



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

**Engines:** 2 Pratt and Whitney Turbofan Engines JT8D-7, JT8D-7A, JT8D-7B, JT8D-9, 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 Ratings:	Takeoff static thrust, standard day, sea level <u>conditions (5 min) lb.</u>	Maximum continuous static thrust, standard day, <u>sea level conditions lbs.</u>
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

**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.

<u>Model:</u>	<u>Eligible Serial Numbers:</u>
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

**II. 737-200 (Cont'd)**

737-293	19306-19309, 19713, 19714, 20334, 20335,
737-296	22276, 22277, 22516, 22398
737-297	20209, 20210, 20242, 21739, 21740, 22051, 22426, 22629-22631
737-25A	23789-23791
737-25C	24236
737-27A	23794
737-2A1	20092-20096, 20589, 20777-20779, 20967-20971, 21094, 21095, 21597-21599, 22602
737-2A3	20299, 20300, 22737-22739
737-2A6	20194, 20195, 20412
737-2A8	20480-20486, 20960-20963, 21163, 21164, 21496-21498, 22280-22286, 22860-22863, 23036, 23037
737-2A9	20956
737-2B1	20280, 20281, 20786
737-2B2	20231, 20680
737-2B6	21214-21216, 22767
737-2B7	22878-22892, 23114-23116, 23131-23135
737-2C0	20070-20074
737-2C3	21012-21017
737-2C9	21443, 21444
737-2D6	20544, 20759, 20884, 21063-21065, 21211, 21212, 21285, 21286, 22766
737-2E1	20396, 20397, 20681, 20776, 20976, 21112
737-2E3	22703, 22792
737-2E7	22875, 22876
737-2F9	20671, 20672, 22771-22774, 22985, 22986
737-2H3	21973, 22624, 22625
737-2H4	20336, 20345, 20369, 20925, 21117, 21262, 21337-21340, 21447, 21448, 21533-21535, 21593, 21721, 21722, 21811, 21812, 21970, 22060-22062, 22356-22358, 22673-22675, 22730-22732, 22826, 22827, 22903-22905, 22963-22965, 23053-23055, 23108-23110, 23249
737-2H5	20453, 20454
737-2H6	20582-20584, 20586, 20587, 20631, 20926, 21732, 22620, 23320, 23849
737-2J8	22859
737-2K2	21397, 22025, 22296, 22906
737-2K3	23912, 24139
737-2K5	22596-22601
737-2K6	20957, 22340
737-2K9	22415, 22416, 22504, 22505, 23386, 23404, 23405
737-2L7	21616
737-2L9	21278, 21279, 21528, 21685, 21686, 22070-22072, 22406-22408, 22733-22735
737-2M2	21172, 21723, 22626, 22775, 22776, 23220, 23351
737-2M6	20913, 21138
737-2M8	21231, 21736, 21955, 22090
737-2M9	21236
737-2N1	21167
737-2N3	21165, 21166
737-2N7	21226
737-2N8	21296
737-2N0	23677-23679
737-2P5	21440, 21810, 22267, 22667, 23113
737-2P6	21355-21359, 21612, 21613, 21677, 21733, 21734
737-2Q3	21476-21478, 22367, 22736, 23117, 23481, 24103
737-2Q8	21518, 21687, 21735, 21960, 22453, 22760, 23148
737-2Q9	21719, 21720, 21975, 21976
737-2S3	21774-21776, 22278, 22279, 22633, 22660
737-2S9	21957
737-2T2	22793
737-2T4	22054, 22055, 22368-22371, 22529, 22697-22701, 22800-22804, 23272-23274, 23443-23447
737-2T5	22023, 22024, 22395-22397, 22632, 22979
737-2T7	22761, 22762
737-2U4	22161, 22576
737-2U9	22575
737-2V2	22607
737-2V5	22531
737-2V6	22431

**II. 737-200 (Cont'd)**

737-2W8	22628
737-2X2	22679
737-2X9	22777-22779
737-2Y5	23038-23040, 23847, 23848, 24031
737-2Z6	23059
737-T43A	20685-20703

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

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

Fuel: See NOTE 4.

Engine Ratings:	Takeoff static thrust, standard day, sea level <u>conditions (5 min) lb.</u>	Maximum continuous static thrust, standard <u>day, sea level conditions lb.</u>
JT8D-7, -7A, -7B	14,000	12,600
JT8D9D-9, -9A	14,500	12,600
JT8D-15, -15A	15,500	13,750
JT8D-17, -17A	16,000	15,200

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.

<u>Model:</u>	<u>Eligible Serial Numbers:</u>
737-202C	19426
737-204C	20282, 20389
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

**III. 737-200C (cont'd)**

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

**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.

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, P-5, and JP-8 are acceptable alternatives. Consult flight manual for additive use.

Engine Ratings:	Takeoff static thrust, standard day, sea level <u>conditions (5 min) lb.</u>	Maximum continuous static thrust, standard day, <u>sea level conditions lb.</u>
	CFM 56-3C-1	20,500
	CFM 56-3-B1	18,900
	CFM 56-3B-2	20,500

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

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.

**Model:****Eligible Serial Numbers:**

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, 25996, 25998

**IV. Model 737-300 (cont'd)**

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
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	29087, 30102
737-37K	27283, 27335, 27375, 29407, 29408
737-37Q	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, 24572, 24888, 24889, 25219, 25250, 25251, 26571-26602, 27378-27380, 27689-27722, 27926-27936, 27953-27956, 28033-28037, 28329-28331, 28398-28401
737-3H6	27125, 27347
737-3H9	23329, 23330, 23415, 23416, 23714-23716, 24140, 24141
737-3J6	23302, 23303, 25078-25081, 25891, 25892, 25893, 27045, 27128, 27361, 27372, 27518, 27523
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	23331, 23332, 23717, 23718, 24219-24221, 24569-24571, 25125, 25150, 25360, 25440-26442, 27061, 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, 24299, 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
737-3U3	28731, 28732, 28733, 28734, 28735, 28736, 28737, 28738, 28739, 28740, 28741, 28742

**IV. Model 737-300 (cont'd)**

737-3U8	28746, 28747, 29088, 29705
737-3W0	23396, 23397, 25090, 27127, 27139, 27522, 28972, 28973, 29068, 29069
737-3Y0	23495-23500, 23684, 23685, 23747-23750, 23812, 23826, 23921-23927, 24255, 24256, 24462-24465, 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
737-3Z9	23601, 24081

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

Engines:	2 CFM-56-3C-1 or CFM-56-3B-2 Turbofan Engines. Refer to the FAA Approved Airplane Flight Manual for engine limitations.	
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 additive use.	
Engine Ratings:	Takeoff static thrust standard day, sea level <u>conditions (5 min) lb.</u>	Maximum continuous static thrust, standard day, <u>sea level conditions lbs.</u>
	CFM-56-3C-1	21,860
	CFM-56-3B-2	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.	

**Model:**

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, 25839-25843, 25848-25857, 25859, 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	27149
737-490	27081, 27082, 28885-28896, 29270, 29318, 29858, 30161
737-497	25663-25666
737-42C	24231, 24232, 24813, 24814
737-42J	27143
737-43Q	28489-28494
737-44P	29914, 29915
737-45D	27156, 27157, 27131, 27256, 27914, 28752, 28753
737-45R	29032-29035
737-45S	28473, 28474, 28476-28478

**V. 737-400 (Cont'd)**

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, 26452, 26457-26468, 26555, 27083-27087, 27096, 27097, 27166-27170, 27190, 27191, 27352, 27306, 27353, 27383-27385, 27673, 27674
737-4K5	24125-24130, 24901, 24769, 26316, 27074, 27102, 27830, 27831
737-4L7	26960, 26961
737-4M0	29201-29207
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, 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
737-4Z9	25147, 27094

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

Engines:	2 CFM-56-3C-1 or CFM-56-3-B1 Turbofan Engines. Refer to the FAA Approved Airplane Flight Manual for engine limitations.	
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 additive use.	
Engine Ratings:	Takeoff static thrust standard day, sea level <u>conditions (5 min) lb.</u>	Maximum continuous static thrust, standard day, <u>sea level conditions lb.</u>
	CFM-56-3C-1	20,100
	CFM-56-3-B1	20,100
	*CFM 56-3C-1 throttle limiter to limit full throttle thrust equivalent to 20,100. 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.	
<u>Model:</u>	<u>Eligible Serial Numbers:</u>	
737-505	24272-24274, 24645-24652, 24828, 25789-25792, 25797, 26297, 27153, 27155, 26304, 25794, 26336, 26338, 27627, 27631	



**VI. Model 737-500 (cont'd)**

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
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

**DATA PERTINENT TO ALL MODELS EXCEPT 737-700, -800, -600, -700C, -900 & -900ER:**

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 & Balance Manual, Boeing Document No. D6-15066

Fuel & Oil Capacities: See appropriate Weight & Balance Manual, Boeing Document No. D6-15066

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).

**DATA PERTINENT TO ALL MODELS EXCEPT 737-700, -800, -600, -700C, -900 & -900ER (CONT'D):**

Other Operating

Limitations:	See FAA Approved Airplane Flight Manual Appendices listed In NOTE 2. See NOTE 12.
Control Surface Movements:	<p>To insure 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.</p> <p>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</p>
Certification Basis:	<p>Type Certification Basis, (737-100 &amp; 737-200 Series Airplanes).</p> <p>14 CFR §25, Amendments 25-1 through 25-3, 25-7, 25-8, 25-15, 14 CFR §21, 14 CFR §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, and Special Condition No. 25-89-NW-5 attached to FAA letter to Boeing dated April 10, 1979.</p> <p>Exemption from 14 CFR §25 - No. 575 - Exemption from 25.1001 - allow takeoff weight 115% of maximum landing weight, (non-advanced airplanes only. See Note 8.)</p> <p>Equivalency safety findings exist with respect to the following regulations for Boeing 737-100 and 200 airplanes:</p> <p>14 CFR §25.811(f) Exterior Exit Marking  14 CFR §25.1415(d) Emergency Locator Transmitter</p> <p>Exemptions from 14 CFR §25:</p> <p>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.</p> <p>Partial Time-Limited Exemption from 14 CFR 25.853(a), appendix F, paragraph (a)(1)(i), Testing on Large Interior Panels, granted through February 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010 )</p> <p>14 CFR §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</p> <p>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</p> <p>14 CFR §36 of the Federal Aviation Regulations.</p> <p>Special Federal Aviation Regulation 27.</p> <p>Type Certification Basis, (737-300 Series Airplanes)</p> <p>14 CFR §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 Part 25 as amended by Amendments 25-1 through:</p> <p>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);</p>

**DATA PERTINENT TO ALL MODELS EXCEPT 737-700, -800, -600, -700C, -900 & -900ER (CONT'D):**

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; 25-53 (§25.1411).

## 14 CFR §26:

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

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

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

14 CFR §36 of the Federal Aviation Regulations with Amendments 36-1 through 36-12, effective August 1, 1981.

Special Federal Aviation Regulation 27.

## Exemptions from 14 CFR §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.

Partial Time-Limited Exemption from 14 CFR 25.853(a), appendix F, paragraph (a)(1)(i), Testing on Large Interior Panels, granted through February 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010 )

\*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). Equivalency safety findings exist with respect to the following regulations: For 737-300 only:

- 14 CFR §25.723(a) Shock Absorption Tests
- 14 CFR §25.791 Passenger Information Signs and Placards
- 14 CFR §25.803(c)(8) Emergency Evacuation
- 14 CFR §25.809(f)(1)(ii) Escape Slides
- 14 CFR §25.853(c) Compartment Interiors
- 14 CFR §25.811(e)(3) Emergency Handle Illumination
- 14 CFR §25.812(b)(1)(i) Emergency Exit Signs
- 14 CFR §25.1093(b)(1) Induction System Deicing and Anti-Icing provisions.
- 14 CFR §25.811(f) Exterior Exit Markings
- 14 CFR §25.1415(d) Emergency Locator Transmitter (ELT)

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

14 CFR §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 §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);

**DATA PERTINENT TO ALL MODELS EXCEPT 737-700, -800, -600, -700C, -900 & -900ER (CONT'D):**

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).

**14 CFR §26:**

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

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

Special Federal Aviation Regulation 27.

\*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).

**Exemptions from 14 CFR §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.

Partial Time-Limited Exemption from 14 CFR 25.853(a), appendix F, paragraph (a)(1)(i), Testing on Large Interior Panels, granted through February 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010 )

Equivalent safety findings exist with respect to the following regulations: For 737-100/-200/-200C/-300/-400/-500: 14 CFR §25.1415(d) Emergency Locator Transmitter

An equivalent safety finding 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

Equivalency safety findings 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

**DATA PERTINENT TO ALL MODELS EXCEPT 737-700, -800, -600, -700C, -900 & -900ER (cont'd):**

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 §25.1323 Airspeed indicating system  
 14 CFR §25.1325 Static pressure systems  
 14 CFR §25.1415(d) Emergency Locator Transmitter (ELT)  
 14 CFR §36 Appendix C Use of the 1g Stall Speed instead of minimum speed in the stall as a basis for determining compliance.

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).
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Ice Protection Provisions	25.1419	
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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.

**NOTES FOR SECTIONS I THRU VI:**

NOTE 1. Current Weight and Balance Control and Loading Manual, including list of equipment, (D6-15066 Airplane Report), included in certificated weight empty and loading instructions must be in each aircraft at the time of original certification and at all times thereafter except in the case of operators having an approved weight control system.

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. D6-8737 is the basic FAA Approved Airplane Flight Manual for Models 737-100/200 airplanes.

Boeing Document No. D6-8730 is the basic FAA Approved Airplane Flight Manual for Model 737-300 airplanes.

Boeing Document No. D6-8734 is the basic FAA Approved Airplane Flight Manual for Model 737-400 airplanes.

**NOTES FOR SECTIONS I THRU VI: (cont'd)**

Boeing Document No. D6-8735 is the basic FAA approved Airplane Flight Manual for Model 737-500 airplanes.

NOTE 3.

The retirement times of fatigue critical parts are listed in the following table. FAA engineering approval is required to increase these values of retirement time. These service lives may be converted to flight hours based on service route segments average time and must be approved by the FAA.

LIFE LIMITS FOR MODEL 737 MAIN/NOSE LANDING GEARS (3)

SERIES	WEIGHT RANGE (KIPS)		LIFE LIMIT (FLIGHTS)	
	TAXI	LANDING	MAIN	NOSE
-100 -200 BGW	95 - 111.2	89.7 - 103	81,000 (1)	81,000
-200 HGWA -200HGWA -200HGWB	114 - 128.6	103-107	100,000 (1) (2)	90,000
-300	136.5 - 139	114	75,000	
-400	143	121	75,000	
-500	134-139	110	75,000	

- (1) Trunnion pins 65-46113-3 and -5 are to be replaced at 76,000 flights.
- (2) Forward trunnion fuse bolts 65-42196-4, -5 and 69-58854-2, used on 737-100 and 737-200 series airplanes are to be replaced at 83,000 flights.
- (3) For Detail Components Lives see Boeing Service Letter 737-SL-32-21.

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.
- (b) Phillips 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.

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.

Weight and Balance Control and Loading Manual. For each Model the Weight and Balance Control and Loading Manual (Boeing Document D6-15066) consists of the Basic Manual and a Supplement Aircraft Report.

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 Boeing 737 SSID, D6-82669, is applicable to the 737-300, 737-400 and 737-500 (See AD 2008-09-13, Amendment 39-15494).

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).

**NOTES FOR SECTIONS I THRU VI: (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. 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 insure 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 FAR 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 FAR 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. The FAA is planning to issue an airworthiness directive mandating compliance with Revision May 2006, or a later FAA-approved revision, applicable to all Model 737-100, -200, -200C, -300, -400, and -500 series airplanes.

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

Engines: Two CFM56-7B, -7B/2 or -7B/3 Series Turbofan Engines. Refer to the FAA Approved Airplane Flight Manual for engine limitations. The CFM56-7B/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 CFM56-7B/3 series have single annular combustors and provide the same thrust as the CFM56-7B series engines at the respective engine ratings.

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.

**VII. 737-700, -800, -600 (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
	CFM56-7B24	24,200	22,800
	CFM56-7B24/2*	24,200	22,800
	CFM56-7B24/3	24,200	22,800
	CFM56-7B24/B1**	24,200	22,800
	CFM56-7B24/3B1**	24,200	22,800
	CFM56-7B22	22,700	22,300
	CFM56-7B22/2*	22,700	22,300
	CFM56-7B22/3	22,700	22,300
	CFM56-7B20	20,600	19,400
	CFM56-7B20/2*	20,600	19,400
	CFM56-7B20/3	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
	CFM56-7B26/3B2	26,300	22,800
	CFM56-7B26/3B2F	26,300	22,800
	CFM56-7B26/3F	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
	CFM56-7B24/3B1**	24,200	22,800
	CFM56-7B22	22,700	22,300
	CFM56-7B22/2*	22,700	22,300
	CFM56-7B22/3	22,700	22,300
	CFM56-7B20	20,600	19,400
	CFM56-70B20/2*	20,600	19,400
	CFM56-7B20/3	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
	CFM56-7B26/3F	26,300	25,900, Limited to 22,800 by FMC
	CFM56-7B26/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

Please see note 4 at the end of Section VII for limitations which may be applicable to the 737-700 IGW airplanes.

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
	CFM56-7B24/B1**	24,200	22,800
	CFM56-7B24/3B1**	24,200	22,800
	CFM56-7B26	26,300	25,900
	CFM56-7B26/2*	26,300	25,900
	CFM56-7B26/3	26,300	25,900
	CFM56-7B26/3F*	26,300	25,900
	CFM56-7B27	27,300	25,900
	CFM56-7B27/2*	27,300	25,900
	CFM56-7B27/3	27,300	25,900
	CFM56-7B27/3F	27,300	25,900
	CFM56-7B27/B1**	27,300	25,900



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

CFM56-7B27/3B1**	27,300	25,900
CFM56-7B27/3B1F**	27,300	25,900
CFM56-7B27/B3**#	27,300	25,900
CFM56-7B27/3B3**#	27,300	25,900

\*See Note 10 for additional limitations that may apply

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
	CFM56-7B22	22,700	22,300
	CFM56-7B22/2*	22,700	22,300
	CFM56-7B22/3	22,700	22,300

\* Double Annular Combustor

\*\* Special Rating

# Special Maintenance Provisions (BBJ applications only).

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:	737-700	
	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.

**737 700 Increased Gross Weight (IGW)**

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)**

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

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.

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

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

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:	737-600	
	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.

**Model 737-700**

737-705

737-724

737-732

737-752

737-758

737-760

737-781

737-783

737-790

737-7B6

737-7C9

737-7H4

737-7K2

737-7K5

737-7K9

737-7L9

737-7M2

737-7Q8

737-7U8

737-7V3

737-7W0

737-7X2

737-7Z9

737-71B

737-71M

737-71Q

737-72K

737-73A

737-73S

737-73V

737-75B

737-75C

737-75N

737-75R

737-76D

737-76J

**Eligible Serial Numbers:**

28211, 28217, 28222, 29089-29098

28762-28769, 28779, 28780, 28782-28787, 28789-28791, 28796-28800, 28803, 28936-28941, 28944, 28945, 28948-28950

29633, 29634, 29645, 29648, 29656, 29665, 29679, 29683, 29687, 29688

28262, 29356, 29363, 30038, 32842, 33783-33793, 34293-34300, 35117, 35118, 35122-35124, 35785-35787

29960, 29961

33764-33766

33872-33878, 33881-33885, 33888-33900, 33916

28314-28317, 30191, 30192, 30471, 32276, 34548, 34549

29751-29753, 30162-30166, 30343, 30344, 30542, 30543, 30626, 30662, 30663, 30778, 30792-30795, 33011, 33012

28982, 28984-28986, 28988, 33062

33802, 33803, 33956

27835-27897, 29275-29279, 29490, 29491, 29798-29856, 30544, 30587-30592, 30601-30606, 30677, 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, 36663, 36887-36890, 39843, 36900, 36913, 36918, 36924

28256, 29347, 30659, 30364-30367, 30371, 30668, 30784, 33462-33465, 34170, 38053, 38054

30714, 30717, 30726, 34693, 35135, 35136, 35140, 35141, 35144, 35150, 35277, 35282

28088-28091, 30041, 30042, 34320, 34321, 34401, 34402

28004-28015

34559-34562

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

32371, 32372

28607, 29360, 30049, 30458-30464, 30497, 30676, 33705-33708, 34535, 34536

29912, 29913, 30074, 30075

28878

30418, 30419

29366, 29367, 29370-29372, 32933-32940, 35337, 35360-35364, 35368, 35372, 35378, 35382-35384

33103

29043-29048

37235, 37237

28497-28500

29076-29083

30235-30249, 32412-32428

28099-28110

28258, 29042, 29084-29086, 30034, 30512, 30513, 30634, 30656, 34024-34028

33654, 33663, 33666

30404-30406, 30411, 34805, 34806

30167, 30168, 33470, 33472, 35778, 35779

36114-36118

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

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, 32440, 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
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, 37423
737-7AD	28436, 28437
737-7AX	30181, 30182, 30183
737-7BD	33917-33935, 33938, 33943, 33944, 34479, 34480, 34861, 34862, 35109, 35110, 35788, 35789, 35962, 36073, 36091, 36399, 36716-36721, 36724, 36725
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
737-7EA	32406, 32407
737-7EE	34263
737-7EH	37595
737-7ES	35327, 35328
737-7FE	34322, 34323
737-7GL	34759-34762, 37233, 37234, 37236
737-7HB	35954, 35956

**737-700 Increased Gross Weight (IGW)**

737-781	33879, 33880
737-72T	29024
737-72U	29273
737-73Q	29102, 30789
737-73T	29054
737-73U	29200
737-73W	
737-74Q	29135, 29136
737-74U	29233
737-74V	29272
737-75T	29142
737-75U	28976
737-75V	28579, 28581
737-79T	29317
737-7AF	40573
737-7AJ	33499
737-7AK	29865, 29866, 30752, 34303
737-7AN	29972
737-7AV	30070
737-7AW	30031
737-7BC	30327, 30329, 30330, 30572, 30756, 30791, 30884, 32575, 32628, 32970, 33036, 33102, 33434
737-7BF	30496
737-7BH	29791
737-7BJ	30076
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

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

737-7DP	32805
737-7DT	30829
737-7ED	32627
737-7EG	32807
737-7EJ	32774
737-7EL	32775
737-7EM	34865
737-7EO	29251
737-7ES	33542, 33962-33965, 33474, 33476, 33477, 33986, 33987, 34700, 35329
737-7ET	33010
737-7FB	33367
737-7FD	33500
737-7FG	33405
737-7GC	34622
737-7HD	35959
737-7HF	35977
737-7JF	37592
737-7H3	29149
737-7H6	29274
737-7N6	34260
737-7P3	29188
737-7Z5	29268, 29269, 29857, 29858

**Model 737-800****Eligible Serial Numbers:**

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, 29557-29570, 29575-29577, 30077-30100, 30598-30600, 30828, 30858, 30906, 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, 33203, 33205-33212, 33518-33521, 40579
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, 31658, 31662, 32402, 32403, 32828, 32832, 32834, 33451-33455, 33458, 33459, 33461, 34000-34005, 37096, 38700
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, 34180-34184, 34195-34202
737-844	32631-32635
737-846	35330-35359, 40346
737-852	35114-35116, 35119-35121
737-858	29957-29959
737-866	35558-35569
737-881	33886, 33887, 33890-33897
737-883	28318-28321, 28323-28328, 28390, 30193-30197, 30467-30470, 32277, 32278, 34546, 34547
737-890	30020, 30022, 34593-34595, 35091, 35103, 35107, 35175-35199, 35681, 35682, 35684-35695, 36346, 36481, 36482, 36578, 39043, 39044
737-81B	30697, 30699, 30708, 30709, 32921-32932, 33006, 34248, 34250, 34252, 35365-35367, 35369-35371, 35373-35376, 35379, 35380, 35381, 35385-35389, 35683
737-81M	30721, 33104, 34242, 35108, 35272, 35284, 35287, 37161
737-81Q	29049-29052, 30618, 30619, 30785-30787
737-82K	35699, 36088, 36089
737-82R	29329, 29344, 30658, 30666, 35699, 35700-35702, 35984, 38173, 40696, 40697, 40871-40876
737-82Y	40712
737-83N	28239, 28243-28247, 28249, 28648, 28653, 30023, 30033, 30640, 30643, 30660, 30673, 30675, 30679, 30706, 32348, 32576-32580, 32609-32616, 32663, 32882, 32884
737-84P	29947, 30474, 30475, 32599-32608, 34029-34034, 35072, 35074, 35076, 35077, 35274, 35276, 35285, 35707, 35747-35749, 35750-35755, 35760, 35762, 35764-35766, 36779-36782, 37422, 37953
737-85C	30723, 35044-35058, 37148, 37149, 37574-37578
737-85F	28821-28830, 30006, 30007, 30476-30478, 30567-30569, 30571
737-85H	29444, 29445

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

737-85N 33660, 33661, 33664, 33665, 36190-36195, 36773-36778, 40882  
 737-85P 28381-28388, 28535, 28536, 33971-33982, 35485-35487, 35706-35708  
 737-85R 29036-29041, 30403, 30407-30410, 34797-34804, 35082, 35083, 35099, 35106, 35289, 35651, 36551, 36553, 36694, 36695  
 737-86D 33471, 35767-35771-35776  
 737-86J 28068-28073, 29120, 29121, 29641, 30062, 30063, 30498-30501, 30570, 30827, 30876-30881, 32624, 32625, 32917-32920, 37740-37743, 37745-37749, 37753-37756  
 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, 32685-32694, 32732, 32733, 32735, 32736, 32739, 32740, 32742, 33003, 33004, 33419, 33677, 34247, 34249, 34251, 34253-34258, 35209-35217, 35219-35222, 35224, 35226, 35228, 35630-35639, 35641, 35643, 35644, 35647-35649, 36540-36543, 36545-36549, 36802, 36809-36820, 37884, 39388-39390  
 737-86Q 30272, 30274, 30276, 30278, 30281, 30284-30287, 30289-30292, 30294-30296, 32773, 32885  
 737-86R 30494, 30495  
 737-87L 35527-35536  
 737-89L 29876-29880, 30159, 30160, 30514-30517, 36483-36492, 36741-36754  
 737-89P 29652, 29653, 29655, 29661, 30681, 30682, 30691, 32800, 32802, 36272, 36761, 36763, 36765, 36769, 36771  
 737-8AJ 32825  
 737-8AL 35069-35071, 35073, 35075, 35079, 35081, 35085, 35087, 35088, 36692, 37424, 37954  
 737-8AN 32438  
 737-8AR 30139  
 737-8AS 29916-29940, 32778-32780, 33544-33643, 33717-33719, 33804-33832, 34177, 34178, 34974, 34975, 34978, 34979, 35000, 35001, 35006-35032, 35502-35505, 35549-35553, 36074-36082, 36567-36576, 37512-37543, 38489-38500, 38503-38515, 40283-40285  
 737-8AW 32806  
 737-8BG 32353-32358  
 737-8BK 29635, 29642-29644, 29646, 29660, 29673, 29675, 29676, 29685, 30620-30625, 33013, 33014, 33016-33024, 33027-33030, 33828  
 737-8CT 32770, 34151-34154, 35080, 35288, 35502, 36690, 36696, 37092, 37158  
 737-8CX 32359-32368  
 737-8DC 34596  
 737-8DP 32451  
 737-8DR 32777  
 737-8DV 32915  
 737-8EC 32450  
 737-8EF 32971  
 737-8EQ 33361  
 737-8EH 34267-34281, 34474, 34475, 34653-34656, 34962-34966, 35063-35066, 35824-35832, 36146-36150, 36566, 36596, 37596-37601  
 737-8EO 35238  
 737-8EV 33079  
 737-8EX 33473  
 737-8FE 33758, 33759, 33794-33801, 33996, 33997, 34013-34015, 34167, 34168, 34438, 34440, 34441, 34443, 36601-36609, 37821, 37822  
 737-8FH 29639, 29640, 29668, 29669, 29671, 29672, 30824, 30826, 35089, 35090, 35092-35098, 35101, 35102, 35104, 35105  
 737-8FN 37076, 37077  
 737-8FZ 29637, 29657, 29659, 29663, 29664, 29674, 29680, 29682, 31713, 31717, 34954  
 737-8GB 34395  
 737-8GG 34620  
 737-8GJ 34896-34905, 34955, 34958-34960, 36367-36369, 37360  
 737-8GK 34948, 34949  
 737-8GQ 35790-35793  
 737-8HC 36529, 36530, 40754, 40775-40777  
 737-8HG 36323-36340  
 737-8HX 29638, 29647, 29649, 29654, 29658, 29662, 29677, 29681, 29684, 29686, 36433, 36434, 36552, 36845-36847, 36849  
 737-8JE 38970, 38971  
 737-8JP 37816, 37817, 39002, 39162-39164  
 737-8KN 29636, 31716, 31765, 35794, 35795, 40233-40236

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

737-8KT	40118
737-8B5	29981-29986
737-8B6	28980, 28981, 28983, 28987, 33057-33061, 33063-33071, 37718
737-8D6	30202-30208, 34164-34166
737-8F2	29765-29790, 34405-34419, 35738-35745
737-8K2	28248, 28373-28380, 29131-29134, 29345, 29595-29598, 29650, 29651, 29678, 30355-30361, 30368, 30370, 30372, 30389-30392, 30646, 30650, 32943, 34169, 34171-34173, 37160, 37593, 37594
737-8K5	27977-27984, 27989-27992, 27985-27988, 28228, 28623, 30413-30417, 30593, 30783, 30882, 30883, 32905-32907, 34684-34692, 35100, 35131-35139, 35142, 35143, 35145-35149
737-8K9	34399, 34400
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
737-8S3	29246-29250
737-8U3	29666, 30140-30148, 30151, 30155-30157, 31763, 36436, 40807
737-8V3	29667, 29670, 33709, 33710, 34006, 35067, 35068, 35125-35127, 36550, 36554, 40663, 40664
737-8X2	29968, 29969
737-8Z0	30071, 30072, 30073
737-8Z6	35478
737-8Z9	28177, 28178, 30420, 30421, 33833, 33834, 34262
<u>Model 737-600</u>	<u>Eligible Serial Numbers:</u>
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

**Model 737-700 LCA/IGW**

737-7AH	29749
737-73W	38633
737-74T	29139
737-75G	36852
737-79U	29441
737-7AU	34477
737-7BC	30328, 30782
737-7EG	35990
737-7EI	34683
737-7FY	36493
737-7GV	36090
737-7HE	36027
737-7HI	36106, 36107, 36108
737-7HZ	37583
737-7JB	36714
737-7JF	37592
737-7JR	37111
737-7JZ	37700
737-7KK	38608
737-7B5	37660

**Model 737-800 LCA**

737-8JM	37633
737-8KB	37545

Minimum Crew

For All Flights: 2 (Pilot and Copilot)

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

## Maximum

Passengers:	<u>737-700</u>	<u>737-800</u>	<u>737-600</u>
	149	189	149

## Maximum Baggage

## Cargo:

See appropriate Weight and Balance Manual, Boeing Document No.:  
D043A560 for Model 737-600  
D043A570 for Model 737-700  
D043A580 for Model 737-800

## Fuel &amp; Oil

## Capacities:

See appropriate Weight and Balance Manual, Boeing Document No. D043A570

## Minimum Required

## Fuel:

See appropriate FAA Approved Airplane Flight Manual listed in Note 2

## Maximum Operating

## Altitude:

41,000 ft.

## Datum:

See appropriate Weight & Balance Manual, Boeing Document No. D043A570

## MAC:

155.81 in

## Other Operating

## Limitations:

See FAA Approved Airplane Flight Manual Appendices

## Control Surface

## Movements:

To insure 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. Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-77 with the exceptions listed below:

<u>SECTION NO.</u>	<u>TITLE</u>	<u>AT AMDT. 25.-</u>
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 of Structure	0, 77, 91**
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**

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

\* Flight attendant seats are qualified to Technical Standard Order C127, dated March 30, 1992, or qualified to TSO C127a, and

- Head Injury Criteria data collected and reported by TSO applicant is less than 1000, and
- Femur Injury Criteria data collected and reported by TSO applicant is less than 2250 pounds, and
- 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).

In addition, the following regulations, which Boeing has voluntarily complied with, are also part of the certification basis;

<b><u>SECTION NO.</u></b>	<b><u>TITLE</u></b>	<b><u>AT AMDT. 25.-</u></b>
25.733	Use of Inert Gas for Tire Inflation	78
25.811(e)	Emergency Handle Illumination	79
25.1316	Lightning Protection Requirements	80
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 Gust Conditions - General	86
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
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 of Structure	86 ** (Note **above)
25.1415(d)	Ditching Equipment (ELT)	82
25.1517	Rough Air Speed $V_{RA}$	86

14 CFR §26:

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



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

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

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 and with the noise standards of part 36 as amended by Amendment 36-20 or any subsequent amendment effective at the time of certification.

**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:

- High Intensity Radiated Fields
- Limit Engine Torque Loads for Sudden Engine Stoppage

Special Conditions No. 25-386-SC, published in the Federal Register on August 7, 2009, addressed 737-600/-700/-700C/-800/ and 900ER series airplanes with inflatable lapbelts installed

**Equivalent Safety Findings:**

The Equivalent Safety Findings were proposed in accordance with § 21.21. The following have been identified as equivalent safety findings:

§ 1.1	General Definitions
§ 1.2	Abbreviations and Symbols
§ 25.21	Proof of Compliance
§ 25.101(I)	Performance – General
§ 25.103	Stalling Speed
§ 25.105(c)(1)	Takeoff
§ 25.107	Takeoff Speeds
§ 25.109	Accelerate Stop Distance; NPRM 93-8: Improved Standards for Determining Rejected Take-off and Landing Performance
§ 25.111	Takeoff Path
§ 25.115(a)	Takeoff Flightpath
§ 25.119	Landing - Climb: All engines operating
§ 25.121	Climb - One engine operative
§ 25.125	Landing
§ 25.143	General - Controllability and Maneuverability
§ 25.145	Longitudinal Control)
§ 25.147	Directional and Lateral Control
§ 25.149	Minimum Control Speed)
§ 25.161	Trim
§ 25.175	Demonstration of Static Longitudinal Stability
§ 25.177	Static Directional and Lateral Stability
§ 25.181	Dynamic Stability
§ 25.201	Stall Demonstration
§ 25.207	Stall Warning
§ 25.231	Longitudinal Stability and Control
§ 25.233	Directional Stability and Control
§ 25.237	Wind Velocities
§ 25.395(a)	Control Systems
§ 25.613	Material Strength Properties and Design Values.
§ 25.735	Brakes
§ 25.773	Pilot Compartment View
§ 25.791(a)	Passenger Information Signs and Placards
§ 25.810 (a)(1)(ii)	Escape Slides
§ 25.811(f)(2)	Exit Band Contrast
§ 25.812(b)(1)(i)	Emergency Exit Signs
§ 25.813(c)(1)(i)	Emergency Exit Access (for Type III Manual Exit)
§ 25.813(c)(1)(i)	Emergency Exit Access (for Type III Automatic Overwing Exit) (Documented in Transport Airplane Directorate ELOS memo TD8301SE-T-C-1)
§ 25.841(b)(6)	High Altitude Landing Operations
§ 25.853(d)	Compartment Interiors
§ 25.933(a)	Reversing Systems
§ 25.979(b)(1)	Pressure Fueling System

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

§ 25.1001	Fuel Jettison System
§ 25.1323	Airspeed Indication Systems
§ 25.1325	Static Pressure Systems
§ 25.1389(b)(1)(2)(3)	Position Light Minimum Intensities
§ 25.1391	Position Light Minimum Intensities
§ 25.1392	Position Light Minimum Intensities
§ 25.1395	Wing Tip Position Lights
§ 25.1415(d)	Emergency Locator Transmitter (ELT)
§ 25.1517	Rough Air Speed, VRA
§ 25.1587	Performance Information

Exemptions: Exemptions granted for previously type-certificated 737 series airplanes do not apply to these derivative models.

- § 25.1435(b)(1) Hydraulic Systems (Exemption 6086, Granted May 17, 1995, Exemption No. 6086A, Granted January 29, 2009, applicable to 737-600, 737-700, and 737-800).
- § 25.562(b)(2) Emergency Landing Dynamic Conditions - related to Flight Deck Testing (Granted April 12, 1996, Exemption No. 6425).
- § 25.571(e)(1) Damage-Tolerance and Fatigue Evaluation of Structure - related to Bird Strike Velocity. (Granted April 8, 1997, Exemption No. 6601).
- § 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.
- § 25.305, 25.307(a), 25.601, 25.603(c), 25-613(a) and (b), and 25.1103(d) Partial Exemption – Localized areas of temperature – related damage. (Exemption No. 9571, December 11, 2007).
- Partial Time-Limited Exemption from 14 CFR 25.853(a), appendix F, paragraph (a)(1)(i), Testing on Large Interior Panels, granted through February 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010)

B. Certification basis for 25.981 at amendment 25-102, and Special Conditions 25.308-SC, issued on December 25, 2005, for the flammability reduction system (FRS), is applied if fuel tank inerting is installed in new airplane production or as a modification. 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 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 has been issued and The Boeing Company is authorized to issue airworthiness certificates under the delegation option authorization provisions of 14 CFR part 21.

**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.

**NOTES FOR SECTION VII:**

**NOTE 1.** The following Serial Numbers were produced under Type Certificate Only:

**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.

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

**NOTES FOR SECTION VII: (cont'd)**

- 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. Required structural inspections for compliance with FAR 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 737-600/700/800 Maintenance Planning Document D626A001-CMR. 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
- 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 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 model installed on a 737-700 IGW 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.
- 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/-800 ETOPS CONFIGURATION, MAINTENANCE, AND PROCEDURES". 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 FAR 121.703, 125.409, and 135.415.
- 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 14 CFR 25.981 are listed in the FAA-approved Airworthiness Limitations and Certification Maintenance Requirement, Section 9, of Boeing 737-600/700/700C/700IGW/800/900 Maintenance Planning Data Document D626A001-CMR, Revision December 2005 or later FAA-approved revision. All Model 737-700, -800, and -600 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 8: 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.
- NOTE 9: 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."

**NOTES FOR SECTION VII: (cont'd)**

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 model 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

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

Engines: Two CFM56-7B, or 7B/3 Series Turbofan Engines. Refer to the FAA Approved Airplane Flight Manual for engine limitations.

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 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
	CFM56-7B24/B1**	24,200	22,800
	CFM56-7B24/3B1**	24,200	22,800
	CFM56-7B22/3	22,700	22,300
	CFM56-7B20/3	20,600	19,400
	CFM56-7B26/3	26,300	25,900, Limited to 22,800 by FMC
	CFM56-7B26/3B2	26,300	22,800
	CFM56-7B26/3B2F	26,300	22,800
	CFM56-7B26/3F	26,300	25,900, Limited to 22,800 by FMC
	CFM56-7B26/B2	26,300	22,800

\*\* Special Rating

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)

C. G. Range: For other airspeed limits see the appropriate FAA Approved Airplane Flight Manual listed in Note 1  
 See the appropriate FAA Approved Airplane Flight Manual listed in Note 1

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.

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

<u>Model 737-700C</u>	<u>Eligible Serial Numbers:</u>	
737-7AF	29979, 29980, 30200, 30781, 32597, 32598, 33826, 33836, 34304	
737-7AX	30184, 30185	
737-7HBC	35955	
737-7HJ	36756	
Minimum Crew for All Flights:	2 (Pilot and Copilot)	
Maximum Passengers:	<u>Passenger only mode</u> 149	<u>Cargo only mode</u> 0
Maximum Baggage Cargo:	See appropriate Weight and Balance Manual, Boeing Document No. D043A573	
Fuel & Oil Capacities:	See appropriate Weight and Balance Manual, Boeing Document No. D043A570	
Minimum Required Fuel:	See appropriate FAA Approved Airplane Flight Manual listed in Note 1	
Maximum Operating Altitude:	41,000 ft.	
Datum:	See appropriate Weight & Balance Manual, Boeing Document No. D043A570	
MAC:	155.81 in	
Other Operating Limitations:	See FAA Approved Airplane Flight Manual Appendices	
Control Surface Movements:	To insure 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. Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-91 with the exceptions listed below:	
<u>SECTION NO.</u>	<u>TITLE</u>	<u>AT AMDT. 25.-</u>
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

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

25.853(d)(3)	Compartment Interiors	72
25.904	Automatic Takeoff Thrust Control System (Not complied with –new at 25-82)	
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 Dispensing Units	41

\* 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)).

\*\* 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.

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

In addition, Boeing has volunteered to comply with the following amendment levels later than amendment 25-91.

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 (d))	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
25.1533	92	Additional Operating Limitations

## Special Conditions:

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

Special Conditions No. 25-386-SC, published in the Federal Register on August 7, 2009, addressed 737-600/-700/-700C/-800/ and 900ER series airplanes with inflatable lapbelts installed

## Equivalent Safety Findings:

§ 25.21(b)	Proof of Compliance
§ 25.103	Stalling Speed
§ 25.107	Takeoff Speeds
§ 25.111(a)	Takeoff Path
§ 25.119(b)	Landing - Climb: All engines operating
§ 25.121	Climb - One engine operative
§ 25.125(a)(2)	Landing
§ 25.143(g)	General - Controllability and Maneuverability
§ 25.145	Longitudinal Control)
§ 25.147	Directional and Lateral Control
§ 25.149	Minimum Control Speed)
§ 25.161	Trim

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

§ 25.175	Demonstration of Static Longitudinal Stability
§ 25.177	Static Directional and Lateral Stability
§ 25.181	Dynamic Stability
§ 25.201	Stall Demonstration
§ 25.207	Stall Warning
§ 25.231	Longitudinal Stability and Control
§ 25.233	Directional Stability and Control
§ 25.237	Wind Velocities
§ 25.395(a)	Control Systems
§ 25.735	Brakes
§ 25.773	Pilot Compartment View
§ 25.810 (a)(1)(ii)	Escape Slides
§ 25.813(c)(1)(i)	Emergency Exit Access (for Type III Automatic Overwing Exit)
§ 25.813(c)(2)(i)	Emergency Exit Access (for Type III Automatic Overwing Exit)
§ 25.841(b)(6)	High Altitude Landing Operations
§ 25.933(a)(1)(ii)	Reversing Systems
§ 25.979(b)(1)	Pressure Fueling System
§ 25.1001	Fuel Jettison System
§ 25.1323	Airspeed Indication Systems
§ 25.1325	Static Pressure Systems
§ 25.1389(b)(3)	Wing Tip Position Lights
§ 25.1587	Performance Information

**Exemptions:**

- § 25.1435(b)(1) Hydraulic Systems (Originally granted May 17, 1995, Exemption No. 6086, applicable to 737-700), extended to include the main deck cargo door hydraulic system. (Exemption 6889, granted April 15, 1999)
- § 25.562(b)(2) Emergency Landing Dynamic Conditions - related to Flight Deck Testing (Originally granted August 20, 1999, Exemption No. 6425A).
- § 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.
- § 25.305, 25.307(a), 25.601, 25.603(c), 25-613(a) and (b), and 25.1103(d) Partial Exemption – Localized areas of temperature – related damage. (Exemption No. 9571, December 11, 2007).
- Partial Time-Limited Exemption from 14 CFR 25.853(a), appendix F, paragraph (a)(1)(i), Testing on Large Interior Panels, granted through February 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010 )

**14 CFR §26:**

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

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

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

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 and with the noise standards of part 36 as amended by Amendment 36-20 or any subsequent amendment effective at the time of certification.

B. Certification basis for 25.981 at amendment 25-102, and Special Conditions 25.308-SC, issued on December 25, 2005, for the flammability reduction system (FRS), is applied if fuel tank inerting is installed in new airplane production or as a modification. 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 June 2000 or later 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 has been issued and The Boeing Company is authorized to issue airworthiness certificates under the delegation option authorization provisions of 14 CFR part 21

**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.

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

## 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.

**NOTES FOR SECTION VIII:**

- NOTE 1. 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 737-700C airplane.
- NOTE 2. Required structural inspections for compliance with FAR 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 737-600/700/800 Maintenance Planning Document D626A001-CMR, Revision June 2000 or later FAA-approved revision.
- NOTE 3. 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/-700C/-800 ETOPS CONFIGURATION, MAINTENANCE, AND PROCEDURES". This finding does not constitute approval to conduct ETOPS operations.
- 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 FAR 121.703, 125.409, and 135.415.
- NOTE 5: 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 and Certification Maintenance Requirement, Section 9, of Boeing 737-600/700/700C/700IGW/800/900 Maintenance Planning Data Document D626A001-CMR, Revision December 2005 or later FAA-approved revision. 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.
- NOTE 6: The Model 737-600/700/800 have 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."

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

Engines: Two CFM 56-7B or -7B/3 Series Turbofan Engines. Refer to the FAA Approved Airplane Flight Manual for engine limitations.

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.

Oil Consumption: 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.



**IX. Model 737-900 (cont'd)**

Engine Ratings:	Model 737-900	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
	CFM56-7B24/3B1**	24,200	22,800
	CFM56-7B26	26,300	25,900
	CFM56-7B26/3	26,300	25,900
	CFM56-7B26/3F	26,300	25,900
	CFM56-7B26/B1	26,300	25,900
	CFM56-7B27	27,300	25,900
	CFM56-7B27/3	27,300	25,900
	CFM56-7B27/3F	27,300	25,900
	CFM56-7B27/B1	27,300	25,900
	CFM56-7B27/3B1	27,300	25,900
	CFM56-7B273/B1F	27,300	25,900
	CFM56-7B27/B3	27,300	25,900
	CFM56-7B27/3B3	27,300	25,900

\*\* Special Rating

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.

<u>Model 737-900</u>	<u>Eligible Serial Numbers:</u>
737-9B5	29987-30002
737-9GP	35713
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

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

Maximum  
Passengers: Passenger only mode 189

Maximum Baggage  
Cargo: See appropriate Weight and Balance Manual, Boeing Document No. D043A590

Fuel & Oil  
Capacities: See appropriate Weight and Balance Manual, Boeing Document No. D043A590

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

**IX. Model 737-900 (cont'd)**

## Maximum Operating

Altitude: 41,000 ft.

Datum: See appropriate Weight &amp; Balance Manual, Boeing Document No. D043A590

MAC: 155.81 in

## Other Operating

Limitations: See FAA Approved Airplane Flight Manual Appendices

## Control Surface

Movements: To insure 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. Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-91 with the exceptions listed below:

<u>SECTION NO.</u>	<u>TITLE</u>	<u>AT AMDT. 25.-</u>
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 25-82)
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 Dispensing Units	41

\* 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.

**IX. Model 737-900 (cont'd)**

\*\*\* 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 Part 25 (February 1, 1965).

In addition, Boeing has volunteered to comply with the following amendment levels later than amendment 25-91.

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
25.1533	92	Additional Operating Limitations

Special Conditions:

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

Special Conditions No. 25-386-SC, published in the Federal Register on August 7, 2009, addressed 737-600/-700/-700C/- 800/ and 900ER series airplanes with inflatable lapbelts installed

Equivalent Safety Findings:

§ 1.2	Abbreviations and Symbols
§ 25.21	Proof of Compliance
§ 25.103	Stalling Speed
§ 25.107	Takeoff Speeds
§ 25.111	Takeoff Path
§ 25.119	Landing - Climb: All engines operating
§ 25.121	Climb - One engine operative
§ 25.125	Landing
§ 25.143	General - Controllability and Maneuverability
§ 25.145	Longitudinal Control
§ 25.147	Directional and Lateral Control
§ 25.149	Minimum Control Speed
§ 25.161	Trim
§ 25.175	Demonstration of Static Longitudinal Stability
§ 25.177	Static Directional and Lateral Stability
§ 25.181	Dynamic Stability
§ 25.201	Stall Demonstration
§ 25.207	Stall Warning
§ 25.231	Longitudinal Stability and Control
§ 25.233	Directional Stability and Control
§ 25.237	Wind Velocities
§ 25.395(a)	Control Systems
§ 25.613	Material Strength Properties and Design Values.
§ 25.735	Brakes
§ 25.773	Pilot Compartment View
§ 25.791	Passenger Information Signs and Placards

**IX. Model 737-900 (cont'd)**

§ 25.810 (a)(1)(ii)	Escape Slides
§ 25.811(f)	Emergency Exit Markings
§ 25.813(c)(1)(i)	Emergency Exit Access (for Type III Automatic Overwing Exit)
§ 25.813(c)(2)(i)	Emergency Exit Access (for Type III Automatic Overwing Exit)
§ 25.841(b)(6)	High Altitude Landing Operations
§ 25.853(f)	Compartment Interiors
§ 25.933(a)	Reversing Systems
§ 25.979(b)(1)	Pressure Fueling System
§ 25.1001	Fuel Jettison System
§ 25.1323	Airspeed Indication Systems
§ 25.1325	Static Pressure Systems
§ 25.1389(b)(3)	Position Light Minimum Intensities
§ 25.1393	Position Light Minimum Intensities
§ 25.1395	Position Light Minimum Intensities
§ 25.1395	Safe Flight in Icing Conditions
§ 25.1587	Performance Information

**Exemptions:**

- § 25.1435(b)(1) Hydraulic Pressure Test (Originally granted August 20, 1999, Exemption No. 6953).
- § 25.562(b)(2) Emergency Landing Dynamic Conditions - related to Flight Deck Testing (Originally granted August 20, 1999, Exemption No. 6425A).
- § 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.
- § 25.305, 25.307(a), 25.601, 25.603(c), 25-613(a) and (b), and 25.1103(d) Partial Exemption – Localized areas of temperature – related damage. (Exemption No. 9571, December 11, 2007).
- Partial Time-Limited Exemption from 14 CFR 25.853(a), appendix F, paragraph (a)(1)(i), Testing on Large Interior Panels, granted through February 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010 )

**14 CFR §26:**

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

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

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

**14 CFR §34:**

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

**14 CFR §36:**

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

B. Certification basis for 25.981 at amendment 25-102, and Special Conditions 25.308-SC, issued on December 25, 2005, for the flammability reduction system (FRS), is applied if fuel tank inerting is installed in new airplane production or as a modification. 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 or later 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 has been issued and The Boeing Company is authorized to issue airworthiness certificates under the delegation option authorization provisions of 14 CFR part 21

**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.

**IX. Model 737-900 (cont'd)**

## 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.

**NOTES FOR SECTION IX:**

- 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.
- 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. Required structural inspections for compliance with FAR 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 737-600/700/800/900 Maintenance Planning Document D626A001-CMR, Revision March 2001 or later FAA-approved revision.
- 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 ETOPS CONFIGURATION, MAINTENANCE, AND PROCEDURES". 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 FAR 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 737-600/700/700C/700IGW/800/900 Maintenance Planning Data Document D626A001-CMR, Revision November 2005 or later FAA-approved revision. 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 56-7B or -7B/3 Series Turbofan Engines. Refer to the FAA Approved Airplane Flight Manual for engine limitations. (See Note 2)

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.

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

**Oil Consumption:** 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 737-900ER 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
	CFM56-7B24/3B1**	24,200	22,800
	CFM56-7B26	26,300	25,900
	CFM56-7B26/B1	26,300	25,900
	CFM56-7B26/3	26,300	25,900
	CFM56-7B26/3F	26,300	25,900
	CFM56-7B27	27,300	25,900
	CFM56-7B27/3	27,300	25,900
	CFM56-7B27/3F	27,300	25,900
	CFM56-7B27/B1	27,300	25,900
	CFM56-7B27/3B1	27,300	25,900
	CFM56-7B27/3B1F	27,300	25,900
	CFM56-7B27/B3	27,300	25,900
	CFM56-7B27/3B3	27,300	25,900
	** Special Rating		

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

<b>Maximum Weights:</b>	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.

<u>Model 737-900ER</u>	<u>Eligible Serial Numbers:</u>
737-924ER	30130, 30131, 31620, 31622, 31633, 31664-31666, 32826, 32827, 32829, 32833, 32835, 33456, 33457, 33460, 33527-33529, 33531-35536, 35719, 35727, 37093-37095, 37097, 37098
737-96NER	35223, 35225, 35227, 36539
737-94XER	36086, 36087
737-9BQER	37632 (See NOTE 9)
737-9FGER	39317 (See NOTE 9)
737-9GJER	34952, 34953, 34956, 34957, 34961
737-9GPER	35679, 35680, 35710-35723, 35724-35737, 37268-37271
737-9HWER	37546 (See NOTE 9)
737-9JAER	37560 (See NOTE 9)
737-9LBER	38890 (See NOTE 9)

**Minimum Crew  
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)  
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 capacity

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

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, Boeing Document No. D043A590.

## Fuel &amp; Oil

Capacities: See Note 1 and appropriate Weight and Balance Manual, Boeing Document No. D043A590.

## Minimum Required

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

## Maximum Operating

Altitude: 41,000 ft.

## Datum:

See appropriate Weight & Balance Manual, Boeing Document No. D043A590

## MAC:

155.81 in

## Other Operating

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

## Control Surface

Movements: To insure 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. Part 25 of the Federal Aviation Regulations as amended by Amendments 25-1 through 25-108 with the exceptions listed below:

<u>SECTION NO.</u>	<u>TITLE</u>	<u>AT AMDT. 25-</u>
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	Doors-Exception applies to all except Forward Access & Airstair, EE Access, automatic overwing exit (AOE) and MED	15
25.783(f)	Doors-Exception applies to (Forward access, Forward Airstair, EE Access and AOE)	88*****
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 to APU spar mounted fuel shut off valve only	11****
25.1183	Flammable Fluid-Carrying Components	57
25.1185	Flammable Fluids	19

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

25.1309	Equipment, Systems and Installations	0**
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 Dispensing Units	41

\* 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.

\*\*\*\* 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.

\*\*\*\*\* Amendment 25-108 is applicable to the new Mid Cabin Emergency Door (MED) only. The three cast doors (forward access, forward airstair, E/E access), and the Automatic Overwing Exit (AOE) door are unchanged areas and comply with Amendment 25-88, the 737-900 certification basis. The remaining unchanged doors comply with Amendment 25-15. The doors which comply, with the later amendments are identified in Boeing document D010A001.

\*\*\*\*\* 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 or Type II) 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.

<u>SECTION NO.</u>	<u>TITLE</u>	<u>AT AMDT. 25-</u>
25.869(a)(4)	Fire Protection Systems	
25.1353(d)	Electrical Equipment and Installations	

Special Conditions:

- Limit Engine Torque Loads for Sudden Engine Stoppage.
- High Intensity Radiated Fields (HIRF) Protection.
- Interaction of Systems and Structures
- Certification basis for 25.981 at amendment 25-102, and Special Conditions 25.308-SC, issued on December 25, 2005, for the flammability reduction system (FRS), is applied if fuel tank inerting is installed in new airplane production or as a modification. Airworthiness limitations for the FRS are contained in Section 9 of the applicable Maintenance Planning Document.

Special Conditions No. 25-386-SC, published in the Federal Register on August 7, 2009, addressed 737-600/-700/-700C/- 800/ and 900ER series airplanes with inflatable lapbelts installed



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

## Equivalent Level of Safety Findings:

§ 25.395(a)	Control Systems
§ 25.613	Material Strength Properties and Design Values
§ 25.791	Passenger Information Signs and Placards
§ 25.810(a)(1)(ii)	Escape Slides
§ 25.811(f)	Emergency Exit Markings
§ 25.813(a)	Type II Emergency Exit Access - 13" Aisle
§ 25.813(c)(1)	Type III Emergency Exit Access
§ 25.813(c)(2)(i)	Type III Emergency Exit Access
§ 25.831(a)	Ventilation
§ 25.841(b)(6)	High Altitude Landing Operations
§ 25.933(a)	Reversing Systems
§ 25.979(b)(1)	Pressure Fueling System
§ 25.1001	Fuel Jettison System
§ 25.1389(b)(3)	Wing Tip Position Lights
§ 25.1389(b)(1)(2), § 25.1391, § 25.1393	Position Light Minimum Intensities
§ 25.1395, § 25.1389(b)(3)	Position Light Overlapping Intensities
§ 25.1419	Ice Protection (In relation to winglet)
§ 25.1435(b)(1)	Hydraulic Systems - Static Proof Pressure Test
§ 25.1517	Rough Air Speed V <sub>RA</sub>

## Exemptions:

- § 25.562(b)(2) Emergency Landing Dynamic Conditions - related to Flight Deck Testing (Originally granted August 20, 1999, Exemption No. 6425A, March 10, 2009, Exemption No. 6425B).
- § 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)
- § 25.305, 25.307(a), 25.601, 25.603(c), 25-613(a) and (b), and 25.1103(d) Partial Exemption – Localized areas of temperature – related damage. (Exemption No. 9571, December 11, 2007).
- Partial Time-Limited Exemption from 14 CFR 25.853(a), appendix F, paragraph (a)(1)(i), Testing on Large Interior Panels, granted through February 28, 2011. (Exemption No. 9791, November 28, 2008, Exemption No. 9791B, March 1, 2010 )

## 14 CFR §26:

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

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

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

## 14 CFR § 34:

Part 34-3

## 14 CFR § 36:

Part 36-28

## 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 or later 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 has been issued and The Boeing Company is authorized to issue airworthiness certificates under the delegation option authorization provisions of 14 CFR part 21

## 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.

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

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

**NOTES FOR SECTION X:**

- 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.
- 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. Required structural inspections for compliance with FAR 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 737-600/700/800/900 Maintenance Planning Document D626A001-CMR, Revision R2, or later FAA-approved revision.
- 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." 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 FAR 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 are listed in the FAA-approved Airworthiness Limitations and Certification Maintenance Requirement, Section 9, of Boeing 737-600/700/800/900 Maintenance Planning Data Document D626A001-CMR, Revision R2, dated March, 2007, or later FAA-approved revision.
- 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 model on 737-900ER model aircraft is dependent on the type of in-service use. See the Airplane Flight Manual for approved installation of either the CFM56-7B26, CFM56-7B26/B1, or CFM56-7B27/B3
- 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

-END-