800			
	CFM56-7B24/3	24,200	22,800			
	CFM56-7B24E	24,200	22,800			
	CFM56-7B24/3B1**	24,200	22,800			
	CFM56-7B24E/B1**	24,200	22,800			
	CFM56-7B22	22,700	22,300			
	CFM56-7B22/2*	22,700	22,300			
	CFM56-7B22/3	22,700	22,300			
	CFM56-7B22E	22,700	22,300			
	CFM56-7B20	20,600	19,400			
	CFM56-70B20/2*	20,600	19,400			
	CFM56-7B20/3	20,600	19,400			
	CFM56-7B20E	20,600	19,400			
	CFM56-7B26	26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26/2*	*				
		26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26/3	26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26E	26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26/3F	26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26E/F	26,300	25,900, Limited to 22,800 by FMC			
	CFM56-7B26/B1#	26,300	25,900			
	CFM56-7B26E/B1#	26,300	25,900			
	CFM56-7B27A	27,300	25,900			
	CFM56-7B27/B3#	27,300	25,900			
	CFM56-7B27/3B3#	27,300	25,900			
	CFM56-7B27E/B3#	27,300	25,900			
	CFM56-7B27E	27,300	25,900			
	CFM56-7B27E/F	27,300	25,900			
	Please see Note 4 for lim	itations which may be applicable	e to the 737-700 IGW airplanes.			

Please see Note 4 for limitations which may be applicable to the 737-700 IGW airplanes.

VII 737-600, 700, -800 (Cont'd.)

Engine Ratings:	Model 737-800	Takeoff static thrust standard day, sea level conditions (5 min) lb.	Maximum continuous static thrust, standard day, sea level conditions lb
	CFM56-7B24	24,200	22,800
	CFM56-7B24/2*	24,200	22,800
	CFM56-7B24/3	24,200	22,800
	CFM56-7B24E	24,200	22,800
	CFM56-7B24/B1**	24,200	22,800
	CFM56-7B24/3B1**	24,200	22,800
	CFM56-7B24E/B1**	24,200	22,800
	CFM56-7B26	26,300	25,900
	CFM56-7B26/2*	26,300	25,900
	CFM56-7B26/3	26,300	25,900
	CFM56-7B26E	26,300	25,900
	CFM56-7B26/3F*	26,300	25,900
	CFM56-7B26E/F*	26,300	25,900
	CFM56-7B27	27,300	25,900
	CFM56-7B27/2*	27,300	25,900
	CFM56-7B27/3	27,300	25,900
	CFM56-7B27E	27,300	25,900
	CFM56-7B27/3F	27,300	25,900
	CFM56-7B27E/F	27,300	25,900
	CFM56-7B27/B1**	27,300	25,900
	CFM56-7B27/3B1**	27,300	25,900
	CFM56-7B27E/B1**	27,300	25,900
	CFM56-7B27/3B1F**	27,300	25,900
	CFM56-7B27E/B1F**	27,300	25,900
	CFM56-7B27/B3**#	27,300	25,900
	CFM56-7B27/3B3**#	27,300	25,900
	CFM56-7B27E/B3**#	27,300	25,900

^{**} Special Rating

Engine and Weight Limits

For engine operating limits see Engine Type Certificate Data Sheet No. E00055EN or E00056EN or the FAA Approved Airplane Flight Manual.

Thrust Settings: The appropriate engine power setting curve (%N1), in the FAA Approved Airplane Flight Manual or

AFM Appendices must be used for control of engine thrust.

Airspeed Limits: VMO/MMO - 340/0.82 (KCAS)

For other airspeed limits see the appropriate FAA Approved Airplane Flight Manual listed in Note 2

C. G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in Note 2

Maximum Weights: 737-600

Maximum Taxi Weight (MTW)146,000 lbs.Maximum Takeoff Weight (MTOW)145,500 lbs.Maximum Landing Weight (MLW)120,500 lbs.Maximum Zero Fuel Weight (MZFW)114,000 lbs.

Maximum Weights: 737-700

Maximum Taxi Weight (MTW)155,000 lbs.Maximum Takeoff Weight (MTOW)154,500 lbs.Maximum Landing Weight (MLW)129,200 lbs.Maximum Zero Fuel Weight (MZFW)121,700 lbs.

[#] Special Maintenance Provisions (BBJ applications only).

VII - 737-600, 700, -800 (Cont'd.)

737-700 Increased Gross Weight (IGW) Maximum Weights:

Please see Note 4 at the end of Section for limitations which may be applicable

to the 737-700 IGW airplanes Maximum Taxi Weight (MTW) 171,500 lbs. Maximum Takeoff Weight (MTOW) 171,000 lbs. Maximum Landing Weight (MLW) 134,000 lbs. Maximum Zero Fuel Weight (MZFW) 126,000 lbs.

737-700 Lower Cabin Altitude (LCA)\Increased Gross Weight (IGW) Maximum Weights:

Please see Note 8 and Note 4 at the end of Section for limitations which may be applicable

to the 737-700 LCA\IGW airplanes

171,500 lbs. Maximum Taxi Weight (MTW) Maximum Takeoff Weight (MTOW) 171,000 lbs. Maximum Landing Weight (MLW) 134,000 lbs. Maximum Zero Fuel Weight (MZFW) 126,000 lbs.

Maximum Weights: 737-800

> Maximum Taxi Weight (MTW) 174,900 lbs. Maximum Takeoff Weight (MTOW) 174,200 lbs. Maximum Landing Weight (MLW) 146,300 lbs. Maximum Zero Fuel Weight (MZFW) 138,300 lbs.

Maximum Weights: 737-800 Lower Cabin Altitude (LCA)

Please see Note 8 at the end Section 7 for additional information that is applicable

to the LCA airplanes

Maximum Taxi Weight (MTW) 174,900 lbs. Maximum Takeoff Weight (MTOW) 174,200 lbs. Maximum Landing Weight (MLW) 146,300 lbs. Maximum Zero Fuel Weight (MZFW) 138,300 lbs.

Eligible Serial Numbers

Eligible Serial Numbers: 737-600:

Model

737-683 28288-28313, 28322, 28605, 30189, 30190 737-6CT 34284-34289, 34621, 34633, 35111-35113, 35570, 35571

737-6D6 30209-30211, 30545, 30546

737-6H3 29496-29502

737-6Q8 28259-28261, 29348, 29349, 29353

737-6Z9 30137, 30138

737-66N 28649, 28650, 28652, 29890-29892

Eligible Serial Numbers: 737-700:

Mod	lel
737.	70

737-705	28211, 28217, 28222, 29089-29098
737-724	28762-28769, 28779, 28780, 28782-28787, 28789-28791, 28796-28800, 28803, 28936-28941, 28944,
	28945, 28948-28950
737-732	29633, 29634, 29645, 29648, 29656, 29665, 29679, 29683, 29687, 29688
737-752	28262, 29356, 29363, 30038, 32842, 33783-33793, 34293-34300, 35117, 35118, 35122-35124,
	35785-35787
737-758	29960, 29961
737-760	33764-33766
737-781	33872-33878, 33881-33885, 33888-33900, 33916
737-783	28314-28317, 30191, 30192, 30471, 32276, 34548, 34549
737-790	29751-29753, 30162-30166, 30343, 30344, 30542, 30543, 30626, 30662, 30663, 30778, 30792-30795,
	, , , , , , , , , , , , , , , , , , , ,

33011, 33012

737-7B6 28982, 28984-28986, 28988, 33062

737-7C9 33802, 33803, 33956

27835-27897, 29275-29279, 29490, 29491, 29798-29856, 30544, 30587-30592, 30601-30606, 30677, 737-7H4

> 32452-32459, 32460-32545, 33658, 33659, 33715, 33716, 33720, 33721, 33829-33832, 33841, 33852-33861, 33866-33869, 33988-33990, 33998, 33999, 34010-34012, 34162, 34163, 34217, 34232, 34259, 34290, 34333, 34450, 34592, 34630-34632, 34713, 34714, 34863, 34864, 34951, 34972, 34973,

> 35554, 36153, 36640-36442, 36528, 36610-36633, 36636, 36637, 36639, 36641, 36643-36648, 36659, 36660, 36662-36665, 36667-36669, 36671-36677, 36679, 36887-36890, 39843, 36900, 36913, 36918,

36924, 36962, 36963, 36965-36967, 41528, 41777

VII - 737-600, 700	<u>0, -800 (Cont'd.)</u>
737-7K2	28256, 29347, 30659, 30364-30367, 30369, 30371, 30668, 30784, 33462-33465, 34170, 38053, 38054, 38125-38128, 38634, 38635, 39255, 39256, 39257, 39446
737-7K5	30714, 30717, 30726, 34693, 35135, 35136, 35140, 35141, 35144, 35150, 35277, 35282
737-7K9	28088-28091, 30041, 30042, 34320, 34321, 34401, 34402
737-7L9	28004-28015
737-7M2	34559-34562
737-7Q8	28209, 28210, 28212, 28216, 28219, 28223, 28224, 28238, 28240, 28250, 28254, 29346, 29350, 29352,
	29354, 29355, 29359, 30037, 30629, 30630, 30633, 30635, 30638, 30641, 30642, 30644, 30647-30649, 30674, 30687, 30707, 30710, 30727
737-7U8	32371, 32372
737-7V3	28607, 29360, 30049, 30458-30464, 30497, 30676, 33705-33708, 34535, 34536
737-7W0	29912, 29913, 30074, 30075
737-7X2	28878
737-7 Z 9	30418, 30419
737-71B	29366, 29367, 29370-29372, 32933-32940, 35337, 35360-35364, 35368, 35372, 35378, 35382-35384,
	38912, 38914, 38917-38920, 38925, 38962
737-71M	33103
737-71Q	29043-29048
737-72K	37235, 37237
737-73A	28497-28500
737-73S	29076-29083
737-73V	30235-30249, 32412-32428
737-74P	39198, 39210-39212
737-75B	28099-28110
737-75C	28258, 29042, 29084-29086, 30034, 30512, 30513, 30634, 30656, 34024-34028, 38381, 38383-38385
737-75N	33654, 33663, 33666
737-75R	30404-30406, 30411, 34805, 34806
737-76D	30167, 30168, 33470, 33472, 35778, 35779, 39303, 39305, 39313, 39315
737-76J	36114-36118, 36873, 36874
737-76N	28577, 28580, 28582-28585, 28609, 28613, 28630, 28635, 28640, 28641, 28651, 28654, 29885, 29886, 29893, 29904, 29905, 30050, 30051, 30133-30136, 30830, 32244, 32404, 32404, 32574, 32581-32583, 32596, 32652-32654, 32656, 32657, 32660-32662, 32664-32668, 32670, 32671, 32673-32681, 32684, 32695, 32696, 32731, 32734, 32737, 32738, 32741, 32743, 32744, 32881, 32883, 33005, 33378-33380, 33417, 33418, 33420, 34753-34758, 35218
737-76Q	30271, 30273, 30275, 30277, 30279, 30280, 30282, 30283, 30288, 30293
737-77L	32722
737-78J	28438-28440, 28442
737-78S	30169-30171
737-79K	29190, 29191
737-79L	33408-33413, 34019-34023, 34537-34543, 41091-41093
737-79P	28253, 28255, 29357, 29358, 29361, 29362, 29364, 29365, 30035, 30036, 30651, 30657, 33008, 33009, 33037-33046, 36269-36271, 36757-36760, 36762, 36764, 36766-36768, 36770, 36772, 37423, 39308, 39310, 39719-39721, 39723, 39725, 39729, 39731, 39733, 39735, 39737, 39739, 39741, 39743, 39745, 39747
737-7AD	28436, 28437
737-7AX	30181, 30182, 30183
737-7BD	33917-33936, 33938, 33943, 33944, 34479, 34480, 34861, 34862, 35109, 35110, 35788, 35789, 35962, 36073, 36091, 36399, 36716-36721, 36724-36726
737-7BK	30617, 33015, 33025, 33026
737-7BX	30736-30746
737-7CT	30712, 30713, 32747-32769, 32771, 32772, 33656, 33657, 33697, 33698, 33969, 33970, 34155-34157, 35078, 35084, 35086, 35503-35505, 35985, 36420-36422, 36442, 36689, 36691, 36693, 37088-37091, 37421, 37423, 37955, 37956, 38096, 40338
737-7EA	32406, 32407
737-7EE	34263
737-7EH	37595, 37608, 37609
737-7ES	35327, 35328737-7FE 34322, 34323
737-7GL	34759-34762, 37233, 37234, 37236
	35954, 35956
737-7HB	33/34, 33/30

VII - 737-600, 700, -800 (Cont'd.)

Eligible Serial Numbers: 737-700 Increased Gross Weight (IGW):

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737-7ME
                     60460, 60461, 60462
 737-781
                     33879, 33880
 737-72T
                     29024
 737-72U
                     29273
 737-73Q
                     29102, 30789
 737-73U
                     29200
 737-74P
                     39199-39201, 39212
 737-74O
                     29135, 29136
 737-74U
                     29233
 737-74V
                     29272
 737-75T
                     29142
 737-75U
                     28976
 737-75V
                     28579, 28581
 737-76N
                     38028
 737-79P
                     39727, 39310
                     29317
 737-79T
 737-7AJ
                     33499
 737-7AK
                     29865, 29866, 30752, 34303
                     29972
 737-7AN
 737-7AV
                     30070
 737-7AW
                     30031
 737-7BC
                     30327, 30329, 30330, 30572, 30756, 30791, 30884, 32575, 32628, 32970, 33036, 33102, 33434
 737-7BF
                     30496
                     29791
 737-7BH
                     30076
 737-7BJ
 737-7BQ
                     30547
 737-7CG
                     30751
 737-7CJ
                     30754
 737-7CP
                     30753, 30755
 737-7CU
                     30772
 737-7DF
                     30790
 737-7DM
                     29971, 32916, 33080, 34807, 34808, 34809, 407066
 737-7DP
                     32805
 737-7DT
                     30829
 737-7ED
                     32627
 737-7EG
                     32807
 737-7EJ
                     32774
 737-7EM
                     34865
 737-7EO
                     29251
                     33542, 33962-33965, 33474, 33476, 33477, 33986, 33987, 34700, 35329
 737-7ES
 737-7ET
                     33010
 737-7FB
                     33367
                     33500
 737-7FD
                     33405
 737-7FG
 737-7HD
                     35959
 737-7HF
                     35977
 737-7JF
                     37592
 737-7H3
                     29149
 737-7H6
                     29274
                     34260
 737-7N6
 737-7P3
                     29188
 737-7Z5
                     29268, 29269, 29857, 29858
 737-7ZF
                     60406
 737-700 (IGW)
                     Reserved for new serial numbers after Line Number 6000
Eligible Serial Numbers: 737-700 IGW with LCA Installation (See Note 8):
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<u>Model</u>	
737-73Q	30789
737-73T	29054
737-73W	38633, 40116, 40117
737-74T	29139
737-75G	36852
737-77W	62467, 62468
737-77Z	62699

VII - 737-600, 700, -800 (Cont'd.)		
	44000	
737-79L	41090	
737-79U	29441	
737-79V	61040	
737-7AH	29749	
737-7AU	34477	
737-7B5	37660	
737-7BC	30328, 30782	
737-7EG	35990, 40586	
737-7EI	34683	
737-7EL	32775	
737-7FY	36493	
737-7GC	34622	
737-7GE	41375	
737-7GJ	41658	
737-7GV	36090	
737-7HD	35959	
737-7HE	36027	
737-7HI	36106, 36107, 36108	
737-7HZ	37583, 40761	
737-7JB	36714	
737-7JF	37592	
737-7JR	37111	
737-7JU	38855	
737-7JV	38854	
737-7JW	38408	
737-7JY	39109	
737-7JZ	37700	
737-7KK	38608	
737-7ZF	60406	
737-7LT	39095	
737-7ZH	38751	
737-7ZW	43826	
737-7ZX	40119	
737-700 (IGW, LCA)	Reserved for new serial numbers after Line	
. , ,	J	

Number 6000

Eligible Serial Numbers: 737-800:

Model	
737-804	28227, 28229, 28231, 30465, 30466, 32903, 32904
737-808	34967, 34701-34710, 34968-34971
737-809	28236, 28402-28407, 29103-29106, 30173-30175, 30636, 30664
737-823	29503-29550, 29554-29573, 29574-29577, 30077-30100, 30598-30600, 30828, 30858, 30903-30908,
	30910, 30912, 30914, 30916, 30918, 30920, 31067, 31069, 31071, 31073, 31075, 31077, 31079, 31081,
	31083, 31085, 31087, 31089, 31091, 31093, 31095, 31097, 31099, 31101, 31103, 31105, 31107, 31109,
	31111, 31127, 31129, 31131, 31133, 31135, 31137, 31139, 31141, 31143, 31145, 31147, 31149, 31151,
	31153-31161, 31163, 31165, 31167, 31169, 31171-31173, 31176-31178, 31185, 31189, 31190, 31192,
	31194, 31196, 31197, 31199, 31200, 31202, 31203, 31205, 31208, 31210, 31214, 31215, 31217, 31218,
	31219, 31225, 31226, 31228, 31229, 31230, 31231, , 31233, 31234, 31236, 31237, 31241, 31242, 31244,
	31245, 31248, 33203, 33205-33214, 33219-33234, 33239, 33240, 33241, 33243, 33247, 33248, 33250,
	33314-33319, 33321-33323, 33327-33331, 33334, 33337, 33338, 33340, 33416, 33487-33492, 33518-
	33521, 40579, 40580-40584, 40762-40769
737-824	28770-28778, 28781, 28788, 28792-28795, 28801, 28802, 28804-28809, 28929-28935, 28942, 28943,
	28946, 28947, 28951-28958, 30132, 30429, 30576-30584, 30610-30613, 30779, 30802, 30803, 30855,
	31582, 31604-31607, 31621, 31623, 31626, 31628, 31632, 31634-31639, 31642, 31652, 31658-31660,
	31662, 31663, 32402, 32403, 32828, 32832, 32834, 33451-33455, 33458, 33459, 33461, 34000-34005,
	37096, 37101, 38700, 38701, 39998, 39999, 62748, 62749, 62750, 62751, 62766
737-832	29619-29632, 30265, 30266, 30345-30350, 30373-30382, 30487-30493, 30536-30541, 30560-30562,
	30773-30776, 30799, 30800, 30813-30823, 30825, 30835-30837, 32373-32375, 32626
737-838	29551-29553, 30101, 30734, 30897, 30899, 30901, 33478-33485, 33722-33725, 33760-33763, 33991-
	33995, 34180-34187, 3418834204, 39357-39359, 39360-39372, 39445, 44573-44577
737-844	32631-32635
737-846	35330-35359, 39190-39194, 40346-40356, 40947, 40948, 40950, 40954

VII - 737-600, 700, -800 (Cont'd.) 737-852 35114-35116, 35119-35121, 36699-36708, 39944, 39945, 39957, 39958, 43657, 43659, 43661, 43665 737-858 29957-29959 737-860 39442, 40961-40967, 40968, 40969, 40970 737-866 35558-35569, 40757-40760, 40800-40803 737-881 33886, 33887, 33890-33899, 33901 -33909, 33910-33915, 35279, 44556-44558, 44559, 62637, 62638, 62639, 62640, 62641 737-883 28318-28321, 28323-28328, 28390, 30193-30197, 30467-30470, 32277, 32278, 34546, 34547 737-890 30020, 30022, 34593-34595, 35091, 35103, 35107, 35175-35203, 35204, 35681, 35682, 35684-35695, 36346, 36481, 36482, 36578, 39043, 39044, 41188 737-81B 30697, 30699, 30708, 30709, 32921-32932, 33006, 34248, 34250, 34252, 35365-35367, 35369-35371, 35373-35376, 35379, 35380, 35381, 35385-35389, 35683, 38913, 38915, 38916, 38918, 38920, 38921-38924, 38926-38961, 38963-38966, 41302, 41303, 41315-41317, 41319, 41320, 41326, 41327, 41328, 41333, 41334, 41606, 41609, 41610, 41611, 41612, 41613, 41614, 43889, 43890, 44386, 44388 737-81D 39412-39418, 39421, 39422, 39425, 39426, 39429, 39431-39433, 39436-39441 737-81M 30721, 33104, 34242, 35108, 35272, 35284, 35287, 37161, 40066, 40067, 40068, 44421, 44422, 44423, 60391, 60392 29049-29052, 30618, 30619, 30785-30787 737-81Q 40076-40078, 40079, 40080, 40081, 40082, 40087, 40089, 40090, 40104, 40105, 737-81Z 737-82K 35699, 36088, 36089, 39774, 39775, 43863, 61573 737-82R 29329, 29344, 30658, 30666, 35699, 35700-35702, 35983, 35984, 38173-38178, 40009-40012,, 40013, 40014, 40696, 40697, 40720, 40721, 40722-40724, 40725-40728, 40871-40881 737-82Y 40712, 40713 737-83N 28239, 28243-28247, 28249, 28648, 28653, 30023, 30033, 30640, 30643, 30660, 30673, 30675, 30679, 30706, 31189, 32348, 32576-32580, 32609-32616, 32663, 32882, 32884 737-83Z 42156, 42157, 61268, 61269, 61270, 61271, 61272 737-84P 29947, 30474, 30475, 32599-32608, 34029-34034, 35072, 35074, 35076, 35077, 35274, 35276, 35285, 35747-35749, 35750-35755, 35756, 35760-35766, 36779-36783, 36697, 37422, 37425, 37953, 38143-38157, 39195-39197, 39202-39209, 39213-39218, 39219, 39220, 39223, 39224, 39961, 39962, 39963, 41376, 41377, 41378, 41379, 41381, 41382, 41383, 41384, 41385, 41386, 41387, 41388, 41389, 41568, 41569, 41570, 41591, 41809, 41811, 43658, 43660, 43663, 61321, 61322, 61323, 61324 737-84R 38119, 38120 737-84Y 40892, 40893 737-85C 30723, 35044-35058, 37148, 37149-37153, 37574-37579, 38380, 38382, 38386-38404, 39330, 39331,39335, 39900, 39901-39907, 39908, 39909, 39910, 39911, 39912, 39913, 39914, 39915, 39916. 39917, 39918, 39919, 39930, 39931, 40957, 40958, 40959, 40960, 41391, 41392, 41393, 41394, 41395, 41396, 41790-41793, , 42925, 42926, 42927, 42928, 42929, 42930, 42931, 43885, 43886, 43887 737-85F 28821-28830, 30006, 30007, 30476-30478, 30567-30569, 30571 737-85H 29444, 29445 737-85N 33660, 33661, 33664, 33665, 36190-36195, 36773-36778, 38637-38642, 38883, 39110-39115, 39125-39127, 39128, 39329, 39330, 39332, 39935, 39937, 39969, 40882, 40883, 41615-41619, 41620, 41621, 41622, 41623, 41624, 41625, 41626, 41627, 41628, 41629, 42154, 44916, 44918, 44925, 44928, 61316, 61317, 61425, 61426, 61427 28381-28388, 28535, 28536, 33971-33982, 35485-35487, 35493, 35496, 35706-35708, 36584, 36588, 737-85P 36589, 36591-36595, 60584, 60585 737-85R 29036-29041, 30403, 30407-30410, 34797-34804, 35082, 35083, 35099, 35106, 35289, 35651, 36551, 36553, 36694, 36695, 36698, 39069, 39070, 42799, 42800, 42804, 42805 33471, 35767-35771-35776, 37906-37908, 38059, 38060 39302, 39304, 39306, 39307, 39309, 39311, 737-86D 39312, 39314, 39316, 41493, 41501 737-86J 28068-28073, 29120, 29121, 29641, 30062, 30063, 30498-30501, 30570, 30827, 30876-30881, 32624, 32625, 32917-32920, 36119-36122, 36821, 36825, 36872, 36875, 36877-36881, 36883, 36884, 36886, 37740-37743, 37744, 37745-37749, 37750, 37752-37758, 37760, 37761, 37766-37769, 37770, 37772-37774, 37778-37782, 37785, 37786, 37794, 39383, 39384, 39387 737-86N 28574-28576, 28587, 28591, 28592, 28595, 28608, 28610, 28612, 28614-28622, 28624-28626, 28628, 28636, 28638, 28639, 28642-28645, 28647, 28655, 29883, 29884, 29887-29889, 30230, 30231, 30806, 30807, 32243, 32655, 32658, 32659, 32669, 32672, 32682, 32683, 32685 - 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VII - 737-600, 700, -800 (Cont'd.) 27977-27984, 27989-27992, 27985-27988, 28228, 28623, 30413-30417, 30593, 30783, 30882, 30883, 737-8K5 32905-32907, 34684-34692, 35100, 35131-35139, 35142, 35143, 35145-35149, 37156, 37238-37255, 37257-37263, 37264-37267, 38097, 38107, 38108, 38820, 39093, 39094, 39922, 39923, 40943, 40944, 41660, 41661, 41662, 41663, 41664, 44271, 44272 737-8K9 34399, 34400 737-8Q3 61475, 61476 737-8Q8 28056, 28213-28215, 28218, 28220, 28221, 28225, 28226, 28230, 28232-28235, 28237, 28241, 28242, 28251, 28252, 29351, 29368, 29369, 29373, 29374, 30032, 30039, 30040, 30332, 30627, 30628, 30631, 30632, 30637, 30639, 30645, 30652, 30654, 30661, 30665, 30667, 30669-30672, 30680, 30683-30686, 30688, 30689, 30690, 30692-30696, 30698, 30700-30705, 30711, 30715, 30716, 30718-30720, 30722, 30724, 30725, 30728, 30730, 30733, 32796-32799, 32801, 32841, 33007, 33699, 35268, 35271, 35273, 35275, 35278-35281, 35283, 35286, 35290, 37159, 37162, 37163, 38819, 38822-38826, 38827, 41786-41789, 41795, 41802, 41803, 41804, 41805, 41807, 41808, 41810 737-8S3 29246-29250 737-8U3 29666, 30140-30151, 30155-30157, 31763, 36436, 36850, 38069-38074, 38821, 38884, 38885, 39891, 39920, 39928, 39929, 39936, 39939, 39954, 39955, 40547, 40807, 41310, 41312, 41322, 41605, 41607, 41794, 41796, 41798, 41800, 41806, 41812, 41815 29667, 29670, 33709, 33710, 34006, 35067, 35068, 35125-35127, 36550, 36554, 37957-37959, 38100, 737-8V3 38102, 38139-38142, 38879, 38882, 39884, 39885, 39965, 39967, 39968, 40361, 40362, 40663-40666, 40778 - 40785, 40786, 40787, 40788 - 40790, 40890, 40891, 41088, 41089, 41445, 41446, 41447, 41448, 4147, 41448, 41488, 41488, 41888, 41888, 41888, 418888, 418888, 418888, 418888, 418888, 418888, 418888, 418888, 418888, 418888, 418888, 418888, 441449, 41454, 44153, 44155, 44156 737-8X2 29968, 29969 737-8Z0 30071, 30072, 30073 737-8Z6 35478, 62445 737-8Z9 28177, 28178, 30420, 30421, 33833, 33834, 34262 737-800 31250, 31253, 31255, 33341, 33342, 33343, 36666, 36670, 36925, 36943, 36944, 36975, 36976, 38314, 38316, 38318, 38812, 38813, 38814, 38816, 40833, 40840, 40841, 40971, 41225, 41228, 41380, 41390, 41481, 41495, 41497, 41498, 41499, 41500, 41502, 41503, 41530, 41531, 42057, 42059, 42056, 42082, 42158, 42159, 42160, 42161, 42271, 42272, 42286, 42932, 42933, 42934, 42935, 42970, 43416, 43417, 43418, 43419, 43888, 43891, 43892, 43893, 43894, 44233, 44387, 44746, 44749, 44750, 44751, 44752, 44753, 44754, 44755, 44756, 44757, 44758, 44759, 44760, 60029, 60089, 60156, 60157, 60158, 60166, 60393, 60394, 60491, 60492, 60493, 60691, 60698, 60699, 60752, 60753, 60754, 60855, 60857, 60859, 60861, 60956, 60957, 60958, 60959, 60960, 60961, 61120, 61273, 61274, 61297, 61325, 61326, 61351, 61352, 61353, 61354, 61355, 61356, 61401, 61422, 61423, 61428, 61429, 61430, 61431, 61684, 61685, 61694, 61695, 61772, 61773, 61775, 61794, 61796, 62689, 62767, 63145, 63146, 63147, 63148, 63324, 63325, 63568, 63569, 63570, 63593, 63594, 63692, 63694

Eligible Serial Numbers: 737-800 with LCA Installation (See NOTE 8)

Model	
737-82Z	60686
737-8GQ	35792
737-8JM	37663
737-8KB	37545
737-8KT	40118
737-8LX	39899
737-8LZ	42510
737-8U3	41706
737-8ZE	42215

737-800 with LCA Reserved for new serial numbers after Line Number 6000

VII - 737-600, 700, -800 (Cont'd.)

Airframe Limits and Capacities

Minimum Crew

For All Flights: 2 (Pilot and Copilot)

Maximum

Passengers: 737-700 737-800 737-600 149 189 149

32

Maximum Baggage

Cargo: See appropriate Weight and Balance Manual listed in Note 1.

Fuel & Oil

Capacities: See appropriate Weight and Balance Manual listed in Note 1.

Minimum Required

Fuel: See appropriate FAA Approved Airplane Flight Manual listed in Note 2

Maximum Operating

Altitude: 41,000 ft.

Datum: See appropriate Weight and Balance Manual listed in Note 1.

MAC: 155.81 in

Other Operating

Limitations: See FAA Approved Airplane Flight Manual Appendices

Control Surface

Movements: To ensure proper operation of the airplane, the movements of the various control surfaces must be

carefully controlled by proper rigging of the flight control systems. The airplanes, must, therefore, be

rigged according to the following FAA Approved data:

Boeing Drawing Numbers:

114A1001, Krueger Flap Instl - Inbd Wing L.E.

251A1001, Rigging Instructions, Lateral & Speedbrake Control 251A2001, Rigging Instructions, Elevator Control System 251A3001, Rigging Instructions, Rudder Control System 251A4001, Rigging Instructions, Stabilizer Trim Control 256A3001, Rigging Instructions - Flap Actuation

256A2284, Flap.Slat Sensor Instl - Leading Edge, Wing

VII - 737-600, 700, -800 (Cont'd.)

Certification Basis:

A. <u>14 CFR Part 25</u> of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-77 with the exceptions listed below:

SECTION NO.	<u>TITLE</u>	AT AMDT. 25
25.365	Pressurized Compartment Loads	0****
25.561	Emergency Landing Conditions-General	0
25.562	Emergency Landing Dynamic Conditions	64*
25.571	Damage-Tolerance and Fatigue Evaluation	0, 77**
	of Structure (Structural Design)	
25.607	Fasteners	0, 77**
25.631	Bird Strike Damage	0, 77**
25.699	Lift and Drag Device Indicator	0, 77**
25.775	Windshields and Windows	0
25.783(f)	Doors	15, 77**
25.807(c)(3)	Emergency Exits	15
25.813	Emergency Exit Access	45, 77**
25.832	Cabin Ozone Concentration	0***
25.1141	Powerplant Controls: General	11****
25.1309	Equipment, Systems and Installations	0, 77**
25.1419(c)	Ice Protection	23, 77**

- * Flight attendant seats are qualified to Technical Standard Order C127, dated March 30, 1992, or qualified to TSO C127a, and
 - a) Head Injury Criteria data collected and reported by TSO applicant is less than 1000, and
 - b) Femur Injury Criteria data collected and reported by TSO applicant is less than 2250 pounds, and
 - c) Permanent deformation data collected and reported by TSO applicant are in compliance with the requirements of FAA Advisory Circular (AC) 25.562-1A.
- * Passenger and crew seats in the flight deck comply with § 25.562(a),(b),((c)(1),(2),(3),(4),(7), and (8)). In addition flight deck observer seats comply with § 25.562((c)(5)). Medical stretchers used to transport non-ambulatory occupants are not required to comply with § 25.562.
- ** Applicable to new and significantly modified structure and systems and portions of the airplane affected by these changes. Where two amendment levels are shown for the same paragraph, the number without the asterisk (*) applies to structures, systems and portions of the airplane which are not new or significantly modified. The structure, systems, and components which comply with the later amendment will be identified in Boeing document D010A001, approved by the FAA and JAA, and referenced on the TCDS.
- *** Boeing provides FAA approved data (Document number D6-49779) to 737 operators to enable the operators to show ozone compliance per §121.578 for their specific route structures.
- **** Exception applies to Auxiliary Power Unit spar mounted fuel shut off valve only. All other power plant controls were shown to comply with § 25.1141 at amendment 25-77.
- ***** For 737-800 airplanes configured with a flat aft pressure bulkhead, the airplane is also designed to withstand the effects of a sudden release of pressure venting aft through any 820 square inch opening in that bulkhead at any operating altitude.

Amendment level "0" is the original published version of Part 25 (February 1, 1965).

The certification basis for the following regulations at amendment levels later than 25-77.

SECTION NO.	<u>TITLE</u>	AT AMDT. 25-
25.143(c),(d),(e),(f)	General, Controllability & Maneuverability	84
25.145(b),(c)(1)	Longitudinal Control	84
25.149(f),(h)	Minimum Control Speed	84
25.203(c)	Stall Characteristics	84
25.253(b)	High-Speed Characteristics	84
25.305(d)	Strength and Deformation	86
25.321(c),(d)	Flight Loads - General	86
25.331(a),(d)	Flight Maneuver and	86
	Gust Conditions - General	
25.333(a),(c)	Flight Envelope	86
25.341	Gust Loads	86
25.343(b)	Design Fuel and Oil Loads	86
25.345(a),(c)	High lift Devices	86
25.349	Rolling Conditions	86
25.351	Yawing Conditions	86

VII. 737-600, 700, -800 (Cont'd.)

25.371	Gyroscopic Loads	86
25.373(a)	Speed Control Devices	86
25.391	Control Surface Loads:general	86
25.427	Unsymmetrical Loads	86
25.519	Jacking and Tie-down Provisions	81
25.571(b)	Damage Tolerance and Fatigue Evaluation	86**(Note ** above)
	of Structure (Loads)	
25.733	Use of Inert Gas for Tire Inflation	78
25.811(e)	Emergency Handle Illumination	79
25.981(b)(d)	Fuel Tank Ignition Prevention	125
	(for Flammability Reduction System)	
25.1316	Lightning Protection Requirements	80
25.1415(d)	Ditching Equipment (ELT)	82
25.1517	Rough Air Speed V _{RA}	86

14 CFR Part 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:

SECTION	NO. <u>TITLE</u>	AT AMDT. 26-
26.11	Electrical wiring interconnection systems (EWIS) maintenance program.	0
26.21	Limit of Validity	5
26.33	Holders of type certificates: Fuel tank flammability.	3
26.39	Newly produced airplanes: Fuel tank flammability	3
26.43	Holders of and applicants for type certificates – Repairs	1
26.45	Holders of type certificates - Alterations and repairs to alterations	1
26.47	Holders of and applicants for a supplemental type certificate – Alterations	1
	And repairs to alterations	
26.49	Compliance plan	1

In addition to the airworthiness standards, the type-certification basis for these derivative airplanes includes compliance with the emissions standards of Part 34 as amended by any amendments effective at the time of certification

<u>14 CFR Part 36</u> as amended by amendment 36-20 or any subsequent amendment effective at the time of certification. See the appropriate FAA Approved Airplane Flight Manual listed in Note (2) for applicability of Stage 4 Noise Recertification through Amendment 36-28.

Special Conditions:

Special Conditions were proposed, in accordance with §21.16. The Special Conditions for the following subjects were issued in Renton, Washington, September 17, 1997. Their effectivity was the same day as issuance:

- 25-ANM-132, published in the Federal Register on September 17, 1997 for 737-600/-700/-800 airplanes and applicable to later amendments of the 737 model that incorporate the same novel or unusual design feature:
 - 1. High Intensity Radiated Fields
 - 2. Limit Engine Torque Loads for Sudden Engine Stoppage
- 25-308-SC, Boeing Model 737-200/200C/300/400/500/600/700/700C/800/900 Series Airplanes; Flammability Reduction Means (Fuel Tank Inerting) published in the Federal Register on December 5, 2005
- 25-358-SC, published in the Federal Register on June 29, 2007 addressed 737-600/-700/-700C/-800/-900 and -900ER series airplanes regarding seats with non-traditional, large, non-metallic panels
- $25\text{-}386\text{-}SC, published in the Federal Register on August 7, 2009, addressed 737\text{-}600/\text{-}700/\text{-}700C/\text{-}800/ and 900ER series airplanes with inflatable lapbelts installed}$
- 25-404-SC, published in the Federal Register on April 12, 2010, Modification to Boeing Model 737-600/-700C/-800/-900 and -900ER Series Airplanes: Rechargeable Lithium Batteries and Rechargeable Lithium-Battery Systems
- 25-550-SC, published in the Federal Register on June 6, 2014, Airplane Electronic Systems Security Protection from Unauthorized External Access
- 25-551-SC, published in the Federal Register on June 6, 2014, Isolation [of] Airplane Electronic System Security Protection from Unauthorized Internal Access
- 25-632-SC, Special Conditions: The Boeing Company, Boeing Model 737-8 Airplane; Non-Rechargeable Lithium Battery Installations, published in the Federal Register on August 19, 2016 (contains applicability that extends across all 737 model series), Effective April 22, 2017

VII. 737-600, 700, -800 (Cont'd.)

Equivalent Safety Findings:

The Equivalent Safety Findings were proposed in accordance with § 21.21. The following have been identified as equivalent safety findings (specifications and restrictions of its content, such as production winglet installation, must be met before an issue paper is considered to apply to any specific configuration of a model series):

SECTION NO.	TITLE	ELOS No.
§1.2	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.21(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.101(i)	Rejected Takeoff Performance	AT0328SE-T-F-4
§25.103	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.105(c)(1)	Rejected Takeoff Performance	AT0328SE-T-F-4
§25.107	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.109	Rejected Takeoff Performance	AT0328SE-T-F-4
§25.111(a)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.113	Rejected Takeoff Performance	AT0328SE-T-F-4
§25.115(a)	Rejected Takeoff Performance	AT0328SE-T-F-4
§25.119(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.121(c)(d)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.125(a)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.143(g)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.145(a)(b)(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.147(a)(c)(d)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.149(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.161(b)(c)(d)(e)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.175(a)(b)(c)(d)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.177(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.181(a)(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.201(a)(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.207(b)(c)(d)(e)(f)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.231(a)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.233(a)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.237(a)(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.251(b)	Vibration/Buffeting Compliance Criteria, Ku-Band External Antenna	PS14-0725-F-1
825 205()	Installed on Boeing Model 737-800 and 737-900ER Series Aircraft.	A TO 220 CE TE A 7
§25.395(a)	Lateral Control System Load Factors	AT0328SE-T-A-5
§25.613	Material Design Values	AT3907SE-T-A-15
§25.733	Return Landing Capability	AT0328SE-T-F-3
§25.735(f)(g)(h)	Rejected Takeoff Performance	AT0328SE-T-F-4
§25.735	Return Landing Capability Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-3 AT0328SE-T-F-1
§25.735(f)(g) §25.773(b)	Use of 1-g Stall Speed Instead of Minimum Speed Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.773(b) §25.791	"No Smoking" limitation in the Passenger Compartment	AT0328SE-T-C-5
§25.810 (a)(1)(ii)	Escape Slides	AT0328SE-T-C-4
\$25.811(f)	Exterior Exit Markings	TD2695SE-T-C-1
§25.812(b)(1)(i)	Emergency Exit Locator and Marking Signs	AT0328SE-T-C-3
§25.813(c)(1)(i),	Emergency Exit Access	TD8301SE-T-C-1
(c)(2)(i)	Emergency Exit Access	1D03013L-1-C-1
§25.813(c)	Seat Obstruction of the Provided Exit Opening at Overwing Exit Door	TS8301SE-T-C-1
\$23.013(0)	and Reduced Passageway to the Overwing Exits (for Type III Automatic	IDOSOIDE I C I
	Overwing Exit) (C-1)	
§25.841(b)(6)	Cabin Altitude Warning System with Dual Limits for Operations into	TD9770SE-T-S-1
3-0101-(0)(0)	High Altitude Airports	
§25.853(a)	Adhesives Used in Interior Panel Bent Joint Potting Applications	PS08-0670-C-1
§ 25.853(a)(d)	Equivalent Level of Safety (ELOS) Finding for Flammability Testing	PS13-1000-C-5
	Hierarchy	
§25.853	"No Smoking" limitation in the Passenger Compartment	AT0328SE-T-C-5
§25.933(a)	Flight Critical Thrust Reversers	AT0328SE-T-P-2
§25.979(b)(1)	Pressure Fueling System – Automatic Refueling Shutoff System Check	AT0328SE-T-P-5
	Function	
§25.981(a)(3)	Equivalent Level of Safety (ELOS) Finding for Boeing Puget Sound	PS-05-0123-P-1
	Ground Fault Interrupter Relays	
§25.981(b)(d)	Fuel Tank Flammability Reduction Rule	PS05-0177-P-2
§25.1001(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.1001	Return Landing Capability	AT0328SE-F-3
§25.1301	Return Landing Capability	AT0328SE-F-3

VII. 737-600, 700, -800 (Cont'd.)

SECTION NO.	<u>TITLE</u>	ELOS No.
§25.1309(a)	Return Landing Capability	AT0328SE-F-3
§25.1309(c)	Cabin Altitude Warning System with Dual Limits for Operations into	TD9770SE-T-S-1
	High Altitude Airports	
§25.1323(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.1325(e)	Use of 1-g Stall Speed Instead of Minimum Speed	AT0328SE-T-F-1
§25.1389(b)(1), (b)(2)	Equivalent Safety Finding (ESF) for Forward Position Light System	LB08-0012-T-SE-1
	Minimum Intensity (737-700 and 737-800 only)	
§25.1389(b)(3)	Equivalent Level of Safety (ELOS) Finding for the Position Light System	AT0328SE-T-S-17
§25.1389 (b)(3)	Equivalent Safety Finding (ESF) for Position Light Overlapping	LB08-0012-T-SE-2
	Intensities (737-700, and 737-700C)	
§25.1391	Equivalent Safety Finding (ESF) for Forward Position Light System	LB08-0012-T-SE-1
	Minimum Intensity (737-700, and 737-700C)	
§25.1393	Equivalent Safety Finding (ESF) for Forward Position Light System	LB08-0012-T-SE-1
	Minimum Intensity (737-700, and 737-700C)	
§25.1395	Equivalent Safety Finding (ESF) for Position Light Overlapping	LB08-0012-T-SE-2
925 1205	Intensities (737-700, and 737-700C)	1 TO 22 O G E T G 1 T
§25.1395	Equivalent Level of Safety (ELOS) Finding for the Position Light	AT0328SE-T-S-17
805 1411/13/13	System (727,700,727,800)	DC10 0077C 1
§25.1411(b)(1)	General – Overhead Life Vest Location (737-700, 737-800)	PS10-0077C-1
§25.1415(d)	Emergency Locator Transmitter (ELT)	TD1990SE-TC-1
§25.1419	Use of Analysis to Demonstrate Safe Flight in Icing Conditions (737-800	TD5046SE, S-1
825 1441(-)	Only)	DC12 0001 EC 1
§25.1441(c)	Crew Determination of the Quantity of Oxygen Available in the Lavatory Passenger Service Units Bottles	PS13-0901-ES-1
§25.1443(c)	Determination of Minimum Oxygen Flow for the Lavatory Oxygen	TS13-0005-S-1
923.1443(C)	System	1313-0003-3-1
§25.1443(d)	Equivalent Level of Safety (ELOS) finding for Portable Pulse Oxygen	TC6918SE-T-ES-20
§23.1443(d)	System (First Aid Oxygen Only)	1C09103E-1-E3-20
§25.1517	Rough Air Speed, VRA (737-700IGW Only)	LB08-0012-G-8
823.1317	Rough All Speed, VRA (757-70010 W Only)	PS05-0002-F-1
§25.1529	Inclusion of Airworthiness Limitations within the Boeing ICA Manuals	TC6918SE-T-G-8
§25.1587(b)	Use of 1-g Stall Speed Instead of Minimum Speed (F-1)	AT0328SE-T-F-1
§25.1587(b)	Rejected Takeoff Performance (F-4)	AT0328SE-T-F-4
§25.1729	Inclusion of Airworthiness Limitations within the Boeing ICA Manuals	TC6918SE-T-G-8
843.1147	inclusion of 7th worthiness Elimitations within the boding ICA Manuals	1 CO / 100E-1-O-0

The following Exemptions are applicable:

- §25.305, 25.307(a), 25.601, 25.603(c), 25.613(a) and (b), 25.901(c), and 25.1103(d) Partial Exemption Localized areas of temperature related damage. (Exemption No. 9571, December 11, 2007)
- \$25.853(a), appendix F, paragraph (a)(1)(i) Partial Time-Limited Exemption, Testing on Large Interior Panels, granted through November 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010, Exemption No. 9791C, February 4, 2011)
- §25.562(b)(2) Emergency Landing Dynamic Conditions related to Flight Deck Testing (Exemption No. 6425, April 12, 1996)
- §25.571(e)(1) Damage-Tolerance and Fatigue Evaluation of Structure related to Bird Strike Velocity. (Exemption No. 6601, April 8, 1997)
- \$25.901(c) Partial Exemption No single powerplant or auxiliary power unit failure will jeopardize the safe operation of the airplane. (Exemption No. 7968, February 4, 2003) See NOTE 6 for information about high thrust failure.
- \$25.901(c) Time-limited exemption for up to 48 months after the effective date of this exemption from 14 CFR 25.901(c), Amendment 25-126, and 25.981(a)(3), Amendment 25-102 or later, as they pertain to fuel tank ignition prevention associated with the following FQIS changes on in-service and newly-produced 737-600/-700/-700C/-800/-900/-900ER airplanes:
 - Replacement of the SCCC and the ARINC display card within the FQPU; and
 - Changed areas for the re-routing and separation of FQIS wires where the changed areas of the FQIS wire routing meet the installation requirements for separation and fault tolerance required to comply with § 25.981(a)(3) as associated with the semi-monolithic side-of-body change, and forward bulkhead relocation.

(Exemption No. 10905, December 18, 2013 Expires December 18, 2017)

- \$25.1435(b)(1) Hydraulic Systems (Exemption 6086, May 17, 1995, Exemption No. 6086A, January 29, 2009).
- §25.1447(c)(1) Automatic Presentation of Oxygen Masks to Allow Operation at High Altitude Airports (Exemption No. 8668A, December 30, 2013).

VII - 737-600, 700, -800 (Cont'd.)

- B. Certification basis for §25.981(b) and §25.981(d) at amendment 25-125, and Equivalent Safety Finding P-2, dated May 25, 2010, for the flammability reduction system (FRS), is applied if fuel tank inerting is installed in new airplane production (line #'s 2517, 2620 and on) or as a modification per Service Bulletins 737-47-1002 and 737-47-1003. Airworthiness limitations for the FRS are contained in Section 9 of the applicable Maintenance Planning Document.
- C. Additional certification basis items for model 737-700 increased gross weight (IGW) aircraft with in-production installation of Winglets:

For 737-700 (IGW) aircraft that have incorporated production installed winglets (BDCO Project LB08-0012), the following equivalent level of safety findings apply:

- § 25.1419 (documented in TAD ELOS Memo LB08-0012-T-S-2)
- §§ 25.1389(b)(1), 25.1389(b)(2), 25.1391, and 25.1393 (documented in TAD ELOS Memo LB08-0012-T-SE-1)
- §§ 25.1389(b)(3) and 25.1395 (documented in TAD ELOS Memo LB08-0012-T-SE-2)
- § 25.1517 (documented in TAD ELOS Memo PS05-0002-F-1 via LB08-0012-G-8 Collector)

Compliance has been found to 14 CFR Part 25 of the Federal Aviation Regulations above amendment 25-77 specific to the in-production installation of Winglets and is listed below:

Section No.	Title	At Amdt. 25.
25.101(i)	General-Performance	92.
25.103(a),(b),(c)	Stall Speed	108
25.105(a),(b),(c) 25.105(c)	Takeoff	92
25.107(a)	Takeoff speeds	94
25.107(a) 25.107(b),(c)	Takeoff speeds	108
25.109(a),(b), (d) thru (g), (i)	Accelerate-stop distance	92
25.111(a)	Takeoff path	108
25.111(a) 25.111(c)	Takeoff path	115
25.113(a),(b),(c)	Takeoff distance and takeoff run	92
25.115(a),(b),(c)	Takeoff flight path	92
25.119(b)	Landing climb: All engines operating	108
25.121(c),(d)	Climb: One engine inoperative	108
25.125(a)	Landing	108
25.143	General – Controllability and Maneuverability	108
25.145	Longitudinal control	108
25.147	Directional and lateral control	115
25.149	Minimum control speed	108
25.161	Trim	115
25.175	Demonstration of static longitudinal stability	115
25.177	Static lateral-directional stability	108
25.181	Dynamic stability	108
25.201	Stall demonstration	108
25.207	Stall warning	108
25.231	Longitudinal stability and control	108
25.233	Directional stability and control	108
25.331	Symmetric maneuvering conditions	91
25.345(d)	High lift devices	91
25.349(a),(b)	Rolling conditions	94
25.351	Yaw Maneuver Conditions	91
25.363	Side load on engine and auxiliary power unit mounts	91
25.371	Gyroscopic loads	91
25.445(a)	Auxiliary aerodynamic surfaces	86
25.571(a),(c),(e)	Damage Tolerance and Fatigue Evaluation of Structure	86*
25.571(b),(e)	Damage Tolerance and Fatigue Evaluation of Structure	96**
25.869(a)(4)	Fire protection: systems	113
25.903(c)	Engines	94
25.1323(c)	Airspeed indication system	109
25.1325(e)	Static pressure system	108
25.1329(g)	Automatic pilot system	119
25.1587(b)	Performance information	108
* For Wing boy Wing leading		

^{*} For Wing box, Wing leading edge and Winglet structure

^{**} For Wing box, Wing leading edge, and Winglet structure – Loads

VII - 737-600, 700, -800 (Cont'd.)

D. Additional cert basis items for model 737-800 aircraft with in-production installation of Winglets:

The following equivalent level of safety findings apply for the 737-800 aircraft that have incorporated production installed winglets (FAA Project No. TD5046SE-T):

- § 25.1389(b) Equivalent Safety Finding (ESF) for Forward Position Light System Minimum Intensity (SE-1)
- § 25.1389 Equivalent Safety Finding (ESF) for Position Light Overlapping Intensities (SE-2)
- § 25.1391 Equivalent Safety Finding (ESF) for Forward Position Light System Minimum Intensity (SE-1)
- § 25.1393 Equivalent Safety Finding (ESF) for Forward Position Light System Minimum Intensity (SE-1)
- § 25.1395 Equivalent Safety Finding (ESF) for Position Light Overlapping Intensities (SE-2)

Compliance has been found to 14 CFR 25.1309 at Amendment 41 for Digital Flight Control and Autothrottle Systems.

Compliance has been found to 14 CFR Part 25 of the Federal Aviation Regulations above the existing certification basis specific to the in-production installation of Winglets and listed below:

Section No.	<u>Title</u>	At Amdt. 25.
25.101(a),(d),(e),(f),(h),(i)	General.	92
25.105(a),(b),(c),(d) 25.105(a),(b),(c),(d)	Takeoff.	92
25.107(a),(b),(c),(d) 25.107(a),(b),(c),(d),(e),(f)	Takeoff speeds.	94
25.107(a),(b),(c),(d),(e),(f),(g),(i) 25.109(a),(b),(c),(d),(e),(f),(g),(i)	Accelerate-stop distance.	92
25.111(a),(b),(c),(d)	Takeoff path.	94
25.111(a),(b),(c) 25.113(a),(b),(c)	Takeoff distance and takeoff run.	92
25.115(a),(b),(c) 25.115(a),(b),(c)	Takeoff flight path.	92
25.119(a),(b) 25.119(a),(b)	Landing climb: All-[engines]-operating.	94
25.121(a),(b),(c),(d)	Climb: One-engine-inoperative	84
25.121(a),(b),(c),(d) 25.125(a),(b),(e),(f)	Landing.	84
25.143(a)(b)	Controllability and Maneuverability (General)	84
25.145(a)(b)	Longitudinal control	98
25.145 25.149(a)(b)(c)(d)(e)	Minimum control speed	96 84
25.201	Stall demonstration.	84
25.201	Stall characteristics	84
25.233	Directional stability and control.	94
25.253	High-speed characteristics	84
25.305(a)(b)(c)(e)(f)	Strength and deformation	86
	Flight Loads, General	86
25.321(a)(b) 25.321(a)(b)(a)	Symmetric maneuvering conditions	91
25.331(a)(b)(c) 25.333(b)	Flight maneuvering envelope	86
25.335(a)(b)(c)(d)(e)(f)	Design airspeeds.	91
25.343(a) (5)(c)(d)(e)(1)	Design fuel and oil loads	86
25.345(a)(b)(d)	High lift devices.	91
25.349(a)(b) 25.349(a)(b)	Rolling conditions.	94
25.351	[Yaw maneuver] conditions.	91
25.363(a)(b)	[Side load on engine and auxiliary power unit mounts.]	91
25.371	Gyroscopic loads.	91
25.371 25.373(b)	Speed control devices	86
25.373(b) 25.415(a)(b)	Ground gust conditions	91
25.445(a)	[Auxiliary aerodynamic surfaces.]	86
25.443(a) 25.473(a)(b)(c)(d)(e)	[Landing load conditions and assumptions.]	91
25.479(a)(c)(d)	Special devices.	91
25.481(a)(c)	Tail down landing conditions.	94
25.483(a)(b)	[One-gear landing conditions.]	91
25.485(a)(b)	Side load conditions.	91
25.491	[Taxi, takeoff and landing roll.]	91
25.493(b)(c)(d)	Braked roll conditions.	97
25.499	[Nose-wheel yaw and steering.]	91
25.561(a)(b)(c)(d)	Emergency Landing Conditions, General	91
25.571(a)(b)	Damage-tolerance and fatigue evaluation of structure.	86***
25.783(c)	Fuselage doors	88
25.785(f)	Seats, berths, safety belts, and harnesses	88
*** For Wing and Winglet	Seates, seriors, sarety series, and natnesses	00
1 of wing and wingict		

VII. 737-600, -700, -800 (Cont'd.)

Certification Maintenance

Requirements (CMR's) The CMR's are listed in either the FAA approved Section 9 of Boeing Maintenance Planning Data

Document D626A001-CMR thru the April 2016 revision, and Document D626A001-9-03 from the July 2016 revision thereafter at latest FAA approved Revision, or the applicable engine Type Certification Data Sheet. The more restrictive requirement from these two documents shall be in force. All 737-600/700/700IGW/800 airplanes with line numbers 715 and on must comply with the damage tolerance structural inspections contained in revision June 2000 or later FAA-approved

revision.

Production

Basis: Production Certificate No. 700

Required

Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification

Basis) must be installed in the aircraft for certification. The required equipment is noted in the Type Design

Data.

Service

Information: The following Boeing "Structural Repair Manual" Documents are FAA-approved. Service Bulletins and

other service information, when FAA-approved, will carry a statement to that effect.

D634A201 for the 737-700 D634A210 for the 737-800 D634A220 for the 737-600 D634A330 for the 737-700 IGW

C.G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

NOTES FOR SECTION VII (737-600, -700, -800):

NOTE 1. A current weight and balance report, including a list of equipment included in the certificated empty weight

and loading instructions when necessary, must be provided for each aircraft at the time of original certification. For each Model the Weight and Balance Control and Loading Manual consists of the Basic

Manual and a Supplement Aircraft Report contained in the following Boeing documents:

D043A560 for the 737-600 D043A570 for the 737-700 D043A580 for the 737-800

This is in accordance with 14 CFR 25.29 and 25.1519 which establishes operating limitations determined

under 25.23 through 25.27.

NOTE 2. Airplane operation must be in accordance with the FAA Approved AFM. All placards required in either the FAA Approved AFM, the applicable operating rules or the Certification Basis must be installed in the

airplane. Boeing Document No. D631A001 is the basic FAA Approved Airplane Flight Manual for Model

737-600/-700/-800 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

referenced in Maintenance Planning Data Document (MPD) Section 9 Airworthiness Limitations and Certification Maintenance Requirements; Boeing Document D626A001-CMR thru the April 2016 revision, and starting with the July 2016 revision Document D626A001-9 thereafter. 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 following documents are the FAA approved requirement to comply with 14 CFR 25.1529, 43.16 and 91.403:

Prior to July 2016:

D626A001-CMR, Boeing 737-600/700C/800/900/900ER Maintenance Planning Data (MPD)

After July 2016:

D626A001-9-01, 737-600/700C/800/900/900ER Airworthiness Limitations (AWLs)

D626A001-9-02, 737-600/700/700C/800/900/900ER Airworthiness Limitations - Line Number Specific D626A001-9-03, 737-600/700/700C/800/900/900ER Certification Maintenance Requirements (CMRs)

D626A001-9-04, 737-600/700/700C/800/900/900ER Special Compliance Items/Airworthiness Limitations

Required structural inspections for compliance with 14 CFR §25.571 and the retirement times for safe-life parts are listed in the FAA Approved Airworthiness Limitations and Certification Maintenance Requirements Section 9 of Boeing 737-600/700/700C/800/900/900ER Maintenance Planning Document D626A001-CMR thru July 2016, and Document D626A001-9-01 thereafter. All 737-600/700/700C/800/900/900ER airplanes with line numbers 715 and on must comply with the Damage Tolerance Structural Inspections contained in revision June 2000 or later FAA-approved revision. Each operator must incorporate into their airline's FAA-approved maintenance program, the applicable requirements of these documents.

VII. 737-600, -700, -800 (Cont'd.)

NOTE 4. Model 737-700 Increased Gross Weight (IGW):

The following exemptions have been granted when the airplane is not operated for hire, or for common carriage (Granted October 5, 1998, Exemption No. 6820):

§25.785(h)(2) Flight Attendant Seat Locations which do not Provide for Direct View of the Cabin,

§25.813(e) Installation of Interior Doors in between passenger compartments,
 §25.853(d) Interior materials that do not comply with Heat Release and Smoke

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Emissions Requirements.

(Granted February 17, 1999, Exemption No. 6820A); -

§25.807(d)(7) Distance Between Exits.

§25.813(e) Installation of Interior Doors in between passenger compartments
 §25.853(d) Interior materials that do not comply with Heat Release and Smoke

Emissions Requirements.

Acceptable engine models installed on a 737-700 IGW are dependent on type of intended in-service use. See the individual Airplane Flight Manual for approved installation of either the CFM56-7B26 or CFM56-7B26/B1 or CFM56-7B27/B3 or CFM56-7B27E/B3.

NOTE 5. The type design reliability and performance of the Model 737-600, -700, and -800 airplanes have been evaluated in accordance with FAA Advisory Circular 120-42A and found suitable for Extended Range Operations with Two-Engine Airplanes (ETOPS) when operated and maintained in accordance with Boeing Document D044A007, "737-600/-700/-700C/-800/-900ER ETOPS CONFIGURATION, MAINTENANCE, AND PROCEDURES". Additionally, type design changes incorporated after February 15, 2007 that require ETOPS approval have been evaluated in accordance with 14 CFR 25.1535 and found suitable for Extended Operations (ETOPS) when operated and maintained in accordance with Boeing Document D044A007. This finding does not constitute approval to conduct ETOPS operations.

NOTE 6. The FAA has determined that the occurrence of any uncontrollable high thrust failure condition "may endanger the safe operation of an airplane" and hence is reportable under 14 CFR §121.703, 125.409, and 135.415.

7: 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 and Special Condition 25-308-SC are listed in the FAA-approved Airworthiness Limitations and Certification Maintenance Requirement, Section 9, of Boeing 737-600/700/700C/800/900/900ER Maintenance Planning Data Document D626A001-CMR, Revision December 2005 or later FAA-approved revision thru July 2016, and the latest FAA-approved revision of the D626A001-9-0x series documents thereafter. All Model 737-600, -700, and -800 series airplanes, production line number 1679 and on, must comply with Revision March 2006, or a later FAA-approved revision. The FAA is planning to issue an airworthiness directive mandating compliance with Revision March 2006, or a later FAA-approved revision, applicable to all Model 737-600, -700, -700C, -800, and -900 series airplanes with production numbers lower than 1679.

737-700 and 737-800 airplanes modified by Boeing STC ST01697SE (Lower Cabin Altitude modification) are capable of maintaining a cabin altitude of 6500 feet in lieu of the standard 8000 feet when operating at a cruising altitude of 41,000 feet. This STC modification has been approved for airplanes listed in Figure 1 of Boeing Report D926A200, Revision N, dated May 23, 2009, or later FAA approved revision.

The Model 737-600/-700/-800 has been approved to operate in "Reduced Vertical Separation Minimum" (RVSM) airspace. Continued airworthiness and operational approval aspects of RVSM must be constructed according to Advisory Circular (AC) 91-RVSM, titled "Approval of Aircraft and Operators for Flight in Airspace Above Flight Level (FL) 290 Where a 1,000 Foot Vertical Separation Minimum is Applied."

NOTE 10: Model 737-800:

The following exemptions have been granted when the airplane is not operated for hire, or for common carriage (Granted August 17, 2001, Exemption No. 7609):

§25.785(h)(2) Flight Attendant Seat Locations which do not Provide for Direct View of the Cabin,

§25.807(d)(7) Distance Between Exits.

§25.813(e) Installation of Interior Doors in between passenger compartments

§25.853(d) Interior materials that do not comply with Heat Release and Smoke Emissions

Requirements.

Acceptable engine models installed on a 737-800 is dependent on type of intended in-service use. See the individual Airplane Flight Manual for approved installation of either the CFM56-7B26 or CFM56-7B26/B1 or CFM56-7B27/B3 or CFM56-7B27E/B3

NOTE 11. The following Serial Numbers were produced under Type Certificate prior to incorporating these model series into the production certificate:

Model 737-600: 28288 thru 28293, 28296, 28297

Model 737-700: 27841, 27842, 27843, 27835, 28100, 27836, 28004, 28005, 27837, 28209, 27838, 28100,

28101, 28102, 28088, 27839, 28210, 28103, 28840, 28089, 28006, 28107, 28108, 28099.

Model 737-800: 27977, 27978, 27979, 27980, 27981, 27982, 28068, 28069, 28213, 28373.

NOTE 7:

NOTE 8:

NOTE 9:

VIII Model 737-700C (Approved August 31, 2000) Transport Aircraft.

Engines: Two CFM International, S.A. CFM56-7B2x, 7B2x/3, or 7B2xE Series Turbofan Engines. Refer to the

FAA Approved Airplane Flight Manual for engine limitations. (Engine Type Certificate No. E00055SE,

or E00056SE)

Fuel: Fuels meeting the following specifications and mixtures thereof are approved for use:

* Jet A, Jet A-1 as specified in ASTM-D1655

* JP-5 as specified in MIL-T-5624

* JP-8 as specified in MIL-T-83133

Fuels conforming to G.E. Specification D50TF2 (Class A, C, D and E) or fuels produced or certified to other specifications and having properties meeting the requirements of the above specifications are acceptable for use. Consult Flight Manual for additive use.

Engine Ratings:	Model 737-700C	Takeoff static thrust	Maximum continuous static
		standard day, sea level	thrust, standard day,
		conditions (5 min) lb.	sea level conditions lb
	CFM56-7B24	24,200	22,800
	CFM56-7B24/3	24,200	22,800
	CFM56-7B24E	24,200	22,800
	CFM56-7B24/B1**	24,200	22,800
	CFM56-7B24/3B1**	24,200	22,800
	CFM56-7B24E/B1**	24,200	22,800
	CFM56-7B22/3	22,700	22,300
	CFM56-7B22E	22,700	22,300
	CFM56-7B20/3	20,600	19,400
	CFM56-7B20E	20,600	19,400
	CFM56-7B26/3	26,300	25,900, Limited to 22,800 by FMC
	CFM56-7B26E	26,300	25,900, Limited to 22,800 by FMC
	CFM56-7B26/3B2	26,300	22,800
	CFM56-7B26E/B2	26,300	22,800
	CFM56-7B26/3B2F	26,300	22,800
	CFM56-7B26E/B2F	26,300	22,800
	CFM56-7B26/3F	26,300	25,900, Limited to 22,800 by FMC
	CFM56-7B26E/F	26,300	25,900, Limited to 22,800 by FMC
	CFM56-7B26/B2	26,300	22,800
	** Special Rating		

Engine and Weight Limits:

For engine operating limits see Engine Type Certificate Data Sheet No. E00055EN or E00056EN or the FAA Approved Airplane Flight Manual.

Thrust Settings: The appropriate engine power setting curve (%N1), in the FAA Approved Airplane Flight Manual or

AFM Appendices must be used for control of engine thrust.

Airspeed Limits: VMO/MMO - 340/0.82 (KCAS)

For other airspeed limits see the appropriate FAA Approved Airplane Flight Manual listed in Note 2

C. G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in Note 2

Maximum Weights: 737-700C

Please see Note 4 at the end of Section for limitations which may be applicable

to the 737-700 IGW airplanes

Maximum Taxi Weight (MTW)171,500 lbs.Maximum Takeoff Weight (MTOW)171,000 lbs.Maximum Landing Weight (MLW)134,000 lbs.Maximum Zero Fuel Weight (MZFW)126,000 lbs.

Eligible Serial Numbers:

Model	
737-7AF	29979, 29980, 30200, 30781, 32597, 32598, 33826, 33836, 34304, 40573, 40574, 40577, 43827, 43828,
	60329
737-7AX	30184, 30185
737-7HBC	35955
737-7HJ	36756
737-7D6C	61340, 61341
737-700C	Reserved for new serial numbers after Line Number 6000

VIII - Model 737-700C (Cont'd)

Airframe Limits Capacities & Rigging

Minimum Crew

for All Flights: 2 (Pilot and Copilot)

Maximum

Passengers: Passenger only mode Cargo only mode 149

Maximum Baggage

Cargo: See appropriate Weight and Balance Manual listed in Note 1.

Fuel & Oil

Capacities: See appropriate Weight and Balance Manual listed in Note 1.

Minimum Required

See appropriate FAA Approved Airplane Flight Manual listed in Note 1 Fuel:

Maximum Operating

41,000 ft. Altitude:

Datum: See appropriate Weight and Balance Manual listed in Note 1.

MAC: 155.81 in

Other Operating

Limitations: See FAA Approved Airplane Flight Manual Appendices

Control Surface

Movements: To ensure proper operation of the airplane, the movements of the various control surfaces must be

carefully controlled by proper rigging of the flight control systems. The airplanes, must, therefore, be

rigged according to the following FAA Approved data:

Boeing Drawing Numbers:

114A1001, Krueger Flap Instl - Inbd Wing L.E.

251A1001, Rigging Instructions, Lateral & Speedbrake Control 251A2001, Rigging Instructions, Elevator Control System 251A3001, Rigging Instructions, Rudder Control System 251A4001, Rigging Instructions, Stabilizer Trim Control 256A3001, Rigging Instructions - Flap Actuation 256A2284, Flap.Slat Sensor Instl - Leading Edge, Wing

Certification Basis:

A. 14 CFR Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-91 with the exceptions listed below:

listed below.		
SECTION NO.	TITLE	AT AMDT. 25
25.445	[Auxiliary Aerodynamic Surfaces]	0****
25.562	Emergency Landing Dynamic Conditions	64*
25.607	Fasteners	0,91**
25.631	Bird Strike Damage	0,91**
25.699	Lift and Drag Device Indicator	0,91**
25.783(f)	Doors	15,91**
25.807(c)(3)	Emergency Exits	15
25.807(d)(1)	Emergency Exits	77
25.831(a) & (g)	Ventilation	41
25.832	Cabin Ozone Concentration	0***
25.841(a)	Pressurized Cabins	38
25.853(d)(3)	Compartment Interiors	72
25.904	Automatic Takeoff Thrust Control System (Not complied with -new	v at 25-62)
25.1141	Power Plant Controls: General	11****
25.1309	Equipment, Systems and Installations	0,91**
25.1419(c)	Ice Protection	23,91**
25.1447(c)(3)(ii)	Equipment Standards for Oxygen	41
	Dispensing Units	

^{*} Flight attendant seats are qualified to Technical Standard Order C127. Passenger and crew seats in the flight deck comply with \$25.562(a),(b),((c)(1),(2),(3),(4),(7), and (8)). In addition flight deck observer seats comply with \$25.562((c)(5)).

VIII Model 737-700C (Cont'd)

- ** Applicable to new and significantly modified structure and systems and portions of the airplane affected by these changes. Where two amendment levels are shown for the same paragraph, the number without the asterisk (*) applies to structures, systems and portions of the airplane which are not new or significantly modified. The structure, systems, and components which comply with the later amendment will be identified in Boeing document D010A001, approved by the FAA and JAA, and referenced on the TCDS.
- *** Boeing provides FAA approved data (Document number D6-49779) to 737 operators to enable the operators to show ozone compliance per §121.578 for their specific route structures.
- **** Exception applies to Auxiliary Power Unit spar mounted fuel shut off valve only. All other power plant controls were shown to comply with §25.1141 at amendment 25-91.
- ***** Exception to Amendment 0 applies only to aircraft without winglets. For aircraft with winglets, see Section C.

Amendment level "0" is the original published version of Part 25 (February 1, 1965).

The certification basis for the following regulations at amendment levels later than 25-91.

SECTION NO.	AT AMDT. 25	TITLE
25.101	92	Performance; General
25.105	82	Takeoff
25.107	94	Takeoff Speeds
25.109	92	Accelerate Stop Distance
25.111	94	Take Off Path
25.113	92	Takeoff Distance and Takeoff Run
25.115	92	Takeoff Flight Path
25.119	94	Landing Climb: All Engines Operating
25.233	94	Ground Directional Stability and Control
25.349	94	Rolling Conditions
25.481	94	Tail-Down Landing Conditions
25.571(e)(1)	96	Damage-Tolerance & Fatigue Evaluation of Structure
25.735	92	Brakes
25.807 (except (g)) 94	Emergency Exits
25.855	93	Cargo or Baggage Compartments
25.857	93	Cargo Compartment Classification
25.858	93	Cargo or Baggage Compartment Smoke or Fire Detection
25.981(b)(d)	125	Fuel Tank Ignition Prevention (for Flammability Reduction System)
25.1533	92	Additional Operating Limitations

Special Conditions:

- 25-ANM-132, Special Conditions published in the Federal Register on September 17, 1997 for 737-600/-700/-800 airplanes and applicable to later amendments of the 737 model that incorporate the same novel or unusual design feature:
 - 1. High Intensity Radiated Fields (HIRF) Protection.
 - 2. Limit Engine Torque Loads for Sudden Engine Stoppage.
- 25-358-SC, Special Conditions published in the Federal Register on June 29, 2007 addressed 737-600/-700/-700C/-800/-900 and 900ER series airplanes regarding seats with non-traditional, large, non-metallic panels
- 25-386-SC, Special Conditions published in the Federal Register on August 7, 2009, addressed 737-600/-700/-700C/-800/ and 900ER series airplanes with inflatable lapbelts installed
- 25-308-SC, Special Conditions Boeing Model 737-200/200C/300/400/500/600/700C/800/900 Series Airplanes; Flammability Reduction Means (Fuel Tank Inerting) published in the Federal Register on December 5, 2005
- 25-404-SC, Special Conditions published in the Federal Register on April 12, 2010, Modification to Boeing Model 737-600/-700/-700C/-800/-900 and -900ER Series Airplanes: Rechargeable Lithium Batteries and Rechargeable Lithium-Battery Systems
- 25-550-SC, Special Conditions published in the Federal Register on June 6, 2014, Airplane Electronic Systems Security Protection from Unauthorized External Access
- 25-551-SC, Special Conditions published in the Federal Register on June 6, 2014, Isolation [of] Airplane Electronic System Security Protection from Unauthorized Internal Access
- 25-632-SC, Special Conditions: The Boeing Company, Boeing Model 737-8 Airplane; Non-Rechargeable Lithium Battery Installations, published in the Federal Register on August 19, 2016 (contains applicability that extends across all 737 model series), Effective April 22, 2017

VIII Model 737-700C (Cont'd)

Equivalent Safety Findings for the 737-700C (specifications and restrictions of its content, such as production winglet installation, must be met before an issue paper is considered to apply to any specific configuration of a model series):

44

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SECTION NO.	TITLE	ELOS No.
§1.2	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.21(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.103	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.107	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.111(a)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.119(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.121(c)(d)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.125(a)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.143(g)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.145(a)(b)(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.147(a)(c)(d)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.149(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.161(b)(c)(d)(e)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.175(a)(b)(c)(d)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.177(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.181(a)(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.201(a)(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.207(b)(c)(d)(e)(f)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.231(a)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.233(a)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.237(a)(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.395(a)	Lateral Control System Load Factors	AT2721SE-T-A-5
§25.613	Material Design Values	AT3907SE-T-A-15
§25.733	Return Landing Capability	AT0328SE-T-F-3
825 725	Determ I and in a Completion	via AT2421SE-T-G-1
§25.735	Return Landing Capability	AT0328SE-T-F-3
\$25.725(f)(a)	Use of 1 a Stell Speed Instead of Minimum Speed	via AT2421SE-T-G-1
§25.735(f)(g)	Use of 1-g Stall Speed Instead of Minimum Speed Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1 AT2721SE-T-F-1
§25.773(b)		
\$25.791 \$25.810 (a)(1)(ii)	"No Smoking" limitation in the Passenger Compartment	AT0328SE-T-C-5 AT2721SE-T-C-4
\$25.810 (a)(1)(ii)	Escape Slides Exterior Exit Markings	TD2695SE-T-C-1
§25.811(f)	Seat Obstruction of the Provided Exit Opening at Overwing	AT2721SE-T-C-1
§25.813(c)	Exit Door and Reduced Passageway to the Overwing Exits	A12/213E-1-C-1
	(for Type III Automatic Overwing Exit)	
\$25.841(b)(6)	Cabin Altitude Warning System with Dual Limits for	TD9770SE-T-S-1
§23.841(b)(b)	Operations into High Altitude Airports	1D3//03E-1-3-1
§25.853(a)	Adhesives Used in Interior Panel Bent Joint Potting	PS08-0670-C-1
§23.833(a)	Applications	1300-0070-C-1
§ 25.853(a)(d)	Equivalent Level of Safety (ELOS) Finding for Flammability	PS13-1000-C-5
§ 25.855(a)(d)	Testing Hierarchy	1313-1000-C-3
§25.853	"No Smoking" limitation in the Passenger Compartment	AT0328SE-T-C-5
§25.633 §25.933(a)	Flight Critical Thrust Reversers	AT2720SE-T-P-2
\$25.933(a) \$25.979(b)(1)	Pressure Fueling System – Automatic Refueling Shutoff	AT0328SE-T-P-5
§23.575(b)(1)	System Check Function	via AT2721SE-T-G-1
§25.981(a)(3)	Equivalent Level of Safety (ELOS) Finding for Boeing Puget	PS-05-0123-P-1
\$23.761(a)(3)	Sound Ground Fault Interrupter Relays	15 03 0123 1 1
§25.981(b)(d)	Fuel Tank Flammability Reduction Rule	PS05-0177-P-2
\$25.1001(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.1001	Return Landing Capability	AT0328SE-T-F-3
323.1001	Return Eulaung Cupusinty	via AT2421SE-T G-1
§25.1301	Return Landing Capability	AT0328SE-T-F-3
0-20.1201	anomg cupucintj	via AT2421SE-T G-1
§25.1309(a)	Return Landing Capability	AT0328SE-T-F-3
0-20.1207 (W)	anomg cupucintj	via AT2421SE-T G-1
§25.1309(c)	Cabin Altitude Warning System with Dual Limits for	TD9770SE-T-S-1
3 (-/	Operations into High Altitude Airports	
•	- r · · · · · · · · · · · · · · · · · ·	

VIII - Model 737-700C (cont'd):

SECTION NO.	<u>TITLE</u>	ELOS No.
§25.132 3 (c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.1325(e)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.1389(b)(1), (b)(2)	Equivalent Safety Finding (ESF) for Forward Position Light	LB08-0012-T-SE-1
	System Minimum Intensity (737-700 and 737-800 only)	
§25.1389(b)(3)	Equivalent Level of Safety (ELOS) Finding for the Position	AT0328SE-T-S-17
	Light System	
§25.1389(b)(3)	Equivalent Safety Finding (ESF) for Position Light	LB08-0012-T-SE-2
	Overlapping Intensities (737-700, and 737-700C)	
§25.1391	Equivalent Safety Finding (ESF) for Forward Position Light	LB08-0012-T-SE-1
	System Minimum Intensity (737-700, and 737-700C)	
§25.1393	Equivalent Safety Finding (ESF) for Forward Position Light	LB08-0012-T-SE-1
	System Minimum Intensity (737-700, and 737-700C)	
§25.1395	Equivalent Safety Finding (ESF) for Position Light	LB08-0012-T-SE-2
	Overlapping Intensities (737-700, and 737-700C)	
§25.1395	Equivalent Level of Safety (ELOS) Finding for the Position	AT0328SE-T-S-17
	Light System	
§25.1397(b)	Equivalent Level of Safety (ELOS) Finding for Aviation	PS12-1026-SE-1
	Green Light Chromaticity Requirements on a Model Boeing	
	737-700/700C/800/900ER airplanes	
§25.1419	Equivalent Level of Safety (ELOS) Finding for Use of	LB08-0012-T-S-2
	Analysis to Demonstrate Safe Flight in Icing Conditions for	
	737-700(IGW) and 737-700C	
§25.1439	Accessible Class E Cargo Compartment	AT2721SE-T-C-6
§25.1441(c)	Crew Determination of the Quantity of Oxygen Available in	PS13-0901-ES-1
	the Lavatory Passenger Service Units Bottles	
§25.1443(c)	Determination of Minimum Oxygen Flow for the Lavatory	TS13-0005-S-1
	Oxygen System	
§25.1443(d)	Equivalent Level of Safety (ELOS) finding for Portable Pulse	TC6918SE-T-ES-20
	Oxygen System (First Aid Oxygen Only)	
§25.1517	Rough Air Speed, VRA	LB08-0012-F-1
§25.1529	Inclusion of Airworthiness Limitations within the Boeing ICA	TC6918SE-T-G-8
	Manuals	
§25.1587(b)	Use of 1-g Stall Speed Instead of Minimum Speed (F-1)	AT2721SE-T-F-1
		via AT2421SE-T G-1
§25.1729	Inclusion of Airworthiness Limitations within the Boeing ICA	TC6918SE-T-G-8
	Manuals	

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Exemptions:

- § 25.305, 25.307(a), 25.601, 25.603(c), 25.613(a) and (b), 25.901(c), and 25.1103(d) Partial Exemption Localized areas of temperature related damage. (Exemption No. 9571, December 11, 2007).
- § 25.562(b)(2) Emergency Landing Dynamic Conditions related to Flight Deck Testing (Exemption 6425 Originally granted April 12th, 1996, Exemption No. 6425A, August 20, 1999).
- \$25.853(a), appendix F, paragraph (a)(1)(i) Partial Time-Limited Exemption, Testing on Large Interior Panels, granted through November 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010, Exemption No. 9791C, February 4, 2011)
- § 25.901(c) Partial Exemption No single powerplant or auxiliary power unit failure will jeopardize the safe operation of the airplane (Originally granted February 4, 2003, Exemption No. 7968). See NOTE 4 for information about high thrust failure.
- § 25.901(c) Time-limited exemption for up to 48 months after the effective date of this exemption from 14 CFR 25.901(c), Amendment 25-126, and 25.981(a)(3), Amendment 25-102 or later, as they pertain to fuel tank ignition prevention associated with the following FQIS changes on in-service and newly-produced 737-600/-700/-700C/-800/-900/-900ER airplanes:
 - Replacement of the SCCC and the ARINC display card within the FQPU; and
 - Changed areas for the re-routing and separation of FQIS wires where the changed areas of the FQIS wire routing meet the installation requirements for separation and fault tolerance required to comply with § 25.981(a)(3) as associated with the semi-monolithic side-of-body change, and forward bulkhead relocation.

(Exemption No. 10905, December 18, 2013, Expires December 18, 2017)

• § 25.1435(b)(1) Hydraulic Systems (Originally granted May 17, 1995, Exemption No. 6086, applicable to 737-700, revised to add the 737-600 and 737-800 in Exemption No 6086A on January 29, 2009), extended to include the main deck cargo door hydraulic system. (Exemption 6889, granted April 15, 1999)

VIII - Model 737-700C (cont'd):

14 CFR Part 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:

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SECTION	NO. <u>TITLE</u>	AT AMDT. 26-
26.11	Electrical wiring interconnection systems (EWIS) maintenance program.	0
26.21	Limit of Validity	5
26.33	Holders of type certificates: Fuel tank flammability.	3
26.39	Newly produced airplanes: Fuel tank flammability	3
26.43	Holders of and applicants for type certificates – Repairs	1
26.45	Holders of type certificates - Alterations and repairs to alterations	1
26.47	Holders of and applicants for a supplemental type certificate – Alterations	
	And repairs to alterations	1
26.49	Compliance plan	1

In addition to the airworthiness standards, the type-certification basis for these derivative airplanes includes compliance with the emissions standards of Part 34 as amended by any amendments effective at the time of certification

- 14 CFR Part 36 as amended by Amendment 36-20 or any subsequent amendment effective at the time of certification. See the appropriate FAA Approved Airplane Flight Manual listed in Note (1) for applicability of Stage 4 Noise Recertification through Amendment 36-28.
- B. Certification basis for \$25.981(b) and \$25.981(d) at amendment 25-125, and Equivalent Safety Finding P-2, dated May 25, 2010, for the flammability reduction system (FRS), is applied if fuel tank inerting is installed in new airplane production (line #'s 2517, 2620 and on) or as a modification per Service Bulletins 737-47-1002 and 737-47-1003. Airworthiness limitations for the FRS are contained in Section 9 of the applicable Maintenance Planning Document.
- C. Additional certification basis items for model 737-700C aircraft with in-production installation of Winglets: For model 737-700C aircraft that have incorporated production installed winglets (BDCO Project LB08-0012), the following equivalent level of safety findings apply:
 - § 25.1419 (documented in TAD ELOS Memo LB08-0012-T-S-2)
 - § 25.1389(b)(l), 25.1389(b)(2), 25.1391, and 25.1393 (documented in TAD ELOS Memo LB08-0012-T-SE-1)
 - § 25.1389(b)(3) and 25.1395 (documented in TAD ELOS Memo LB08-0012-T-SE-2)
 - § 25.1517, "Rough Air Speed, V " (documented in TAD ELOS Memo PS05-0002-F-1 via LB08-0012-G-8

Compliance has been found to 14 CFR Part 25 of the Federal Aviation Regulations above amendment 25-91 specific to the in-production installation of Winglets and is listed below:

Section No.	<u>Title</u>	At Amdt. 25.
25.103(a),(b),(c)	Stall Speed	108
25.107(b),(c), (g)	Takeoff speeds	108
25.111(a)	Takeoff path	108
25.111(c)	Takeoff path	115
25.113(a),(b),(c)	Takeoff distance and takeoff run	92
25.115(a)	Takeoff flight path	92
25.119(b)	Landing climb: All engines operating	108
25.121(c),(d)	Climb: One engine inoperative	108
25.125(a)	Landing	108
25.143	General – Controllability and Maneuverability	108
25.145	Longitudinal control	108
25.147	Directional and lateral control	115
25.149	Minimum control speed	108
25.161	Trim	115
25.175	Demonstration of static longitudinal stability	115
25.177	Static lateral-directional stability	108
25.181	Dynamic stability	108
25.201	Stall demonstration	108
25.207	Stall warning	108
25.231	Longitudinal stability and control	108
25.233	Directional stability and control	108
25.571(b),(e)	Damage Tolerance and Fatigue Evaluation of Structure	96*
25.869(a)(4)	Fire protection: systems	113
25.903(c)	Engines	94
25.1323(c)	Airspeed indication system	109
25.1325(e)	Static pressure system	108

VIII - Model 737-700C (cont'd):

25.1329(g) Automatic pilot system 119 25.1587(b) Performance information 108

Certification Maintenance

Requirements (CMR's)

The CMR's are listed in either the FAA approved Section 9 of Boeing Maintenance Planning Data Document D626A001-CMR, revision June 2000 thru the April 2016 revision, and Document D626A001-9-03 from the July 2016 revision thereafter at latest FAA approved Revision, or the applicable engine Type Certification Data Sheet. The more restrictive requirement from these two documents shall be in force.

Production

Basis: Production Certificate No. 700

Required

Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification

Basis) must be installed in the aircraft for certification. The required equipment is noted in the Type Design

Data.

Service

Information: The following Boeing "Structural Repair Manual" Documents are FAA-approved. Service Bulletins and

other service information, when FAA-approved, will carry a statement to that effect.

D634A201 for the 737-700C

C.G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

NOTES FOR SECTION VIII (737-700C):

NOTE 1. A current weight and balance report, including a list of equipment included in the certificated empty weight and loading instructions when necessary, must be provided for each aircraft at the time of original

certification. For each Model the Weight and Balance Control and Loading Manual (Boeing Document D043A573) consists of the Basic Manual and a Supplement Aircraft Report. This is in accordance with 14 CFR 25.29 and 25.1519 which establishes operating limitations determined under 25.23 through 25.27.

NOTE 2. Airplane operation must be in accordance with the FAA Approved AFM. All placards required in either the

FAA Approved AFM, the applicable operating rules or the Certification Basis must be installed in the airplane. Boeing Document No. D631A001 is the basic FAA Approved Airplane Flight Manual for Model

737-600/-700/-800 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

referenced in Maintenance Planning Data Document (MPD) Section 9 Airworthiness Limitations and Certification Maintenance Requirements; Boeing Document D626A001-CMR thru the April 2016 revision, and starting with the July 2016 revision Document D626A001-9 thereafter. 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 following documents are the FAA approved requirement to comply with 14 CFR 25.1529, 43.16 and 91.403.

Prior to July 2016:

D626A001-CMR, Boeing 737-600/700/700C/800/900/900ER Maintenance Planning Data (MPD)

After July 2016:

D626A001-9-01, 737-600/700C/800/900/900ER Airworthiness Limitations (AWLs)

 $D626A001-9-02, 737-600/700/700C/800/900/900ER\ Airworthiness\ Limitations\ -\ Line\ Number\ Specific\ D626A001-9-03, 737-600/700/700C/800/900/900ER\ Certification\ Maintenance\ Requirements\ (CMRs)\ D626A001-9-04, 737-600/700/700C/800/900/900ER\ Special\ Compliance\ Items/Airworthiness\ Limitations$

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Each operator must incorporate into their airline's FAA-approved maintenance program, the applicable requirements of these documents.

NOTE 4. The FAA has determined that the occurrence of any uncontrollable high thrust failure condition "may

endanger the safe operation of an airplane" and hence is reportable under 14 CFR §121.703, 125.409,

and 135.415.

NOTE 5: The type design reliability and performance of the Model 737-700C, airplane has been evaluated in

accordance with FAA Advisory Circular 120-42A and found suitable for Extended Range Operations with Two-Engine Airplanes (ETOPS) when operated and maintained in accordance with Boeing Document D044A007, "737-600/-700/-800/-900/-900ER ETOPS CONFIGURATION, MAINTENANCE, AND PROCEDURES". Additionally, type design changes incorporated after February 15, 2007 that require ETOPS approval have been evaluated in accordance with 14 CFR 25.1535 and found suitable for Extended Operations (ETOPS) when operated and maintained in accordance with Boeing Document D044A007. This finding does not constitute approval to conduct ETOPS operations.

^{*} For Wing box, Wing leading edge, and Winglet structure - Loads

VIII - Model 737-700C (cont'd):

NOTE 6:

The Model 737-700C has been approved to operate in "Reduced Vertical Separation Minimum" (RVSM) airspace. Continued airworthiness and operational approval aspects of RVSM must be constructed according to Advisory Circular (AC) 91-RVSM, titled "Approval of Aircraft and Operators for Flight in Airspace Above Flight Level (FL) 290 Where a 1,000 Foot Vertical Separation Minimum is Applied."

NOTE 7:

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 § 25.981 are listed in the FAA-approved Airworthiness Limitations and Certification Maintenance Requirement, Section 9, of Boeing 737-600/700/700C/800/900/900ER Maintenance Planning Data Document D626A001-CMR, Revision December 2005 or later FAA-approved revision thru July 2016, and the latest FAA-approved revision of the D626A001-9-0x series documents thereafter. All Model 737-700C series airplanes, production line number 1679 and on, must comply with Revision March 2006, or a later FAA-approved revision. The FAA is planning to issue an airworthiness directive mandating compliance with Revision March 2006, or a later FAA-approved revision, applicable to all Model 737-600, -700, -700C, -800, and -900 series airplanes with production numbers lower than 1679.

IX Model 737-900 (Approved April 17, 2001) Transport Aircraft.

Engines: Two CFM International, S.A. CFM 56-7B2x, -7B2x/3 or -7B2xE Series Turbofan Engines. Refer to the

FAA Approved Airplane Flight Manual for engine limitations. (Engine Type Certificate No. E00055SE,

or E00056SE)

Fuels meeting the following specifications and mixtures thereof are approved for use:

* Jet A, Jet A-1 as specified in ASTM-D1655

 \ast JP-5 as specified in MIL-T-5624

* JP-8 as specified in MIL-T-83133

Fuels conforming to G.E. Specification D50TF2 (Class A, C, D and E) or fuels produced or certified to other specifications <u>and having properties meeting the requirements of the above specifications</u> are acceptable for use. Consult Flight Manual for additive use.

Oil Consumption:

Fuel:

For compliance with FAR 25.1011(b), the approved maximum oil consumption rate for the CFM56-7B engines installed on this model airplane has been established as 0.340 gallons per hour. Operation of the Model 737-900 airplane with engine oil consumption rates higher than this limit is not permitted.

Engine Ratings:	Model 737-900	Takeoff static thrust	Maximum continuous static
88		standard day, sea level	thrust, standard day,
		conditions (5 min) lb.	sea level conditions lb.
	CFM56-7B24	24,200	22,800
	CFM56-7B24/3	24,200	22,800
	CFM56-7B24E	24,200	22,800
	CFM56-7B24/3B1**	24,200	22,800
	CFM56-7B24E/B1**	24,200	22,800
	CFM56-7B26	26,300	25,900
	CFM56-7B26/3	26,300	25,900
	CFM56-7B26E	26,300	25,900
	CFM56-7B26/3F	26,300	25,900
	CFM56-7B26E/F	26,300	25,900
	CFM56-7B26/B1	26,300	25,900
	CFM56-7B27	27,300	25,900
	CFM56-7B27/3	27,300	25,900
	CFM56-7B27E	27,300	25,900
	CFM56-7B27/3F	27,300	25,900
	CFM56-7B27E/F	27,300	25,900
	CFM56-7B27/B1	27,300	25,900
	CFM56-7B27/3B1	27,300	25,900
	CFM56-7B27E/B1	27,300	25,900
	CFM56-7B27/3B1F	27,300	25,900
	CFM56-7B27E/B1F	27,300	25,900
	CFM56-7B27/B3	27,300	25,900
	CFM56-7B27/3B3	27,300	25,900
	CFM56-7B27E/B3	27,300	25,900
	** Special Rating		

IX - Model 737-900 (cont'd)

Engine and Weight Limits

For engine operating limits see Engine Type Certificate Data Sheet No. E00055EN or E00056EN or the

FAA Approved Airplane Flight Manual.

Thrust Settings: The appropriate engine power setting curve (%N1), in the FAA Approved Airplane Flight Manual or

AFM Appendices must be used for control of engine thrust.

Airspeed Limits: VMO/MMO - 340/0.82 (KCAS)

For other airspeed limits see the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

C. G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

Maximum Weights: 737-900

Please see Note 4 at the end of Section VII for limitations which may be applicable

to the 737-900 airplanes

Maximum Taxi Weight (MTW)174,700 lbs.Maximum Takeoff Weight (MTOW)174,200 lbs.Maximum Landing Weight (MLW)147,300 lbs.Maximum Zero Fuel Weight (MZFW)140,300 lbs.

Eligible Serial Numbers:

Model

737-9B5 29987-30002 737-9K2 29599-29602, 32944 737-95R 30412, 33740

737-97L 33644-33646, 33648, 33649

737-924 30118-30129

737-990 30013-30019, 30021, 30856, 30857, 33679, 33680

Airframe Limits Capacities & Rigging

Minimum Crew

for All Flights: 2 (Pilot and Copilot)

Maximum

Passengers: <u>Passenger only mode</u> 189

Maximum Baggage

Cargo: See appropriate Weight and Balance Manual listed in Note 1.

Fuel & Oil

Capacities: See appropriate Weight and Balance Manual listed in Note 1.

Minimum Required

Fuel: See appropriate FAA Approved Airplane Flight Manual listed in Note 2.

Maximum Operating

Altitude: 41,000 ft.

Datum: See appropriate Weight and Balance Manual listed in Note 1.

MAC: 155.81 in

Other Operating

Limitations: See FAA Approved Airplane Flight Manual Appendices (Note 2).

Control Surface

Movements: To ensure proper operation of the airplane, the movements of the various control surfaces must be

carefully controlled by proper rigging of the flight control systems. The airplanes, must, therefore, be

rigged according to the following FAA Approved data:

Boeing Drawing Numbers:

114A1001, Krueger Flap Instl - Inbd Wing L.E.

251A1001, Rigging Instructions, Lateral & Speedbrake Control 251A2001, Rigging Instructions, Elevator Control System 251A3001, Rigging Instructions, Rudder Control System 251A4001, Rigging Instructions, Stabilizer Trim Control 256A3001, Rigging Instructions - Flap Actuation 256A2284, Flap Slat Sensor Instl - Leading Edge, Wing

IX - Model 737-900 (cont'd)

Certification Basis:

A. 14 CFR Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-91 with the exceptions listed below:

SECTION NO.	<u>TITLE</u>	AT AMDT. 25
25.365	Pressurized Compartment Loads	0
25.562	Emergency Landing Dynamic Conditions	64*
25.607	Fasteners	0,91**
25.631	Bird Strike Damage	0,91**
25.699	Lift and Drag Device Indicator	0,91**
25.783(f)	Doors	15,91**
25.807(c)(3)	Emergency Exits	15
25.813	Emergency Exit Access	45,91**
25.831(a) & (g)	Ventilation	41
25.832	Cabin Ozone Concentration	0***
25.841(a)	Pressurized Cabins	38
25.853(d)(3)	Compartment Interiors	72
25.904	[Automatic Takeoff Thrust Control System]	Not complied with (New at 25-62)
25.1141	Power Plant Controls: General	11****
25.1309	Equipment, Systems and Installations	0,91**
25.1419(c)	Ice Protection	23,91**
25.1447(c)(3)(ii)	Equipment Standards for Oxygen	41
	Dispensing Units	

- * Flight attendant seats are qualified to:
 - 1. Technical Standard Order (TSO) C127, dated March 30, 1992, or
 - 2. TSO C127a, and

Head Injury Criteria data collected and reported by the TSO applicant is less than 1000 and, Femur Injury Criteria data collected and reported by the TSO applicant is less than 2250 pounds, and, Permanent deformation data collected and reported by the TSO applicant are in compliance with the requirements of FAA Advisory Circular (AC) 25.562-1A.

Passenger and crew seats in the flight deck comply with \$25.562(a),(b),((c)(1),(2),(3),(4),(7), and (8)). In addition flight deck observer seats will comply with \$25.562((c)(5)).

- ** Applicable to new and significantly modified structure and systems and portions of the airplane affected by these changes. Where two amendment levels are shown for the same paragraph, the number without the asterisk (*) applies to structures, systems and portions of the airplane which are not new or significantly modified. The structure, systems, and components which comply with the later amendment are identified in Boeing document D010A001, approved by the FAA and JAA, and referenced on the TCDS.
- *** Boeing provides FAA approved data (Document number D6-49779) to 737 operators to enable the operators to show ozone compliance per §121.578 for their specific route structures.
- **** Exception applies to Auxiliary Power Unit spar mounted fuel shut off valve only. All other power plant controls were shown to comply with § 25.1141 at amendment 25-91.

Amendment level "0" is the original published version of 14 CFR Part 25 (February 1, 1965). The certification basis for the following regulations at amendment levels later than amendment 25-91.

SECTION NO.	AT AMDT. 25.	<u>TITLE</u>
25.101	92	Performance; General
25.105	92	Takeoff
25.107	94	Takeoff Speeds
25.109	92	Accelerate Stop Distance
25.113	92	Takeoff Distance and Takeoff Run
25.115	92	Takeoff Flight Path
25.571(e)(1)	96	Damage Tolerance and Fatigue Evaluation of Structure
25.735	92	Brakes
25.855	93	Cargo or Baggage Compartments
25.857	93	Cargo Compartment Classification
25.858	93	Cargo or Baggage Compartment Smoke or Fire Detection System
25.981(b)(d)	125	Fuel Tank Ignition Prevention (for Flammability Reduction System)
25.1533	92	Additional Operating Limitations

IX - Model 737-900 (cont'd)

Special Conditions:

25-ANM-132, Special Conditions published in the Federal Register on September 17, 1997 for 737-600/-700/-800 airplanes and applicable to later amendments of the 737 model that incorporate the same novel or unusual design feature:

- 1. High Intensity Radiated Fields (HIRF) Protection.
- 2. Limit Engine Torque Loads for Sudden Engine Stoppage.

25-308-SC, Special Conditions Boeing Model 737-200/200C/300/400/500/600/700C/800/900 Series Airplanes; Flammability Reduction Means (Fuel Tank Inerting) published in the Federal Register on December 5, 2005

25-358-SC, Special Conditions published in the Federal Register on June 29, 2007 addressed 737-600/-700/-700C/-800/-900 and 900ER series airplanes regarding seats with non-traditional, large, non-metallic panels

25-386-SC, Special Conditions published in the Federal Register on August 7, 2009, addressed 737-600/-700/-700C/-800/ and 900ER series airplanes with inflatable lapbelts installed

25-404-SC, Special Conditions published in the Federal Register on April 12, 2010, Modification to Boeing Model 737-600/-700/-700C/-800/-900 and -900ER Series Airplanes: Rechargeable Lithium Batteries and Rechargeable Lithium-Battery Systems

25-632-SC, Special Conditions: The Boeing Company, Boeing Model 737-8 Airplane; Non-Rechargeable Lithium Battery Installations, published in the Federal Register on August 19, 2016 (contains applicability that extends across all 737 model series), Effective April 22, 2017

<u>Equivalent Safety Findings</u> for the 737-900 (specifications and restrictions of its content, such as production winglet installation, must be met before an issue paper is considered to apply to any specific configuration of a model series):

SECTION NO.	TITLE	ELOS No.
§1.2	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§1.2 §25.21(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.103	Use of 1-g Stall Speed Instead of Minimum Speed Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.103 §25.107	Use of 1-g Stall Speed Instead of Minimum Speed Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.107 §25.111(a)	Use of 1-g Stall Speed Instead of Minimum Speed Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.111(a) §25.119(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.121(c)(d)	Use of 1-g Stall Speed Instead of Minimum Speed Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1 AT2721SE-T-F-1
	Use of 1-g Stall Speed Instead of Minimum Speed Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1 AT2721SE-T-F-1
\$25.125(a) \$25.143(a)	Use of 1-g Stall Speed Instead of Minimum Speed Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1 AT2721SE-T-F-1
\$25.143(g)	Use of 1-g Stall Speed Instead of Minimum Speed Use of 1-g Stall Speed Instead of Minimum Speed	
\$25.145(a)(b)(c)	Use of 1-g Stall Speed Instead of Minimum Speed Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.147(a)(c)(d)		AT2721SE-T-F-1
\$25.149(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.161(b)(c)(d)(e)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.175(a)(b)(c)(d)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.177(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.181(a)(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.201(a)(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.207(b)(c)(d)(e)(f)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.231(a)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.233(a)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.237(a)(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.395(a)	Lateral Control System Load Factors	AT2721SE-T-A-5
§25.613	Material Design Values	AT2720SE-T-A-9
§25.733	Return Landing Capability	AT0328SE-T-F-3
	D 7 11 0 1111	via AT2421SE-T-G-1
§25.735	Return Landing Capability	AT0328SE-T-F-3
<u> </u>		via AT2421SE-T-G-1
§25.735(f)(g)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.773(b)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.791	"No Smoking" limitation in the Passenger Compartment	AT0328SE-T-C-5
§25.810 (a)	Escape Slides	AT2721SE-T-C-4
§25.811(f)	Exterior Exit Markings	TD2695SE-T-C-1
§25.811(f)	Door Sill Reflectance on B727, B737, B747, B757, B767, and B777	AT1736SE-T-C-14
§25.812(b)	Emergency Exit Locator and Marking Signs	AT0328SE-T-C-3
		via AT2720SE-T-G-1
§25.813(c)	Seat Obstruction of the Provided Exit Opening at Overwing	AT2721SE-T-C-1
	Exit Door and Reduced Passageway to the Overwing Exits	
	(for Type III Automatic Overwing Exit)	
§25.831	Airplane Operation with Air Conditioning Packs Off During	AT2720SE-T-S-20
	Takeoff	via PS05-0002-G-8
§25.841(a)(b)	Cabin Altitude Warning System with Dual Limits for	TD9770SE-T-S-1
	Operations into High Altitude Airports	
§25.853(a)	Adhesives Used in Interior Panel Bent Joint Potting	PS08-0670-C-1
	Applications	

IX - Model 737-900 (cont'd)

\$ 25.853(a)(d)	TITLE Equivalent Level of Safety (ELOS) Finding for Flammability	ELOS No. PS13-1000-C-5
	Testing Hierarchy	
§25.853	"No Smoking" limitation in the Passenger Compartment	AT0328SE-T-C-5
§25.933(a)	Flight Critical Thrust Reversers	AT2720SE-T-P-2
		via PS05-0002-G-8
§25.979(b)(1)	Pressure Fueling System – Automatic Refueling Shutoff	AT0328SE-T-P-5
007.004()(0)	System Check Function	via AT2720SE-T-G-1
§25.981(a)(3)	Equivalent Level of Safety (ELOS) Finding for Boeing Puget	PS-05-0123-P-1
825 001 (L) (D)	Sound Ground Fault Interrupter Relays	D005 0155 D 0
§25.981(b)(d)	Fuel Tank Flammability Reduction Rule	PS05-0177-P-2
§25.1001(c)	Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
§25.1001	Return Landing Capability	AT0328SE-T-F-3
825 1201	D . I . I . G . LIII.	via AT2421SE-T G-1
§25.1301	Return Landing Capability	AT0328SE-T-F-3
		:- ATO401CE T.C. 1
825 1200(-)	Determ I and in a Constitute	via AT2421SE-T G-1
§25.1309(a)	Return Landing Capability	AT0328SE-T-F-3
\$25 1200(a)	Cohin Altitude Warning System with Dwel Limits for	via AT2421SE-T G-1 TD9770SE-T-S-1
§25.1309(c)	Cabin Altitude Warning System with Dual Limits for	1D9//03E-1-3-1
825 1222(a)	Operations into High Altitude Airports Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1
\$25.1323(c) \$25.1325(e)	Use of 1-g Stall Speed Instead of Minimum Speed Use of 1-g Stall Speed Instead of Minimum Speed	AT2721SE-T-F-1 AT2721SE-T-F-1
· · · · · · · · · · · · · · · · · · ·	Equivalent Level of Safety (ELOS) Finding for the Position	
§25.1389(b)(3)	• • • • • • • • • • • • • • • • • • • •	AT0328SE-T-S-17
§25.1441(c)	Light System Crew Determination of the Quantity of Oxygen Available in	PS13-0901-ES-1
§23.1441(C)	the Lavatory Passenger Service Units Bottles	F313-0901-E3-1
§25.1443(c)	Determination of Minimum Oxygen Flow for the Lavatory	TS13-0005-S-1
§23.1443(C)	Oxygen System	1313-0003-3-1
§25.1443(d)	Equivalent Level of Safety (ELOS) finding for Portable Pulse	TC6918SE-T-ES-20
823.1443(u)	Oxygen System (First Aid Oxygen Only)	vis PS15-0817-G-6
§25.1447(c)(1)	Cabin Altitude Warning System with Dual Limits for	TD9770SE-T-S-1
§23.1447(C)(1)	Operations into High Altitude Airports	1D)//03E-1-5-1
§25.1529	Inclusion of Airworthiness Limitations within the Boeing ICA	TC6918SE-T-G-8
823.1327	Manuals	1C0/105E-1-U-0
§25.1587(b)	Use of 1-g Stall Speed Instead of Minimum Speed (F-1)	AT2721SE-T-F-1
523.1307(0)	ose of 1 g start speed instead of withinfiant speed (1-1)	via AT2421SE-T-G-1
1		11111111111111111111111111111111111111

Exemptions:

- \$25.305, 25.307(a), 25.601, 25.603(c), 25.613(a) and (b), 25.901(c), and 25.1103(d) Partial Exemption Localized areas of temperature related damage (Exemption No. 9571, December 11, 2007).
- \$25.853(a), appendix F, paragraph (a)(1)(i) Partial Time-Limited Exemption, Testing on Large Interior Panels, granted through November 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010, Exemption No. 9791C, February 4, 2011)
- § 25.562(b)(2) Emergency Landing Dynamic Conditions related to Flight Deck Testing (Exemption No. 6425 Originally granted April 12th, 1996, Exemption 6425A granted August 20,1999).
- \$25.901(c) Partial Exemption No single powerplant or auxiliary power unit failure will jeopardize the safe operation of the airplane. (Originally granted February 4, 2003, Exemption No. 7968) See NOTE 5 for information about high thrust failure.
- \$25.901(c) Time-limited exemption for up to 48 months after the effective date of this exemption from 14 CFR 25.901(c), Amendment 25-126, and 25.981(a)(3), Amendment 25-102 or later, as they pertain to fuel tank ignition prevention associated with the following FQIS changes on in-service and newly-produced 737-600/-700/-700C/-800/-900/-900ER airplanes:
 - Replacement of the SCCC and the ARINC display card within the FQPU; and
 - Changed areas for the re-routing and separation of FQIS wires where the changed areas of the FQIS wire routing meet the installation requirements for separation and fault tolerance required to comply with § 25.981(a)(3) as associated with the semi-monolithic side-of-body change, and forward bulkhead relocation.

(Exemption No. 10905, December 18, 2013, Expires December 18, 2017)

- §25.1435(b)(1) Hydraulic Pressure Test (Originally granted August 20, 1999, Exemption No. 6953).
- \$25.1447(c)(1) Automatic Presentation of Oxygen Masks to Allow Operation at High Altitude Airports (Exemption No. 8668A, December 30, 2013).

IX - Model 737-900 (cont'd)

14 CFR Part 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:

SECTION NO.	<u>TITLE</u>	AT AMDT. 26-
26.11	Electrical wiring interconnection systems (EWIS) maintenance program.	0
26.21	Limit of Validity	5
26.33	Holders of type certificates: Fuel tank flammability.	3
26.39	Newly produced airplanes: Fuel tank flammability	3
26.43	Holders of and applicants for type certificates – Repairs	1
26.45	Holders of type certificates - Alterations and repairs to alterations	1
26.47	Holders of and applicants for a supplemental type certificate – Alterations	
	And repairs to alterations	1
26.49	Compliance plan	1

14 CFR Part 34:

§34 of the FAR as amended at the time of certification.

14 CFR Part 36:

§36 of the FAR as amended at the time of certification. See the appropriate FAA Approved Airplane Flight Manual listed in Note (2) for applicability of Stage 4 Noise Recertification through Amendment 36-28.

B. Certification basis for §25.981(b) and §25.981(d) at amendment 25-125, and Equivalent Safety Finding P-2, dated May 25, 2010, for the flammability reduction system (FRS), is applied if fuel tank inerting is installed in new airplane production (line #'s 2517, 2620 and on) or as a modification per Service Bulletins 737-47-1002 and 737-47-1003. Airworthiness limitations for the FRS are contained in Section 9 of the applicable Maintenance Planning Document.

Certification Maintenance

Requirements (CMR's): The CMR's are listed in either the FAA approved Section 9 of Boeing Maintenance Planning Data

Document D626A001-CMR, revision March 2001 thru the April 2016 revision, and Document D626A001-9-03 from the July 2016 revision thereafter at latest FAA approved revision, or the applicable engine Type Certification Data Sheet. The more restrictive requirement from these two

documents shall be in force.

Production

Basis: Production Certificate No. 700

Required

Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification

Basis) must be installed in the aircraft for certification. The required equipment is noted in the Type Design

data.

Service

Information: The following Boeing "Structural Repair Manual" Documents are FAA-approved. Service Bulletins and

other service information, when FAA-approved, will carry a statement to that effect. D634A211 for the 737

900.

C.G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

IX - Model 737-900 (cont'd)

NOTES FOR SECTION IX (737-900):

NOTE 1. A current weight and balance report including list of equipment included in the certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification. For each Model the Weight and Balance Control and Loading Manual (Boeing Document D043A590) consists of the Basic Manual and a Supplement Aircraft Report. This is in accordance with 14 CFR 25.29 and 25.1519 which establishes operating limitations determined under 25.23 through 25.27.

NOTE 2. Airplane operation must be in accordance with the FAA Approved AFM. All placards required in either the FAA Approved AFM, the applicable operating rules or the Certification Basis must be installed in the airplane. Boeing Document No. D631A001 is the basic FAA Approved Airplane Flight Manual for Model 737-900 airplane.

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 D626A001-CMR thru the April 2016 revision, and starting with the July 2016 revision Document D626A001-9 thereafter. 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 following documents are the FAA approved requirement to comply with 14 CFR 25.1529, 43.16 and 91.403.

Prior to July 2016:

D626A001-CMR, Boeing 737-600/700C/800/900/900ER Maintenance Planning Data (MPD) After July 2016:

 $D626A001-9-01, 737-600/700/700C/800/900/900ER\ Airworthiness\ Limitations\ (AWLs)$ $D626A001-9-02, 737-600/700/700C/800/900/900ER\ Airworthiness\ Limitations\ -\ Line\ Number\ Specific$ $D626A001-9-03, 737-600/700/700C/800/900/900ER\ Certification\ Maintenance\ Requirements\ (CMRs)$ $D626A001-9-04, 737-600/700/700C/800/900/900ER\ Special\ Compliance\ Items/Airworthiness\ Limitations$

Each operator must incorporate into their airline's FAA-approved maintenance program, the applicable requirements of these documents.

- NOTE 4. The type design reliability and performance of the Model 737-900, airplane has been evaluated in accordance with FAA Advisory Circular 120-42A and found suitable for Extended Range Operations with Two-Engine Airplanes (ETOPS) when operated and maintained in accordance with Boeing Document D044A007, "737-600/-700/-700C/-800/-900/ER ETOPS CONFIGURATION, MAINTENANCE, AND PROCEDURES". Additionally, type design changes incorporated after February 15, 2007 that require ETOPS approval have been evaluated in accordance with 14 CFR 25.1535 and found suitable for Extended Operations (ETOPS) when operated and maintained in accordance with Boeing Document D044A007. This finding does not constitute approval to conduct ETOPS operations.
- NOTE 5. The FAA has determined that the occurrence of any uncontrollable high thrust failure condition "may endanger the safe operation of an airplane" and hence is reportable under §121.703, 125.409, and 135.415.
- NOTE 6: 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 and Special Conditions 25-308-SC are listed in the FAA-approved Airworthiness Limitations and Certification Maintenance Requirement, Section 9, of Boeing 737-600/700C/800/900/900ER Maintenance Planning Data Document D626A001-CMR, Revision November 2005 or later FAA-approved revision thru July 2016, and the latest FAA-approved revision of the D626A001-9-0x series documents thereafter. All Model 737-900 series airplanes, production line number 1679 and on, must comply with Revision March 2006, or a later FAA-approved revision. The FAA is planning to issue an airworthiness directive mandating compliance with Revision March 2006, or a later FAA-approved revision, applicable to all Model 737-600, -700, -700C, -800, and -900 series airplanes with production numbers lower than 1679.
- NOTE 7: The Model 737-900 has been approved to operate in "Reduced Vertical Separation Minimum" (RVSM) airspace. Continued airworthiness and operational approval aspects of RVSM must be constructed according to Advisory Circular (AC) 91-RVSM, titled "Approval of Aircraft and Operators for Flight in Airspace Above Flight Level (FL) 290 Where a 1,000 Foot Vertical Separation Minimum is Applied."

X. Model 737-900ER (Approved April 20, 2007) Transport Aircraft.

Engines: Two CFM International, S.A. CFM 56-7B2x, -7B2x/3 or -7B2xE Series Turbofan Engines. Refer to the

FAA Approved Airplane Flight Manual identified in Note 2 for engine limitations. (Engine Type

Certificate No. E00055SE, or E00056SE)

Fuel: Fuels meeting the following specifications and mixtures thereof are approved for use:

* Jet A, Jet A-1 as specified in ASTM-D1655

* JP-5 as specified in MIL-T-5624

* JP-8 as specified in MIL-T-83133

Fuels conforming to G.E. Specification D50TF2 (Class A, C, D and E) or fuels produced or certified to other specifications <u>and having properties meeting the requirements of the above specifications</u> are acceptable for use. Consult Flight Manual for additive use.

Oil Consumption: For compliance with \$25.1011(b), the approved maximum oil consumption rate for the CFM56-7B

engines installed on this model airplane has been established as 0.340 gallons per hour. Operation of the Model 737-900ER airplane with engine oil consumption rates higher than this limit is not permitted.

Engine Ratings:

Model 737-900ER	Takeoff static thrust standard day, sea level conditions (5 min) lb.	Maximum continuous static thrust, standard day, sea level conditions lb.
CFM56-7B24	24,200	22,800
CFM56-7B24/3	24,200	22,800
CFM56-7B24E	24,200	22,800
CFM56-7B24/3B1**	24,200	22,800
CFM56-7B24E/B1**	24,200	22,800
CFM56-7B26	26,300	25,900
CFM56-7B26/B1	26,300	25,900
CFM56-7B26/3	26,300	25,900
CFM56-7B26E	26,300	25,900
CFM56-7B26/3F	26,300	25,900
CFM56-7B26E/F	26,300	25,900
CFM56-7B27	27,300	25,900
CFM56-7B27/3	27,300	25,900
CFM56-7B27E	27,300	25,900
CFM56-7B27/3F	27,300	25,900
CFM56-7B27E/F	27,300	25,900
CFM56-7B27/B1	27,300	25,900
CFM56-7B27/3B1	27,300	25,900
CFM56-7B27E/B1	27,300	25,900
CFM56-7B27/3B1F	27,300	25,900
CFM56-7B27E/B1F	27,300	25,900
CFM56-7B27/B3	27,300	25,900
CFM56-7B27/3B3	27,300	25,900
CFM56-7B27E/B3	27,300	25,900
** Special Rating		

Engine and Weight Limits:

For engine operating limits see Engine Type Certificate Data Sheet No. E00055EN or E00056EN or the FAA Approved Airplane Flight Manual identified in Note 2. Additional limitations may apply to 737-900ER model airplanes (see Note 8)

Thrust Settings: The appropriate engine power setting curve (%N1), in the FAA Approved Airplane Flight Manual or

AFM Appendices must be used for control of engine thrust.

Airspeed Limits: VMO/MMO - 340/0.82 (KCAS)

For other airspeed limits see the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

C. G. Range: See the appropriate FAA Approved Airplane Flight Manual (See Note 2)

Maximum Weights: 737-900ER

Maximum Taxi Weight (MTW)188,200 lbs.Maximum Takeoff Weight (MTOW)187,700 lbs.Maximum Landing Weight (MLW)157,300 lbs.Maximum Zero Fuel Weight (MZFW)149,300 lbs.

X - Model 737-900ER (cont'd)

Eligible Serial Numbers:

Model 737-924ER 30130, 30131, 31620, 31622, 31633, 31640, 31643, 31644, 31646-31651, 31653 31655, 31661, 31664-31666, 32826, 32827, 32829, 32833, 32835, 32836, 33456, 33457, 33460, 33527-33529, 33531-33537, 35719, 35727, 36599, 36600, 37093-37095, 37097-37100, 37102, 37199-37201, 37205-37208, 38702, 38703, 40000, 40003-40005, 41742-41745, 42175-42180, 42181, 42182, 42183, 42184, 42185, 42186, 42187, 42188, 42189, 42190, 42191, 42192, 42193, 42194, 42195, 42196, 42197, 42198, 42199, 42200, 42201, 42202, 42203, 42204, 42739, 42740, 42742, 42744, 42745-42748, 42816-42821, 43530-43535, 44560, 44561, 44562-44565, 44580, 44581, 60087, 60088, 60121, 60122, 60316, 60317 737-932ER 31912-31942, 31943, 31944, 31945, 31946, 31947, 31948, 31949, 31950, 31951, 31952, 31953, 31954, 31955, 31956, 31957, 31958, 31959, 31960, 31961, 31962, 31963, 31964, 31965, 31966, 31967, 31968, 31969, 31970, 31971, 31972, 31973, 31974, 31975, 31976 737-958ER 41552-41554, 41555, 41556, 41557, 41558, 41559 737-990ER 35205, 35206, 36348, 36349, 36350, 36351, 36352, 36353, 36354, 36355, 36356, 36357, 36360, 36361-36363, 36364, 40714, 40715, 40716, 41189, 41702-41704, 41705, 41727, 41728, 41729, 41730-41735, 43255, 43292, 43293, 44105, 44106, 44107, 44108, 44109, 44110, 60576, 60580, 62469, 62470, 62471, 61620, 62680, 62681 737-91MER 40069, 40070, 40071, 44424, 44425 40888, 40889 737-93YER 737-94XER 36086, 36087 737-96NER 35223, 35225, 35227, 36539 737-97YER 62515 737-9B5ER 37633-37636, 42173, 42174 737-9BQER 37632 (See NOTE 9 for information about Lower Cabin Altitude) 737-9F2ER 40973, 40974, 40977-40979, 40982, 40983, 40985, 40986, 42010, 42011, 42012, 42013, 42014 737-9FGER 39317, 39318 (See NOTE 9 for information about Lower Cabin Altitude) 34952, 34953, 34956, 34957, 34961, 37363 737-9GJER 737-9GPER 35679, 35680, 35710-35723, 35724-35737, 37268-37288-37290, 37291, 37296, 38299-38302, 38304, 38305, 38306, 38307, 38310, 38311, 38313, 38315, 38683, 38684, 38687-38690, 38720, 38723, 38726, 38729-38732, 38736-38739, 38741, 38742, 38743, 38748, 38749, 39823, 39824, 39832, 39837, 39839, 39841, 39860, 39878, 39880 737-9HWER 37546 (See NOTE 9 for information about Lower Cabin Altitude) 737-9JAER 37560 (See NOTE 9 for information about Lower Cabin Altitude) 737-9KFER 41114, 41118, 41119 737-9KVER 41534, 41535 737-9LBER 38890 (See NOTE 9 for information about Lower Cabin Altitude)

Airframe Limits Capacities & Rigging

Minimum Crew

737-9LPER

737-900ER

for All Flights: 2 (Pilot and Copilot)

Maximum

Passengers: Three exit configurations based on the activation and classification of the Mid-Cabin Emergency Door

(MED)

41712, 41843

Two door arrangement with MED de-activated has 189 maximum passenger capacity

Three door arrangement with MED activated and rated as a Type II exit - 215 maximum passenger

31977, 31978, 31979, 31980, 38312, 62682, 62683, 62768, 62769, 62814, 62815, 62816, 62817

Three door arrangement with MED activated and rated as a Type I exit – 220 maximum passenger

capacity

Maximum Baggage

Cargo: See Note 1 and appropriate Weight and Balance Manual listed in Note 1.

Fuel & Oil

Capacities: See Note 1 and appropriate Weight and Balance Manual listed in Note 1.

Minimum Required

Fuel: See appropriate FAA Approved Airplane Flight Manual listed in Note 2.

Maximum Operating

Altitude: 41,000 ft.

Datum: See appropriate Weight and Balance Manual listed in Note 1.

MAC: 155.81 in

X - Model 737-900ER (cont'd)

Other Operating

Limitations: See Note 4 - Extended Range Two-Engine Operations (ETOPS)

Control Surface

Movements: To ensure proper operation of the airplane, the movements of the various control surfaces must be

carefully controlled by proper rigging of the flight control systems. The airplanes, must, therefore, be

rigged according to the following FAA Approved data:

Boeing Drawing Numbers:

114A1001, Krueger Flap Instl - Inbd Wing L.E.

251A1001, Rigging Instructions, Lateral & Speedbrake Control 251A2001, Rigging Instructions, Elevator Control System 251A3001, Rigging Instructions, Rudder Control System 251A4001, Rigging Instructions, Stabilizer Trim Control 256A3001, Rigging Instructions - Flap Actuation 256A2284, Flap Slat Sensor Instl - Leading Edge, Wing

Certification Basis:

A. 14 CFR Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-108 with the exceptions listed below:

SECTION NO.	TITLE	AT AMDT. 25-
25.365	Pressurized Compartment Loads	0*****
25.562	Emergency Landing Dynamic Conditions	64*
25.571 except (e)	Damage Tolerance	86 (See Note 3)
25.607	Fasteners	0**
25.631	Bird Strike Damage	0**
25.699	Lift and Drag Device Indicator	0**
25.783(f)	Doors-Exception applies to all except Forward Access	15**
	& Airstair, EE Access, automatic overwing exit	
	(AOE) and MED	
25.807 except (c)(3)	Emergency Exits (with MED de-activated)	72*****
25.807(c)(3)	Emergency Exits (with MED de-activated)	15*****
25.831(a)(g)	Ventilation	41
25.832	Cabin Ozone Concentration	0***
25.841(a)	Pressurized Cabins	38
25.903	Engines	94
25.981	Fuel Tank Ignition Prevention	11
25.1091	Air Induction	57
25.1141	Power Plant Controls: General, Exception applies	11****
	to APU spar mounted fuel shut off valve only	
25.1183	Flammable Fluid-Carrying Components	57
25.1185	Flammable Fluids	19
25.1309	Equipment, Systems and Installations	0,108**
25.1419(c)	Ice Protection	23
25.1419 except (c)	Ice Protection	72
25.1435	Hydraulic Systems	72
25.1447(c)(3)(ii)	Equipment Standards for Oxygen	41
	Dispensing Units	

- * Flight attendant seats are qualified to:
 - 1. Technical Standard Order (TSO) C127, dated March 30, 1992, or
 - 2. TSO C127a, and
 - a) Head Injury Criteria data collected and reported by the TSO applicant is less than 1000 and.
 - b) Femur Injury Criteria data collected and reported by the TSO applicant is less than 2250 pounds, and,
 - c) Permanent deformation data collected and reported by the TSO applicant are in compliance with the requirements of FAA Advisory Circular (AC) 25.562-1A.
 - 3. As an alternative, flight attendant partitions may be qualified to \$25.562(a), (b),(c). Passenger and crew seats in the flight deck comply with \$25.562(a),(b), ((c)(1),(2),(3),(4),(7), and (8)). In addition flight deck observer seats will comply with \$25.562((c)(5)).
- ** Exception applies only to structures, systems and portions of the airplane which are not new or significantly modified. The structure, systems, and components which comply with amendment 25-108 are identified in Boeing document D010A001 "New and Significantly Modified Systems, Equipment, and Structures on the Next Generation 737 Airplane Family."
- *** Boeing provides FAA approved data (Document number D6-49779) to 737 operators to enable the operators to show ozone compliance per §121.578 for their specific route structures.
- *** Exception applies to Auxiliary Power Unit spar mounted fuel shut off valve only.

X - Model 737-900ER (cont'd)

**** Exception applies to Auxiliary Power Unit spar mounted fuel shut off valve only. All other power plant controls were shown to comply with § 25.1141 at Amendment 25-108.

58

***** Note deleted

****** Exceptions to \$25.807(c)(3) at Amendment 25-15 and \$25.807 at amendment 25-72 apply to the exit configuration with a de-activated Mid Cabin Emergency Exit Door only. The exit configurations with the activated Mid Cabin Emergency Door (Type I) comply with \$25.807 at Amendment 25-108.

****** The airplane is designed to withstand the effects of a sudden release of pressure venting aft through an 820 square inch opening in that bulkhead above the main deck floor and the total available bulkhead area below the main deck floor at any operating altitude.

The certification basis for the following regulations at amendment levels later than 25-108.

SECTION NO.	<u>TITLE</u>	AT AMDT. 25-
25.869(a)(4)	Fire Protection Systems	113
25.981(b)(d)	Fuel Tank Ignition Prevention	125
	(for Flammability Reduction System)	
25.1353(d)	Electrical Equipment and Installations	113

Special Conditions:

25-ANM-132, Special Conditions published in the Federal Register on September 17, 1997 for 737-600/-700/-800 airplanes and applicable to later amendments of the 737 model that incorporate the same novel or unusual design feature:

- 1. High Intensity Radiated Fields (HIRF) Protection.
- 2. Limit Engine Torque Loads for Sudden Engine Stoppage.

25-347-SC, Special Conditions published in the Federal Register on March 26, 2007 addressed 737-900ER series airplanes regarding the Interaction of Systems and Structures

25-358-SC, Special Conditions published in the Federal Register on June 29, 2007 addressed 737-600/-700/-700C/-800/-900 and 900ER series airplanes regarding seats with non-traditional, large, non-metallic panels

25-386-SC, Special Conditions published in the Federal Register on August 7, 2009, addressed 737-600/-700/-700C/-800/ and 900ER series airplanes with inflatable lapbelts installed

25-404-SC, Special Conditions published in the Federal Register on April 12, 2010, Modification to Boeing Model 737-600/-700/-700C/-800/-900 and -900ER Series Airplanes: Rechargeable Lithium Batteries and Rechargeable Lithium-Battery Systems

25-550-SC, Special Conditions published in the Federal Register on June 6, 2014, Airplane Electronic Systems Security Protection from Unauthorized External Access

25-551-SC, Special Conditions published in the Federal Register on June 6, 2014, Isolation [of] Airplane Electronic System Security Protection from Unauthorized Internal Access

25-632-SC, Special Conditions: The Boeing Company, Boeing Model 737-8 Airplane; Non-Rechargeable Lithium Battery Installations, published in the Federal Register on August 19, 2016 (contains applicability that extends across all 737 model series), Effective April 22, 2017

<u>Equivalent Level of Safety Findings</u> for the 737-900ER (specifications and restrictions of its content, such as production winglet installation, must be met before an issue paper is considered to apply to any specific configuration of a model series):

SECTION NO.	<u>TITLE</u>	ELOS No.
§25.251	Vibration/Buffeting Compliance Criteria, Ku-Band External	PS14-0725-F-1
	Antenna Installed on Boeing Model 737-800 and 737-900ER	
	Series Aircraft.	
§25.395(a)	Lateral Control System Load Factors	AT0328SE-T-A-5
		via PS05-0002-G-8
§25.613	Material Design Values	AT2720SE-T-A-9
		via PS05-0002-G-8
§25.733	Return Landing Capability	AT0328SE-T-F-3
		via PS05-0002 G-8
§25.735	Return Landing Capability	AT0328SE-T-F-3
		via PS05-0002-G-8
§25.791	"No Smoking" limitation in the Passenger Compartment	AT0328SE-T-C-5
		via PS05-0002-G-8
§25.807(g)	Acceptable Passenger Capacity and Access to Mid Cabin Exits	AT6325SE-T-C-1
§25.810 (a)(1)(ii)	Escape Slides	AT0328SE-T-C-4
		via PS05-0002-G-8
§25.811(f)	Door Sill Reflectance on B727, B737, B747, B757, B767, and	AT1736SE-T-C-14
	B777	via PS05-0002-G-8
§25.811(f)	Exterior Exit Markings	TD2695SE-T-C-1

X - Model 737-900ER (cont'd)

SECTION NO.	TITLE	ELOS No.
§25.812(b)	Emergency Exit Locator and Marking Signs	AT0328SE-T-C-3 via PS05-0002-G-8
§25.813(a)	Acceptable Passenger Capacity and Access to Mid Cabin Exits	AT6325SE-T-C-1
§25.813(c)	Seat Obstruction of the Provided Exit Opening at Overwing Exit Door and Reduced Passageway to the Overwing Exits (for Type III Automatic Overwing Exit)	AT2721SE-T-C-1
§25.831(a)	Airplane Operation with Air Conditioning Packs Off During Takeoff	AT2720SE-T-S-20 via PS05-0002-G-8
§25.841(a), (b)(6)	Cabin Altitude Warning System with Dual Limits for Operations into High Altitude Airports	TD9770SE-T-S-1 via PS08-0120 G-6
§25.853	"No Smoking" limitation in the Passenger Compartment	AT0328SE-T-C-5 via PS05-0002-G-8
§25.853(a)	Adhesives Used in Interior Panel Bent Joint Potting Applications	PS08-0670-C-1
§25.933(a)	Flight Critical Thrust Reversers	AT2721SE-T-P-2 via PS05-0002-G-8
§25.979(b)(1)	Pressure Fueling System – Automatic Refueling Shutoff System Check Function	AT0328SE-T-P-5 via PS05-0002-G-8
§25.981(a)(3)	Equivalent Level of Safety (ELOS) Finding for Boeing Puget Sound Ground Fault Interrupter Relays	PS-05-0123-P-1
§25.981(b)(d)	Fuel Tank Flammability Reduction Rule	PS05-0177-P-2
§25.1001	Return Landing Capability	AT0328SE-T-F-3
\$23.1001	Return Eunding Capability	via PS05-0002-G-8
§25.1301	Return Landing Capability	AT0328SE-T-F-3
§23.1301	Return Landing Capability	via PS05-0002-G-8
§25.1309(a)	Return Landing Capability	AT0328SE-T-F-3
§23.1309(a)	Return Landing Capability	via PS05-0002-G-8
§25.1389(b)(3)	Equivalent Level of Safety (ELOS) Finding for the Position	AT0328SE-T-S-17
§23.1369(b)(3)	Light System	A103265E-1-5-17
§25.1389(b)	Equivalent Level of Safety (ESF) Finding for the Position Light System	TD5046SE-T-SE-2 via PS05-0002-G-8
§25.1389(b)	Equivalent Safety Finding (ESF) for Forward Position Light System Minimum Intensity	LB08-0012-T-SE-1 via PS05-0002-G-8
§25.1391	Equivalent Safety Finding (ESF) for Forward Position Light System Minimum Intensity	LB08-0012-T-SE-1 via PS05-0002-G-8
§25.1393	Equivalent Safety Finding (ESF) for Forward Position Light System Minimum Intensity	LB08-0012-T-SE-1 via PS05-0002-G-8
§25.1395	Equivalent Level of Safety (ESF) Finding for the Position Light System	TD5046SE-T-SE-2 via PS05-0002-G-8
§25.1395	Equivalent Safety Finding for Forward and Rear Position Lights	AT2721SE-T-S-17
§23.1397(b)	Aviation Green Light Chromaticity Requirements	PS12-1026-SE-1
\$25.1411(b)	Equivalent Level of Safety and Means of Compliance for Life Vest Stowage in Overhead Passenger Service Units (PSU)	PS10-0077-C-1
§25.1419	Use of Analysis to Demonstrate Safe Flight in Icing Conditions	AT6325SE-T-S-2
§25.1435(b)	Request for an Equivalent Level of Safety Finding for the Hydraulic System Pressure Test	AT6325SE-T-S-1
§25.1441(c)	Crew Determination of the Quantity of Oxygen Available in the Lavatory Passenger Service Units Bottles	PS13-0901-ES-1
§25.1443(c)	Determination of Minimum Oxygen Flow for the Lavatory Oxygen System	TS13-0005-S-1
§25.1443(d)	Equivalent Level of Safety (ELOS) finding for Portable Pulse Oxygen System (First Aid Oxygen Only)	TC6918SE-T-ES-20 vis PS15-0817-G-6
§25.1517	Rough Air Speed VRA	AT6325SE-T-F-1
§25.1529	Inclusion of Airworthiness Limitations within the Boeing ICA Manuals	TC6918SE-T-G-8

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Exemptions applicable to the 737-900ER:

\$25.562(b)(2) Emergency Landing Dynamic Conditions - related to Flight Deck Testing (Exemption No. 6425 Originally granted August 12th, 1996, Exemption 6425A granted August 20,1999, Exemption No. 6425B granted March 10, 2009).

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- \$25.853(a), appendix F, paragraph (a)(1)(i) Partial Time-Limited Exemption, Testing on Large Interior Panels, granted through November 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010, Exemption No. 9791C, February 4, 2011).
- \$25.901(c) Partial Exemption No single powerplant or auxiliary power unit failure will jeopardize the safe operation of the airplane. (Originally granted February 4, 2003, Exemption No. 7968) (See Note 5)
- \$25.901(c) Time-limited exemption for up to 48 months after the effective date of this exemption from 14 CFR 25.901(c), Amendment 25-126, and 25.981(a)(3), Amendment 25-102 or later, as they pertain to fuel tank ignition prevention associated with the following FQIS changes on in-service and newly-produced 737-600/-700/-700C/-800/-900/-900ER airplanes:
 - Replacement of the SCCC and the ARINC display card within the FQPU; and
 - Changed areas for the re-routing and separation of FQIS wires where the changed areas of the FQIS wire routing meet the installation requirements for separation and fault tolerance required to comply with § 25.981(a)(3) as associated with the semi-monolithic side-of-body change, and forward bulkhead relocation.

(Exemption No. 10905, December 18, 2013, Expires December 18, 2017)

• \$25.1447(c)(1). Automatic Presentation of Oxygen Masks to Allow Operation at High Altitude Airports (Exemption No. 8668A, December 30, 2013).

14 CFR Part 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:

SECTION NO.	<u>TITLE</u>	AT AMDT. 26-
26.11	Electrical wiring interconnection systems (EWIS) maintenance program.	0
26.21	Limit of Validity	5
26.33	Holders of type certificates: Fuel tank flammability.	3
26.39	Newly produced airplanes: Fuel tank flammability	3
26.43	Holders of and applicants for type certificates – Repairs	1
26.45	Holders of type certificates - Alterations and repairs to alterations	1
26.47	Holders of and applicants for a supplemental type certificate – Alterations	1
	And repairs to alterations	
26.49	Compliance plan	1

Certification basis for §25.981(b) and §25.981(d) at amendment 25-125, and Equivalent Safety Finding P-2, dated May 25, 2010, for the flammability reduction system (FRS), is applied if fuel tank inerting is installed in new airplane production (line #'s 2517, 2620 and on) or as a modification per Service Bulletins 737-47-1002 and 737-47-1003. Airworthiness limitations for the FRS are contained in Section 9 of the applicable Maintenance Planning Document.

14 CFR Part 34: §34-3

14 CFR Part 36:

§36-28

X - Model 737-900ER (cont'd)

Certification Maintenance

Requirements (CMR's)

The CMR's are listed in either the FAA approved Section 9 of Boeing Maintenance Planning Data Document D626A001-CMR, revision R2 of March 2007 thru the April 2016 revision, and Document D626A001-9-03 from the July 2016 revision thereafter at latest FAA approved revision, or the applicable engine Type Certification Data Sheet. The more restrictive requirement from these two documents shall be in force.

Production

Production Certificate No. 700 **Basis:**

Required

Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification

Basis) must be installed in the aircraft for certification. The required equipment is noted in the Type Design

data.

Service

Information: The following Boeing "Structural Repair Manual" Documents are FAA-approved. Service Bulletins and

other service information, when FAA-approved, will carry a statement to that effect. D634A213 for the

737-900ER.

C.G. Range: See the appropriate FAA Approved Airplane Flight Manual listed in Note 2.

NOTES FOR SECTION X (737-900ER):

NOTE 1. A current weight and balance report including list of equipment included in the certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification. For each Model the Weight and Balance Control and Loading Manual (Boeing Document D043A590) consists of the Basic Manual and a Supplement Aircraft Report. This is in accordance with 14 CFR 25.29 and 25.1519 which establishes operating limitations determined under 25.23 through 25.27.

NOTE 2. Airplane operation must be in accordance with the FAA Approved AFM. All placards required in either the FAA Approved AFM, the applicable operating rules or the Certification Basis must be installed in the airplane. Boeing Document No. D631A001 is the basic FAA Approved Airplane Flight Manual for Model 737-900ER airplane.

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 D626A001-CMR thru the April 2016 revision, and starting with the July 2016 revision Document D626A001-9 thereafter. 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 following documents are the FAA approved requirement to comply with 14 CFR 25.1529, 43.16 and 91.403.

Prior to July 2016:

D626A001-CMR, Boeing 737-600/700C/800/900/900ER Maintenance Planning Data (MPD) After July 2016:

D626A001-9-01, 737-600/700/700C/800/900/900ER Airworthiness Limitations (AWLs) D626A001-9-02, 737-600/700/700C/800/900/900ER Airworthiness Limitations - Line Number Specific D626A001-9-03, 737-600/700C/800/900/900ER Certification Maintenance Requirements (CMRs) $D626A001-9-04, 737-600/700C/800/900/900ER\ Special\ Compliance\ Items/Airworthiness\ Limitations$

Required structural inspections for compliance with §25.571 and the retirement times for Safe-life parts are listed in the FAA Approved Airworthiness Limitations and Certification Maintenance Requirements Section 9 of Boeing 737-600/700/700C/800/900/900ER Maintenance Planning Document D626A001-CMR, Revision R2, or later FAA-approved revision thru July 2016, and the latest FAA-approved revision of the D626A001-9-0x series documents thereafter. Each operator must incorporate into their airline's FAAapproved maintenance program, the applicable requirements of this document.

NOTE 4.

The type design reliability and performance of the Model 737-900ER, airplane has been evaluated in accordance with FAA Advisory Circular 120-42A and found suitable for Extended Range Operations with Two-Engine Airplanes (ETOPS) when operated and maintained in accordance with Boeing Document D044A007, "737-600/-700/-700C/-800/-900/-900ER ETOPS CONFIGURATION, MAINTENANCE, AND PROCEDURES." Additionally, type design changes incorporated after February 15, 2007 that require ETOPS approval have been evaluated in accordance with 14 CFR 25.1535 and found suitable for Extended Operations (ETOPS) when operated and maintained in accordance with Boeing Document D044A007. This finding does not constitute approval to conduct ETOPS operations.

NOTE 5. The FAA has determined that the occurrence of any uncontrollable high thrust failure condition "may endanger the safe operation of an airplane" and hence is reportable under §121.703, 125.409, and 135.415.

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NOTE 6:

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 §25.981 are listed in the FAA-approved Airworthiness Limitations and Certification Maintenance Requirement, Section 9, of Boeing 737-600/700C/800/900 /900ER Maintenance Planning Data Document D626A001-CMR, Revision R2, dated March, 2007, or later FAA-approved revision thru July 2016, and the latest FAA-approved revision of the D626A001-9-0x series documents thereafter.

NOTE 7:

The Model 737-900ER has been approved to operate in "Reduced Vertical Separation Minimum" (RVSM) airspace. Continued airworthiness and operational approval aspects of RVSM must be constructed according to Advisory Circular (AC) 91-RVSM, titled "Approval of Aircraft and Operators for Flight in Airspace Above Flight Level (FL) 290 Where a 1,000 Foot Vertical Separation Minimum is Applied."

NOTE 8:

The acceptable engine models on 737-900ER model aircraft are dependent on the type of in-service use. See the Airplane Flight Manual for approved installation of the CFM56-7B26, CFM56-7B26/B1, or CFM56-7B27/B3 or CFM56-7B27E/B3. This applies only when the airplane is operating under the low cycles/hours maintenance program.

NOTE 9:

737-900ER airplanes modified by Boeing STC ST01697SE (Lower Cabin Altitude modification) are capable of maintaining a cabin altitude of 6500 feet in lieu of the standard 8000 feet when operating at a cruising altitude of 41,000 feet. This STC modification has been approved for airplanes listed in Figure 1 of Boeing Report D926A200, Revision N, dated May 23, 2009, or later FAA approved revision.

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