



CAGE Code 81205

Next-Generation 737 Airplane Characteristics for Airport Planning

DOCUMENT NUMBER:

D6-58325-7

REVISION:

Rev A

REVISION DATE:

March 2023

CONTENT OWNER:

Boeing Commercial Airplanes

All revisions to this document must be approved by the content owner before release.

Not Subject to US Export Administration Regulations (EAR), (15 C.F.R. Parts 730-774) or US International Traffic in Arms Regulations (ITAR), (22 C.F.R. Parts 120-130).



Revision Record

Revision Letter	A
Revision Date	March 2023
Changes in This Revision	All sections: Separating the 737 Airplane Characteristics for Airport Planning Manual (D6-58325-6) for 737 Classic and Next Generation Airplanes. This document gives Airplane Characteristics for Airport Planning information for 737-600/ -700/ -800/ -900. Section 6.0: Adding Inlet Hazard Area information. Section 7.0: Adding ACR/PCR information.

Table of Contents

1.0	SCOPE AND INTRODUCTION.....	1-1
1.1	SCOPE.....	1-1
1.2	INTRODUCTION.....	1-2
1.3	A BRIEF DESCRIPTION OF THE 737 FAMILY OF AIRPLANES.....	1-3
2.0	AIRPLANE DESCRIPTION.....	2-1
2.1	GENERAL CHARACTERISTICS.....	2-1
2.1.1	General Characteristics: Model 737-600.....	2-2
2.1.2	General Characteristics: Model 737-700, -700W, -700C.....	2-3
2.1.3	General Characteristics: Model 737-800, -800W, -800BCF.....	2-4
2.1.4	General Characteristics: Model 737-900, -900W.....	2-5
2.1.5	General Characteristics: Model 737-900ER, -900ERW.....	2-6
2.1.6	General Characteristics: Model 737 BBJ.....	2-7
2.1.7	General Characteristics: Model 737 BBJ2.....	2-8
2.2	GENERAL DIMENSIONS.....	2-9
2.2.1	General Dimensions: Model 737-600.....	2-9
2.2.2	General Dimensions: Model 737-600W.....	2-10
2.2.3	General Dimensions: Model 737-700, -700C.....	2-11
2.2.4	General Dimensions: Model 737-700W, BBJ1.....	2-12
2.2.5	General Dimensions: Model 737-800.....	2-13
2.2.6	General Dimensions: Model 737-800W, BBJ2, -800BCF.....	2-14
2.2.7	General Dimensions: Model 737-900, -900ER.....	2-15
2.2.8	General Dimensions: Model 737-900W, -900ERW.....	2-16
2.3	GROUND CLEARANCES.....	2-17
2.3.1	Ground Clearances: Model 737-600, -700, -700C.....	2-17
2.3.2	Ground Clearances: Model 737-800, -900, -900ER.....	2-18
2.3.3	Ground Clearances: Model 737-700W, -800W, -900W, - 900ERW, BBJ, BBJ2.....	2-19
2.3.4	Ground Clearances: Model 737-800BCF.....	2-20
2.4	INTERIOR ARRANGEMENTS.....	2-21
2.4.1	Interior Arrangements: Model 737-600.....	2-21
2.4.2	Interior Arrangements: Model 737-700, -700W.....	2-22
2.4.3	Interior Arrangements: Model 737-700C.....	2-23
2.4.4	Interior Arrangements: Model 737-800, -800W.....	2-24
2.4.5	Interior Arrangements: Model 737 BBJ1, 737 BBJ2.....	2-25
2.4.6	Interior Arrangements: Model 737-800BCF.....	2-26
2.4.7	Interior Arrangements: Model 737-900, -900W.....	2-27
2.4.8	Interior Arrangements: Model 737-900ER, -900ERW.....	2-28
2.5	CABIN CROSS SECTIONS.....	2-29

2.5.1	Cabin Cross-Sections: Model 737-600, -700, -800, -900, BBJ1, BBJ2, Four-Abreast Seating.....	2-29
2.5.2	Cabin Cross-Sections: Model 737-600, -700, -800, -900, Six-Abreast Seating	2-30
2.6	LOWER CARGO COMPARTMENTS	2-31
2.6.1	Lower Cargo Compartments: Model 737-600, -700, -700C, -800, -800BCF, -900, -900ER With and Without Winglets, Capacities	2-31
2.6.2	Lower Cargo Compartments: Model 737BBJ1, 737 BBJ2, Capacities	2-32
2.7	DOOR CLEARANCES.....	2-33
2.7.1	Door Clearances: Model 737, All Models, Forward Main Entry Door No. 1.....	2-33
2.7.2	Door Clearances: Model 737, All Models, Optional Forward Airstairs, Main Entry Door No 1.....	2-34
2.7.3	Door Clearances: Model 737-600, -700, -700C, -800, -800BCF, -900, -900ER, BBJ1, BBJ2, With and Without Winglets, Locations of Sensors and Probes – Forward of Main Entry Door No 1	2-35
2.7.4	Door Clearances: Model 737, All Models, Forward Service Door.....	2-36
2.7.5	Door Clearances: Model 737, All Models, Aft Entry Door and Aft Service Door.....	2-37
2.7.6	Door Clearances: Model 737-700C, Main Deck Cargo Door.....	2-38
2.7.7	Door Clearances: Model 737-800BCF, Main Deck Cargo Door.....	2-39
3.0	AIRPLANE PERFORMANCE	3-1
3.1	GENERAL INFORMATION.....	3-1
3.2	PAYLOAD/RANGE FOR LONG RANGE CRUISE	3-2
3.2.1	Payload/Range for Long Range Cruise: Model 737-600	3-2
3.2.2	Payload/Range for Long Range Cruise: Model 737-700, -700W	3-3
3.2.3	Payload/Range for Long Range Cruise: Model 737-700ER, -700ERW, -700C, -700CW, BBJ1	3-4
3.2.4	Payload/Range for Long Range Cruise: Model 737-800, -800W, -800BCF, BBJ2	3-5
3.2.5	Payload/Range for Long Range Cruise: Model 737-900, -900W	3-6
3.2.6	Payload/Range for Long Range Cruise: Model 737-900ER, -900ERW, BBJ3	3-7
3.3	FAA/EASA TAKEOFF RUNWAY LENGTH REQUIREMENTS.....	3-8
3.3.1	FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-600 (CFM56-7B18/-7B20 Engines at 20,000 LB SLST).....	3-8
3.3.2	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-600 (CFM56-7B18/-7B20 Engines at 20,000 LB SLST)	3-9

3.3.3	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 40°F (STD + 22.2°C), Dry Runway: Model 737-600 (CFM56-7B18/-7B20 Engines at 20,000 LB SLST)	3-10
3.3.4	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-600 (CFM56-7B18/-7B20 Engines at 20,000 LB SLST)	3-11
3.3.5	FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-600 (CFM56-7B22 Engines at 22,000 LB SLST)	3-12
3.3.6	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-600 (CFM56-7B22 Engines at 22,000 LB SLST)	3-13
3.3.7	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-600 (CFM56-7B22 Engines at 22,000 LB SLST)	3-14
3.3.8	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-600 (CFM56-7B22 Engines at 22,000 LB SLST)	3-15
3.3.9	FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-700, 700W (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST).....	3-16
3.3.10	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-700, 700W (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)	3-17
3.3.11	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 40°F (STD + 22.2°C), Dry Runway: Model 737-700, -700W (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)	3-18
3.3.12	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-700, -700W (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)	3-19
3.3.13	FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-700, -700W (CFM56-7B26 Engines at 26,000 LB SLST).....	3-20
3.3.14	FAA/EASA Takeoff Runway Length Requirements - Standard Day, +27°F (STD + 15°C), Dry Runway: Model 737-700, -700W (CFM56-7B26 Engines at 26,000 LB SLST)	3-21
3.3.15	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-700, -700W (CFM56-7B26 Engines at 26,000 LB SLST)	3-22
3.3.16	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-700, -700W (CFM56-7B26 Engines at 26,000 LB SLST)	3-23
3.3.17	FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-700ER, -700ERW, -700C, -	

	700CW (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)	3-24
3.3.18	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)	3-25
3.3.19	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 40°F (STD + 22.2°C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)	3-26
3.3.20	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)	3-27
3.3.21	FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW, BBJ1 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)	3-28
3.3.22	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW, BBJ1 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)	3-29
3.3.23	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW, BBJ1 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)	3-30
3.3.24	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW, BBJ1 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)	3-31
3.3.25	FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B27-B1 Engine at 26,000 LB SLST)	3-32
3.3.26	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B27-B1 Engine at 26,000 LB SLST)	3-33
3.3.27	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B27-B1 Engine at 26,000 LB SLST)	3-34
3.3.28	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35°C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B27-B1 Engine at 26,000 LB SLST)	3-35
3.3.29	FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B24/-7B26/-7B27 Engines at 26,000 LB SLST)	3-36

3.3.30	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B24/-7B26/-7B27 Engines at 26,000 LB SLST).....	3-37
3.3.31	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B24/-7B26/-7B27 Engines at 26,000 LB SLST).....	3-38
3.3.32	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B24/-7B26/-7B27 Engines at 26,000 LB SLST).....	3-39
3.3.33	FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-900, -900W (CFM56-7B24/-7B26 Engines at 24,000 LB SLST)	3-40
3.3.34	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-900, -900W (CFM56-7B24/-7B26 Engines at 24,000 LB SLST)	3-41
3.3.35	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-900, -900W (CFM56-7B24/-7B26 Engines at 24,000 LB SLST)	3-42
3.3.36	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-900, -900W (CFM56-7B24/-7B26 Engines at 24,000 LB SLST)	3-43
3.3.37	FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-900ER, -900ERW, BBJ3 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)	3-44
3.3.38	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-900ER, -900ERW, BBJ3 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST).....	3-45
3.3.39	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-900ER, -900ERW, BBJ3 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST).....	3-46
3.3.40	FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-900ER, -900ERW, BBJ3 (CFM56-7B26/-7B27 Engines at 6,000 LB SLST).....	3-47
3.3.41	ICAO Aerodrome Reference Code – All Models	3-48
3.4	FAA/EASA LANDING RUNWAY LENGTH REQUIREMENTS.....	3-49
3.4.1	FAA/EASA Landing Runway Length Requirements - Flaps 30: Model 737-600.....	3-49

3.4.2	FAA/EASA Landing Runway Length Requirements - Flaps 30: Model 737-700, -700W, 700ER, -700ERW, 700C, -700CW, BBJ1	3-50
3.4.3	FAA/EASA Landing Runway Length Requirements - Flaps 30: Model 737-800, -800W, -800BCF, BBJ2	3-51
3.4.4	FAA/EASA Landing Runway Length Requirements - Flaps 30: Model 737-900, -900W	3-52
3.4.5	FAA/EASA Landing Runway Length Requirements - Flaps 30: Model 737-900ER, -900ERW, BBJ3	3-53
4.0	AIRPLANE PERFORMANCE	4-1
4.1	GENERAL INFORMATION	4-1
4.2	TURNING RADII	4-2
4.2.1	Turning Radii – No Slip Angle: Model 737-600	4-2
4.2.2	Turning Radii – No Slip Angle: Model 737-600W	4-3
4.2.3	Turning Radii – No Slip Angle: Model 737-700	4-4
4.2.4	Turning Radii – No Slip Angle: Model 737-700W, BBJ1	4-5
4.2.5	Turning Radii – No Slip Angle: Model 737-800	4-6
4.2.6	Turning Radii – No Slip Angle: Model 737-800W, -800BCF, BBJ2	4-7
4.2.7	Turning Radii – No Slip Angle: Model 737-900, -900ER	4-8
4.2.8	Turning Radii – No Slip Angle: Model 737-900W, -900ERW	4-9
4.3	CLEARANCE RADII	4-10
4.3.1	Minimum Turning Radii – 3” Slip Angle: Model 737-600, -700, - 800, -900, -900ER	4-10
4.3.2	Minimum Turning Radii – 3” Slip Angle: Model 737-600W, - 700W, -800W, -800BCF, -900W, -900ERW, BBJ1, BBJ2	4-11
4.4	VISIBILITY FROM COCKPIT IN STATIC POSITION: MODEL 737, ALL MODELS	4-12
4.5	RUNWAY AND TAXIWAY TURN PATHS	4-13
4.5.1	Runway and Taxiway Turn Paths - Runway-to-Taxiway, More Than 90 Degrees, Nose Gear Tracks Centerline: Model 737, All Models	4-13
4.5.2	Runway and Taxiway Turn Paths - Runway-to-Taxiway, 90 Degrees, Nose Gear Tracks Centerline: Model 737, All Models	4-14
4.5.3	Runway and Taxiway Turn Paths - Taxiway-to-Taxiway, 90 Degrees, Nose Gear Tracks Centerline: Model 737, All Models	4-15
4.5.4	Runway and Taxiway Turn Paths - Taxiway-to-Taxiway, 90 Degrees, Cockpit Tracks Centerline: Model 737, All Models	4-16
4.6	RUNWAY HOLDING BAY: MODEL 737, ALL MODELS	4-17
5.0	TERMINAL SERVICING	5-1
5.1	AIRPLANE SERVICING ARRANGEMENT - TYPICAL TURNAROUND	5-2

5.1.1	Airplane Servicing Arrangement - Typical Turnaround: Model 737-600	5-2
5.1.2	Airplane Servicing Arrangement - Typical Turnaround: Model 737-700, -700W	5-3
5.1.3	Airplane Servicing Arrangement - Typical Turnaround: Model 737-700C, -700QC, -800BCF	5-4
5.1.4	Airplane Servicing Arrangement - Typical Turnaround: Model 737-800, -800W	5-5
5.1.5	Airplane Servicing Arrangement - Typical Turnaround: Model 737-900, -900ER, With and Without Winglets.....	5-6
5.1.6	Airplane Servicing Arrangement - Typical Turnaround: Model 737 BBJ1, BBJ2	5-7
5.2	TERMINAL OPERATIONS - TURNAROUND STATION	5-8
5.2.1	Terminal Operations – Turnaround Station: Model 737-600.....	5-8
5.2.2	Terminal Operations – Turnaround Station: Model 737-700, -700W	5-9
5.2.3	Terminal Operations – Turnaround Station: Model 737-700C, -700QC	5-10
5.2.4	Terminal Operations – Turnaround Station: Model 737-800, -800W	5-11
5.2.5	Terminal Operations – Turnaround Station: Model 737-900, -900ER, With and Without Winglets	5-12
5.2.6	Terminal Operations – Turnaround Station: Model 737 BBJ1, BBJ2.....	5-13
5.3	TERMINAL OPERATIONS - EN ROUTE STATION.....	5-14
5.3.1	Terminal Operations - En Route Station: Model 737-600	5-14
5.3.2	Terminal Operations - En Route Station: Model 737-700, -700W	5-15
5.3.3	Terminal Operations - En Route Station: Model 737-800, -800W	5-16
5.3.4	Terminal Operations - En Route Station: Model 737-900, -900ER, With and Without Winglets	5-17
5.3.5	Terminal Operations - En Route Station: Model 737 BBJ1, BBJ2.....	5-18
5.4	GROUND SERVICING CONNECTIONS.....	5-19
5.4.1	Ground Service Connections: Model 737-600.....	5-19
5.4.2	Ground Service Connections: Model 737-700.....	5-20
5.4.3	Ground Service Connections: Model 737-700W, BBJ 1	5-21
5.4.4	Ground Service Connections: Model 737-800.....	5-22
5.4.5	Ground Service Connections: Model 737-800W, -800BCF, BBJ2	5-23
5.4.6	Ground Service Connections: Model 737-900, -900ER	5-24
5.4.7	Ground Service Connections: Model 737-900W, -900ERW.....	5-25
5.4.8	Ground Servicing Connections and Capacities: Model 737, All Models.....	5-26
5.5	ENGINE STARTING PNEUMATIC REQUIREMENTS	5-27

5.5.1	Engine Start Pneumatic Requirements - Sea Level: Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets, BBJ1, BBJ2.....	5-27
5.6	GROUND PNEUMATIC POWER REQUIREMENTS	5-28
5.6.1	Ground Pneumatic Power Requirements - Heating/Cooling: Model 737-600, -700, With and Without Winglets	5-28
5.6.2	Ground Pneumatic Power Requirements - Heating/Cooling: Model 737-800, -800BCF, -900, -900ER, With and Without Winglets	5-29
5.7	CONDITIONED AIR REQUIREMENTS	5-30
5.7.1	Conditioned Air Flow Requirements: Model 737-600, -700, With and Without Winglets	5-30
5.7.2	Conditioned Air Flow Requirements: Model 737-800, -800BCF, -900, -900ER, With and Without Winglets	5-31
5.8	GROUND TOWING REQUIREMENTS	5-32
5.8.1	Ground Towing Requirements - English Units: Model 737, All Models.....	5-32
5.8.2	Ground Towing Requirements - Metric Units: Model 737, All Models.....	5-33
6.0	JET ENGINE WAKE AND NOISE DATA	6-1
6.1	JET ENGINE EXHAUST VELOCITIES AND TEMPERATURES	6-1
6.1.1	Jet Engine Exhaust Velocity Contours – Idle Thrust: Model 737-600.....	6-2
6.1.2	Jet Engine Exhaust Velocity Contours – Idle Thrust: Model 737-700, -700W.....	6-3
6.1.3	Jet Engine Exhaust Velocity Contours – Idle Thrust: Model 737-800, -800W, -800BCF.....	6-4
6.1.4	Jet Engine Exhaust Velocity Contours – Idle Thrust: Model 737-900, -900ER, With and Without Winglets.....	6-5
6.1.5	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MLW: Model 737-600.....	6-6
6.1.6	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MTW: Model 737-600.....	6-7
6.1.7	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / Both Engines / MTW: Model 737-600	6-8
6.1.8	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 1% Slope / Both Engines / MTW: Model 737-600	6-9
6.1.9	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MLW: Model 737-700, -700W.....	6-10
6.1.10	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MTW: Model 737-700, -700W.....	6-11
6.1.11	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / Both Engines / MTW: Model 737-700, -700W.....	6-12

6.1.12	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 1% Slope / Both Engines / MTW: Model 737-700, -700W	6-13
6.1.13	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MLW: Model 737-800, -800W, -800BCF	6-14
6.1.14	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MTW: Model 737-800, -800W, -800BCF	6-15
6.1.15	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / Both Engines / MTW: Model 737-800, -800W, -800BCF	6-16
6.1.16	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 1% Slope / Both Engines / MTW: Model 737-800, -800W, -800BCF	6-17
6.1.17	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MLW: Model 737-900, -900ER, With and Without Winglets	6-18
6.1.18	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MTW: Model 737-900, -900ER, With and Without Winglets	6-19
6.1.19	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / Both Engines / MTW: Model 737-900, -900ER, With and Without Winglets	6-20
6.1.20	Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 1% Slope / Both Engines / MTW: Model 737-900, -900ER, With and Without Winglets	6-21
6.1.21	Jet Engine Exhaust Velocity Contours - Takeoff Thrust: Model 737-600	6-22
6.1.22	Jet Engine Exhaust Velocity Contours - Takeoff Thrust: Model 737-700, -700W	6-23
6.1.23	Jet Engine Exhaust Velocity Contours - Takeoff Thrust: Model 737-800, -800W, -800BCF	6-24
6.1.24	Jet Engine Exhaust Velocity Contours - Takeoff Thrust: Model 737-900, -900ER, With and Without Winglets.....	6-25
6.1.25	Jet Engine Exhaust Temperature Contours - Idle Thrust: Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets	6-26
6.1.26	Jet Engine Exhaust Temperature Contours – Breakaway Thrust: Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets	6-27
6.1.27	Jet Engine Exhaust Temperature Contours – Takeoff Thrust: Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets	6-28
6.1.28	Inlet Hazard Areas: Models 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets	6-29
6.2	AIRPORT AND COMMUNITY NOISE.....	6-30
7.0	PAVEMENT DATA	7-1

7.1	GENERAL INFORMATION.....	7-1
7.2	LANDING GEAR FOOTPRINT	7-4
7.2.1	Landing Gear Footprint: Model Advanced 737-600, -700, -800, - 800BCF, -900, -900ER, With and Without Winglets	7-4
7.2.2	Landing Gear Footprint: Model 737 BBJ1, BBJ2	7-5
7.3	MAXIMUM PAVEMENT LOADS.....	7-6
7.3.1	Maximum Pavement Loads: Model 737-600, -700, -800, - 800BCF, -900, -900ER With and Without Winglets	7-6
7.3.2	Maximum Pavement Loads: Model 737 BBJ1, BBJ2	7-8
7.4	LANDING GEAR LOADING ON PAVEMENT	7-9
7.4.1	Landing Gear Loading on Pavement: 737-600	7-9
7.4.2	Landing Gear Loading on Pavement: Model 737-700, -700W.....	7-10
7.4.3	Landing Gear Loading on Pavement: Model 737 BBJ1	7-11
7.4.4	Landing Gear Loading on Pavement: Model 737-800, -800W, - 800BCF	7-12
7.4.5	Landing Gear Loading on Pavement: Model 737 BBJ2	7-13
7.4.6	Landing Gear Loading on Pavement: Model 737-900, -900W.....	7-14
7.4.7	Landing Gear Loading on Pavement: Model 737-900ER, - 900ERW.....	7-15
7.5	FLEXIBLE PAVEMENT REQUIREMENTS - U.S. ARMY CORPS OF ENGINEERS METHOD S-77-1 AND FAA DESIGN METHOD.....	7-16
7.5.1	Flexible Pavement Requirements - U.S. Army Corps of Engineers Design Method (S-77-1) and FAA Design Method: Model 737- 600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets, BBJ1, BBJ2.....	7-17
7.6	FLEXIBLE PAVEMENT REQUIREMENTS - LCN CONVERSION.....	7-18
7.6.1	Flexible Pavement Requirements - LCN Method: Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets, BBJ1, BBJ2	7-19
7.7	RIGID PAVEMENT REQUIREMENTS - PORTLAND CEMENT ASSOCIATION DESIGN METHOD	7-20
7.7.1	Rigid Pavement Requirements - Portland Cement Association Design Method: Model 737-600, -700, -800, -800BCF, -900, - 900ER, With and Without Winglets, BBJ1, BBJ2.....	7-21
7.7.2	Rigid Pavement Requirements - Portland Cement Association Design Method: Model 737-600, -700 (Optional Tires).....	7-22
7.8	RIGID PAVEMENT REQUIREMENTS - LCN CONVERSION	7-23
7.8.1	Radius of Relative Stiffness (Reference: Portland Cement Association)	7-24
7.8.2	Rigid Pavement Requirements - LCN Conversion: Model 737- 600, -700, -800, -800BCF, -900, -900ER With and Without Winglets, BBJ1, BBJ2.....	7-25
7.9	RIGID PAVEMENT REQUIREMENTS - FAA DESIGN METHOD	7-26

7.9.1	Rigid Pavement Requirements – FAA Design Method: Model 737-600, -700, -800, -800BCF, -900, -900ER With and Without Winglets, BBJ1, BBJ2.....	7-27
7.9.2	Rigid Pavement Requirements – FAA Design Method: Model 737-600, -700 (Optional Tires)	7-28
7.10	ACN/PCN REPORTING SYSTEM - FLEXIBLE AND RIGID PAVEMENTS	7-29
7.10.1	Aircraft Classification Number - Flexible Pavement: Model 737-600.....	7-30
7.10.2	Aircraft Classification Number - Flexible Pavement: Model 737-600 (Optional Tires).....	7-31
7.10.3	Aircraft Classification Number - Flexible Pavement: Model 737-700, -700W	7-32
7.10.4	Aircraft Classification Number - Flexible Pavement: Model 737-700, -700W (Optional Tires).....	7-33
7.10.5	Aircraft Classification Number - Flexible Pavement: Model 737 BBJ1	7-34
7.10.6	Aircraft Classification Number - Flexible Pavement: Model 737-800, -800W, -800BCF	7-35
7.10.7	Aircraft Classification Number - Flexible Pavement: Model 737 BBJ2.....	7-36
7.10.8	Aircraft Classification Number - Flexible Pavement: Model 737-900, -900W.....	7-37
7.10.9	Aircraft Classification Number - Flexible Pavement: Model 737-900ER, -900ERW	7-38
7.10.10	Aircraft Classification Number - Rigid Pavement: Model 737-600	7-39
7.10.11	Aircraft Classification Number - Rigid Pavement: Model 737-600 (Optional Tires).....	7-40
7.10.12	Aircraft Classification Number - Rigid Pavement: Model 737-700, -700W	7-41
7.10.13	Aircraft Classification Number - Rigid Pavement: Model 737-700, -700W (Optional Tires).....	7-42
7.10.14	Aircraft Classification Number - Rigid Pavement: Model 737 BBJ1	7-43
7.10.15	Aircraft Classification Number - Rigid Pavement: Model 737-800, -800W, -800BCF	7-44
7.10.16	Aircraft Classification Number - Rigid Pavement: Model 737 BBJ2.....	7-45
7.10.17	Aircraft Classification Number - Rigid Pavement: Model 737-900, -900W.....	7-46
7.10.18	Aircraft Classification Number - Rigid Pavement: Model 737-900ER, -900ERW	7-47

7.11	ACR/PCR REPORTING SYSTEM – FLEXIBLE AND RIGID PAVEMENTS	7-48
7.11.1	Aircraft Classification Rating - Flexible Pavement: Model 737-600.....	7-49
7.11.2	Aircraft Classification Rating - Flexible Pavement: Model 737-700, -700W.....	7-50
7.11.3	Aircraft Classification Rating - Flexible Pavement: Model 737 BBJ1.....	7-51
7.11.4	Aircraft Classification Rating - Flexible Pavement: Model 737-800, -800W, -800BCF.....	7-52
7.11.5	Aircraft Classification Rating - Flexible Pavement: Model 737 BBJ2.....	7-53
7.11.6	Aircraft Classification Rating - Flexible Pavement: Model 737-900, -900W.....	7-54
7.11.7	Aircraft Classification Rating - Flexible Pavement: Model 737-900ER, -900ERW	7-55
7.11.8	Aircraft Classification Rating - Rigid Pavement: Model 737-600.....	7-56
7.11.9	Aircraft Classification Rating - Rigid Pavement: Model 737-700, -700W.....	7-57
7.11.10	Aircraft Classification Rating - Rigid Pavement: Model 737 BBJ1	7-58
7.11.11	Aircraft Classification Rating - Rigid Pavement: Model 737-800, -800W, -800BCF.....	7-59
7.11.12	Aircraft Classification Rating - Rigid Pavement: Model 737 BBJ2	7-60
7.11.13	Aircraft Classification Rating - Rigid Pavement: Model 737-900, -900W.....	7-61
7.11.14	Aircraft Classification Rating - Rigid Pavement: Model 737-900ER, -900ERW	7-62
8.0	FUTURE 737 DERIVATIVE AIRPLANES.....	8-1
9.0	SCALED 737 DRAWINGS	9-1
9.1	MODEL 737-600.....	9-2
9.1.1	Scaled Drawings – 1 IN. = 32 FT: Model 737-600.....	9-2
9.1.2	Scaled Drawings – 1 IN. = 32 FT: Model 737-600.....	9-3
9.1.3	Scaled Drawings – 1 IN. = 50 FT: Model 737-600.....	9-4
9.1.4	Scaled Drawings – 1 IN. = 50 FT: Model 737-600.....	9-5
9.1.5	Scaled Drawings – 1 IN. = 100 FT: Model 737-600.....	9-6
9.1.6	Scaled Drawings – 1 IN. = 100 FT: Model 737-600.....	9-7
9.1.7	Scaled Drawings – 1:500: Model 737-600.....	9-8
9.1.8	Scaled Drawings – 1:500: Model 737-600.....	9-9
9.1.9	Scaled Drawings – 1:1000: Model 737-600.....	9-10
9.1.10	Scaled Drawings – 1:1000: Model 737-600.....	9-11
9.2	MODEL 737-600W	9-12
9.2.1	Scaled Drawings – 1 IN. = 32 FT: Model 737-600W.....	9-12

9.2.2	Scaled Drawings – 1 IN. = 32 FT: Model 737-600W	9-13
9.2.3	Scaled Drawings – 1 IN. = 50 FT: Model 737-600W	9-14
9.2.4	Scaled Drawings – 1 IN. = 50 FT: Model 737-600W	9-15
9.2.5	Scaled Drawings – 1 IN. = 100 FT: Model 737-600W	9-16
9.2.6	Scaled Drawings – 1 IN. = 100 FT: Model 737-600W	9-17
9.2.7	Scaled Drawings – 1:500: Model 737-600W	9-18
9.2.8	Scaled Drawings – 1:500: Model 737-600W	9-19
9.2.9	Scaled Drawings – 1:1000: Model 737-600W	9-20
9.2.10	Scaled Drawings – 1:1000: Model 737-600W	9-21
9.3	MODEL 737-700.....	9-22
9.3.1	Scaled Drawings – 1 IN. = 32 FT: Model 737-700.....	9-22
9.3.2	Scaled Drawings – 1 IN. = 32 FT: Model 737-700.....	9-23
9.3.3	Scaled Drawings – 1 IN. = 50 FT: Model 737-700.....	9-24
9.3.4	Scaled Drawings – 1 IN. = 50 FT: Model 737-700.....	9-25
9.3.5	Scaled Drawings – 1 IN. = 100 FT: Model 737-700.....	9-26
9.3.6	Scaled Drawings – 1 IN. = 100 FT: Model 737-700.....	9-27
9.3.7	Scaled Drawings – 1:500: Model 737-700.....	9-28
9.3.8	Scaled Drawings – 1:500: Model 737-700.....	9-29
9.3.9	Scaled Drawings – 1:1000: Model 737-700.....	9-30
9.3.10	Scaled Drawings – 1:1000: Model 737-700.....	9-31
9.4	MODEL 737-700W, BBJ1	9-32
9.4.1	Scaled Drawings – 1 IN. = 32 FT: Model 737-700W	9-32
9.4.2	Scaled Drawings – 1 IN. = 32 FT: Model 737 BBJ1	9-33
9.4.3	Scaled Drawings – 1 IN. = 50 FT: Model 737-700W, BBJ1	9-34
9.4.4	Scaled Drawings – 1 IN. = 50 FT: Model 737-700W, BBJ1	9-35
9.4.5	Scaled Drawings – 1 IN. = 100 FT: Model 737-700W, BBJ1	9-36
9.4.6	Scaled Drawings – 1 IN. = 100 FT: Model 737-700W, BBJ1	9-37
9.4.7	Scaled Drawings – 1:500: Model 737-700W, BBJ1	9-38
9.4.8	Scaled Drawings – 1:500: Model 737-700W, BBJ1	9-39
9.4.9	Scaled Drawings – 1:1000: Model 737-700W, BBJ1	9-40
9.4.10	Scaled Drawings – 1:1000: Model 737-700W, BBJ1	9-41
9.5	MODEL 737-800.....	9-42
9.5.1	Scaled Drawings – 1 IN. = 32 FT: Model 737-800.....	9-42
9.5.2	Scaled Drawings – 1 IN. = 32 FT: Model 737-800.....	9-43
9.5.3	Scaled Drawings – 1 IN. = 50 FT: Model 737-800.....	9-44
9.5.4	Scaled Drawings – 1 IN. = 50 FT: Model 737-800.....	9-45
9.5.5	Scaled Drawings – 1 IN. = 100 FT: Model 737-800.....	9-46
9.5.6	Scaled Drawings – 1 IN. = 100 FT: Model 737-800.....	9-47
9.5.7	Scaled Drawings – 1:500: Model 737-800.....	9-48
9.5.8	Scaled Drawings – 1:500: Model 737-800.....	9-49
9.5.9	Scaled Drawings – 1:1000: Model 737-800.....	9-50

9.5.10	Scaled Drawings – 1:1000: Model 737-800.....	9-51
9.6	MODEL 737-800W, BBJ2	9-52
9.6.1	Scaled Drawings – 1 IN. = 32 FT: Model 737-800W, BBJ2	9-52
9.6.2	Scaled Drawings – 1 IN. = 32 FT: Model 737-800W, BBJ2	9-53
9.6.3	Scaled Drawings – 1 IN. = 50 FT: Model 737-800W, BBJ2	9-54
9.6.4	Scaled Drawings – 1 IN. = 50 FT: Model 737-800W, BBJ2	9-55
9.6.5	Scaled Drawings – 1 IN. = 100 FT: Model 737-800W, BBJ2	9-56
9.6.6	Scaled Drawings – 1 IN. = 100 FT: Model 737-800W, BBJ2	9-57
9.6.7	Scaled Drawings – 1:500: Model 737-800W, BBJ2	9-58
9.6.8	Scaled Drawings – 1:500: Model 737-800W, BBJ2	9-59
9.6.9	Scaled Drawings – 1:1000: Model 737-800W, BBJ2	9-60
9.6.10	Scaled Drawings – 1:1000: Model 737-800W, BBJ2	9-61
9.7	MODEL 737-900, -900ER	9-62
9.7.1	Scaled Drawings – 1 IN. = 32 FT: Model 737-900, -900ER	9-62
9.7.2	Scaled Drawings – 1 IN. = 32 FT: Model 737-900, -900ER	9-63
9.7.3	Scaled Drawings – 1 IN. = 50 FT: Model 737-900, -900ER	9-64
9.7.4	Scaled Drawings – 1 IN. = 50 FT: Model 737-900, -900ER	9-65
9.7.5	Scaled Drawings – 1 IN. = 100 FT: Model 737-900, -900ER	9-66
9.7.6	Scaled Drawings – 1 IN. = 100 FT: Model 737-900, -900ER	9-67
9.7.7	Scaled Drawings – 1:500: Model 737-900, -900ER	9-68
9.7.8	Scaled Drawings – 1:500: Model 737-900, -900ER	9-69
9.7.9	Scaled Drawings – 1:1000: Model 737-900, -900ER	9-70
9.7.10	Scaled Drawings – 1:1000: Model 737-900, -900ER	9-71
9.8	MODEL 737-900W, -900ERW	9-72
9.8.1	Scaled Drawings – 1 IN. = 32 FT: Model 737-900W, -900ERW	9-72
9.8.2	Scaled Drawings – 1 IN. = 32 FT: Model 737-900W, -900ERW	9-73
9.8.3	Scaled Drawings – 1 IN. = 50 FT: Model 737-900W, -900ERW	9-74
9.8.4	Scaled Drawings – 1 IN. = 50 FT: Model 737-900W, -900ERW	9-75
9.8.5	Scaled Drawings – 1 IN. = 100 FT: Model 737-900W, -900ERW	9-76
9.8.6	Scaled Drawings – 1 IN. = 100 FT: Model 737-900W, -900ERW	9-77
9.8.7	Scaled Drawings – 1:500: Model 737-900W, -900ERW	9-78
9.8.8	Scaled Drawings – 1:500: Model 737-900W, -900ERW	9-79
9.8.9	Scaled Drawings – 1:1000: Model 737-900W, -900ERW	9-80
9.8.10	Scaled Drawings – 1:1000: Model 737-900W, -900ERW	9-81

1.0 SCOPE AND INTRODUCTION

1.1 SCOPE

This document provides, in a standardized format, airplane characteristics data for general airport planning. Since operational practices vary among airlines, specific data should be coordinated with the using airlines prior to facility design. Boeing Commercial Airplanes should be contacted for any additional information required.

Content of the document reflects the results of a coordinated effort by representatives from the following organizations:

- Aerospace Industries Association
- Airports Council International - North America
- Air Transport Association of America
- International Air Transport Association

The airport planner may also want to consider the information presented in the "Commercial Aircraft Design Characteristics - Trends and Growth Projections," for long range planning needs and can be accessed via the following website:

<http://www.boeing.com/airports>

The document is updated periodically and represents the coordinated efforts of the following organizations regarding future aircraft growth trends.

- International Coordinating Council of Aerospace Industries Associations
- Airports Council International - North America
- Air Transport Association of America
- International Air Transport Association

1.2 INTRODUCTION

This document conforms to NAS 3601. It provides characteristics of the Boeing Model 737 Next Generation airplane for airport planners and operators, airlines, architectural and engineering consultant organizations, and other interested industry agencies. Airplane changes and available options may alter model characteristics. Data contained herein is generic in scope and not customer-specific.

For additional information contact:

Boeing Commercial Airplanes
2201 Seal Beach Blvd. M/C: 110-SB02
Seal Beach, CA 90740-1515
U.S.A.

Attention: Manager, Airport Operations Engineering

Email: AirportCompatibility@boeing.com

1.3 A BRIEF DESCRIPTION OF THE 737 FAMILY OF AIRPLANES

The 737 is a twin-engine airplane designed to operate over short to medium ranges from sea level runways of less than 6,000 ft (1,830 m) in length.

Significant features of interest to airport planners are described below:

- Underwing-mounted engines provide eye-level assessability. Nearly all system maintenance may be performed at eye level.
- Optional airstairs allow operation at airports where no passengers loading bridges or stairs are available.
- Auxiliary power unit can supply energy for engine starting, air conditioning, and electrical power while the airplane is on the ground or in flight.
- Servicing connections allow single-station pressure fueling and overwing gravity fueling.
- All servicing of the 737 is accomplished with standard ground equipment.

737-600

The 737-600, along with the 737-700, -800, and -900 is the latest derivative in the 737 family of airplanes. This airplane has the same fuselage as the 737-500 and fitted with new wing, stabilizer, and tail sections. This enables the airplane to fly over longer distances. The 737-600 is 102 ft 6 in long and can carry up to 130 passengers in an all-economy configuration.

737-700

The 737-700 has the same fuselage as the 737-300 and is fitted with the new wing, stabilizer, and tail sections. The 737-700 is 110 ft 4 in long and can carry up to 148 passengers in an all-economy configuration.

737-800

The 737-800 has a slightly longer fuselage than the 737-400 and is fitted with the new wing, stabilizer, and tail sections. The 737-800 is 129 ft 6 in long and can carry up to 184 passengers in an all-economy configuration.

737-900

The 737-900 is a derivative of the -800 and is 96 inches longer than the -800. Two sections were added to the -800 fuselage; a 54-in section forward of the wing and a 42-in section aft of the wing. The -900 can seat as many as 189 passengers in all-economy configuration.

737 BBJ1

The Boeing Business Jet One is a 737-700 airplane that is delivered without any interior furnishings. The customer installs specific interior configurations. This 737-700 model airplane is equipped with a 737-800 landing gear configuration and has the same weight and performance capabilities as the -800. One unique feature of the 737 BBJ1 is the addition of winglets to provide improved cruise performance capabilities.

737 BBJ2

The Boeing Business Jet Two is a 737-800 airplane that is delivered without any interior furnishings. The customer installs specific interior configurations. Like the 737 BBJ, the BBJ2 is equipped with winglets to provide improved cruise performance capabilities.

737-600, -700, -800, -900 with Winglets

The 737-700, -800, and -900 airplanes are also delivered with winglets. Interior configurations are similar to the base airplane models. Like the BBJ airplanes, the winglets provide improved cruise performance capabilities. Winglets are installed on some 737-600 airplanes as an after-market airline option. Data for this airplane is included for dimensional information only.

737-900ER, -900ER with Winglets

The 737-900ER airplanes are long-range derivatives of the 737-900 and -900 with winglets and designed for higher capacity seating. Additional exit doors are installed aft of the wing to provide exit capability for the additional passenger capacity. The 737-900ER and -900ER with winglets are capable of carrying up to 215 passengers with the additional exit doors.

Engines

The 737-600, -700, -800, and -900 airplanes are equipped with advanced derivatives of the 737-300, -400, and -500 engines. These engines (CFM56-7) generate more thrust and exhibit noise characteristics that are below the current noise standards.

Passenger Cabin Interiors

Early 737s were equipped with hat-rack-type overhead stowage. Later models were equipped with a “wide-body look” interior that incorporates stowage bins in the sidewall and ceiling panels to simulate a superjet interior. More recent configurations include carryall compartments and the advanced technology interior. These interiors provide more stowage above the passenger seats.

Auxiliary Fuel Tanks

Optional auxiliary fuel tanks installed in the lower cargo compartments, provide extra range capability. Although this option increases range, it decreases payload.

Document Page Applicability

Several configurations have been developed for the 737 family of airplanes to meet varied airline requirements. Configurations shown in this document are typical and individual airlines may have different combinations of options. The airlines should be consulted for specific airplane configuration.

Document Applicability

This document contains information on all 737 Next Generation models.

Information on the 737-600, -700, -800, and -900 model airplanes formerly contained in Document D6-58325-3, 737-600/700/800/900 Airplane Characteristics for Airport Planning is now included in this document. Document D6-58325-3 is superseded and should be discarded.

Information on the 737-600, -700, -800, and -900 model airplanes with winglets formerly contained in Document D6-58325-5, 737-700/800/900 (With Winglets) Airplane Characteristics for Airport Planning is now included in this document. Document D6-58325-5 is superseded and should be discarded.

Information on the Boeing Business Jet airplanes formerly contained in Document D6-58325-4, 737-BBJ Airplane Characteristics for Airport Planning is now included in this document. Document D6-58325-4 is superseded and should be discarded.

Information on the 737-600, -700, -800, and -900 model airplanes (with and without winglets) and information on the Boeing Business Jet airplanes formerly contained in Document D6-58325-6, 737 Airplane Characteristics for Airport Planning is now included in this document. Document 58325-6 is superseded for these models but should still be used for information on all 737-100, -200, -300, -400, and -500 model airplanes.

2.0 AIRPLANE DESCRIPTION

2.1 GENERAL CHARACTERISTICS

Maximum Design Taxi Weight (MTW). Maximum weight for ground maneuver as limited by aircraft strength and airworthiness requirements. (It includes weight of taxi and run-up fuel.)

Maximum Design Takeoff Weight (MTOW). Maximum weight for takeoff as limited by aircraft strength and airworthiness requirements. (This is the maximum weight at start of the takeoff run.)

Maximum Design Landing Weight (MLW). Maximum weight for landing as limited by aircraft strength and airworthiness requirements.

Maximum Design Zero Fuel Weight (MZFW). Maximum weight allowed before usable fuel and other specified usable agents must be loaded in defined sections of the aircraft as limited by strength and airworthiness requirements.

Operating Empty Weight (OEW). Weight of structure, powerplant, furnishing systems, unusable fuel and other unusable propulsion agents, and other items of equipment that are considered an integral part of a particular airplane configuration. Also included are certain standard items, personnel, equipment, and supplies necessary for full operations, excluding usable fuel and payload.

Maximum Payload. Maximum design zero fuel weight minus operational empty weight.

Maximum Seating Capacity. The maximum number of passengers specifically certificated or anticipated for certification.

Maximum Cargo Volume. The maximum space available for cargo.

Usable Fuel. Fuel available for aircraft propulsion.

2.1.1 General Characteristics: Model 737-600

CHARACTERISTICS	UNITS	MODEL 737-600		
MAX DESIGN - TAXI WEIGHT	POUNDS	124,500	144,000	145,000
	KILOGRAMS	56,472	65,317	65,771
MAX DESIGN - TAKEOFF WEIGHT	POUNDS	124,000	143,500	144,500
	KILOGRAMS	56,245	65,091	65,544
MAX DESIGN - LANDING WEIGHT	POUNDS	120,500	120,500	121,500
	KILOGRAMS	54,658	54,658	55,111
MAX DESIGN - ZERO FUEL WEIGHT	POUNDS	113,500	113,500	114,500
	KILOGRAMS	51,483	51,483	51,936
OPERATING - EMPTY WEIGHT (1)	POUNDS	80,200	80,200	80,200
	KILOGRAMS	36,378	36,378	36,378
MAX STRUCTURAL - PAYLOAD	POUNDS	33,300	33,300	34,300
	KILOGRAMS	15,105	15,105	15,558
SEATING CAPACITY (1)	TWO-CLASS	108	108	108
	ALL-ECONOMY	130	130	130
MAX CARGO VOLUME - LOWER DECK	CUBIC FEET	756	756	756
	CUBIC METERS	21.4	21.4	21.4
USABLE FUEL	US GALLONS	6875	6875	6875
	LITERS	26,022	26,022	26,022
	POUNDS	46,063	46,063	46,063
	KILOGRAMS	20,894	20,894	20,894

NOTE:

1. OPERATING EMPTY WEIGHT FOR BASELINE MIXED CLASS CONFIGURATION. CONSULT WITH AIRLINE FOR SPECIFIC WEIGHTS AND CONFIGURATIONS.

2.1.2 General Characteristics: Model 737-700, -700W, -700C

CHARACTERISTICS	UNITS	MODEL 737-700, -700W, -700C		
MAX DESIGN - TAXI WEIGHT	POUNDS	133,500	153,500	155,000
	KILOGRAMS	60,555	69,626	70,307
MAX DESIGN - TAKEOFF WEIGHT	POUNDS	133,000	153,000	154,500
	KILOGRAMS	60,328	69,400	70,080
MAX DESIGN - LANDING WEIGHT	POUNDS	128,000	128,000	129,200
	KILOGRAMS	58,060	58,060	58,604
MAX DESIGN - ZERO FUEL WEIGHT	POUNDS	120,500	120,500	121,700
	KILOGRAMS	54,658	54,658	55,202
OPERATING - EMPTY WEIGHT (1)	POUNDS	83,000	83,000	83,000
	KILOGRAMS	37,648	37,648	37,648
MAX STRUCTURAL - PAYLOAD	POUNDS	37,500	37,500	38,700
	KILOGRAMS	17,010	17,010	17,554
SEATING CAPACITY (1)	TWO-CLASS	128	128	128
	ALL-ECONOMY	148	148	148
MAX CARGO VOLUME - LOWER DECK	CUBIC FEET	1,002	1,002	1,002
	CUBIC METERS	28.4	28.4	28.4
USABLE FUEL	US GALLONS	6875	6875	6875
	LITERS	26,022	26,022	26,022
	POUNDS	46,063	46,063	46,063
	KILOGRAMS	20,894	20,894	20,894

NOTE:

1. OPERATING EMPTY WEIGHT FOR BASELINE MIXED CLASS CONFIGURATION. CONSULT WITH AIRLINE FOR SPECIFIC WEIGHTS AND CONFIGURATIONS.

2.1.3 General Characteristics: Model 737-800, -800W, -800BCF

CHARACTERISTICS	UNITS	737-800, -800W			737-800BCF
MAX DESIGN - TAXI WEIGHT	POUNDS	156,000	173,000	174,700	174,700
	KILOGRAMS	70,760	78,471	79,242	79,242
MAX DESIGN - TAKEOFF WEIGHT	POUNDS	155,500	172,500	174,200	174,200
	KILOGRAMS	70,534	78,245	79,016	79,015
MAX DESIGN - LANDING WEIGHT	POUNDS	144,000	144,000	146,300	146,300
	KILOGRAMS	65,317	65,317	66,361	66,360
MAX DESIGN - ZERO FUEL WEIGHT	POUNDS	136,000	136,000	138,300	138,300
	KILOGRAMS	61,689	61,689	62,732	62,731
OPERATING - EMPTY WEIGHT (1)	POUNDS	91,300	91,300	91,300	80,800
	KILOGRAMS	41,413	41,413	41,413	36,651
MAX STRUCTURAL - PAYLOAD	POUNDS	44,700	44,700	47,000	47,000
	KILOGRAMS	20,276	20,276	21,319	21,319
SEATING CAPACITY (1)	TWO-CLASS	160	160	160	N/A
	ALL-ECONOMY	184	184	184	N/A
MAX CARGO VOLUME - LOWER DECK (2)	CUBIC FEET	1,591	1,591	1,591	6,581
	CUBIC METERS	45.1	45.1	45.1	186.4
USABLE FUEL	US GALLONS	6875	6875	6875	6875
	LITERS	26,022	26,022	26,022	26,022
	POUNDS	46,063	46,063	46,063	46,063
	KILOGRAMS	20,894	20,894	20,894	20,894

NOTE:

1. OPERATING EMPTY WEIGHT FOR BASELINE MIXED CLASS CONFIGURATION. CONSULT WITH AIRLINE FOR SPECIFIC WEIGHTS AND CONFIGURATIONS.
2. MAX CARGO VOLUME FOR 737-800BCF INCLUDES UPPER DECK AND LOWER DECK CAPACITIES

2.1.4 General Characteristics: Model 737-900, -900W

CHARACTERISTICS	UNITS	MODEL 737-900, -900W	
MAX DESIGN - TAXI WEIGHT	POUNDS	164,500	174,700
	KILOGRAMS	74,616	79,243
MAX DESIGN - TAKEOFF WEIGHT	POUNDS	164,000	174,200
	KILOGRAMS	74,389	79,016
MAX DESIGN - LANDING WEIGHT	POUNDS	146,300	147,300
	KILOGRAMS	66,361	66,814
MAX DESIGN - ZERO FUEL WEIGHT	POUNDS	138,300	140,300
	KILOGRAMS	62,732	63,639
OPERATING - EMPTY WEIGHT (1)	POUNDS	94,580	94,580
	KILOGRAMS	42,901	42,901
MAX STRUCTURAL - PAYLOAD	POUNDS	43,720	45,720
	KILOGRAMS	19,831	20,738
SEATING CAPACITY (1)	TWO-CLASS	177	177
	ALL-ECONOMY	189	189
MAX CARGO VOLUME - LOWER DECK	CUBIC FEET	1,852	1,852
	CUBIC METERS	52.5	52.5
USABLE FUEL	US GALLONS	6875	6875
	LITERS	26,022	26,022
	POUNDS	46,063	46,063
	KILOGRAMS	20,894	20,894

NOTE:

1. OPERATING EMPTY WEIGHT FOR BASELINE MIXED CLASS CONFIGURATION. CONSULT WITH AIRLINE FOR SPECIFIC WEIGHTS AND CONFIGURATIONS.

2.1.5 General Characteristics: Model 737-900ER, -900ERW

CHARACTERISTICS	UNITS	MODEL 737-900ER, -900ER WITH WINGLETS		
MAX DESIGN - TAXI WEIGHT	POUNDS	164,500	188,200	
	KILOGRAMS	74,616	85,366	
MAX DESIGN - TAKEOFF WEIGHT	POUNDS	164,000	187,700	
	KILOGRAMS	74,389	85,139	
MAX DESIGN - LANDING WEIGHT	POUNDS	146,300	157,300	
	KILOGRAMS	66,361	71,350	
MAX DESIGN - ZERO FUEL WEIGHT	POUNDS	138,300	149,300	
	KILOGRAMS	62,732	67,721	
OPERATING - EMPTY WEIGHT (1)	POUNDS	98,495	98,495	
	KILOGRAMS	44,677	44,677	
MAX STRUCTURAL - PAYLOAD	POUNDS	39,308	50,805	
	KILOGRAMS	17,830	23,045	
SEATING CAPACITY (1)	TWO-CLASS	177	177	
	ALL-ECONOMY	186 WITH MID EXIT DOOR, 215: FAA EXIT LIMIT		
AUXILIARY FUEL OPTIONS	SEE NOTES	(2)	(3)	(4)
MAX CARGO - LOWER DECK	CUBIC FEET	1,826	1,673	1,585
	CUBIC METERS	51.7	47.7	44.9
USABLE FUEL	US GALLONS	6,875	7,390	7,837
	LITERS	26,025	27,974	29,666
	POUNDS	46,063	49,513	52,508
	KILOGRAMS	20,894	22,459	23,817

NOTES:

1. OPERATING EMPTY WEIGHT FOR BASELINE MIXED CLASS CONFIGURATION. CONSULT WITH AIRLINE FOR SPECIFIC WEIGHTS AND CONFIGURATIONS.
2. WITH NO AUXILIARY FUEL TANK
3. WITH ONE AUXILIARY FUEL TANK
4. WITH TWO AUXILIARY FUEL TANKS

2.1.6 General Characteristics: Model 737 BBJ

CHARACTERISTICS	UNITS	MODEL 737 BBJ
MAX DESIGN - TAXI WEIGHT	POUNDS	171,500
	KILOGRAMS	77,791
MAX DESIGN - TAKEOFF WEIGHT	POUNDS	171,000
	KILOGRAMS	77,564
MAX DESIGN - LANDING WEIGHT	POUNDS	134,000
	KILOGRAMS	60,781
MAX DESIGN - ZERO FUEL WEIGHT	POUNDS	126,000
	KILOGRAMS	57,152

NUMBER OF AUXILIARY FUEL TANKS		3	4	5	6	7	8	9
SPEC OPERATING - EMPTY WEIGHT (1)	POUNDS	92,345	92,722	93,393	93,785	94,056	94,352	94,570
	KILOGRAMS	41,887	42,058	42,362	43,540	42,663	42,797	42,896
MAX STRUCTURAL - PAYLOAD	POUNDS	33,655	33,278	32,607	32,215	31,944	31,648	31,430
	KILOGRAMS	15,300	15,126	14,821	14,609	14,520	14,385	14,286
MAX CARGO - LOWER DECK	CUBIC FEET	611	515	415	319	268	214	160
	CUBIC METERS	17.3	14.6	11.7	9.0	7.6	6.1	4.6
USEABLE FUEL	US GALLONS	8,360	8,897	9,399	9,917	10,213	10,457	10,697
	LITERS	31,646	33,611	35,579	37,540	38,660	39,584	40,485
	POUNDS	56,012	59,610	62,973	66,444	68,427	70,062	71,670
	KILOGRAMS	25,460	27,095	28,624	30,202	31,103	31,846	32,577

NOTE:

1. SPEC WEIGHT FOR NUMBER OF AUXILIARY FUEL TANKS SHOWN. CONSULT WITH AIRCRAFT OPERATOR FOR SPECIFIC WEIGHTS AND CONFIGURATIONS.

2.1.7 General Characteristics: Model 737 BBJ2

CHARACTERISTICS	UNITS	MODEL 737 BBJ2
MAX DESIGN - TAXI WEIGHT	POUNDS	174,700
	KILOGRAMS	79,245
MAX DESIGN - TAKEOFF WEIGHT	POUNDS	174,200
	KILOGRAMS	79,015
MAX DESIGN - LANDING WEIGHT	POUNDS	146,300
	KILOGRAMS	66,360
MAX DESIGN - ZERO FUEL WEIGHT	POUNDS	138,300
	KILOGRAMS	62,730

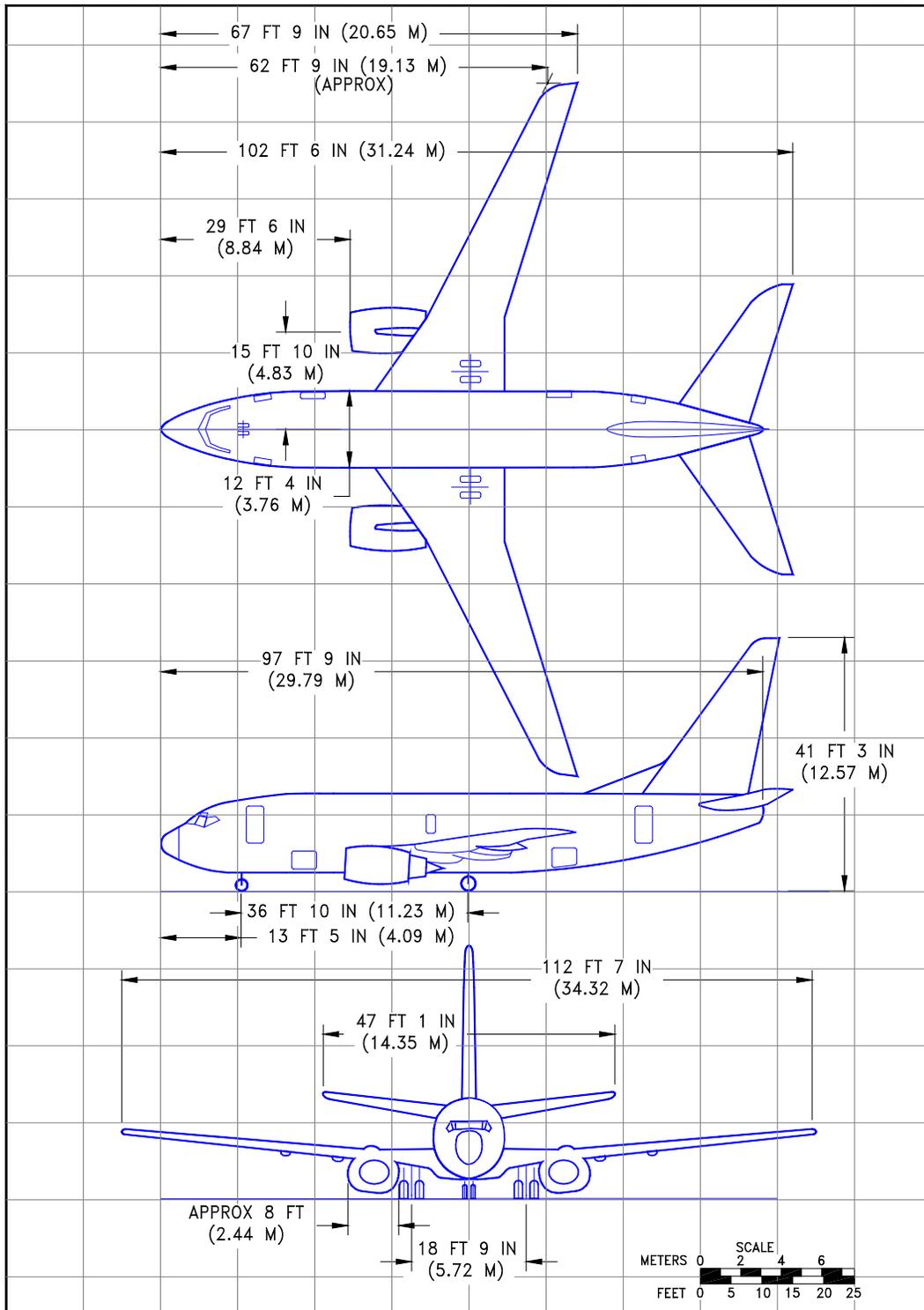
NUMBER OF AUXILIARY FUEL TANKS		0	1	2	3	4	5	6	7
SPEC OPERATING - EMPTY WEIGHT (1)	POUNDS	96,727	97,372	97,821	98,344	98,722	99,393	99,785	100,312
	KILOGRAMS	43,875	44,167	44,371	44,608	44,780	45,084	45,262	45,501
MAX STRUCTURAL - PAYLOAD	POUNDS	41,573	40,928	40,479	39,356	39,578	38,907	38,515	37,988
	KILOGRAMS	18,859	18,570	18,366	18,130	17,960	17,563	17,475	17,236
MAX CARGO - LOWER DECK	CUBIC FEET	1,546	1,423	1,331	1,224	1,116	1,029	922	814
	CUBIC METERS	43.8	40.3	37.7	34.7	31.6	29.2	26.1	23.1
USEABLE FUEL	US GALLONS	6,875	7,395	7,837	8,360	8,879	9,399	9,917	10,443
	LITERS	26,025	27,992	29,665	31,645	33,609	35,578	37,538	39,530
	POUNDS	46,080	49,546	52,508	56,012	59,489	62,973	66,571	69,968
	KILOGRAMS	20,910	22,480	23,824	25,414	26,992	28,572	30,214	31,746

NOTE:

1. SPEC WEIGHT FOR NUMBER OF AUXILIARY FUEL TANKS SHOWN. CONSULT WITH AIRCRAFT OPERATOR FOR SPECIFIC WEIGHTS AND CONFIGURATIONS.

2.2 GENERAL DIMENSIONS

2.2.1 General Dimensions: Model 737-600



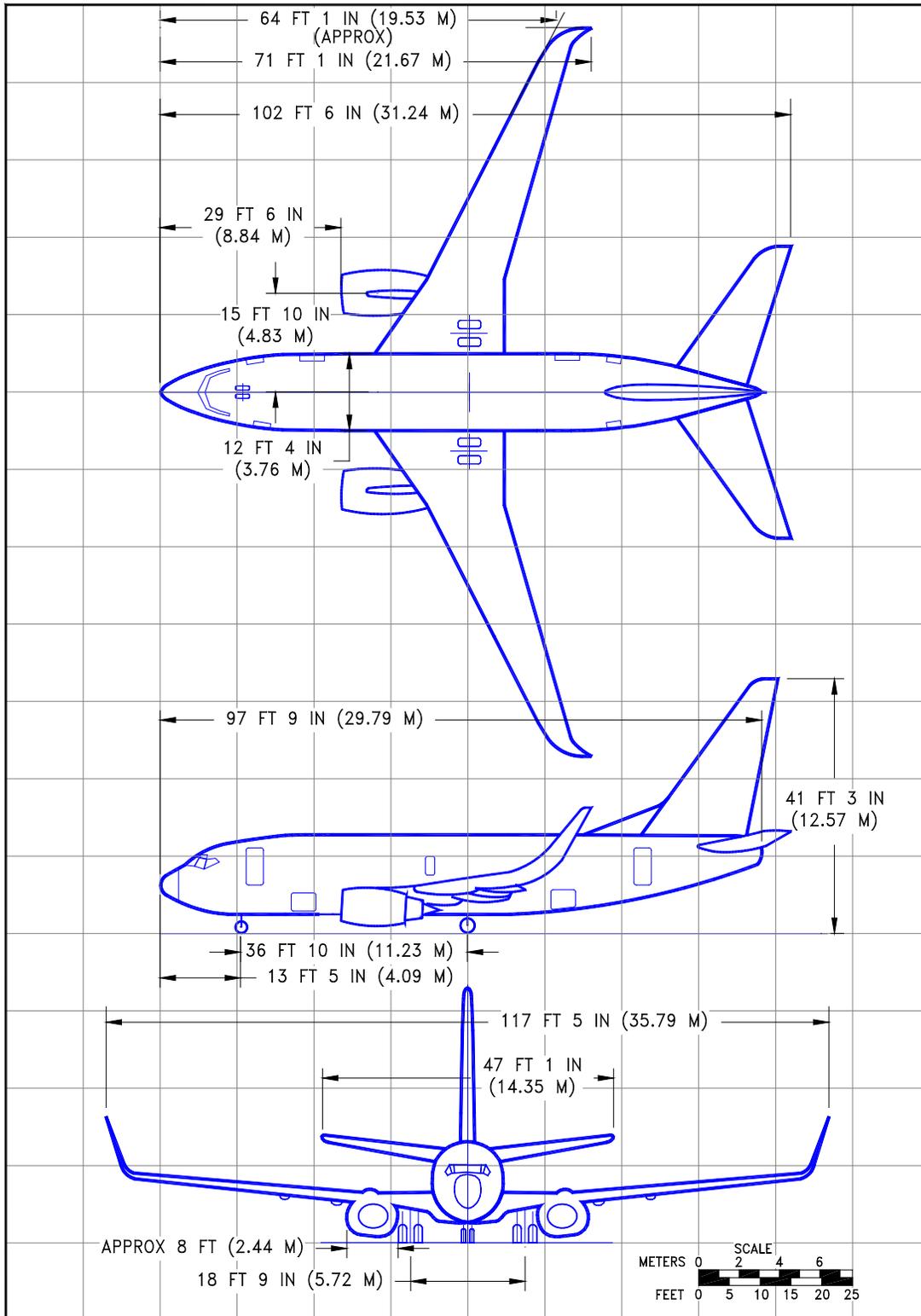
D6-58325-7

REV A

March 2023

2-9

2.2.2 General Dimensions: Model 737-600W



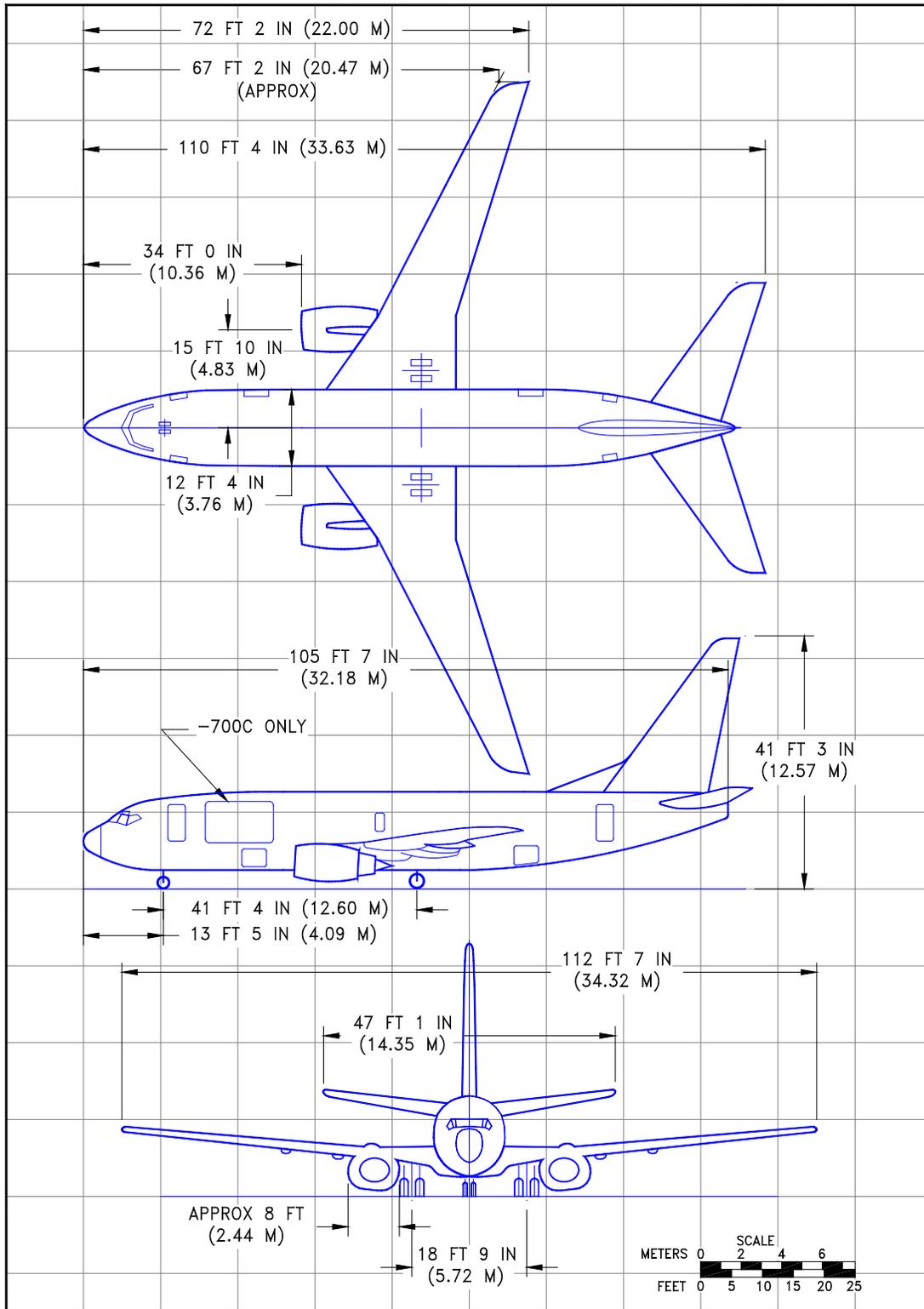
D6-58325-7

REV A

March 2023

2-10

2.2.3 General Dimensions: Model 737-700, -700C



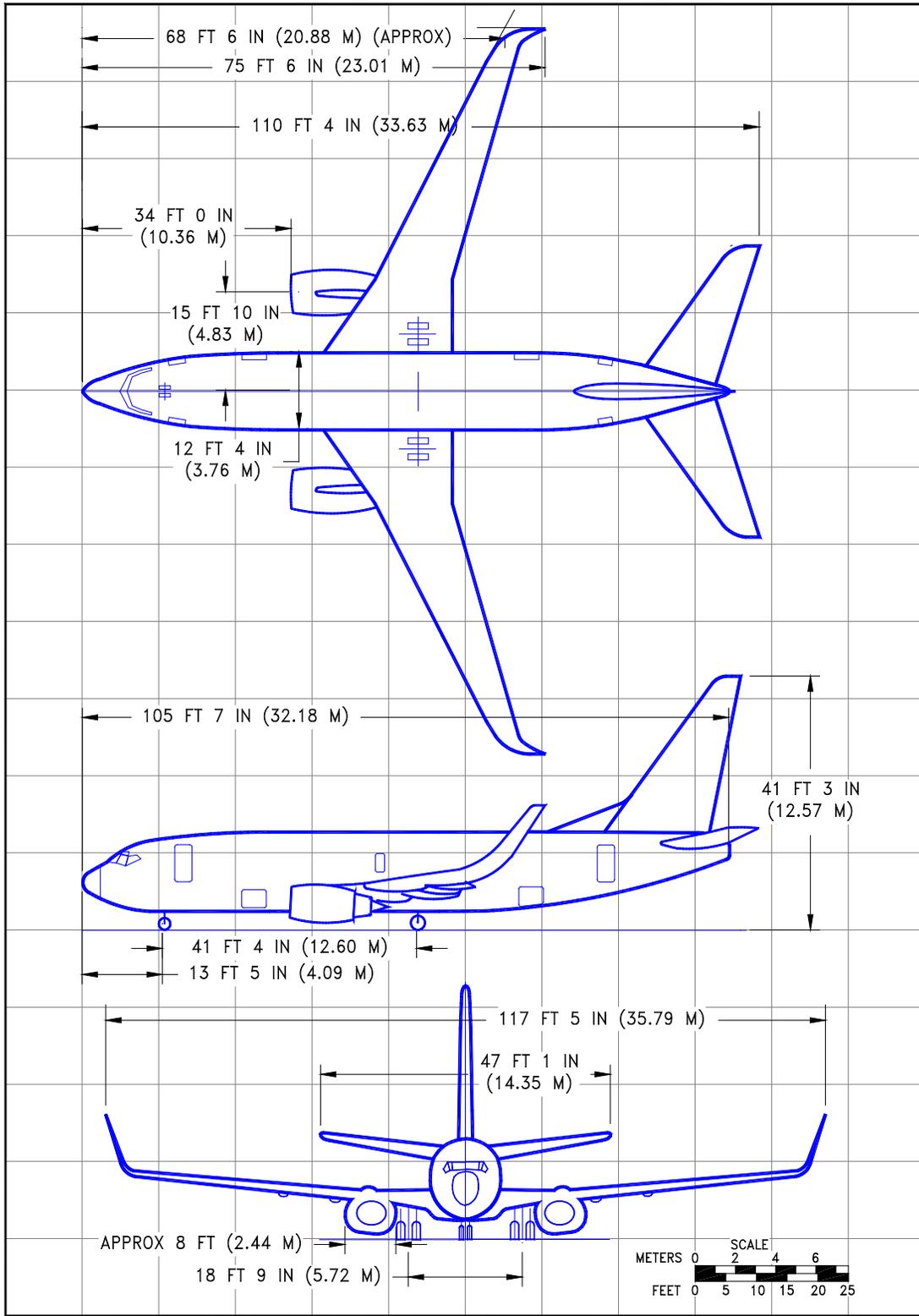
D6-58325-7

REV A

March 2023

2-11

2.2.4 General Dimensions: Model 737-700W, BBJ1



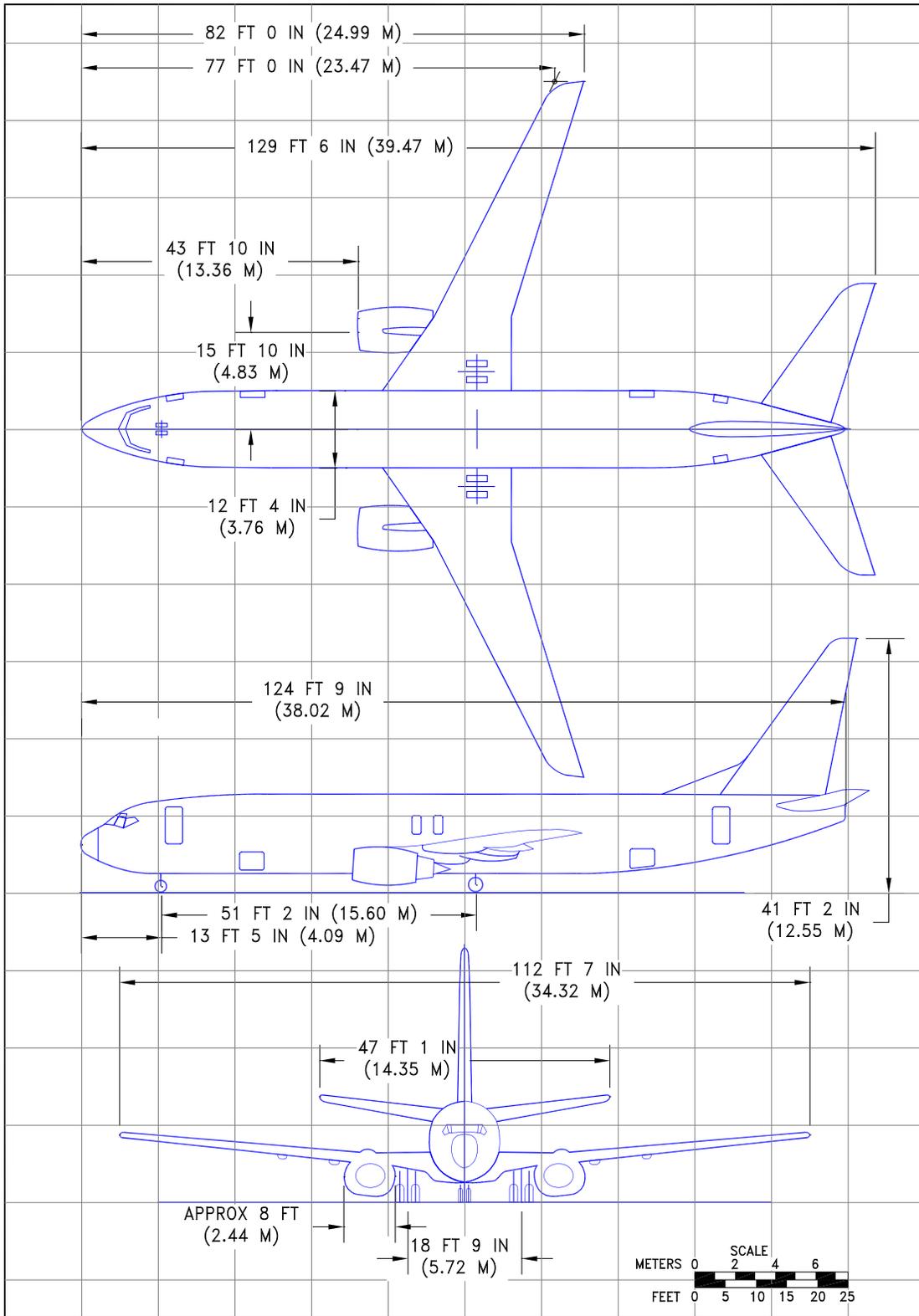
D6-58325-7

REV A

March 2023

2-12

2.2.5 General Dimensions: Model 737-800



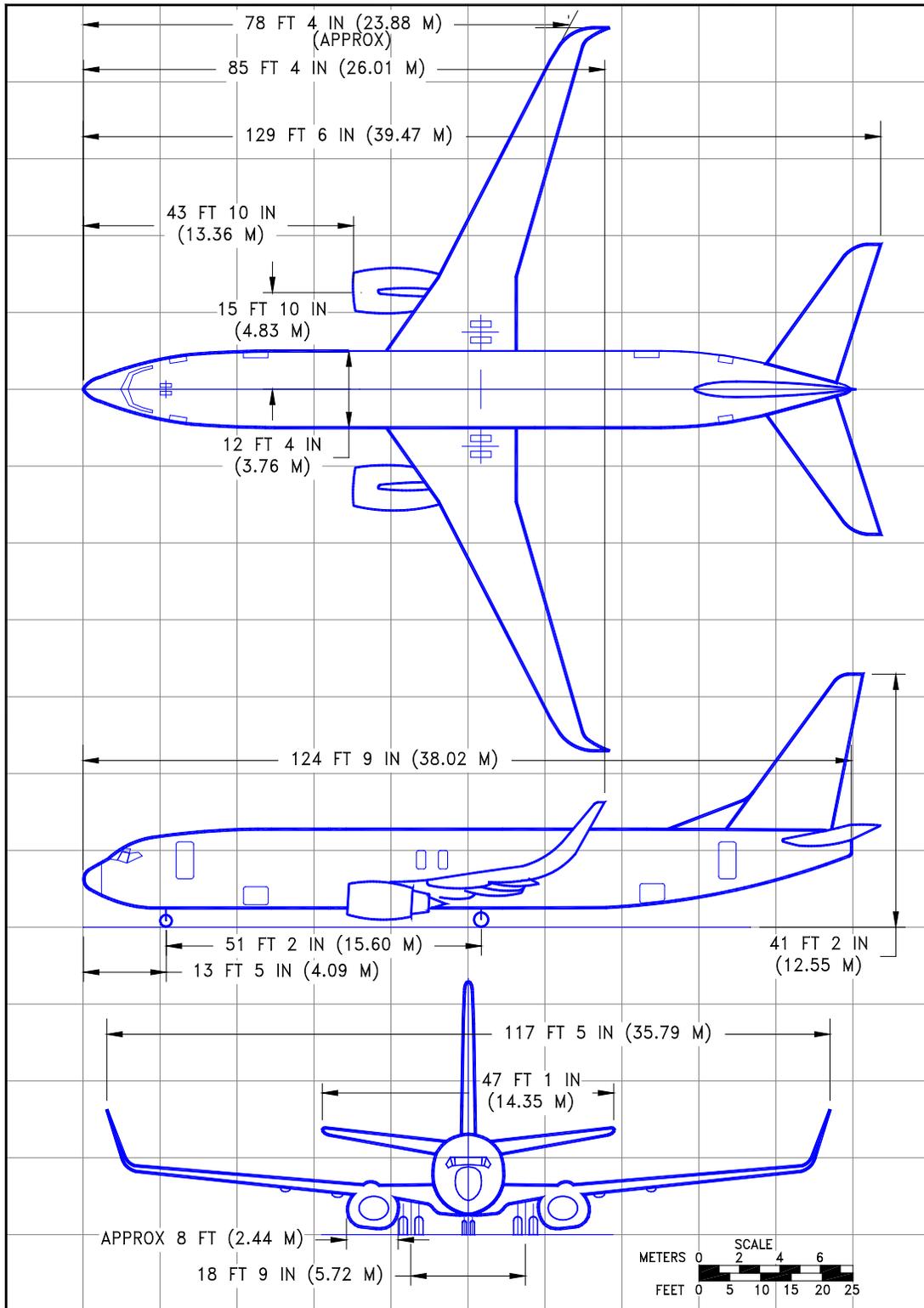
D6-58325-7

REV A

March 2023

2-13

2.2.6 General Dimensions: Model 737-800W, BBJ2, -800BCF



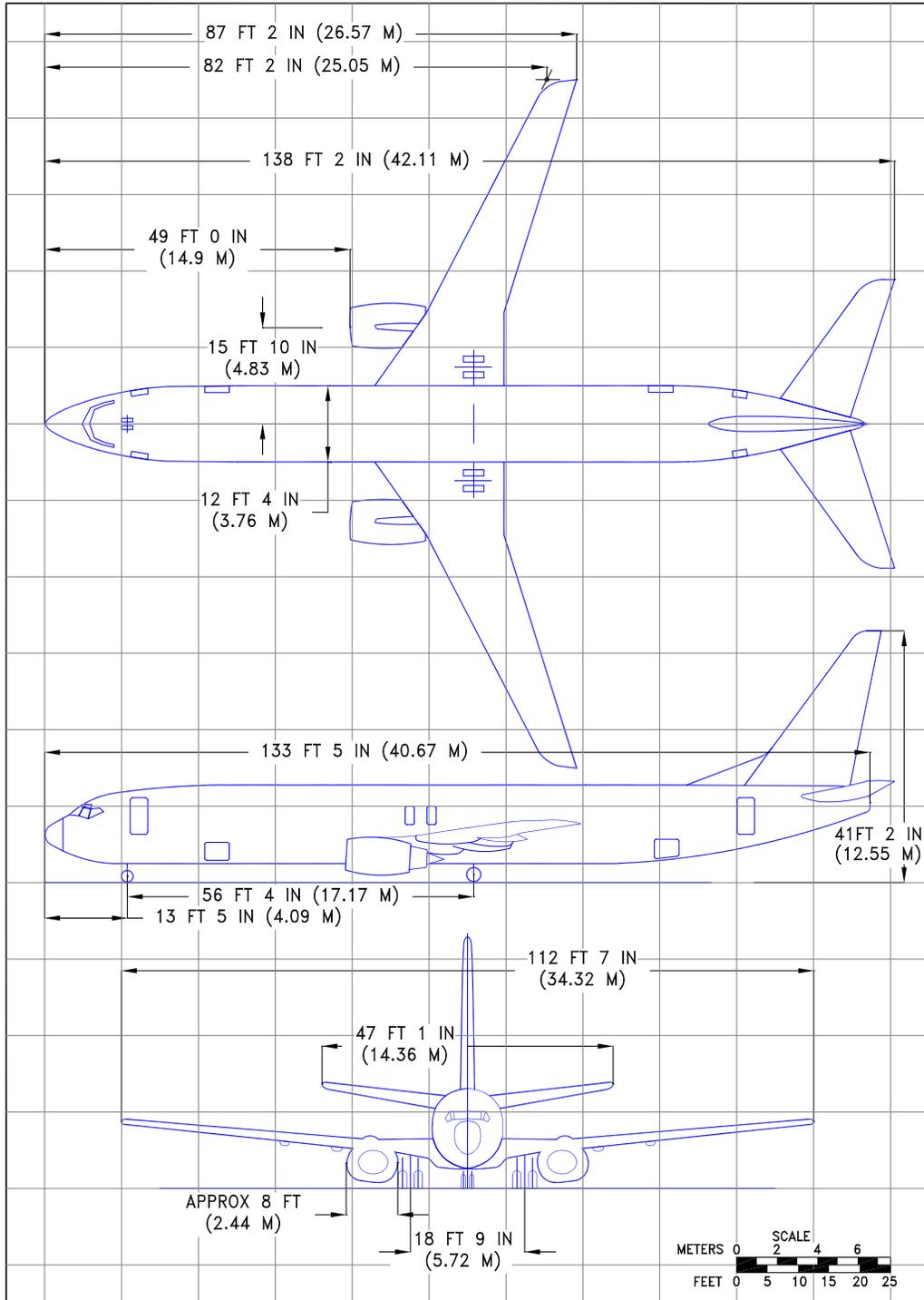
D6-58325-7

REV A

March 2023

2-14

2.2.7 General Dimensions: Model 737-900, -900ER



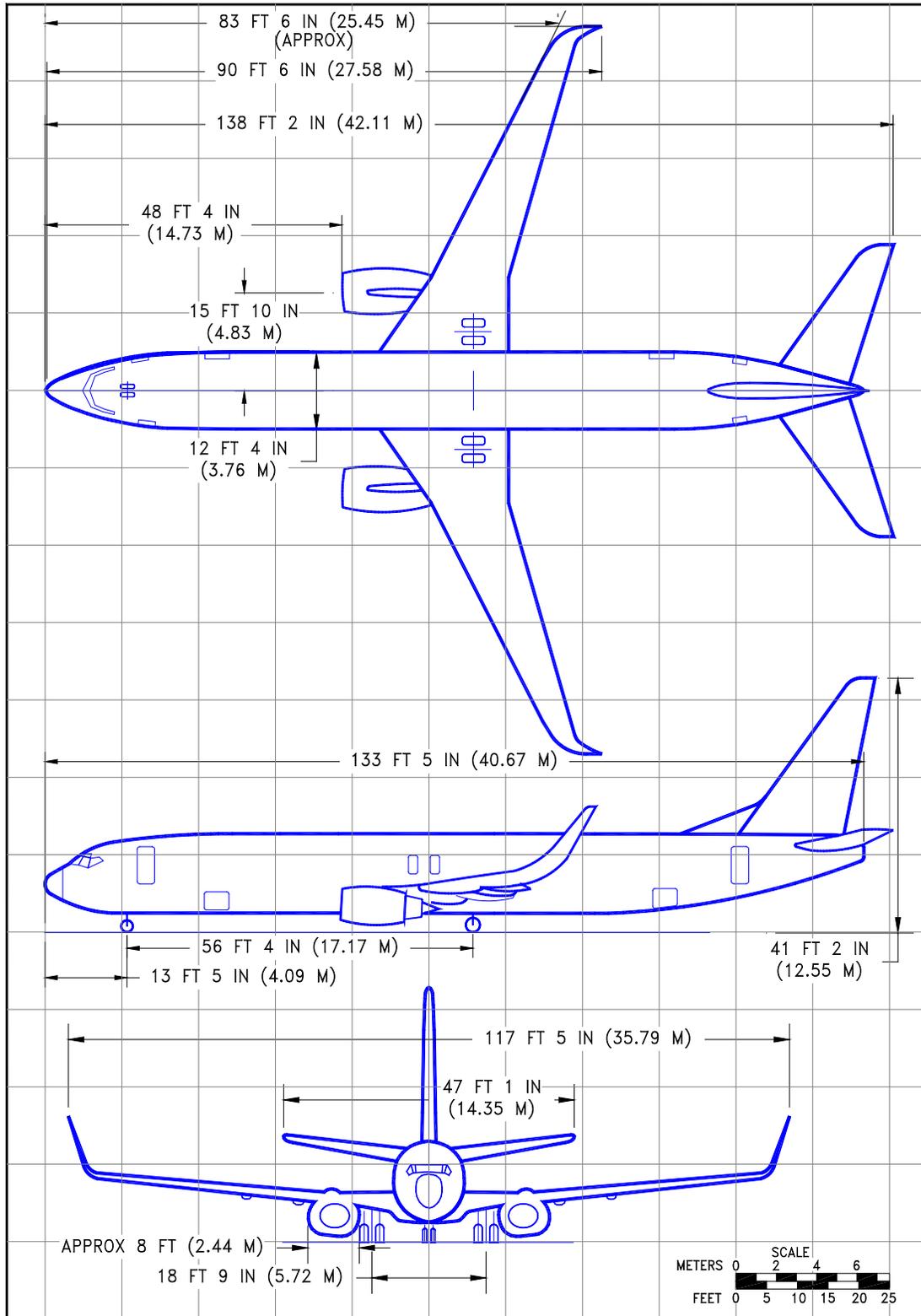
D6-58325-7

REV A

March 2023

2-15

2.2.8 General Dimensions: Model 737-900W, -900ERW



D6-58325-7

REV A

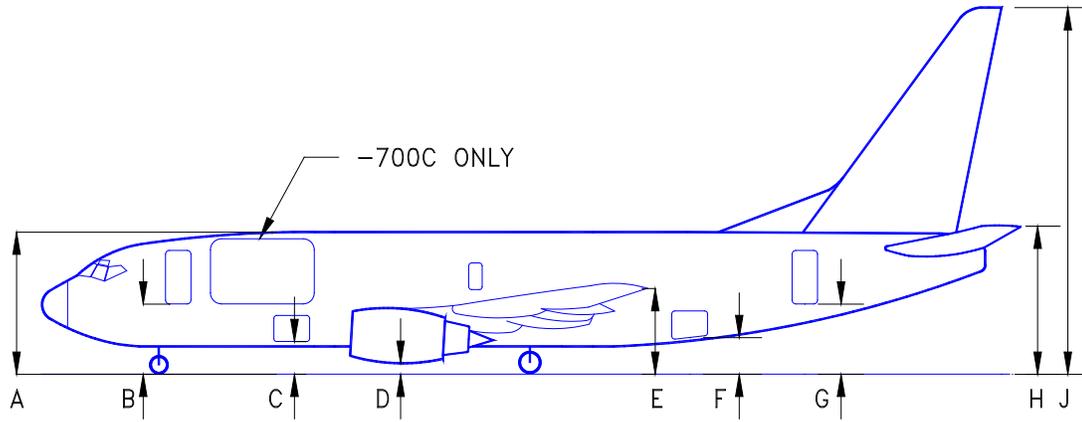
March 2023

2-16

Not Subject to EAR or ITAR.
Copyright © 2023 Boeing. All Rights Reserved.

2.3 GROUND CLEARANCES

2.3.1 Ground Clearances: Model 737-600, -700, -700C

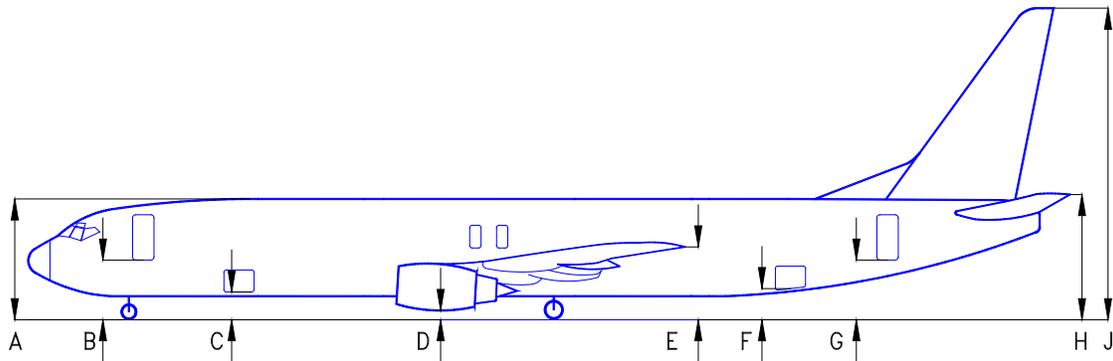


DESCRIPTION	737-600				737-700, -700C			
	MAX (AT OEW)		MIN (AT MTW)		MAX (AT OEW)		MIN (AT MTW)	
	FT - IN	M	FT - IN	M	FT - IN	M	FT - IN	M
A TOP OF FUSELAGE	18 - 2	5.54	17 - 8	5.38	18 - 3	5.56	17 - 9	5.41
B ENTRY DOOR NO 1	9 - 0	2.74	8 - 6	2.59	9 - 0	2.74	8 - 6	2.59
C FWD CARGO DOOR	4 - 9	1.45	4 - 3	1.30	4 - 9	1.45	4 - 3	1.30
D ENGINE	2 - 0	0.61	1 - 6	0.46	2 - 0	0.61	1 - 6	0.46
E WINGTIP	12 - 9	3.89	11 - 11	3.63	12 - 9	3.89	11 - 11	3.63
F AFT CARGO DOOR	5 - 10	1.78	5 - 4	1.63	5 - 10	1.78	5 - 4	1.63
G ENTRY DOOR NO 2	10 - 2	3.10	9 - 8	2.95	10 - 2	3.10	9 - 8	2.95
H STABILIZER	18 - 5	5.61	17 - 11	5.46	18 - 5	5.61	17 - 11	5.46
J VERTICAL TAIL	41 - 8	12.70	40 - 10	12.45	41 - 7	12.67	40 - 10	12.45

NOTES: CLEARANCES SHOWN ARE NOMINAL. ADD PLUS OR MINUS 3 INCHES TO ACCOUNT FOR VARIATIONS IN LOADING, OLEO AND TIRE PRESSURES, CENTER OF GRAVITY, ETC.

DURING ROUTINE SERVICING, THE AIRPLANE REMAINS RELATIVELY STABLE, PITCH AND ELEVATION CHANGES OCCURRING SLOWLY.

2.3.2 Ground Clearances: Model 737-800, -900, -900ER

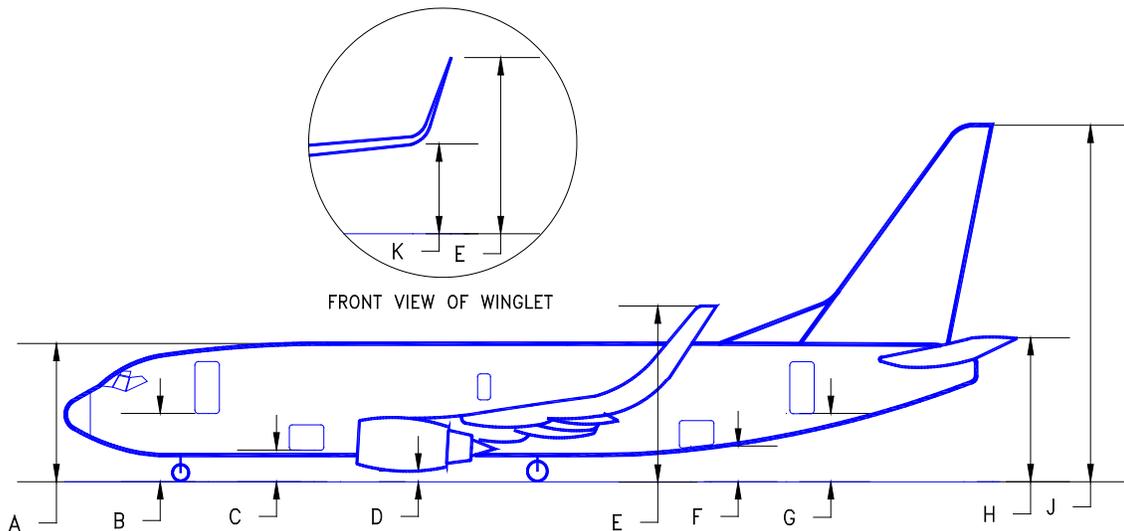


DESCRIPTION	737-800				737-900				
	MAX (AT OEW)		MIN (AT MTW)		MAX (AT OEW)		MIN (AT MTW)		
	FT - IN	M	FT - IN	M	FT - IN	M	FT - IN	M	
A	TOP OF FUSELAGE	18 - 3	5.56	17 - 9	5.41	18 - 4	5.59	17 - 10	5.44
B	ENTRY DOOR NO 1	9 - 0	2.74	8 - 6	2.59	9 - 0	2.74	8 - 6	2.59
C	FWD CARGO DOOR	4 - 9	1.45	4 - 3	1.30	4 - 9	1.45	4 - 3	1.30
D	ENGINE	2 - 1	0.64	1 - 7	0.48	2 - 1	0.64	1 - 7	0.48
E	WINGTIP	12 - 10	3.91	12 - 0	3.66	12 - 10	3.91	12 - 0	3.66
F	AFT CARGO DOOR	5 - 11	1.80	5 - 5	1.65	5 - 11	1.80	5 - 5	1.65
G	ENTRY DOOR NO 2	10 - 3	3.12	9 - 9	2.97	10 - 3	3.12	9 - 9	2.97
H	STABILIZER	18 - 6	5.64	18 - 0	5.49	18 - 7	5.66	18 - 1	5.51
J	VERTICAL TAIL	41 - 5	12.62	40 - 7	12.37	41 - 5	12.62	40 - 7	12.37

NOTES: CLEARANCES SHOWN ARE NOMINAL. ADD PLUS OR MINUS 3 INCHES TO ACCOUNT FOR VARIATIONS IN LOADING, OLEO AND TIRE PRESSURES, CENTER OF GRAVITY, ETC.

DURING ROUTINE SERVICING, THE AIRPLANE REMAINS RELATIVELY STABLE, PITCH AND ELEVATION CHANGES OCCURRING SLOWLY.

2.3.3 Ground Clearances: Model 737-700W, -800W, -900W, -900ERW, BBJ, BBJ2

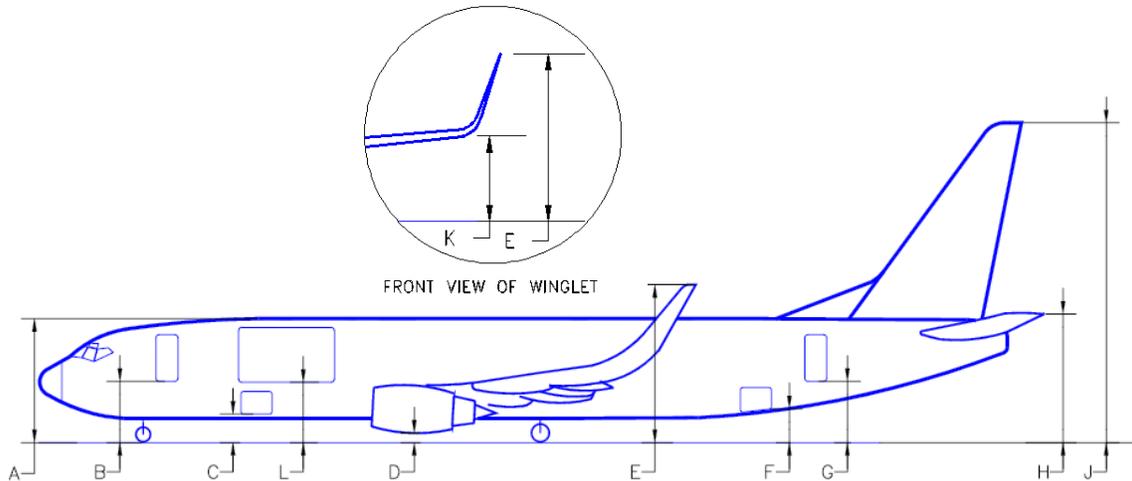


DESCRIPTION	737-700 WITH WINGLETS, BBJ				737-800 WITH WINGLETS, BBJ2				737-900 WITH WINGLETS			
	MAX (OEW)		MIN (MTW)		MAX (OEW)		MIN (MTW)		MAX (OEW)		MIN (MTW)	
	FT - IN	M	FT - IN	M	FT - IN	M	FT - IN	M	FT - IN	M	FT - IN	M
A TOP OF FUSELAGE	18 - 3	5.56	17 - 9	5.41	18 - 3	5.56	17 - 9	5.41	18 - 4	5.59	17 - 10	5.41
B ENTRY DOOR NO 1	9 - 0	2.74	8 - 6	2.59	9 - 0	2.74	8 - 6	2.59	9 - 0	2.74	8 - 6	2.59
C FWD CARGO DOOR	4 - 9	1.45	4 - 3	1.30	4 - 9	1.45	4 - 3	1.30	4 - 9	1.45	4 - 3	1.30
D ENGINE	2 - 0	0.61	1 - 6	0.46	2 - 1	0.64	1 - 7	0.48	2 - 1	0.64	1 - 7	0.48
E WINGTIP	21 - 9	6.63	21 - 3	6.48	22 - 2	6.76	21 - 4	6.50	22 - 2	6.76	21 - 4	6.50
F AFT CARGO DOOR	5 - 10	1.78	5 - 4	1.63	5 - 11	1.80	5 - 5	1.65	5 - 11	1.80	5 - 5	1.65
G ENTRY DOOR NO 2	10 - 2	3.10	9 - 8	2.95	10 - 3	3.12	9 - 9	2.97	10 - 3	3.12	9 - 9	2.97
H STABILIZER	18 - 5	5.61	17 - 11	5.46	18 - 6	5.64	18 - 0	5.49	18 - 7	5.66	18 - 1	5.51
J VERTICAL TAIL	41 - 7	12.67	40 - 10	12.45	41 - 5	12.62	40 - 7	12.37	41 - 5	12.62	40 - 7	12.37
K BOTTOM OF WINGLET (APPROX)	13 - 9	4.19	13 - 3	4.04	14 - 2	4.32	13 - 4	4.06	14 - 2	4.32	13 - 4	4.06

NOTES: CLEARANCES SHOWN ARE NOMINAL. ADD PLUS OR MINUS 3 INCHES TO ACCOUNT FOR VARIATIONS IN LOADING, OLEO AND TIRE PRESSURES, CENTER OF GRAVITY, ETC.

DURING ROUTINE SERVICING, THE AIRPLANE REMAINS RELATIVELY STABLE, PITCH AND ELEVATION CHANGES OCCURRING SLOWLY.

2.3.4 Ground Clearances: Model 737-800BCF



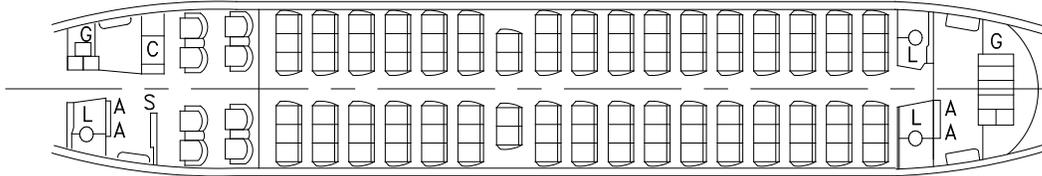
DESCRIPTION	737-800BCF				
	MAX (OEW)		MIN (MTW)		
	FT - IN	M	FT - IN	M	
A	TOP OF FUSELAGE	18 - 3	5.56	17 - 9	5.41
B	ENTRY DOOR NO 1	9 - 0	2.74	8 - 6	2.59
C	FWD CARGO DOOR	4 - 9	1.45	4 - 3	1.30
D	ENGINE	2 - 1	0.64	1 - 7	0.48
E	WINGTIP	22 - 2	6.76	21 - 4	6.50
F	AFT CARGO DOOR	5 - 11	1.80	5 - 5	1.65
G	ENTRY DOOR NO 2	10 - 3	3.12	9 - 9	2.97
H	STABILIZER	18 - 6	5.64	18 - 0	5.49
J	VERTICAL TAIL	41 - 5	12.62	40 - 7	12.37
K	BOTTOM OF WINGLET (APPROX)	14 - 2	4.32	13 - 4	4.06
L	MAIN DECK CARGO DOOR	9 - 2	2.79	8 - 8	2.64

NOTES: CLEARANCES SHOWN ARE NOMINAL. ADD PLUS OR MINUS 3 INCHES TO ACCOUNT FOR VARIATIONS IN LOADING, OLEO AND TIRE PRESSURES, CENTER OF GRAVITY, ETC.

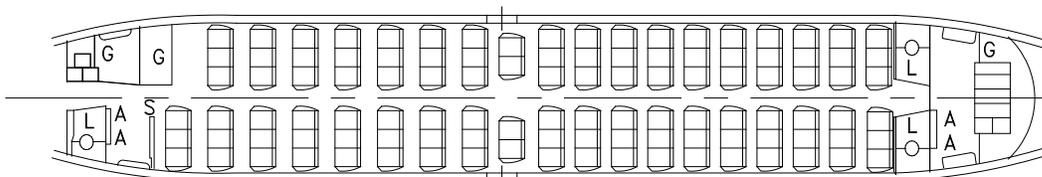
DURING ROUTINE SERVICING, THE AIRPLANE REMAINS RELATIVELY STABLE, PITCH AND ELEVATION CHANGES OCCURRING SLOWLY.

2.4 INTERIOR ARRANGEMENTS

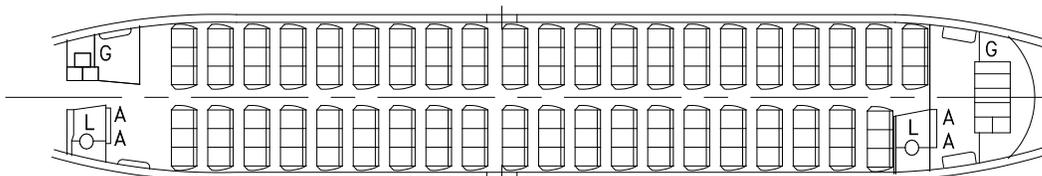
2.4.1 Interior Arrangements: Model 737-600



MIXED CLASS
 8 FIRST CLASS SEATS AT 36-IN PITCH
 100 ECONOMY CLASS SEATS AT 32-IN PITCH



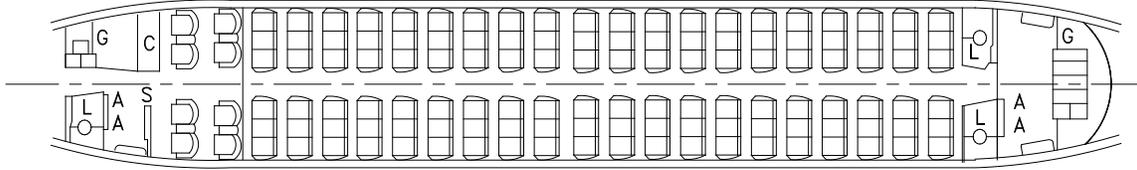
MIXED CLASS
 70 BUSINESS CLASS SEATS AT 34-IN PITCH
 39 ECONOMY CLASS SEATS AT 32-IN PITCH



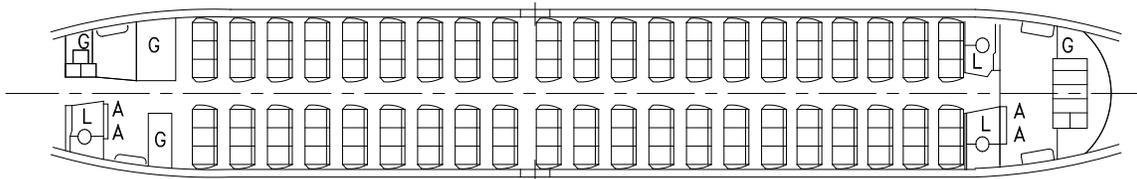
SINGLE CLASS
 123 ECONOMY CLASS SEATS AT 32-IN PITCH (SHOWN)
 OR 130 ECONOMY CLASS SEATS AT 30-IN PITCH

[A] ATTENDANT [C] CLOSET [G] GALLEY [L] LAVATORY [S] STOWAGE

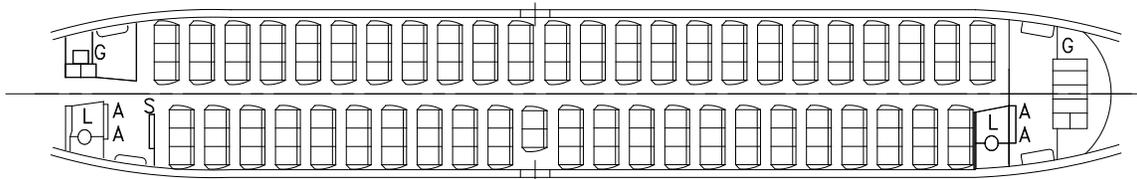
2.4.2 Interior Arrangements: Model 737-700, -700W



MIXED CLASS
 8 FIRST CLASS SEATS AT 36-IN PITCH
 120 ECONOMY CLASS SEATS AT 32-IN PITCH



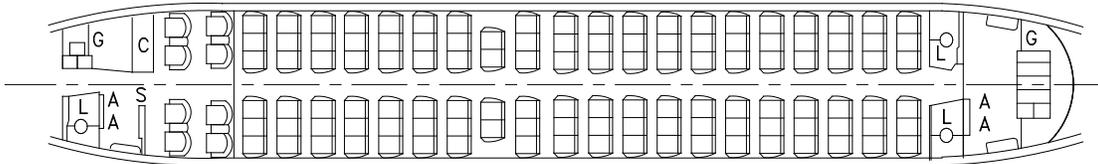
MIXED CLASS
 90 BUSINESS CLASS SEATS AT 34-IN PITCH
 36 ECONOMY CLASS SEATS AT 32-IN PITCH



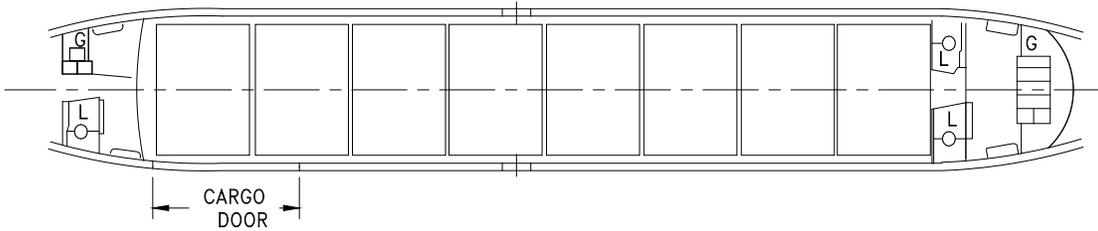
SINGLE CLASS
 140 ECONOMY CLASS SEATS AT 32-IN PITCH (SHOWN)
 OR 148 ECONOMY CLASS SEATS AT 30-IN PITCH

[A] ATTENDANT [C] CLOSET [G] GALLEY [L] LAVATORY [S] STOWAGE

2.4.3 Interior Arrangements: Model 737-700C



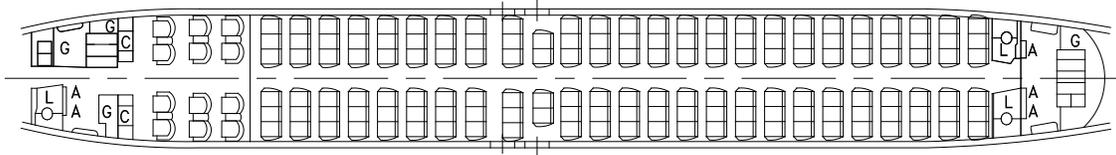
PASSENGER CONFIGURATION – MIXED CLASS
 8 FIRST CLASS SEATS AT 36-IN PITCH
 118 ECONOMY CLASS SEATS AT 32-IN PITCH



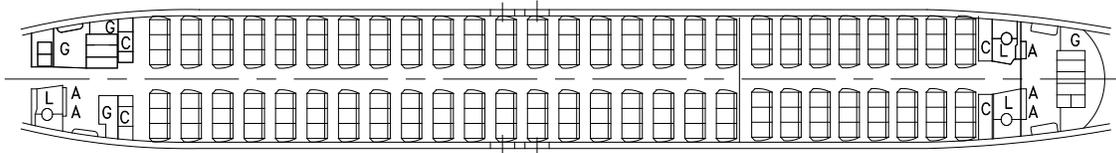
CARGO CONFIGURATION
 EIGHT 88 X 125 IN (2.24 X 3.18 M) PALLETS AS SHOWN
 OR EIGHT 88 X 108 IN (2.24 X 2.64 M)

[A] ATTENDANT [C] CLOSET [G] GALLEY [L] LAVATORY [S] STOWAGE

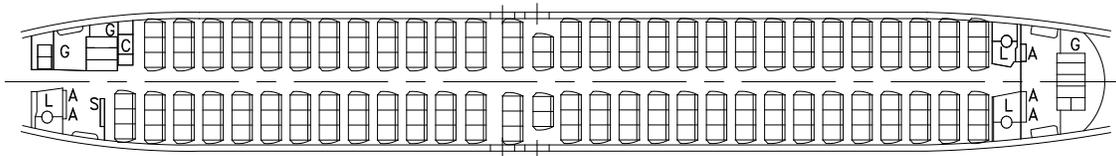
2.4.4 Interior Arrangements: Model 737-800, -800W



MIXED CLASS
 12 FIRST CLASS SEATS AT 36-IN PITCH
 148 ECONOMY CLASS SEATS AT 32-IN PITCH



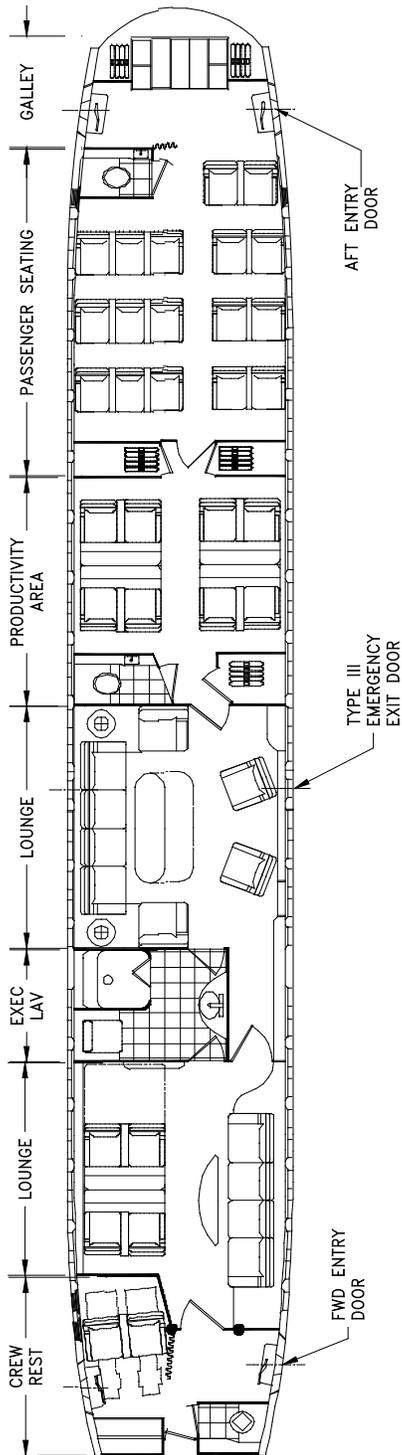
MIXED CLASS
 108 BUSINESS CLASS SEATS AT 34-IN PITCH
 54 ECONOMY CLASS SEATS AT 32-IN PITCH



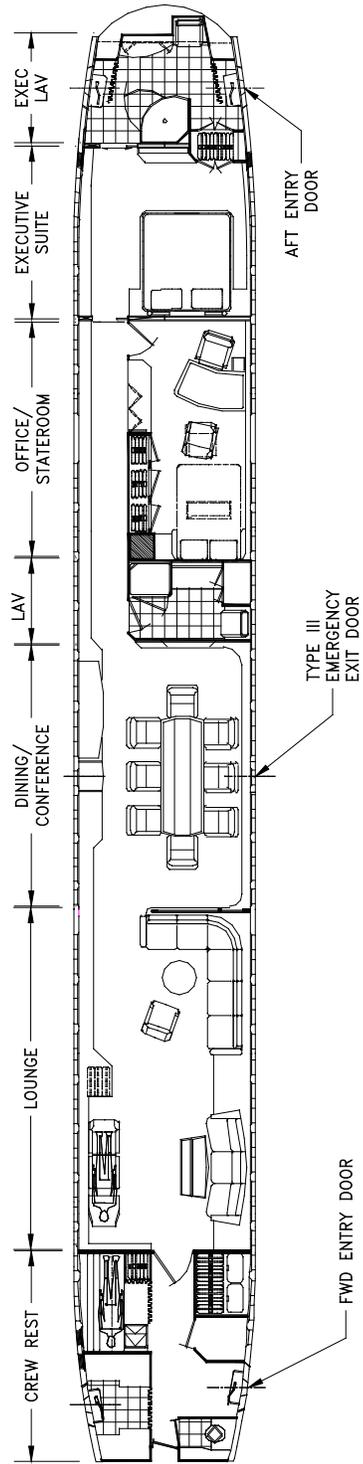
SINGLE CLASS
 175 ECONOMY CLASS SEATS AT 32-IN PITCH (SHOWN)
 OR 184 ECONOMY CLASS SEATS AT 30-IN PITCH

[A] ATTENDANT [C] CLOSET [G] GALLEY [L] LAVATORY [S] STOWAGE

2.4.5 Interior Arrangements: Model 737 BBJ1, 737 BBJ2



TYPICAL 737 BBJ1 INTERIOR ARRANGEMENT



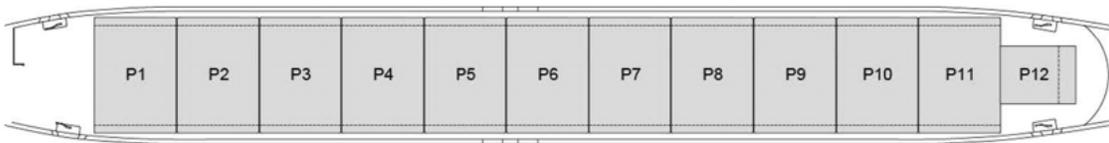
TYPICAL 737 BBJ2 INTERIOR ARRANGEMENT

2.4.6 Interior Arrangements: Model 737-800BCF

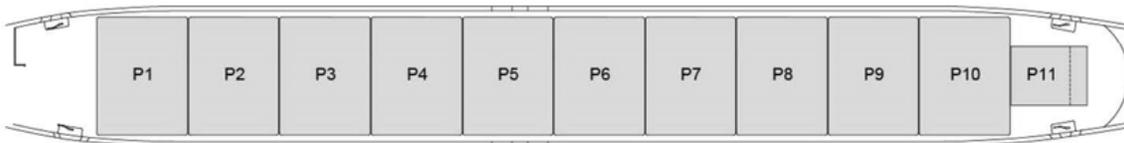
Baseline 11 ULD (88"x 125") plus 1 ULD (60.4" x 61.5")



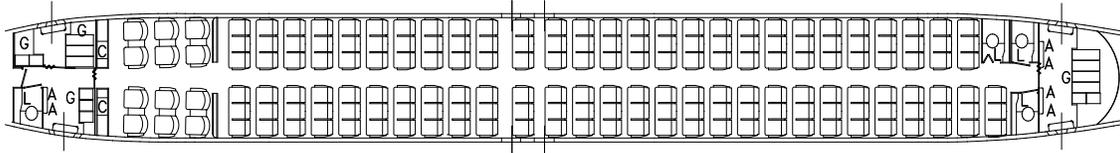
Alternate 11 ULD (88"x 108") plus 1 ULD (60.4" x 61.5")



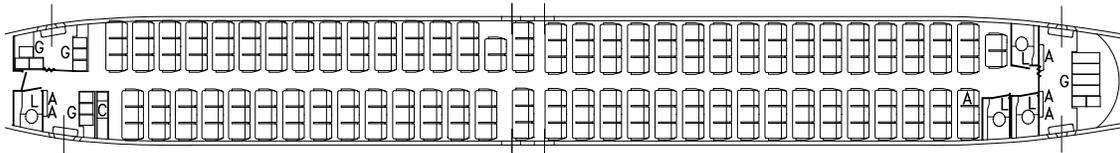
Alternate 10 ULD (96"x 125") plus 1 ULD (60.4" x 61.5")



2.4.7 Interior Arrangements: Model 737-900, -900W



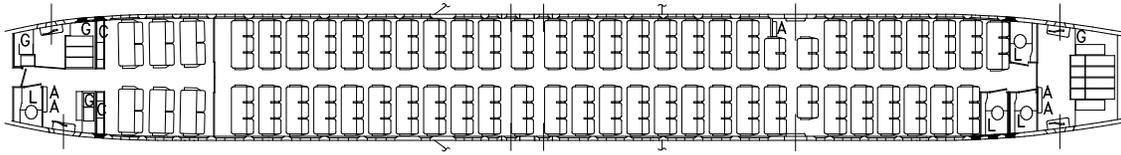
MIXED CLASS
 12 FIRST CLASS SEATS AT 36-IN PITCH
 165 ECONOMY CLASS SEATS AT 32-IN PITCH



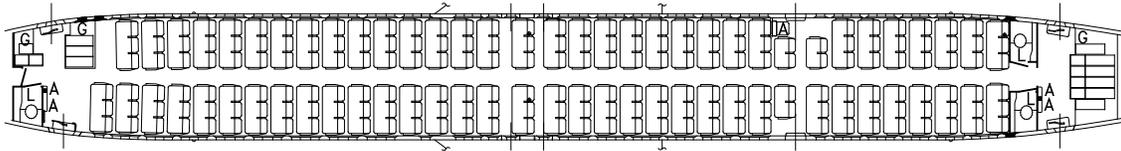
SINGLE CLASS
 177 ECONOMY CLASS SEATS AT 32-IN PITCH (SHOWN)
 OR 189 ECONOMY CLASS SEATS AT 31-IN PITCH

A ATTENDANT C CLOSET G GALLEY L LAVATORY

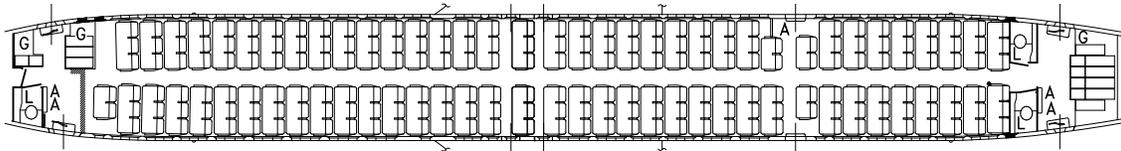
2.4.8 Interior Arrangements: Model 737-900ER, -900ERW



MIXED CLASS
 12 FIRST CLASS SEATS AT 36-IN PITCH
 162 ECONOMY CLASS SEATS AT 32-IN PITCH



SINGLE CLASS
 204 ECONOMY CLASS SEATS AT 30-IN PITCH

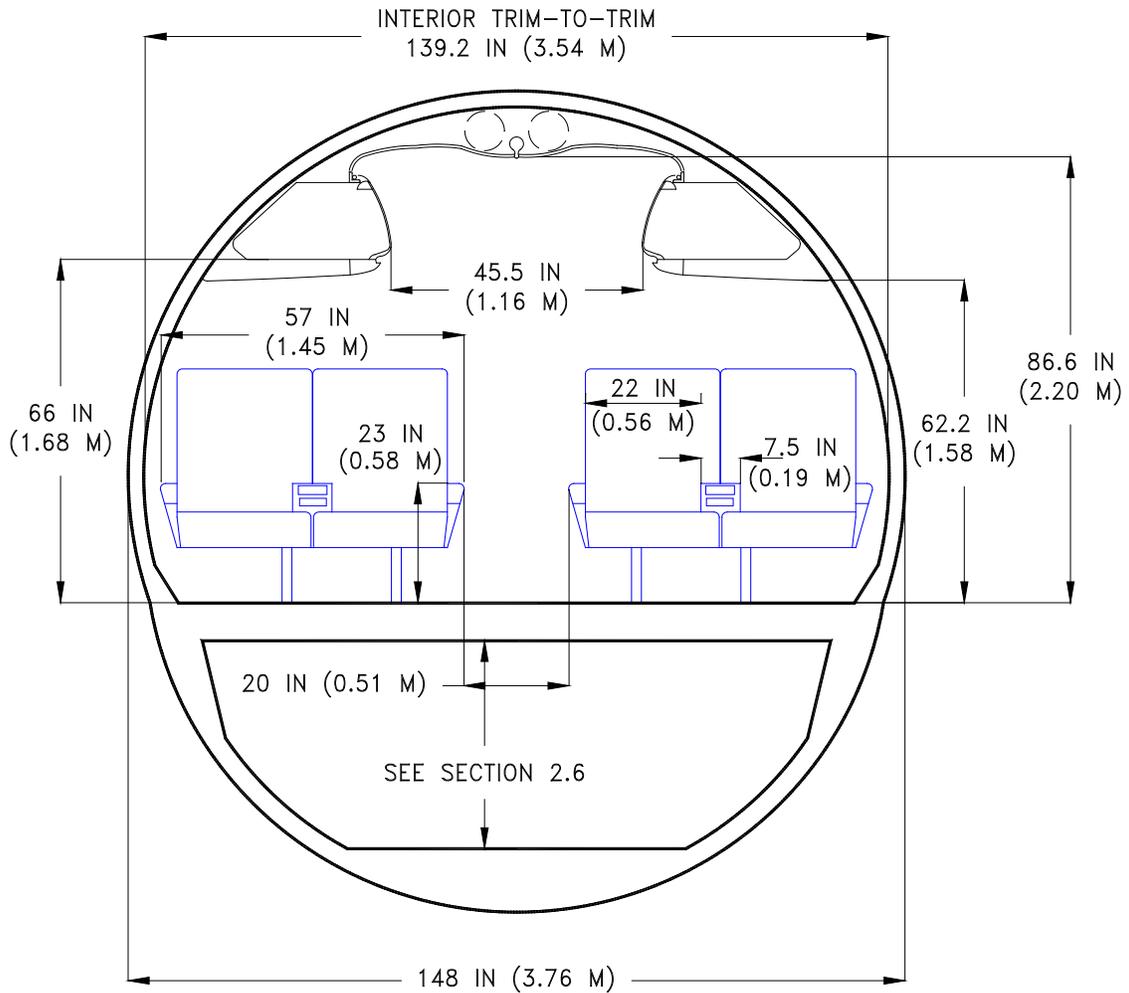


SINGLE CLASS (HIGH-DENSITY SEATING)
 215 ECONOMY CLASS SEATS AT 28-IN PITCH

[A] ATTENDANT [G] GALLEY [L] LAVATORY [C] CLOSET

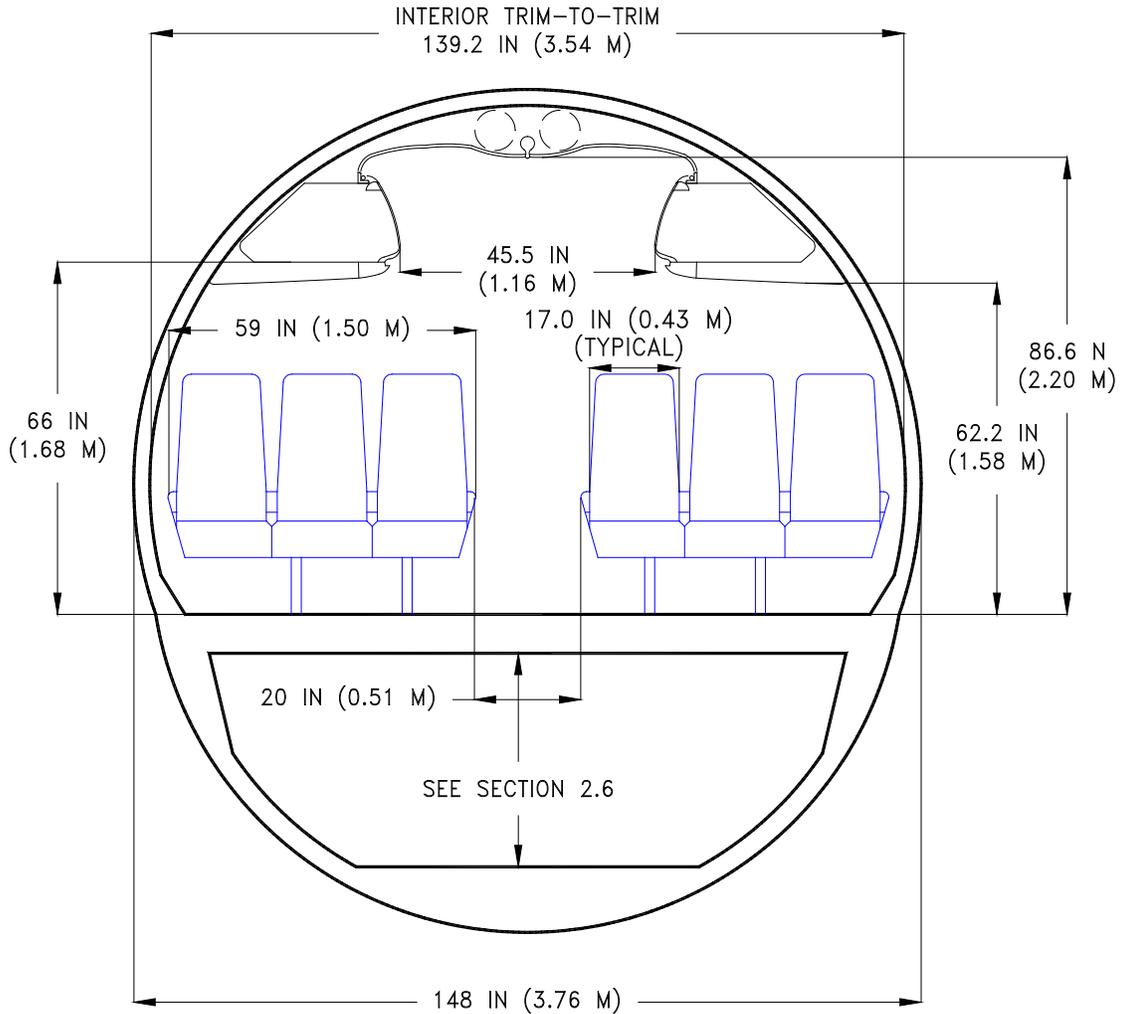
2.5 CABIN CROSS SECTIONS

2.5.1 Cabin Cross-Sections: Model 737-600, -700, -800, -900, BBJ1, BBJ2, Four-Abreast Seating



NOTE: CABIN INTERIOR FOR BBJ1 AND BBJ2 AIRPLANES ARE DEPENDENT ON CUSTOMER OPTION.

2.5.2 Cabin Cross-Sections: Model 737-600, -700, -800, -900, Six-Abreast Seating



D6-58325-7

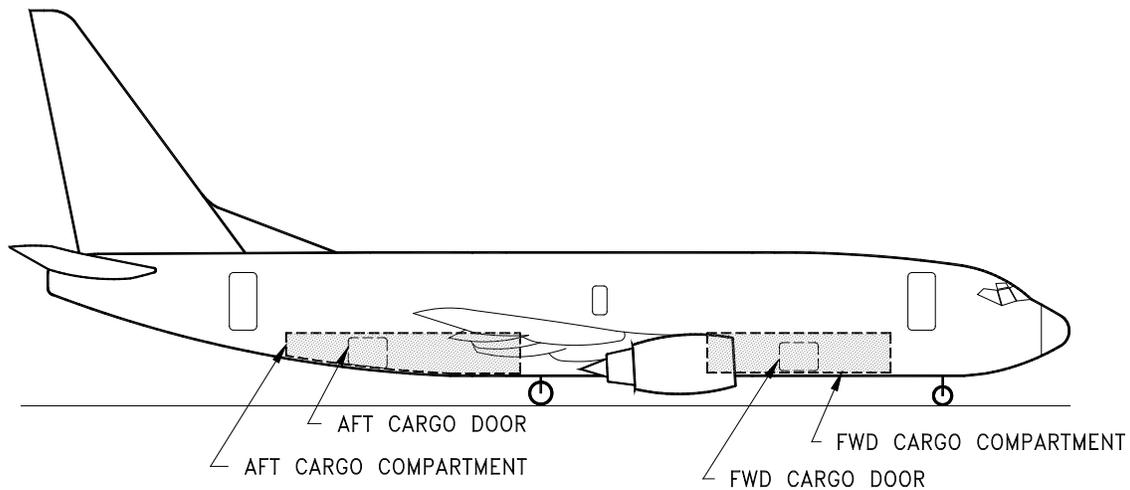
REV A

March 2023

2-30

2.6 LOWER CARGO COMPARTMENTS

2.6.1 Lower Cargo Compartments: Model 737-600, -700, -700C, -800, -800BCF, -900, -900ER With and Without Winglets, Capacities

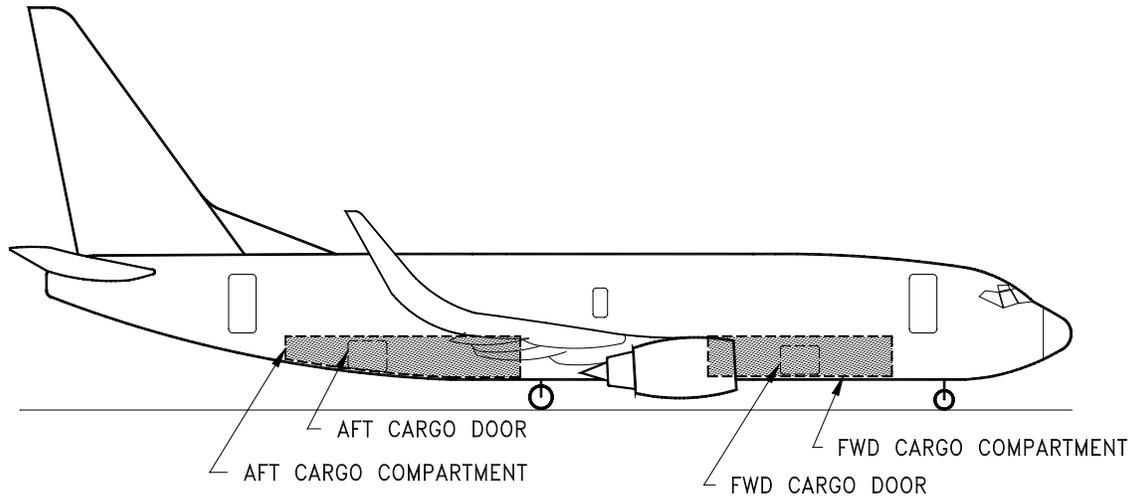


AIRPLANE MODEL	AFT CARGO COMPARTMENT			FORWARD COMPARTMENT BULK CARGO	TOTAL BULK CARGO	NOTES
	BULK CARGO	AUXILIARY FUEL TANK CAPACITY	AUXILIARY FUEL TANK COMPARTMENT CAPACITY			
737-600	488 CU FT (13.8 CU M)	0	0	268 CU FT (7.6 CU M)	756 CU FT (21.4 CU M)	(1)
737-700, -700C	596 CU FT (16.9 CU M)	0	0	406 CU FT (11.5 CU M)	1,002 CU FT (28.4 CU M)	(1)
737-800, -800BCF	899 CU FT (25.5 CU M)	0	0	692 CU FT (19.6 CU M)	1,591 CU FT (45.1 CU M)	(1)
737-900	1,012 CU FT (28.7 CU M)	0	0	840 CU FT (23.8 CU M)	1,852 CU FT (52.5 CU M)	(1)
737-900ER	996 CU FT (28.2 CU M)	0	0	830 CU FT (23.5 CU M)	1,826 CU FT (51.7 CU M)	(2)
737-900ER	843 CU FT (23.9 CU M)	520 GAL (1,968 L)	153 CU FT (4.3 CU M)	830 CU FT (23.5 CU M)	1,673 CU FT (47.7 CU M)	(3)
737-900ER	755 CU FT (21.4 CU M)	962 GAL (3,641 L)	241 CU FT (6.8 CU M)	830 CU FT (23.5 CU M)	1,585 CU FT (44.9 CU M)	(4)

NOTES:

1. NO AUXILIARY FUEL TANK
2. USEABLE CAPACITY, NO AUXILIARY FUEL TANK – PRELIMINARY ESTIMATES
3. USEABLE CAPACITY, WITH ONE AUXILIARY FUEL TANK – PRELIMINARY ESTIMATES
4. USEABLE CAPACITY, WITH TWO AUXILIARY FUEL TANKS – PRELIMINARY ESTIMATES

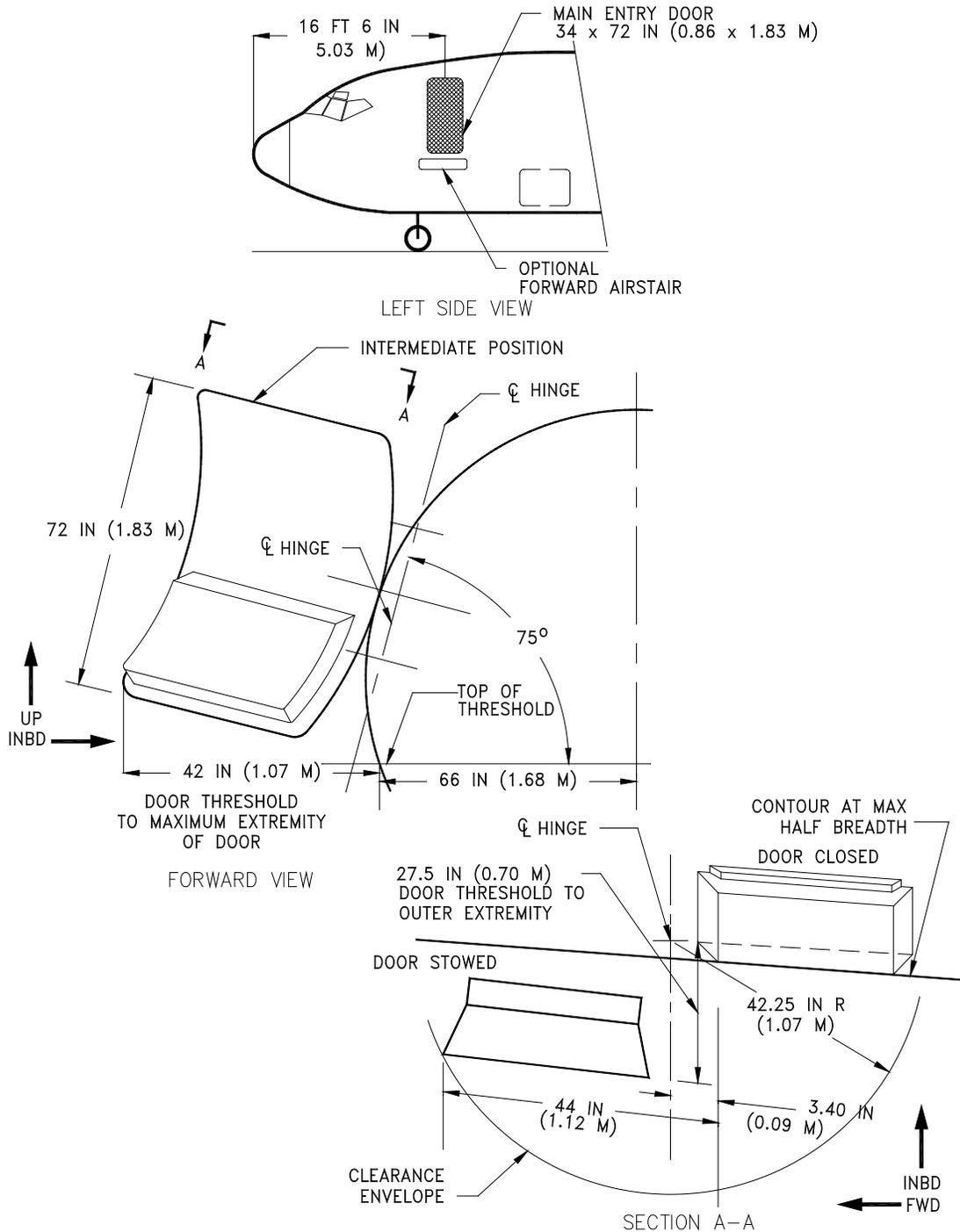
2.6.2 Lower Cargo Compartments: Model 737BBJ1, 737 BBJ2, Capacities



AIRPLANE MODEL	FWD CARGO COMPARTMENT			AFT CARGO COMPARTMENT			TOTAL CARGO	
	NO OF FUEL TANKS	CAPACITY AVAILABLE		NO OF FUEL TANKS	CAPACITY AVAILABLE		CAPACITY AVAILABLE	
		CU FT	CU M		CU FT	CU M	CU FT	CU M
737 BBJ1	0	377	10.7	3	234	6.6	611	17.3
	0	377	10.7	4	138	3.9	515	14.6
	2	181	5.1	3	234	6.6	415	11.7
	2	181	5.1	4	138	3.9	319	9.0
	2	181	5.1	5	87	2.5	268	7.6
	3	127	3.6	5	87	2.5	214	6.1
	4	73	2.1	5	87	2.5	160	4.6
737 BBJ2	0	985	27.9	3	561	15.9	1,546	43.8
	0	985	27.9	3	454	12.8	1,423	40.3
	0	985	27.9	5	346	9.8	1,331	37.7
	1	662	18.8	3	561	15.9	1,224	34.7
	1	662	18.8	4	454	12.8	1,116	31.6
	2	468	13.3	3	561	15.9	1,029	29.2
	2	468	13.3	4	454	12.8	922	26.1
	2	468	13.3	5	346	9.8	814	23.1

2.7 DOOR CLEARANCES

2.7.1 Door Clearances: Model 737, All Models, Forward Main Entry Door No. 1



NOTES: 737-800BCF does not have Optional Forward Airstairs.

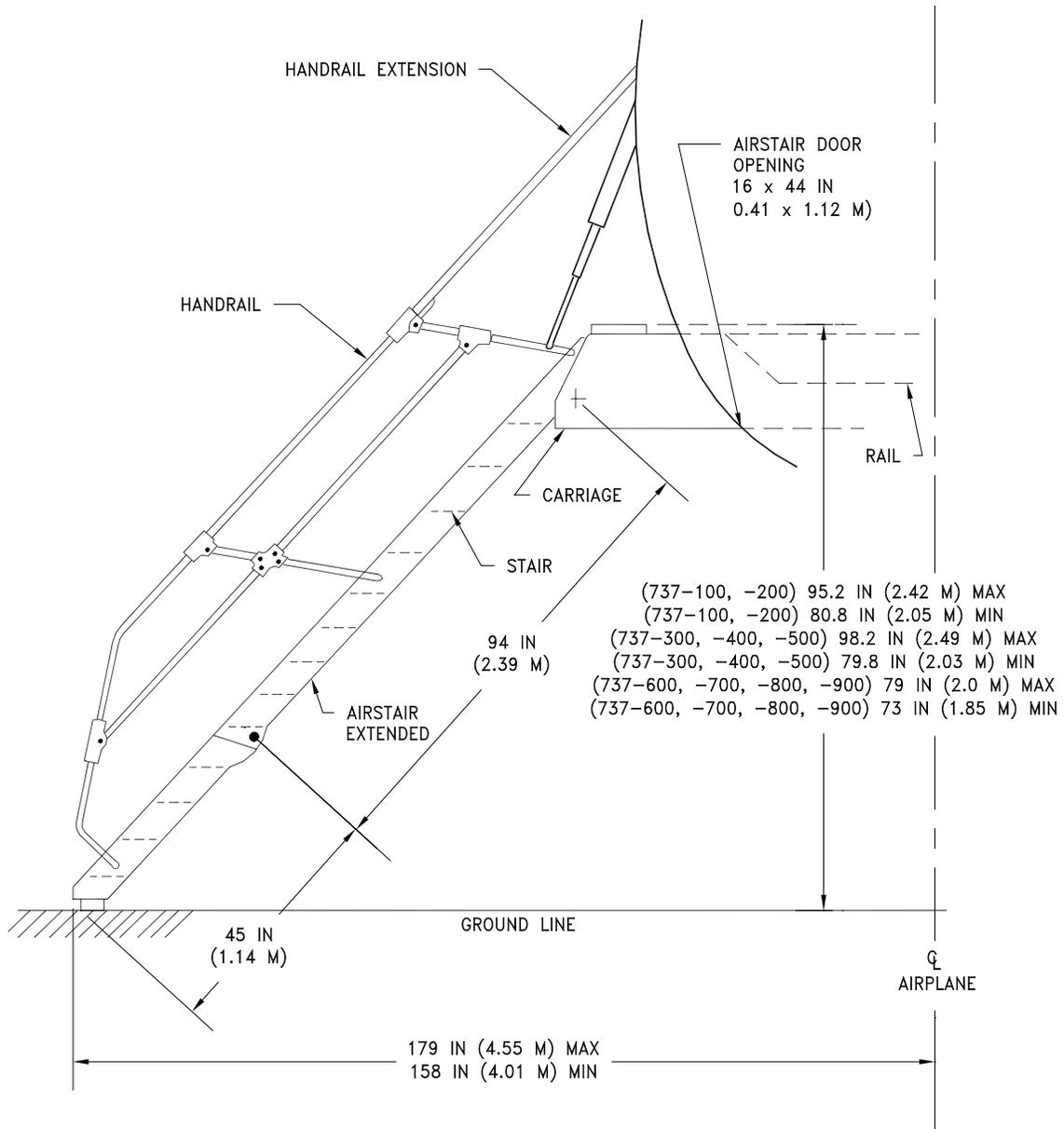
D6-58325-7

REV A

March 2023

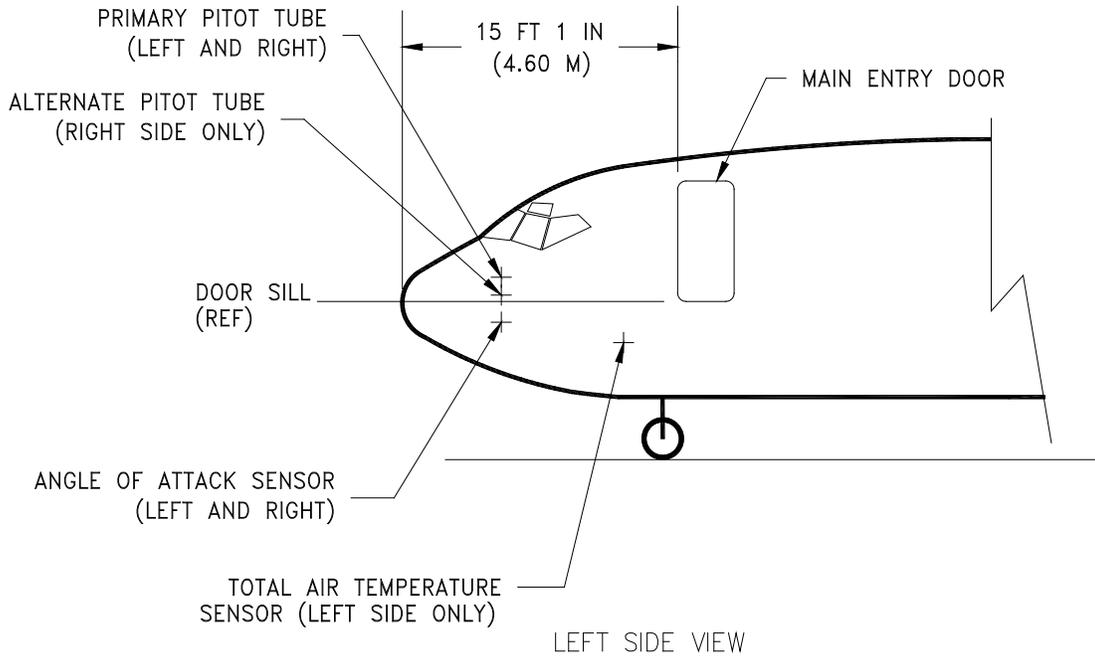
2-33

2.7.2 Door Clearances: Model 737, All Models, Optional Forward Airstairs, Main Entry Door No 1



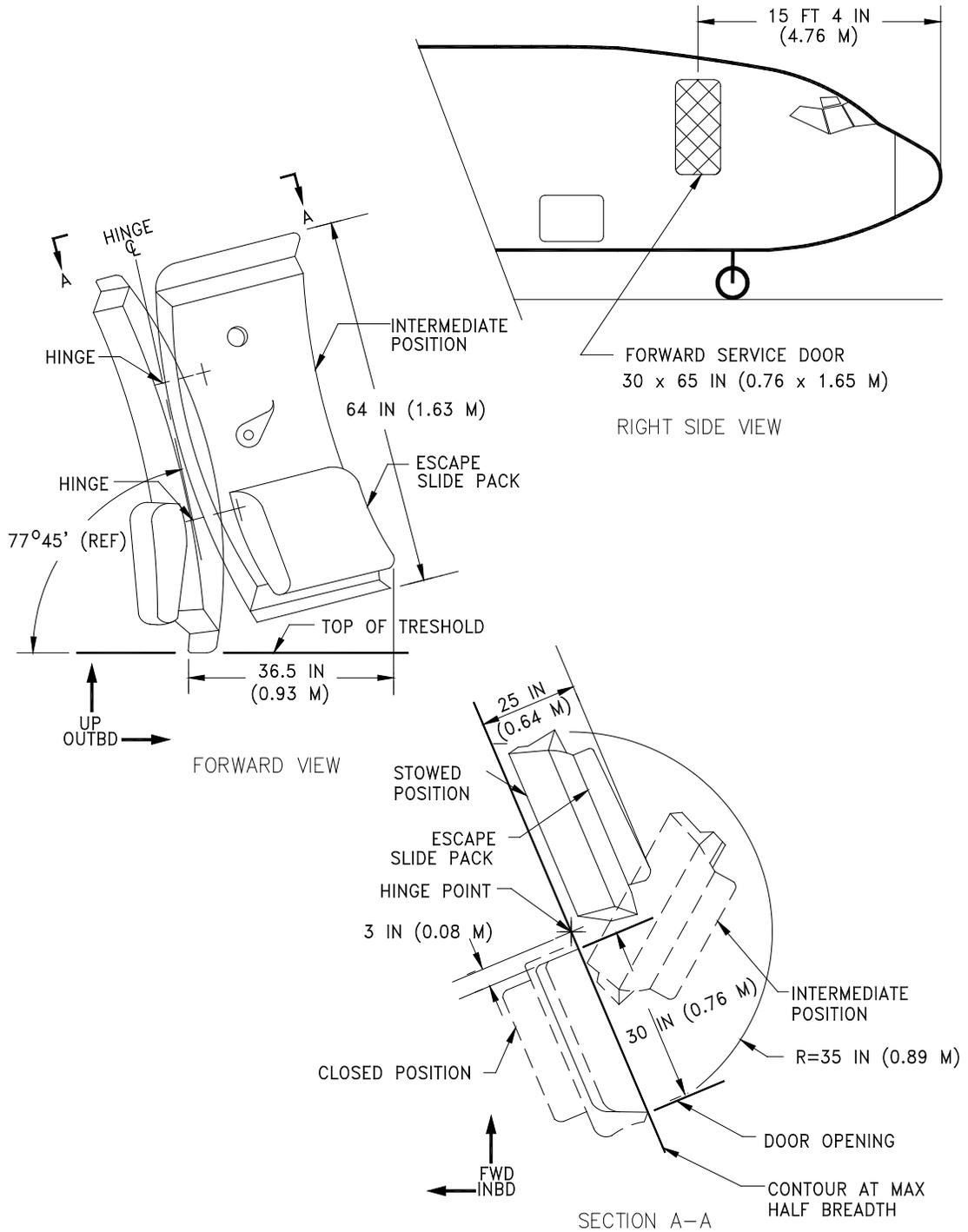
NOTES: 737-800BCF does not have Optional Forward Airstairs.

2.7.3 Door Clearances: Model 737-600, -700, -700C, -800, -800BCF, -900, -900ER, BBJ1, BBJ2, With and Without Winglets, Locations of Sensors and Probes – Forward of Main Entry Door No 1



NAME OF SENSOR	DISTANCE AFT OF NOSE	DISTANCE ABOVE (+) OR BELOW (-) DOOR SILL REFERENCE LINE	PROTRUSION FROM AIRPLANE SKIN
PRIMARY PITOT-STATIC (L/R)	5 FT 2 IN (1.57 M)	+1 FT 3 IN (0.38 M)	6 IN (0.15 M)
ALTERNATE PITOT-STATIC (R)	5 FT 2 IN (1.57 M)	+ 3 IN (0.08 M)	6 IN (0.15 M)
ANGLE OF ATTACK (L/R)	5 FT 2 IN (1.57 M)	-6 IN (-0.15 M)	4 IN (0.10 M)
TOTAL AIR TEMPERATURE (L)	11 FT 6 IN (3.50 M)	+ 1 FT 6 IN (0.46 M)	4 IN (0.10 M)

2.7.4 Door Clearances: Model 737, All Models, Forward Service Door



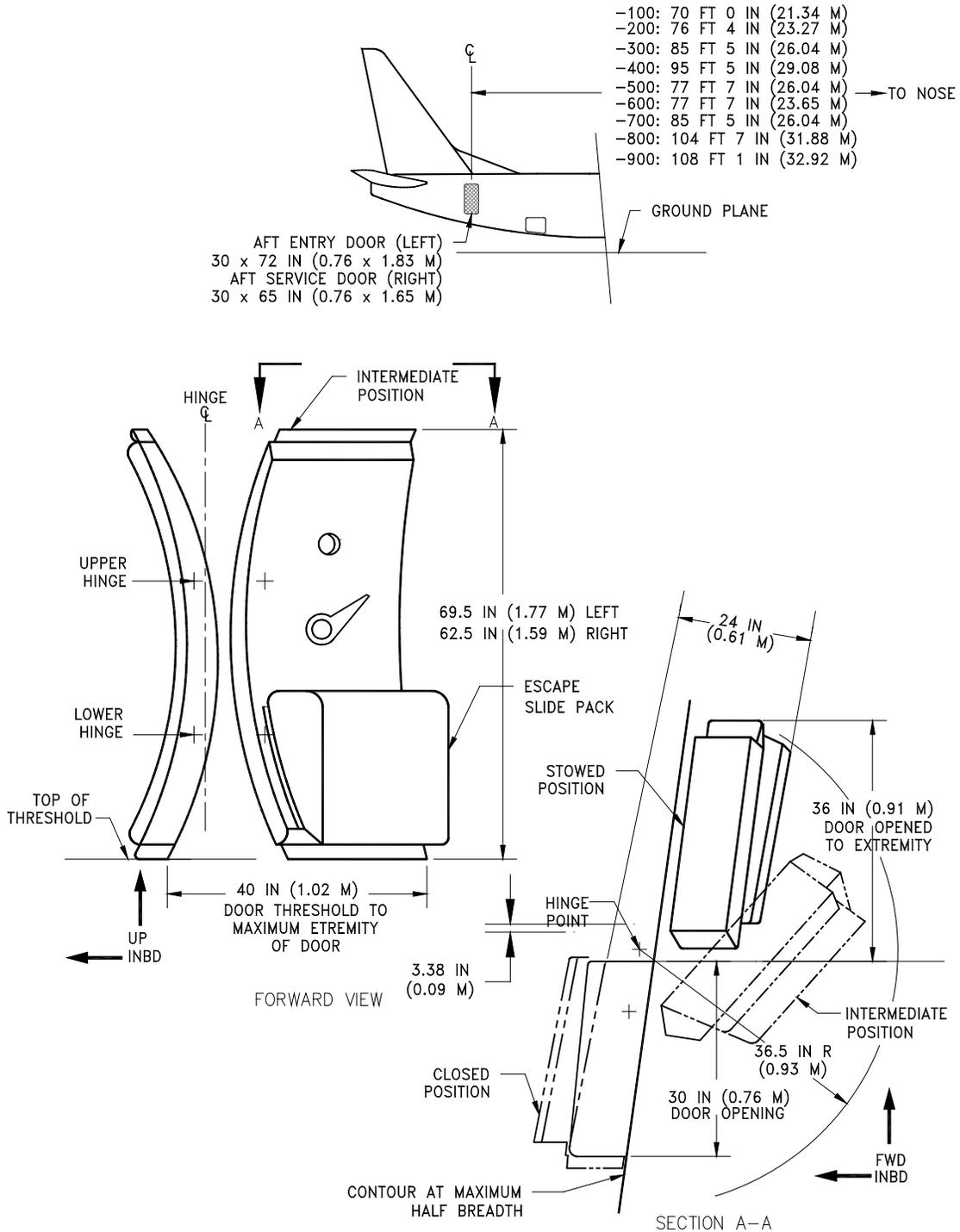
D6-58325-7

REV A

March 2023

2-36

2.7.5 Door Clearances: Model 737, All Models, Aft Entry Door and Aft Service Door



NOTES: 737-800BCF deactivates all Overwing and Aft Entry and Service Doors.

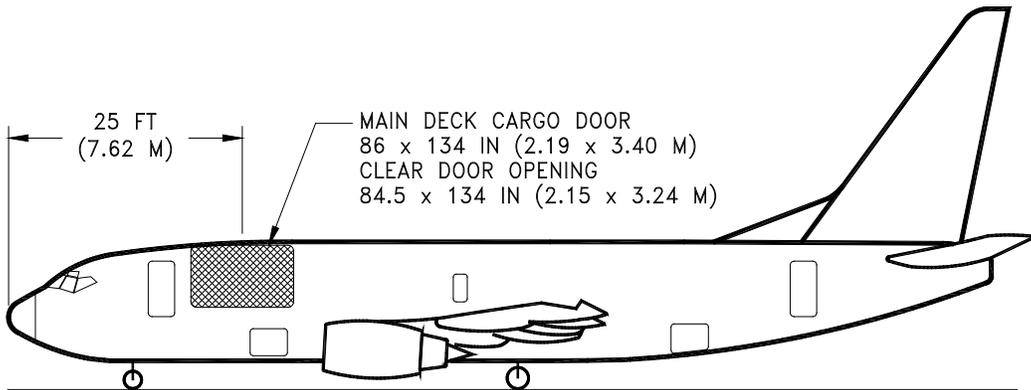
D6-58325-7

REV A

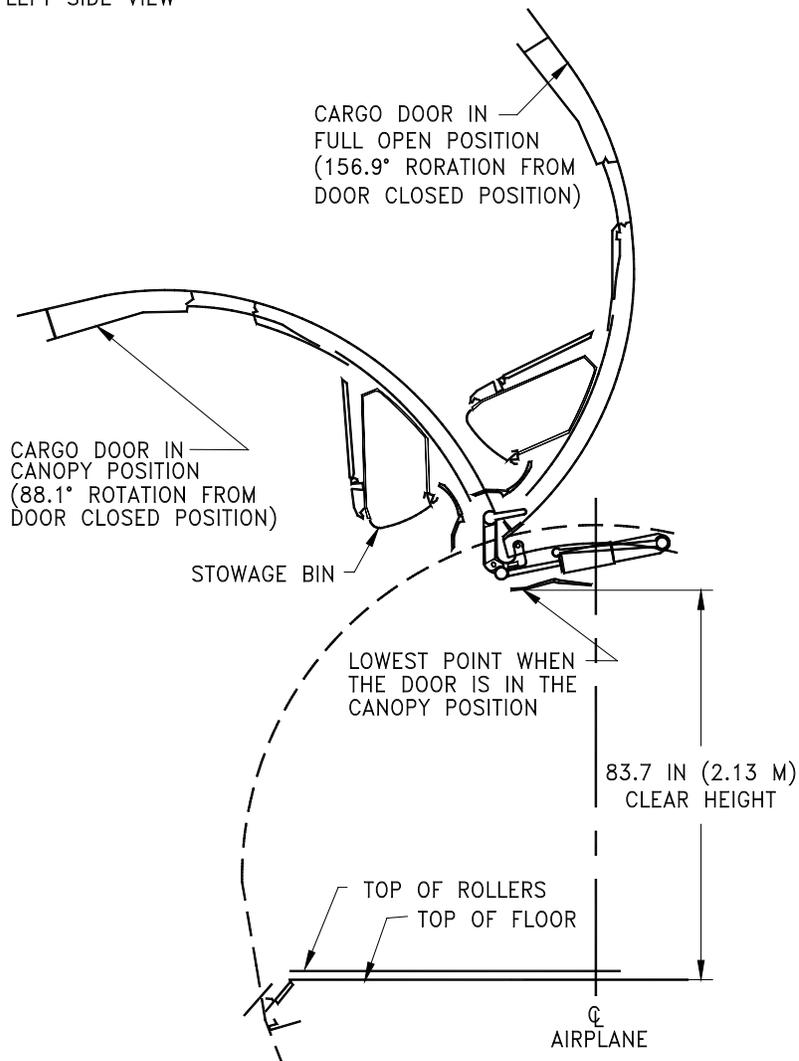
March 2023

2-37

2.7.6 Door Clearances: Model 737-700C, Main Deck Cargo Door



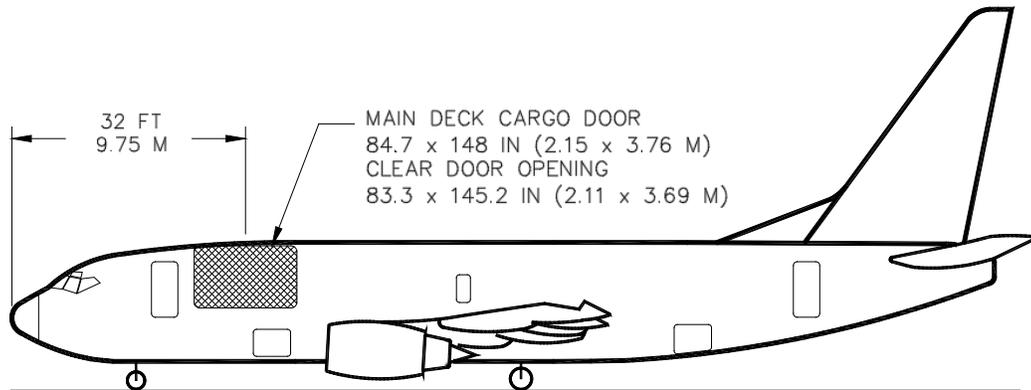
LEFT SIDE VIEW



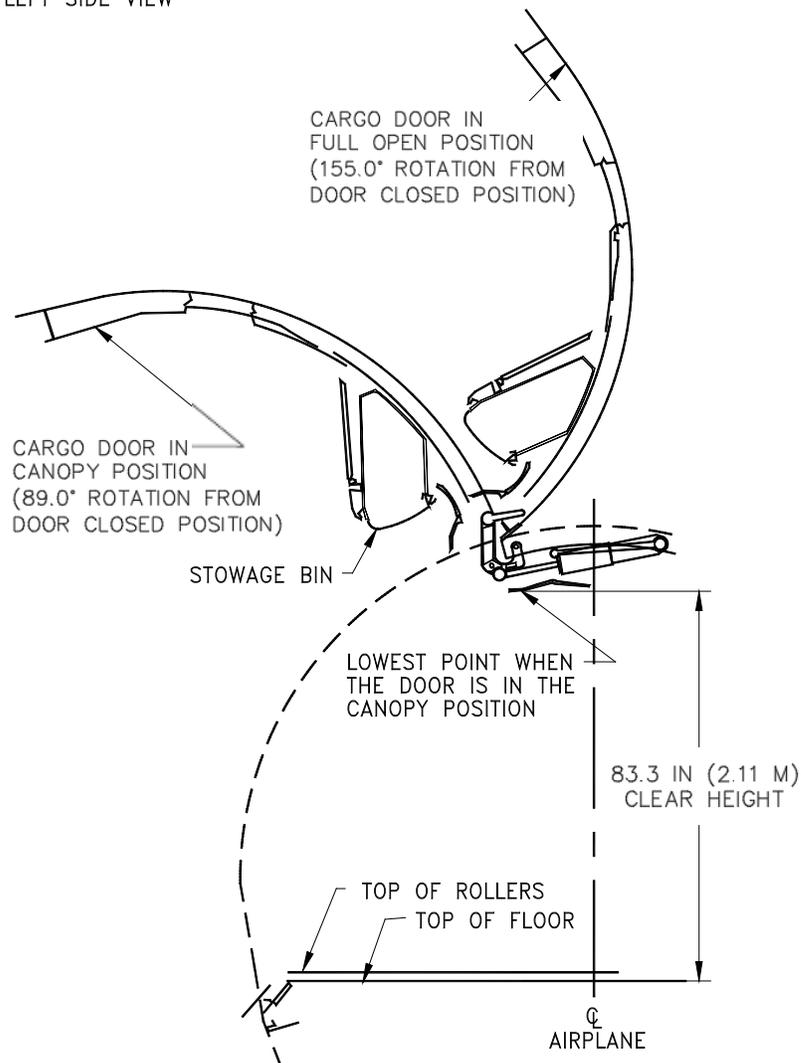
REAR VIEW

D6-58325-7

2.7.7 Door Clearances: Model 737-800BCF, Main Deck Cargo Door



LEFT SIDE VIEW



REAR VIEW

D6-58325-7

3.0 AIRPLANE PERFORMANCE

3.1 GENERAL INFORMATION

The graphs in Section 3.2 provide information on payload-range capability of the 737 NG airplane. To use these graphs, if the trip range and zero fuel weight (OEW + payload) are known, the approximate takeoff weight can be found, limited by maximum zero fuel weight, maximum design takeoff weight, or fuel capacity.

The graphs in Section 3.3 provide information on FAA/EASA takeoff runway length requirements with typical engines at different pressure altitudes. Maximum takeoff weights shown on the graphs are the heaviest for the particular airplane models with the corresponding engines. Standard day temperatures for pressure altitudes shown on the FAA/EASA takeoff graphs are given below:

PRESSURE ALTITUDE		STANDARD DAY TEMP	
FEET	METERS	°F	°C
0	0	59.0	15.0
2,000	610	51.9	11.0
4,000	1,219	44.7	7.1
6,000	1,829	37.6	3.1
8,000	2,438	30.5	-0.8
10,000	3,048	23.3	-4.8
12,000	3,658	16.2	-8.8
14,000	4,267	9.1	-12.7
15,500	4,724	3.7	-15.7

The graphs in Section 3.4 provide information on landing runway length requirements for different airplane weights and airport altitudes. The maximum landing weights shown are the heaviest for the particular airplane model.

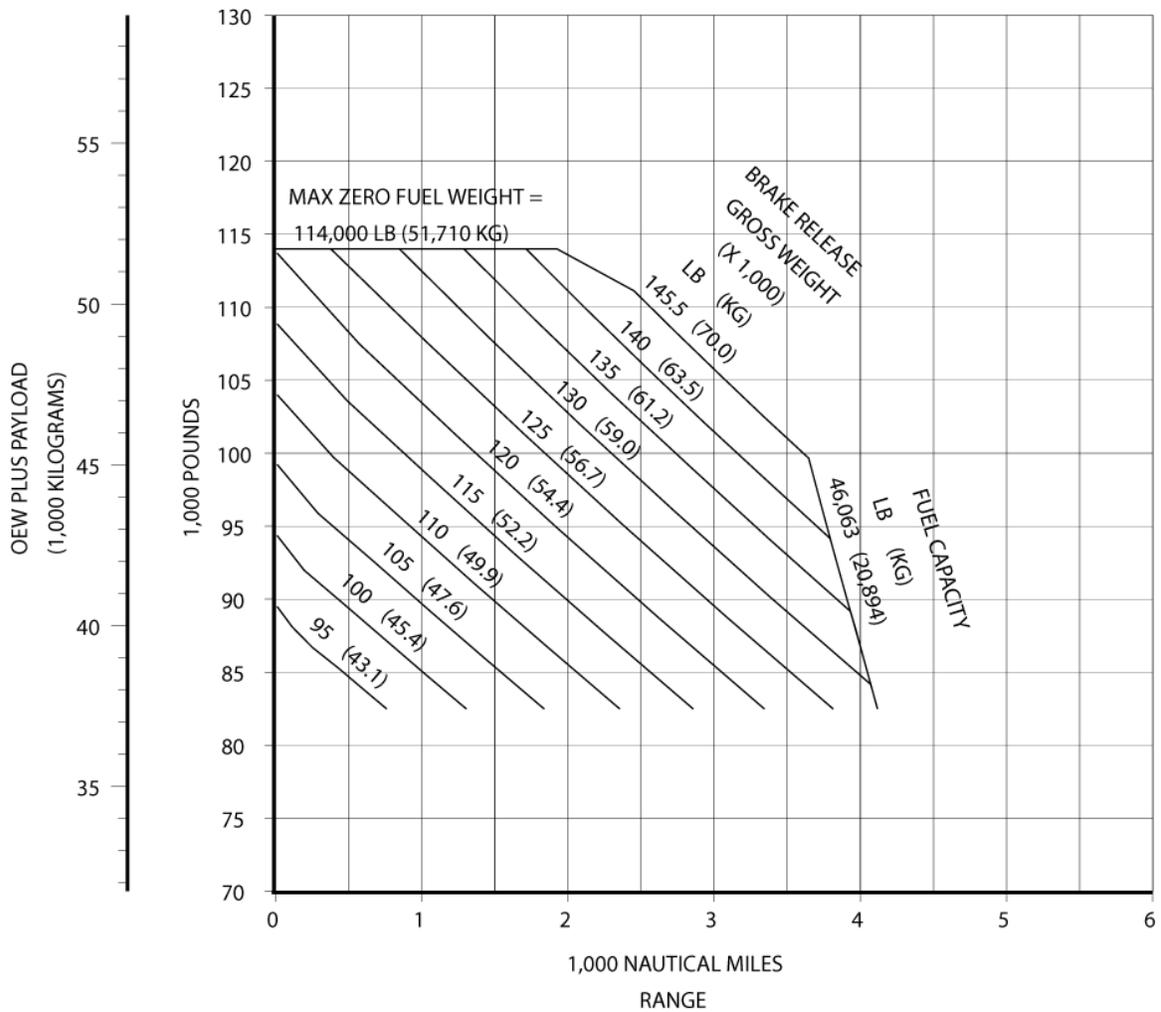
3.2 PAYLOAD/RANGE FOR LONG RANGE CRUISE

3.2.1 Payload/Range for Long Range Cruise: Model 737-600

DO NOT USE FOR DISPATCH

Payload/Range
737-600 (CFM56-7B Series)

- STANDARD DAY, ZERO WIND
- CRUISE MACH = LRC
- NORMAL POWER EXTRACTION AND AIR CONDITIONING BLEED
- TYPICAL MISSION RULES
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE AND OEW PRIOR TO FACILITY DESIGN.



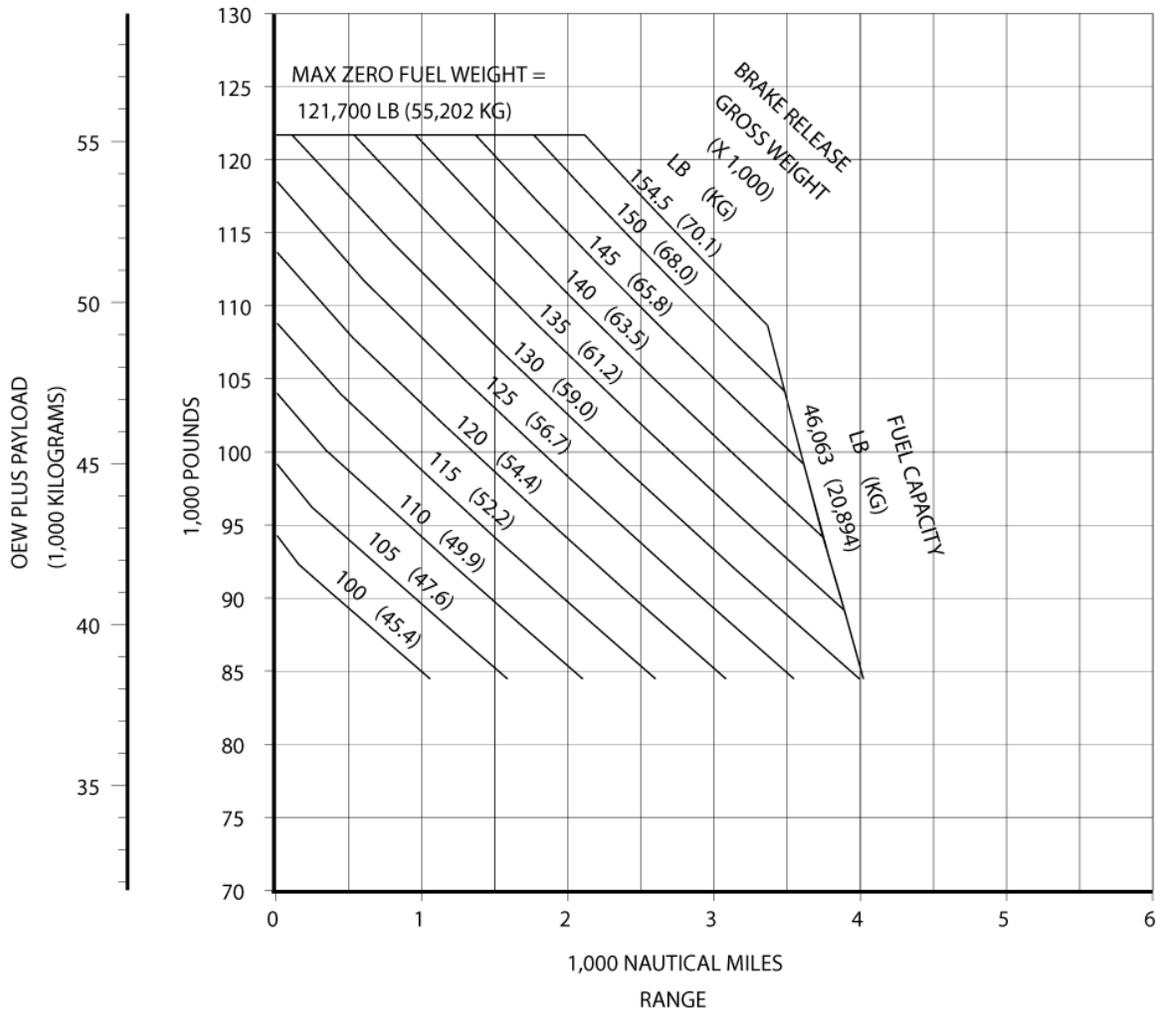
D6-58325-7

3.2.2 Payload/Range for Long Range Cruise: Model 737-700, -700W

DO NOT USE FOR DISPATCH

Payload/Range
737-700/-700W (CFM56-7B Series)

- STANDARD DAY, ZERO WIND
- CRUISE MACH = LRC
- NORMAL POWER EXTRACTION AND AIR CONDITIONING BLEEDS
- TYPICAL MISSION RULES
- NON-WINGLET PERFORMANCE SHOWN. WINGLET AIRCRAFT WILL HAVE SLIGHTLY GREATER RANGE.
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE AND OEW PRIOR TO FACILITY DESIGN.



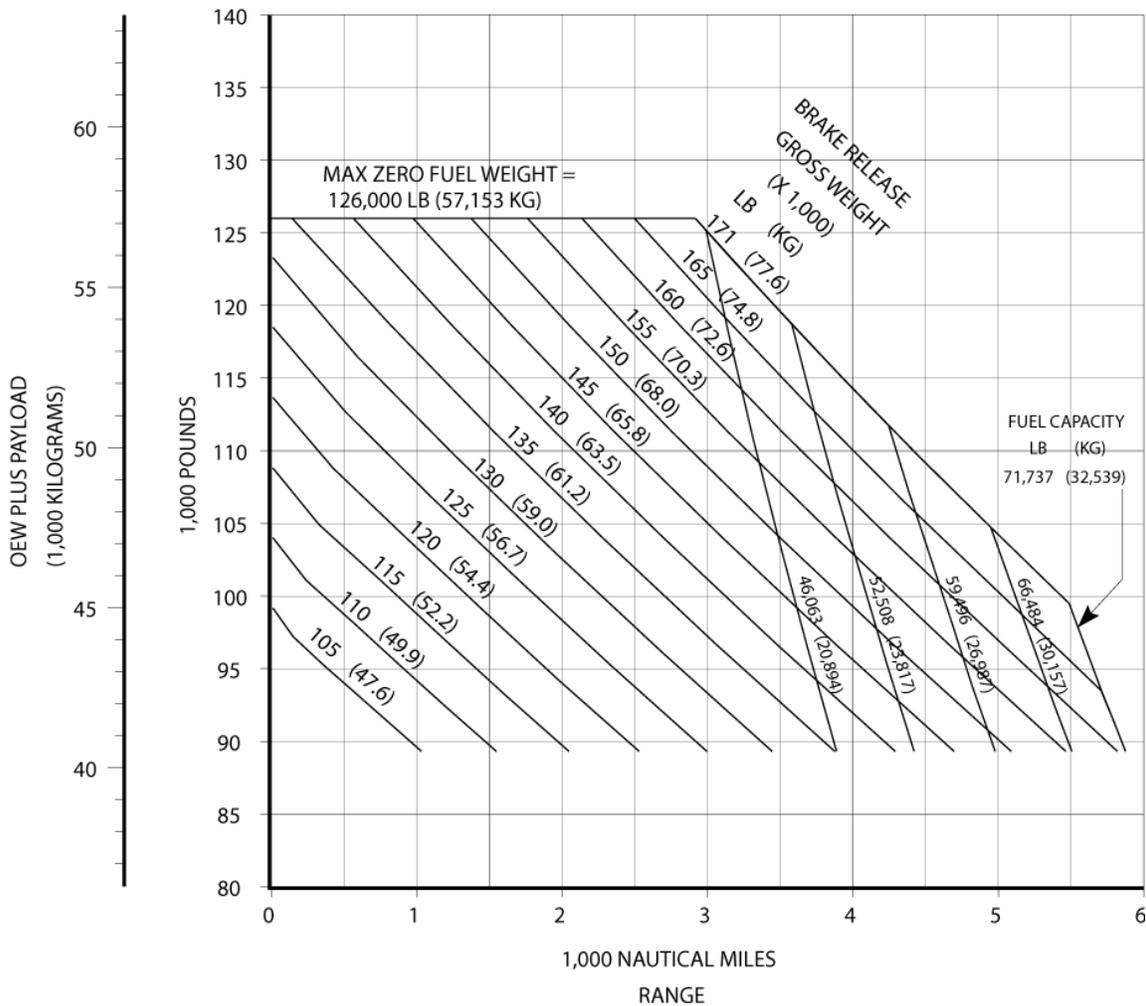
D6-58325-7

3.2.3 Payload/Range for Long Range Cruise: Model 737-700ER, -700ERW, -700C, -700CW, BBJ1

DO NOT USE FOR DISPATCH

Payload/Range
737-700ER/-700ERW/-700C/-700CW/BBJ1 (CFM56-7B Series)

- STANDARD DAY, ZERO WIND
- CRUISE MACH = LRC
- NORMAL POWER EXTRACTION AND AIR CONDITIONING BLEEDS
- TYPICAL MISSION RULES
- NON-WINGLET PERFORMANCE SHOWN. WINGLET AIRCRAFT WILL HAVE SLIGHTLY GREATER RANGE.
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE AND OEW PRIOR TO FACILITY DESIGN.



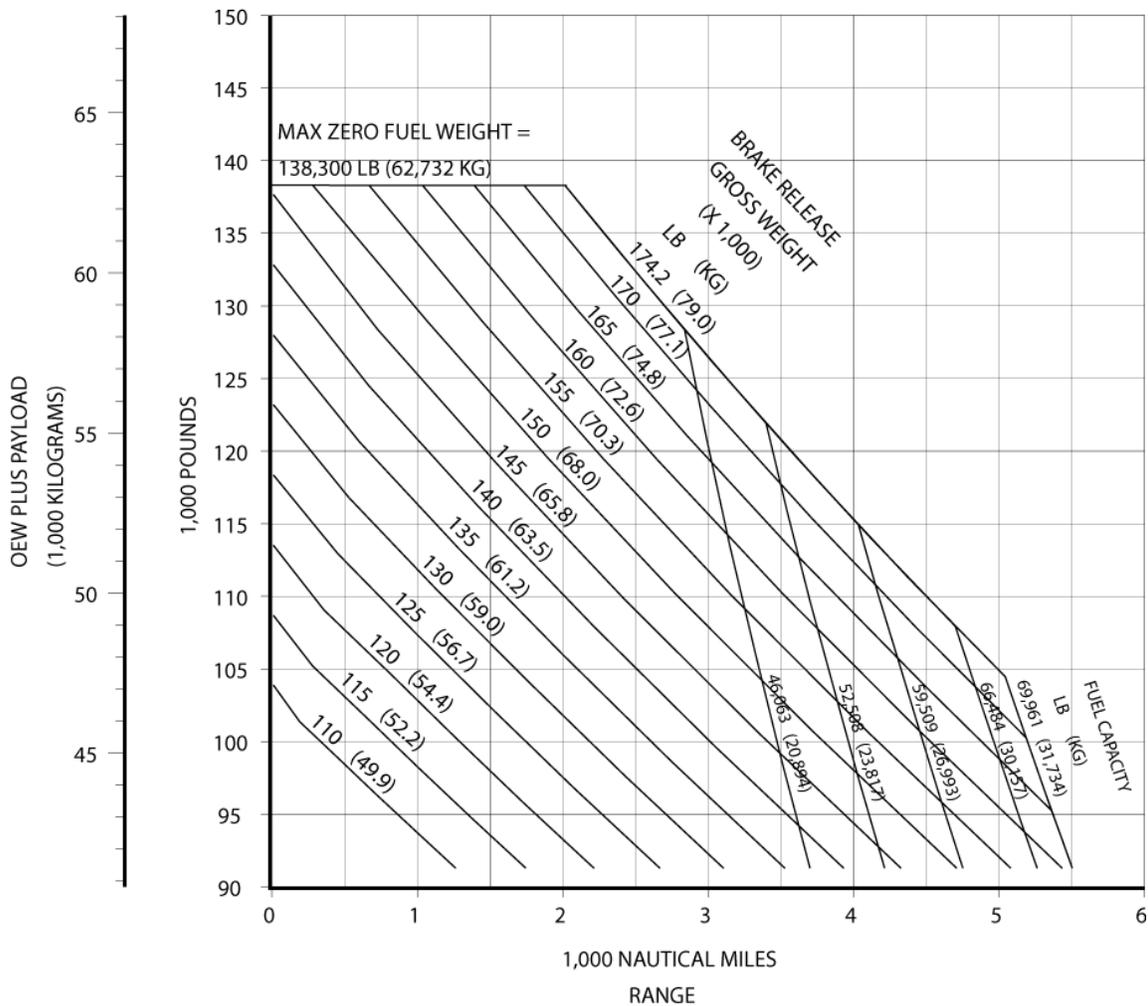
D6-58325-7

3.2.4 Payload/Range for Long Range Cruise: Model 737-800, -800W, -800BCF, BBJ2

DO NOT USE FOR DISPATCH

Payload/Range
737-800/800W/BBJ2 (CFM56-7B Series)

- STANDARD DAY, ZERO WIND
- CRUISE MACH = LRC
- NORMAL POWER EXTRACTION AND AIR CONDITIONING BLEEDS
- TYPICAL MISSION RULES
- NON-WINGLET PERFORMANCE SHOWN. WINGLET AIRCRAFT WILL HAVE SLIGHTLY GREATER RANGE.
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE AND OEW PRIOR TO FACILITY DESIGN.



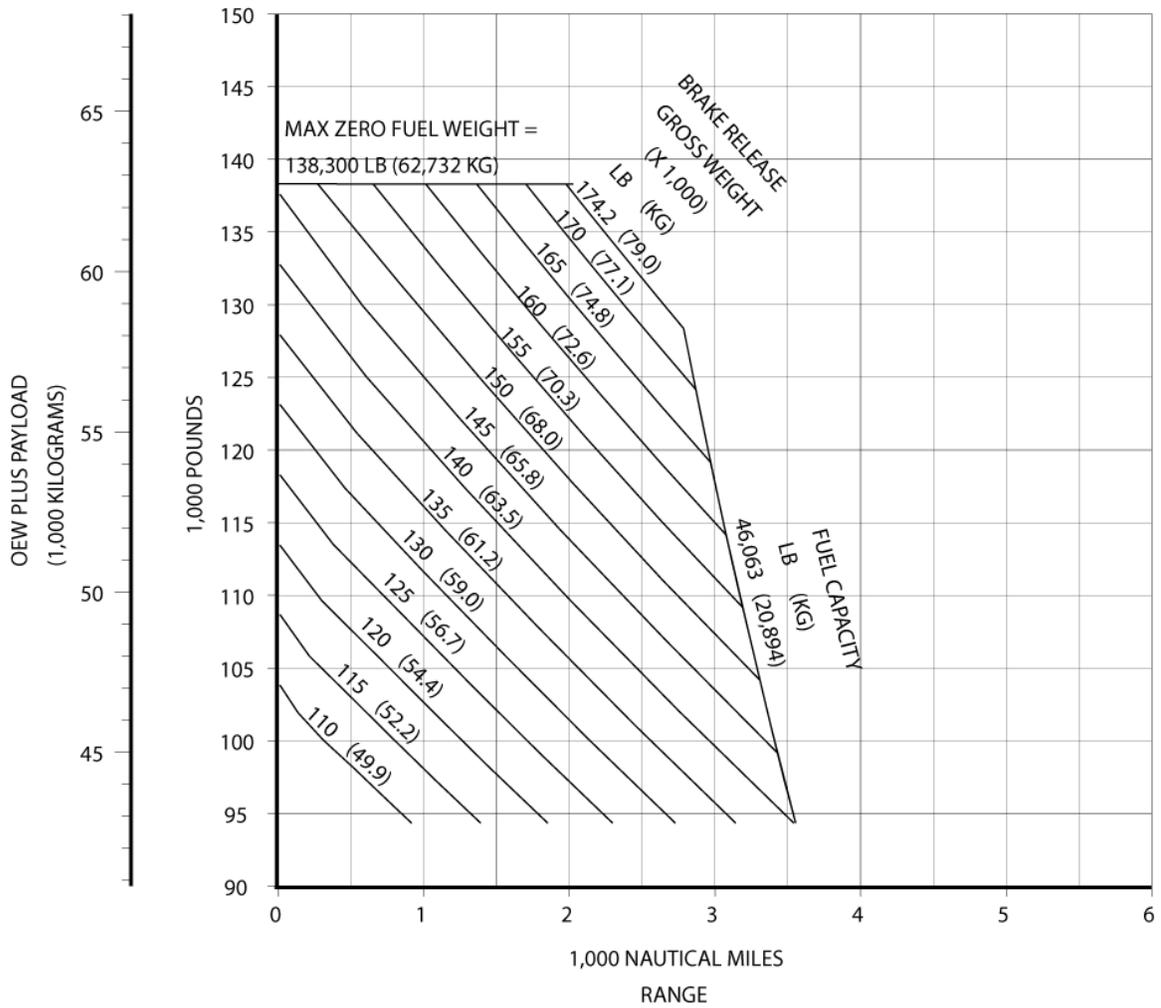
D6-58325-7

3.2.5 Payload/Range for Long Range Cruise: Model 737-900, -900W

DO NOT USE FOR DISPATCH

Payload/Range
737-900/-900W (CFM56-7B Series)

- STANDARD DAY, ZERO WIND
- CRUISE MACH = LRC
- NORMAL POWER EXTRACTION AND AIR CONDITIONING BLEEDS
- TYPICAL MISSION RULES
- NON-WINGLET PERFORMANCE SHOWN. WINGLET AIRCRAFT WILL HAVE SLIGHTLY GREATER RANGE.
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE AND OEW PRIOR TO FACILITY DESIGN.



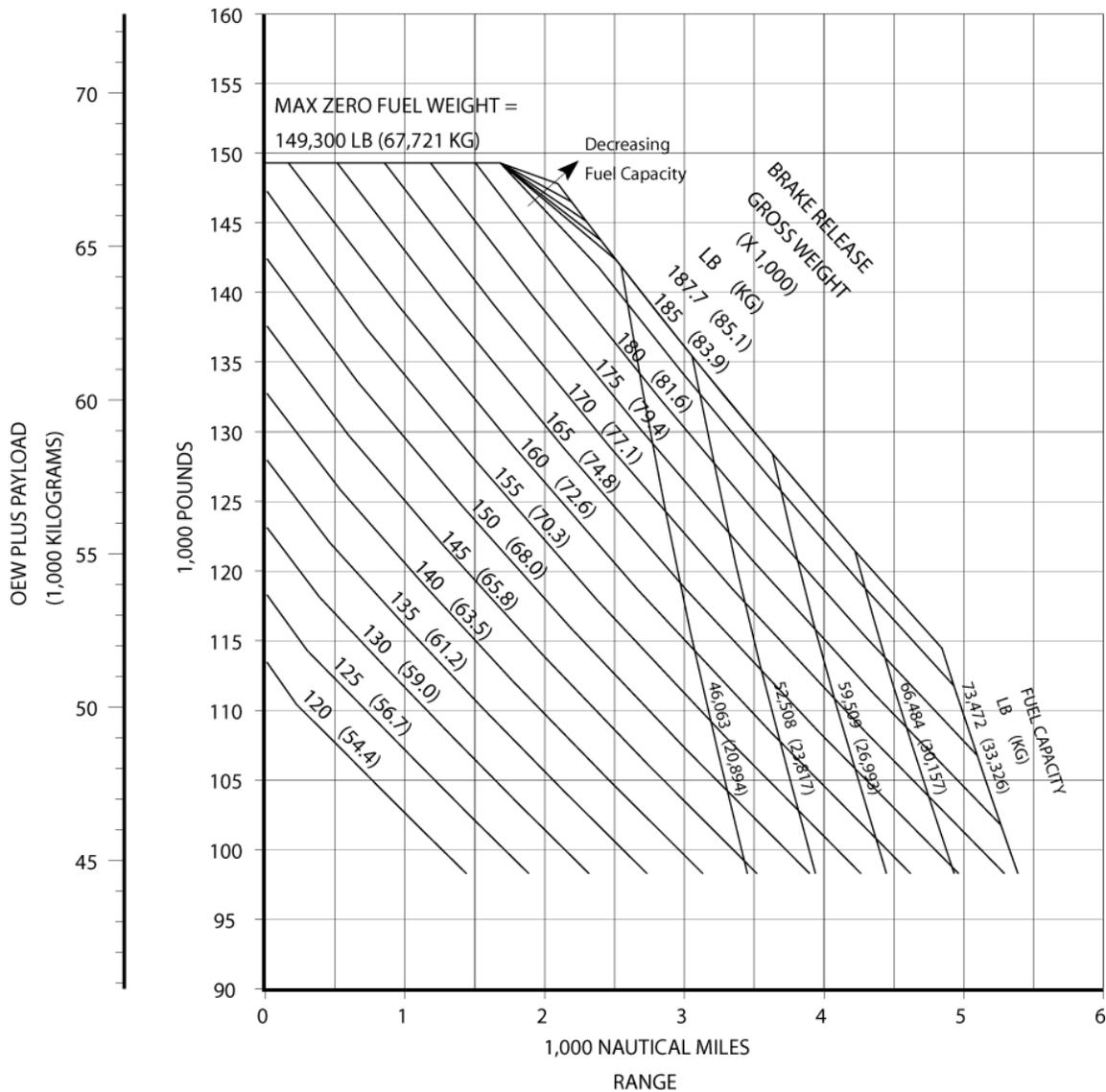
D6-58325-7

3.2.6 Payload/Range for Long Range Cruise: Model 737-900ER, -900ERW, BBJ3

DO NOT USE FOR DISPATCH

Payload/Range
737-900ER/900ERW/BBJ3 (CFM56-7B Series)

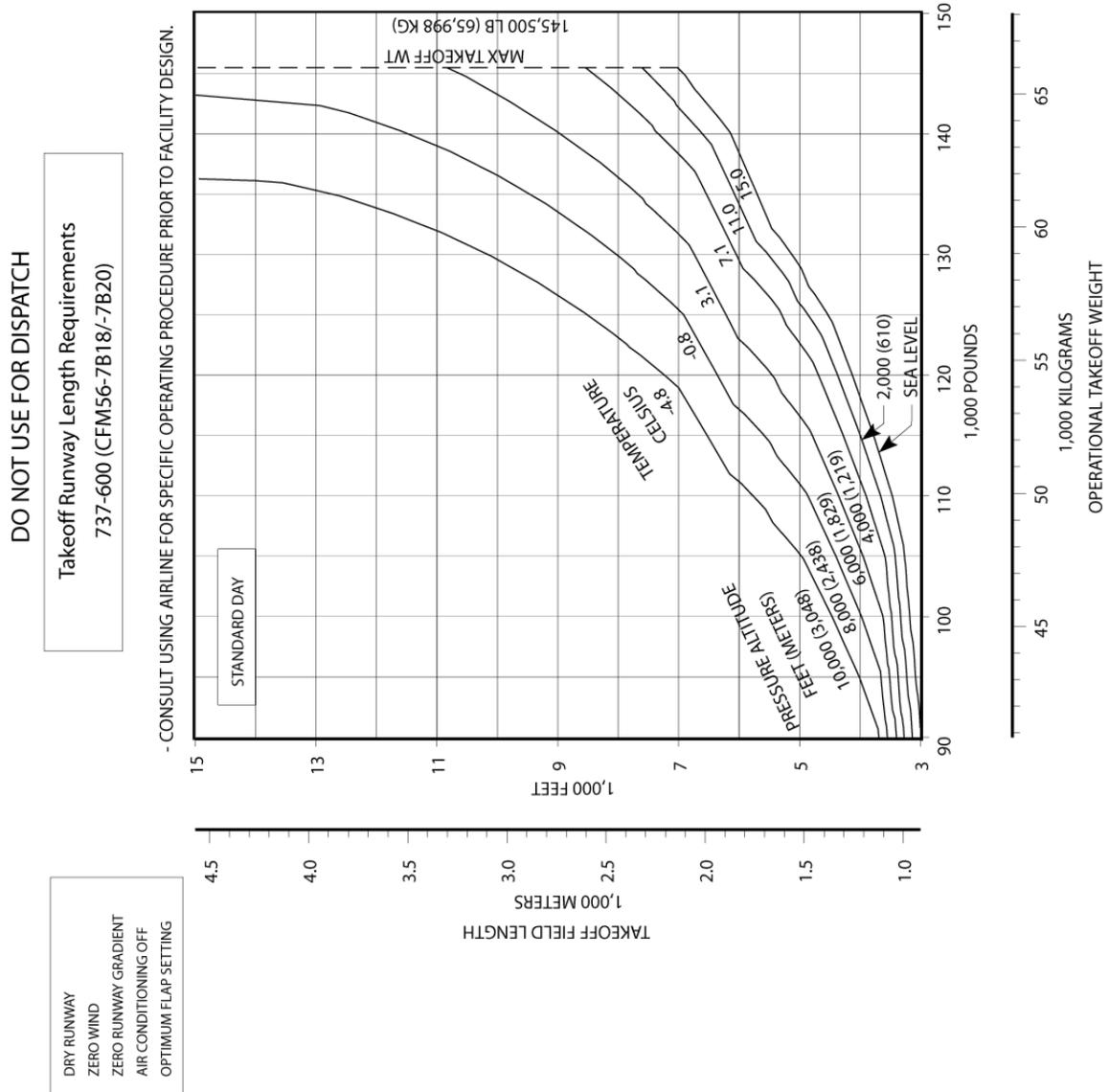
- STANDARD DAY, ZERO WIND
- CRUISE MACH = LRC
- NORMAL POWER EXTRACTION AND AIR CONDITIONING BLEEDS
- TYPICAL MISSION RULES
- NON-WINGLET PERFORMANCE SHOWN. WINGLET AIRCRAFT WILL HAVE SLIGHTLY GREATER RANGE.
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE AND OEW PRIOR TO FACILITY DESIGN.



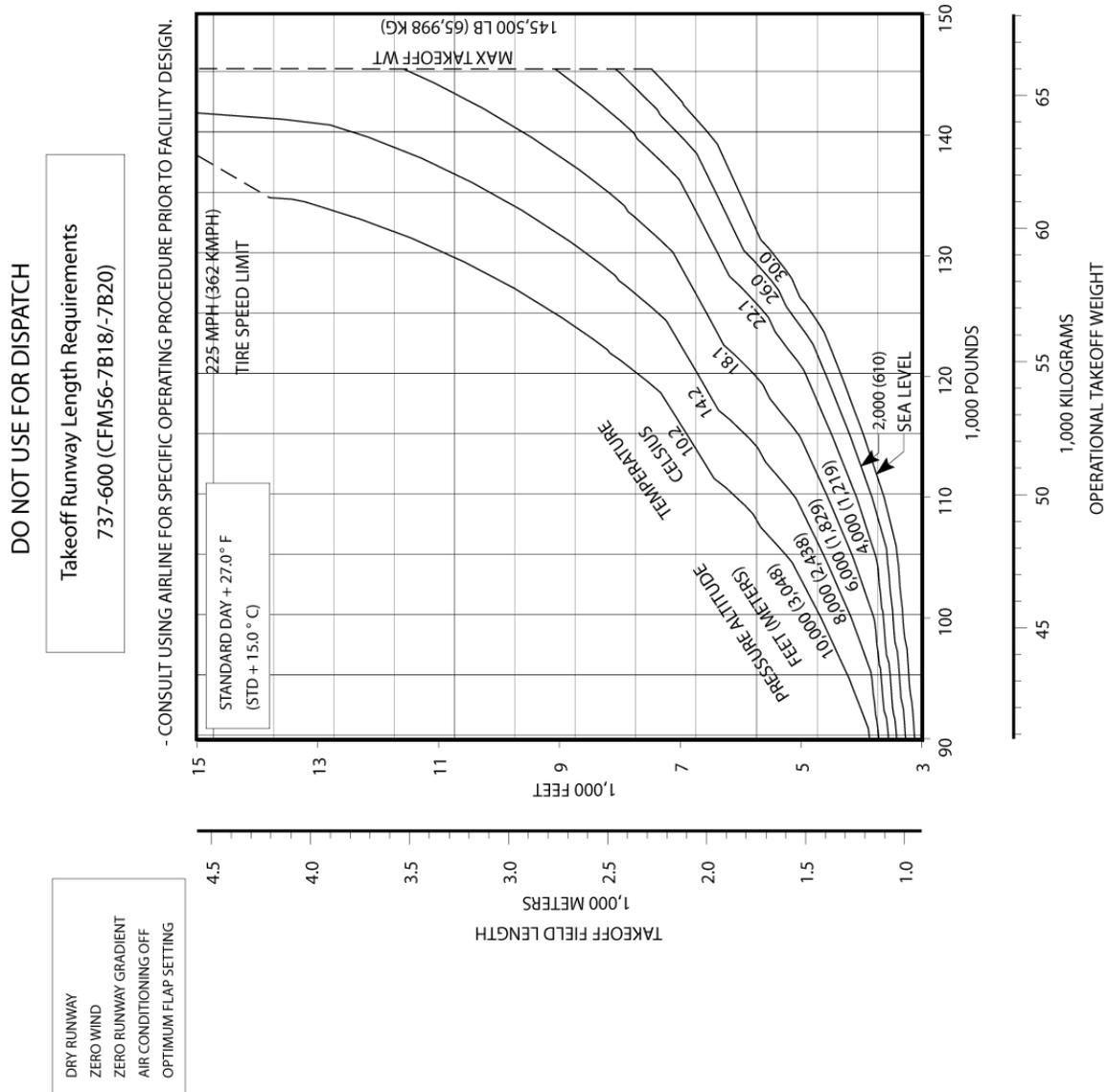
D6-58325-7

3.3 FAA/EASA TAKEOFF RUNWAY LENGTH REQUIREMENTS

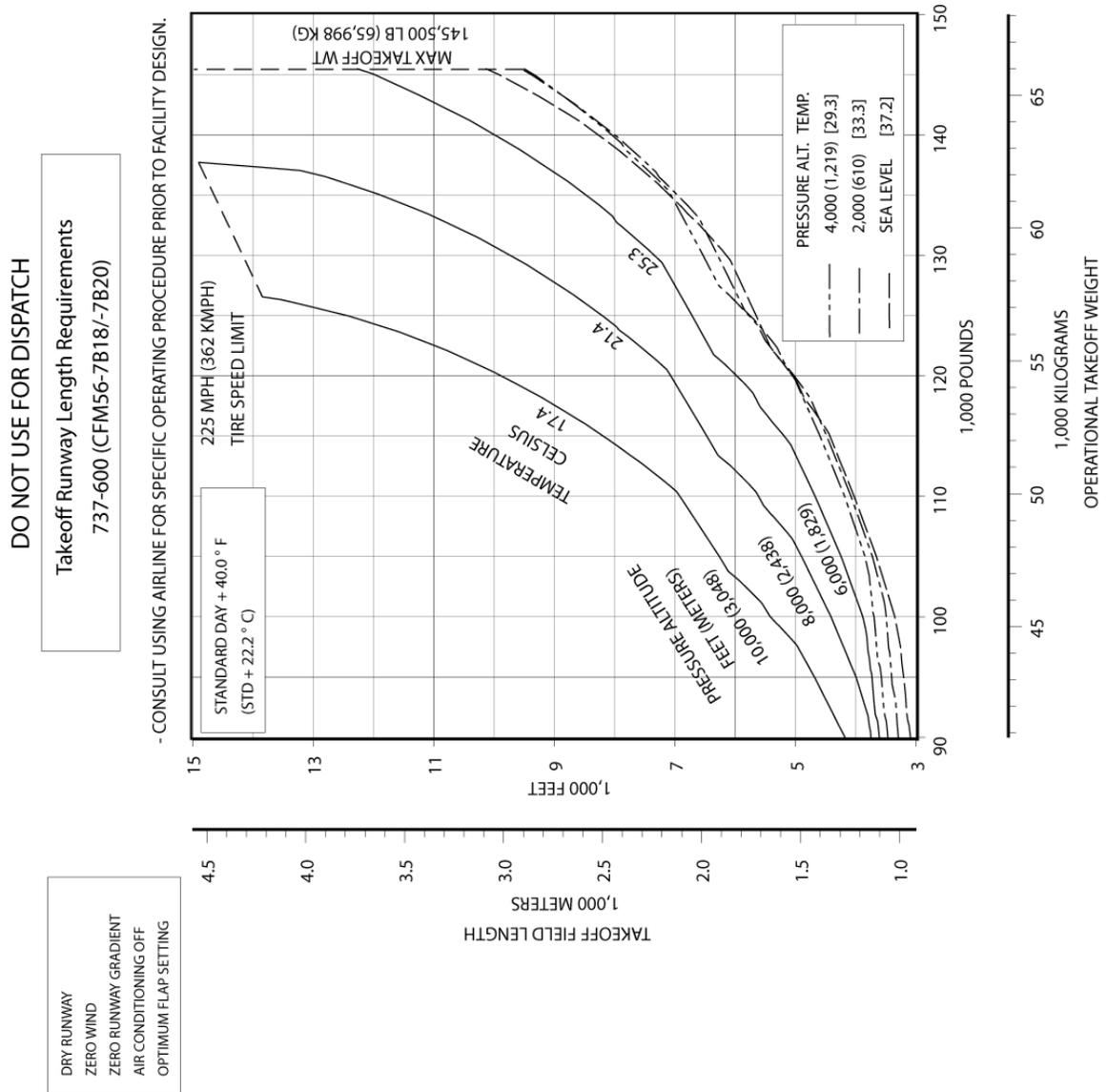
3.3.1 FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-600 (CFM56-7B18/-7B20 Engines at 20,000 LB SLST)



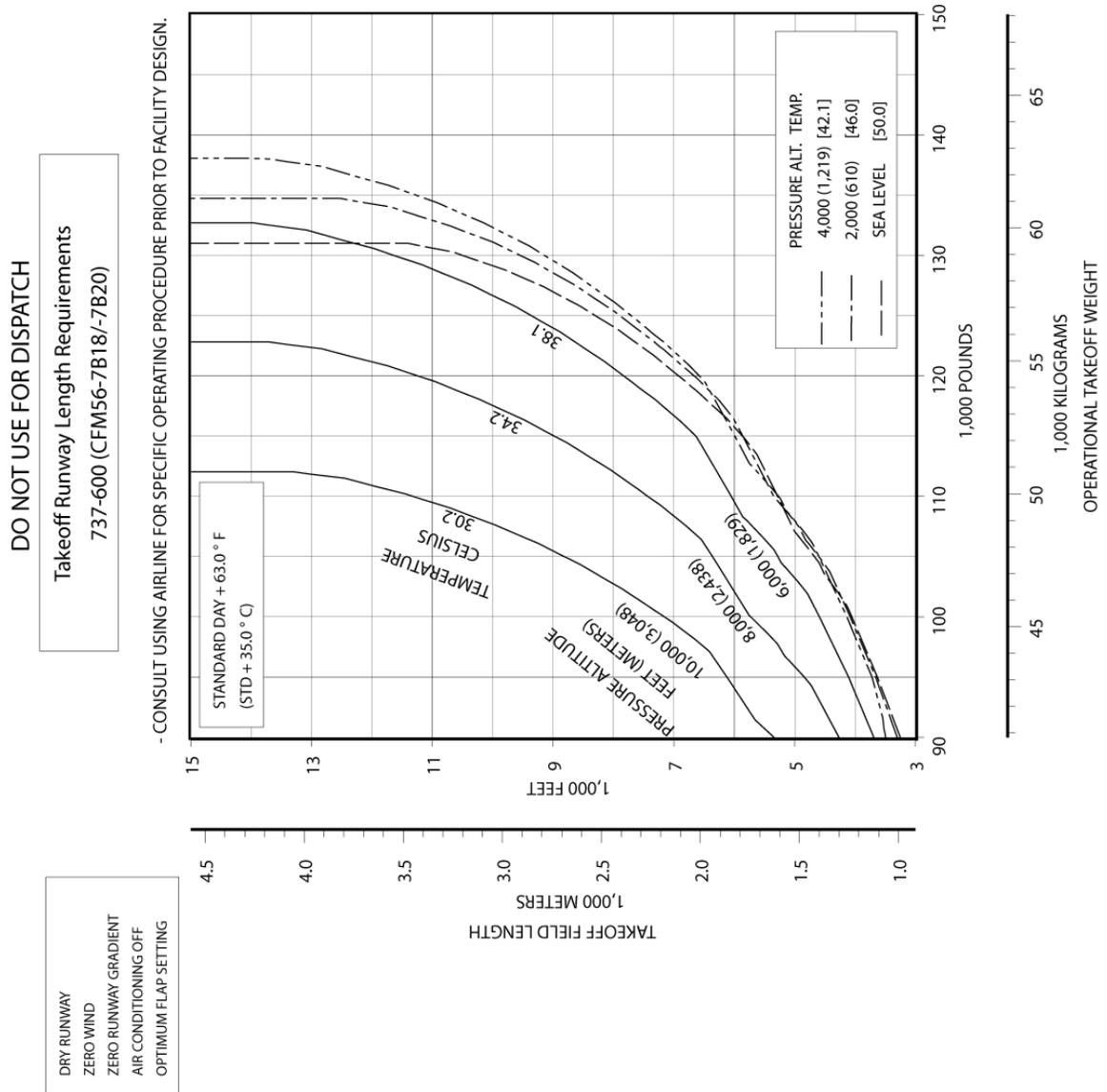
3.3.2 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-600 (CFM56-7B18/-7B20 Engines at 20,000 LB SLST)



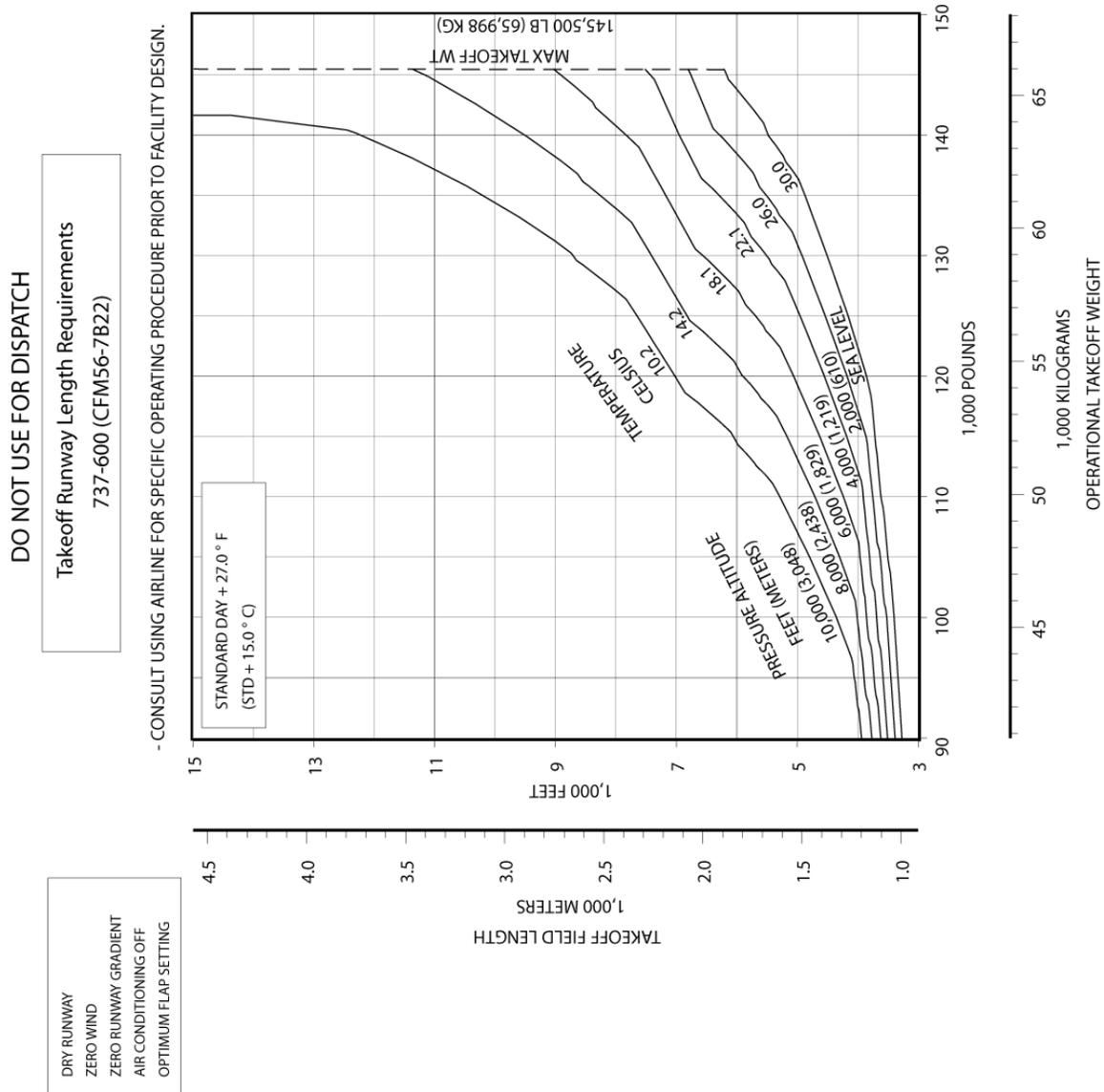
3.3.3 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 40°F (STD + 22.2°C), Dry Runway: Model 737-600 (CFM56-7B18/-7B20 Engines at 20,000 LB SLST)



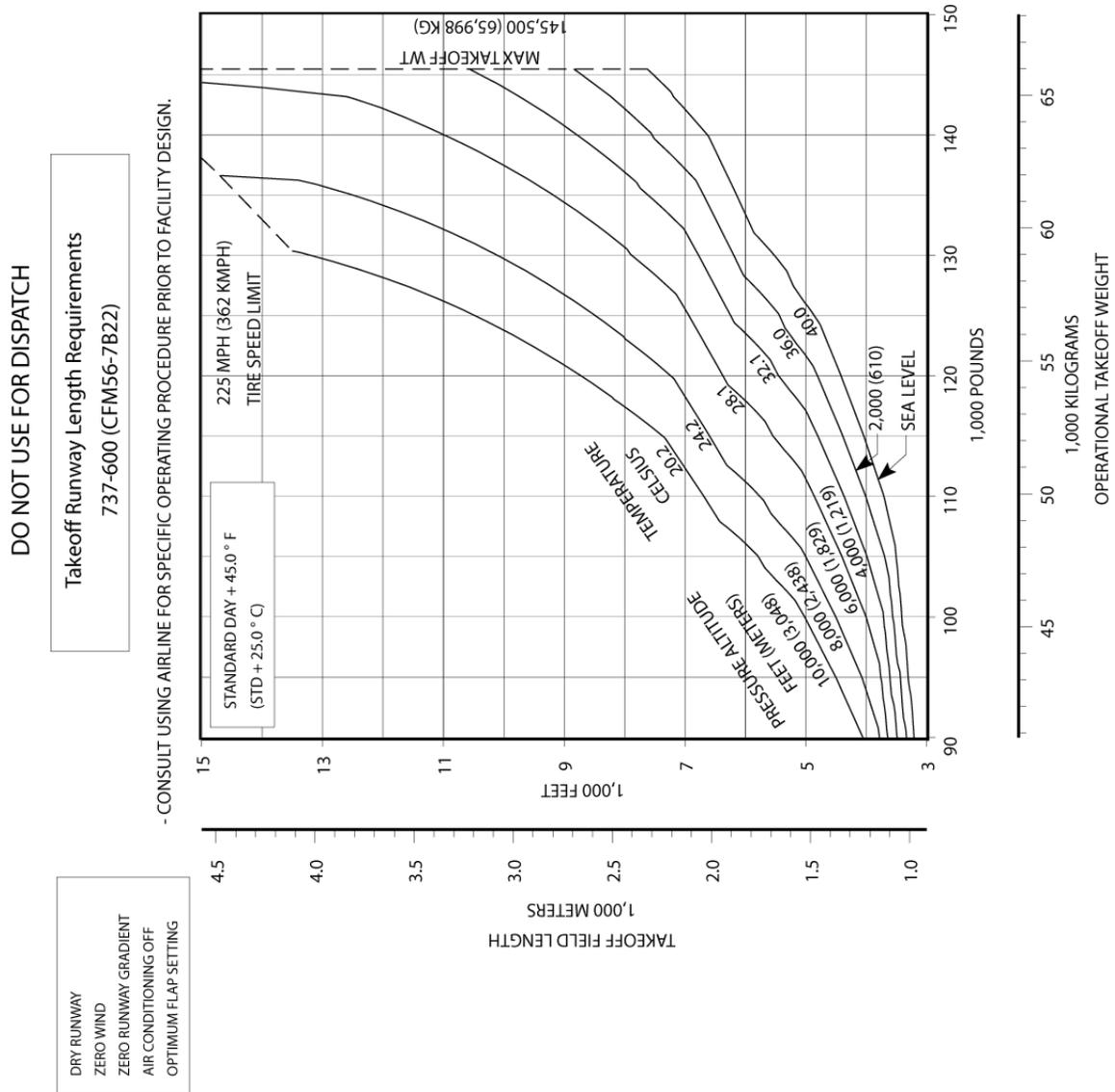
3.3.4 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-600 (CFM56-7B18/-7B20) Engines at 20,000 LB SLST)



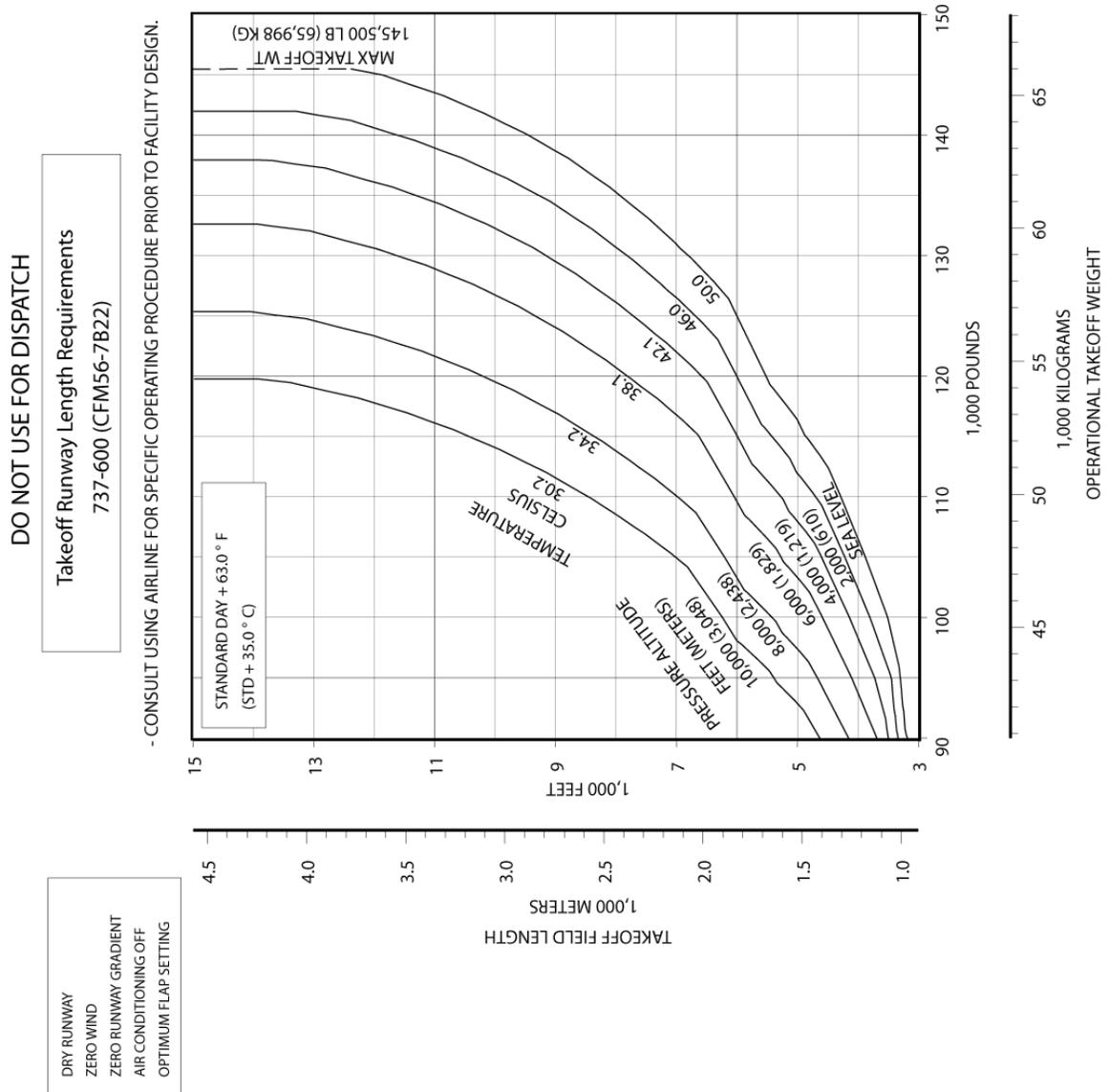
3.3.6 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-600 (CFM56-7B22 Engines at 22,000 LB SLST)



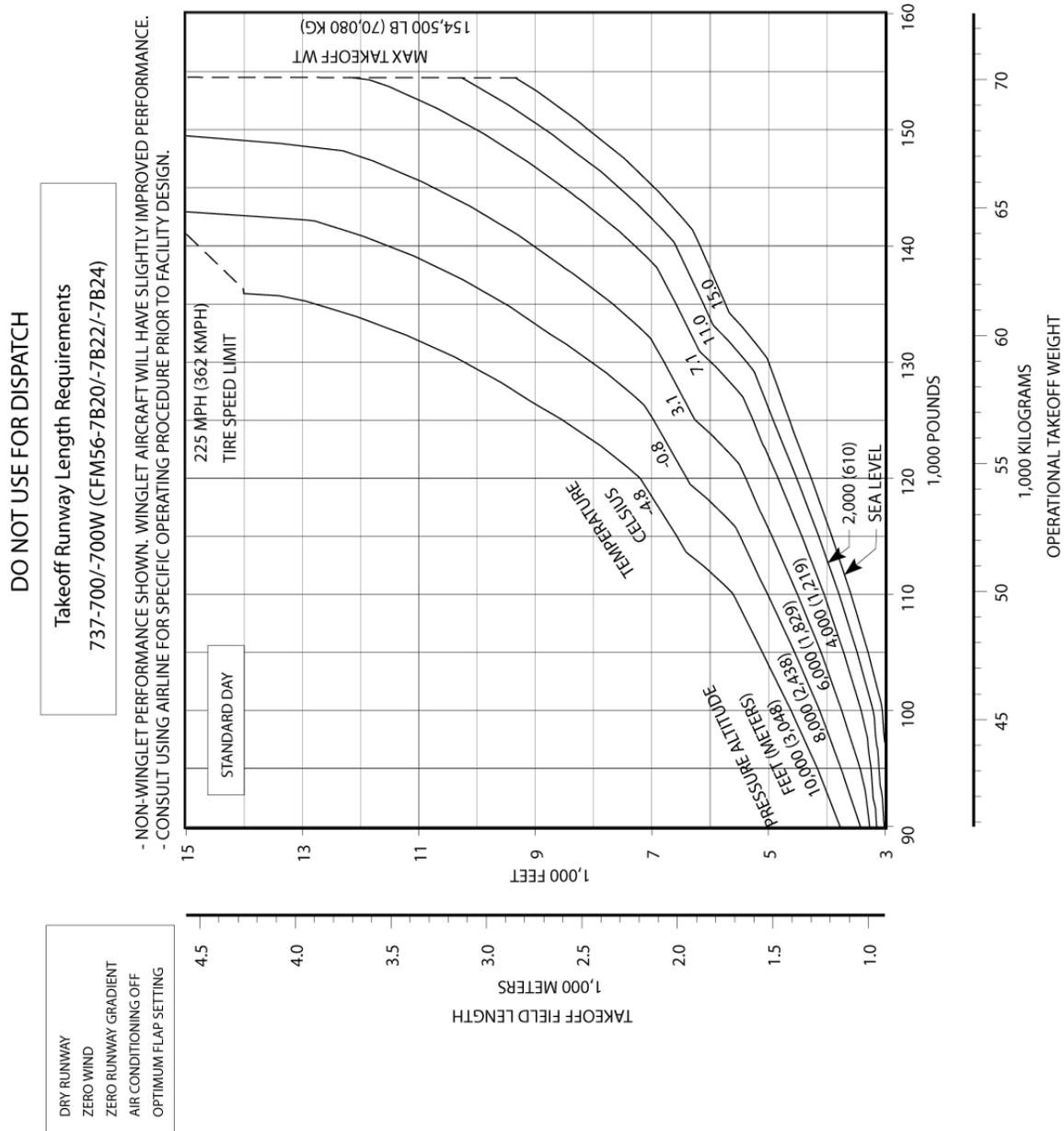
3.3.7 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-600 (CFM56-7B22 Engines at 22,000 LB SLST)



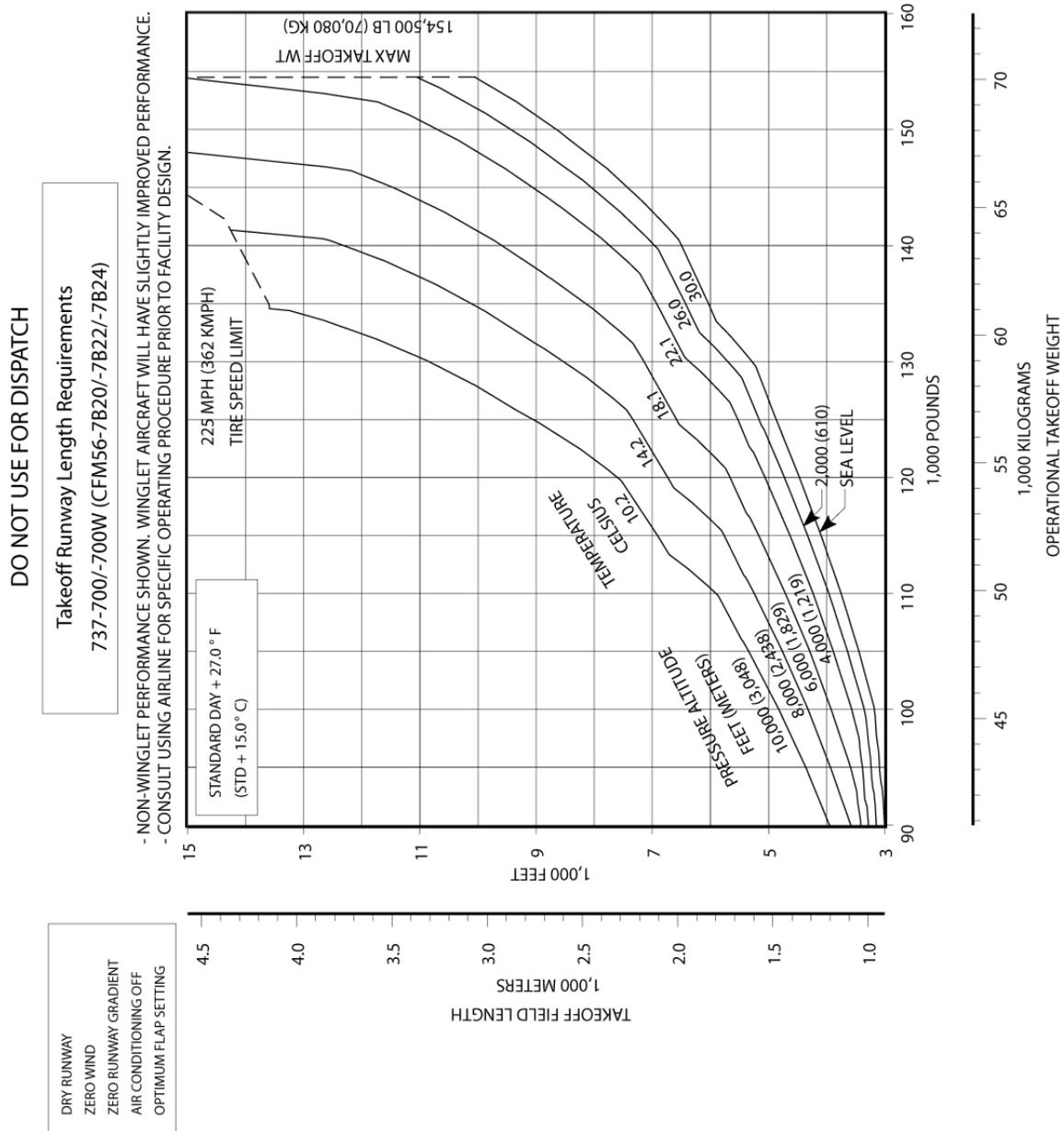
3.3.8 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-600 (CFM56-7B22 Engines at 22,000 LB SLST)



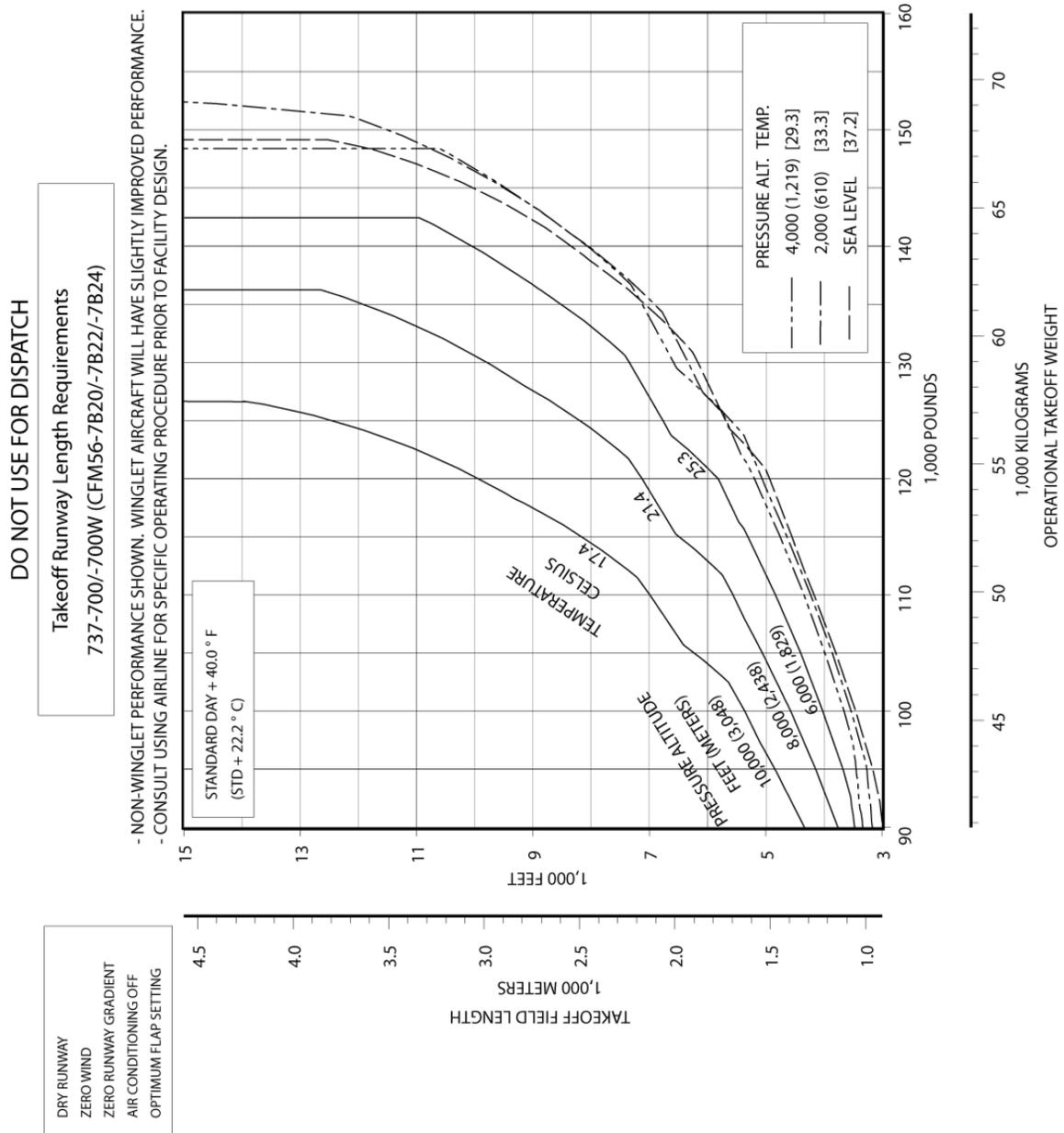
3.3.9 FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-700, 700W (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)



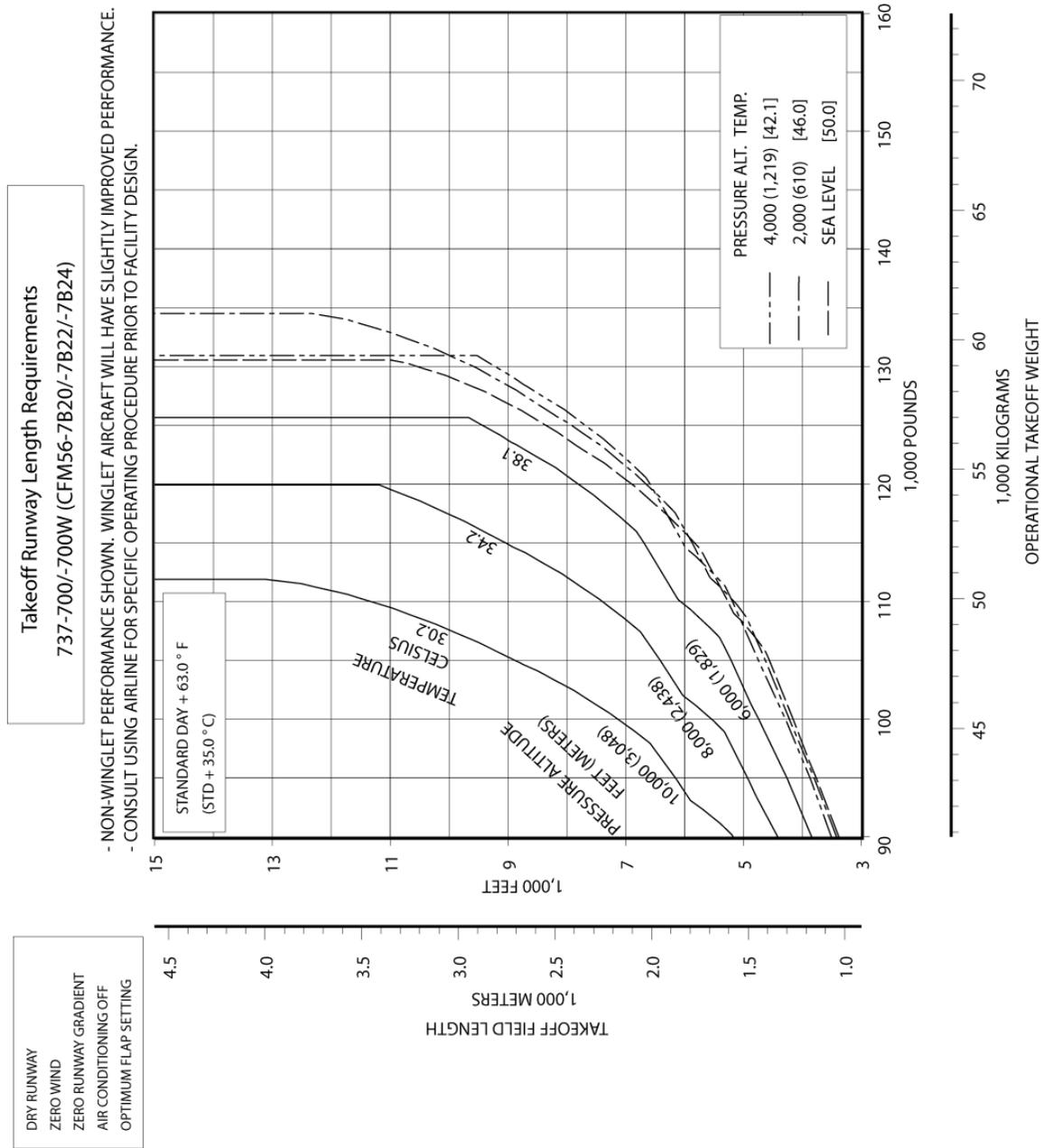
3.3.10 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-700, 700W (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)



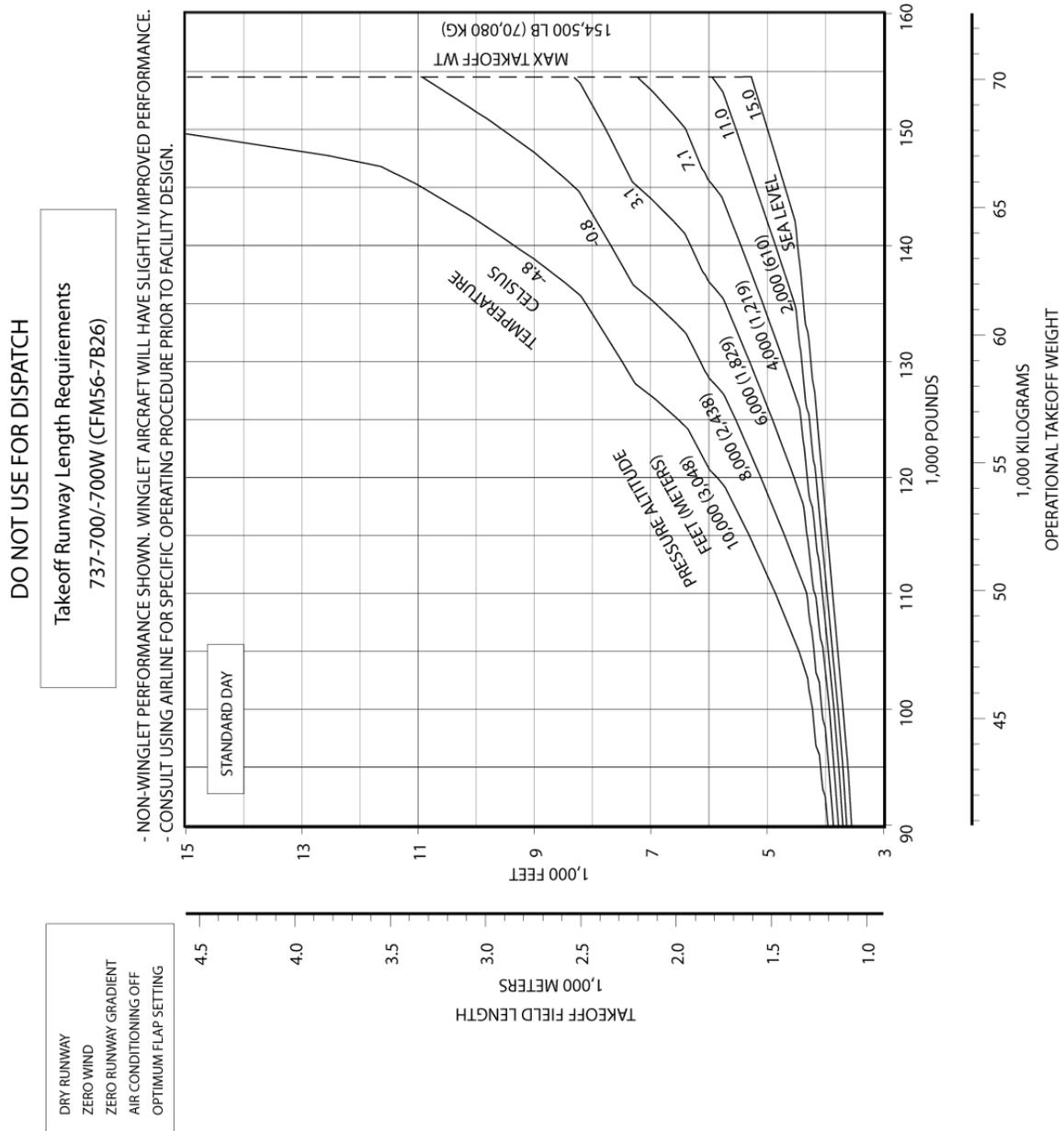
3.3.11 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 40°F (STD + 22.2°C), Dry Runway: Model 737-700, -700W (CFM56-7B20/-7B22/-7B24) Engines at 20,000 LB SLST)



3.3.12 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-700, -700W (CFM56-7B20/-7B22/-7B24) Engines at 20,000 LB SLST)

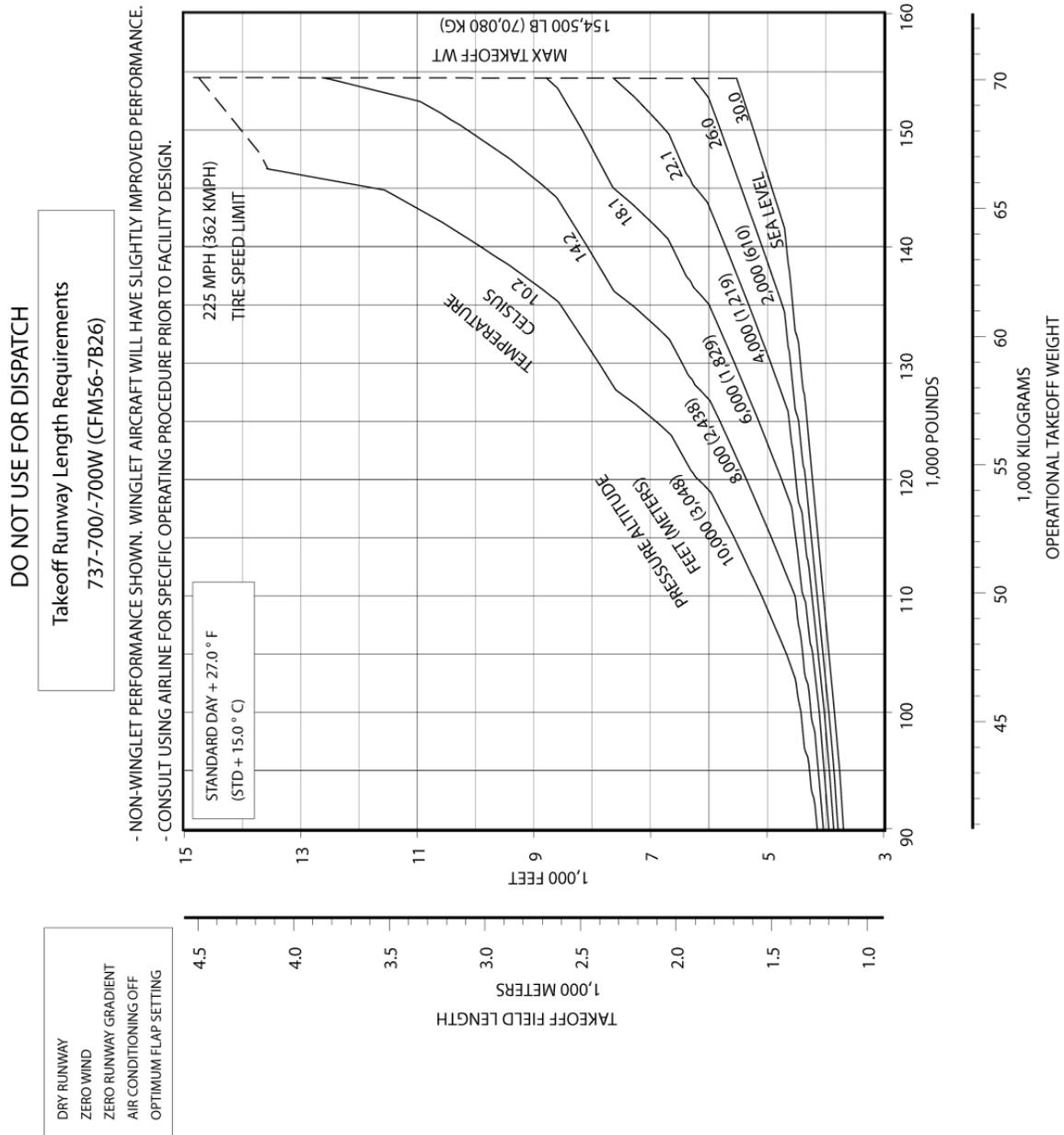


3.3.13 FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-700, -700W (CFM56-7B26 Engines at 26,000 LB SLST)



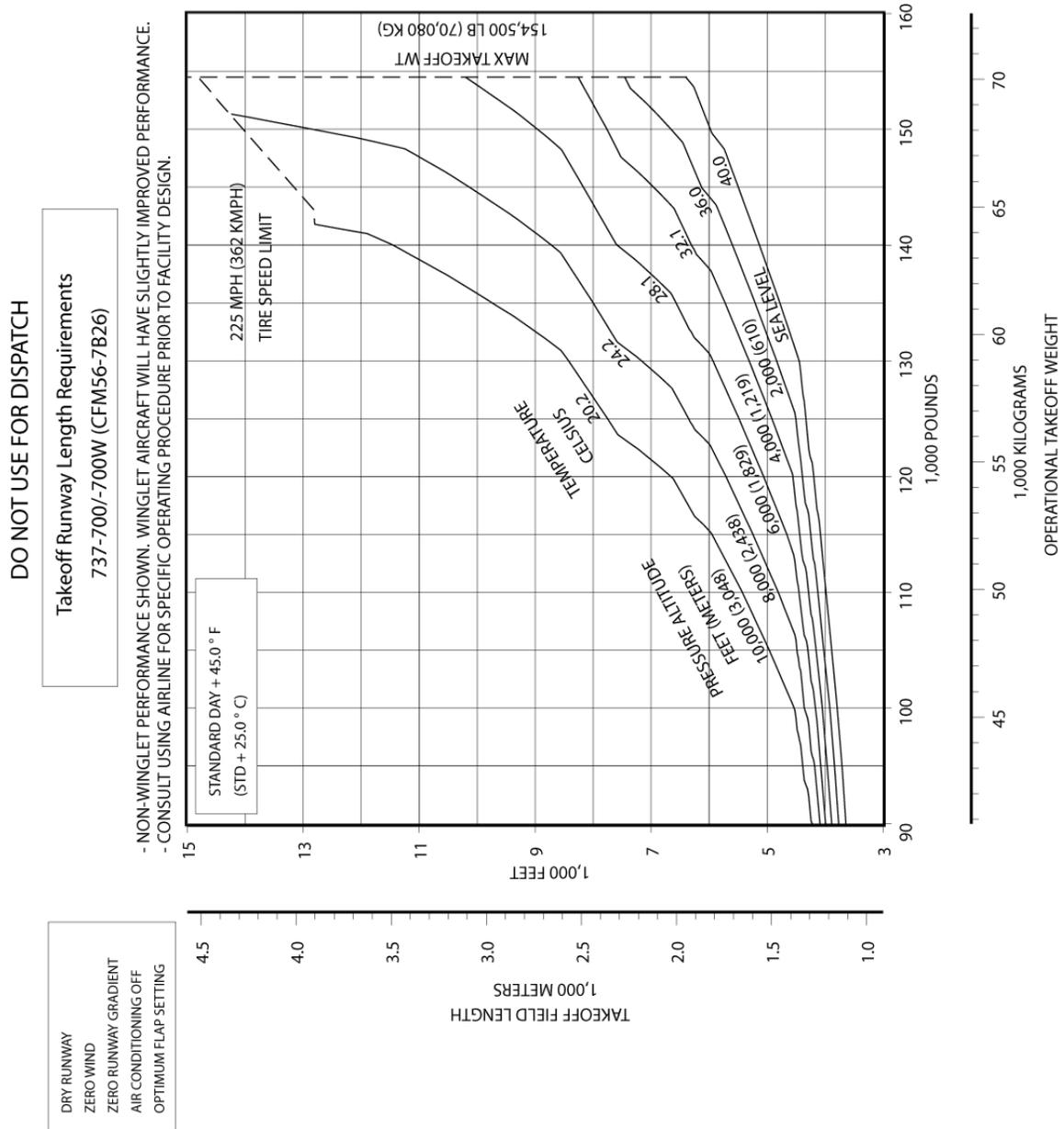
D6-58325-7

3.3.14 FAA/EASA Takeoff Runway Length Requirements - Standard Day, +27°F (STD + 15°C), Dry Runway: Model 737-700, -700W (CFM56-7B26 Engines at 26,000 LB SLST



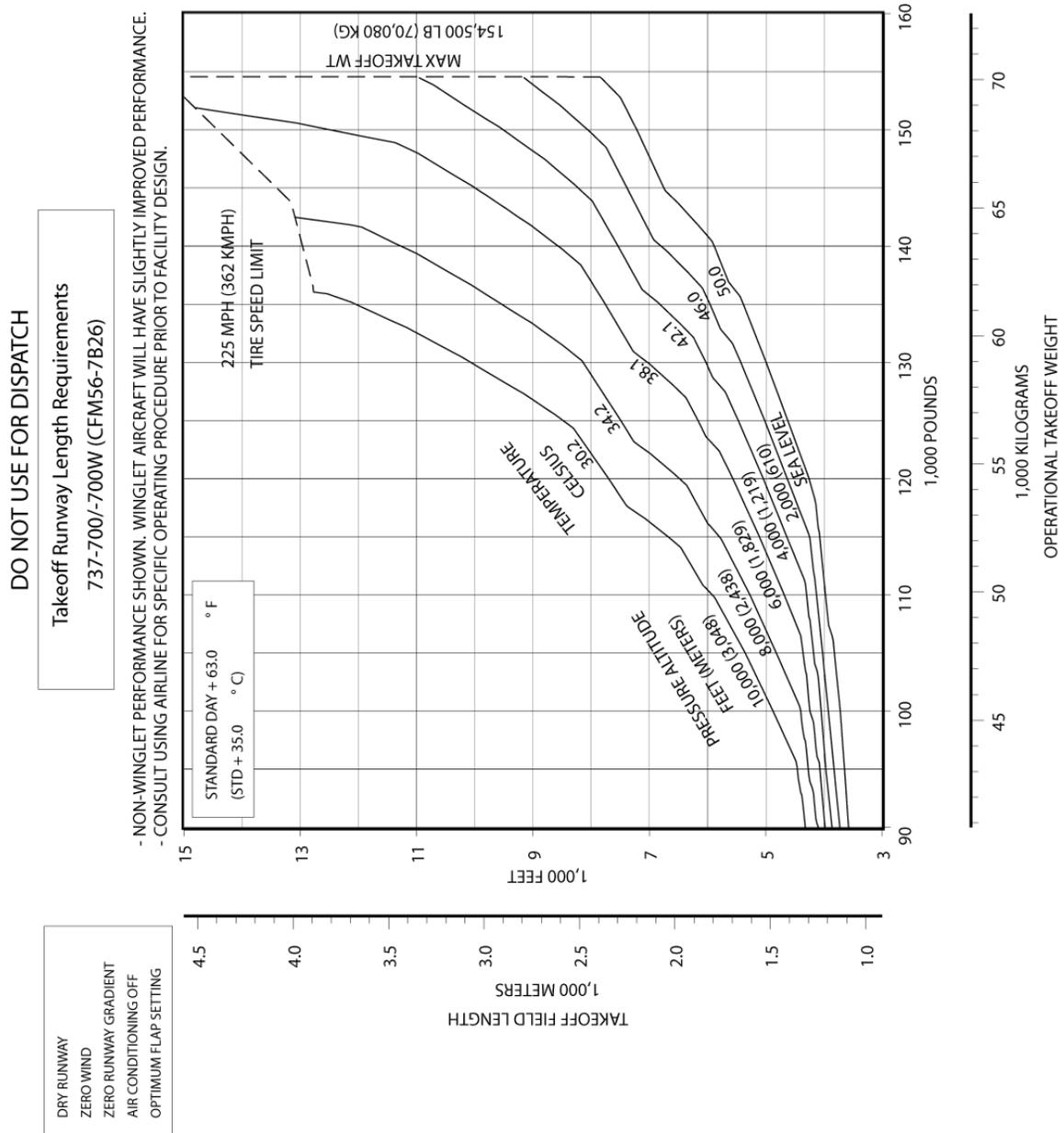
D6-58325-7

3.3.15 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-700, -700W (CFM56-7B26 Engines at 26,000 LB SLST)



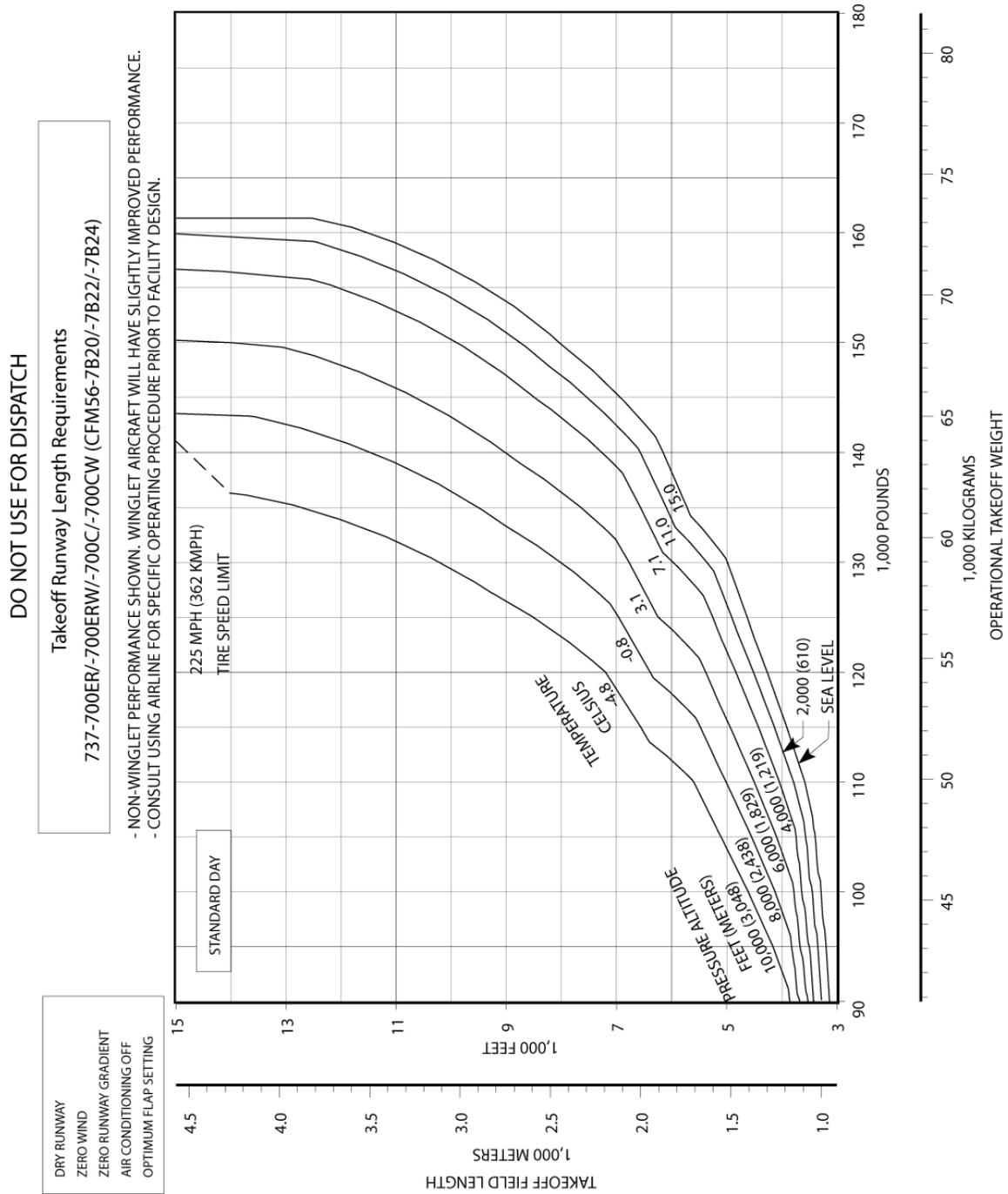
D6-58325-7

3.3.16 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-700, -700W (CFM56-7B26 Engines at 26,000 LB SLST)



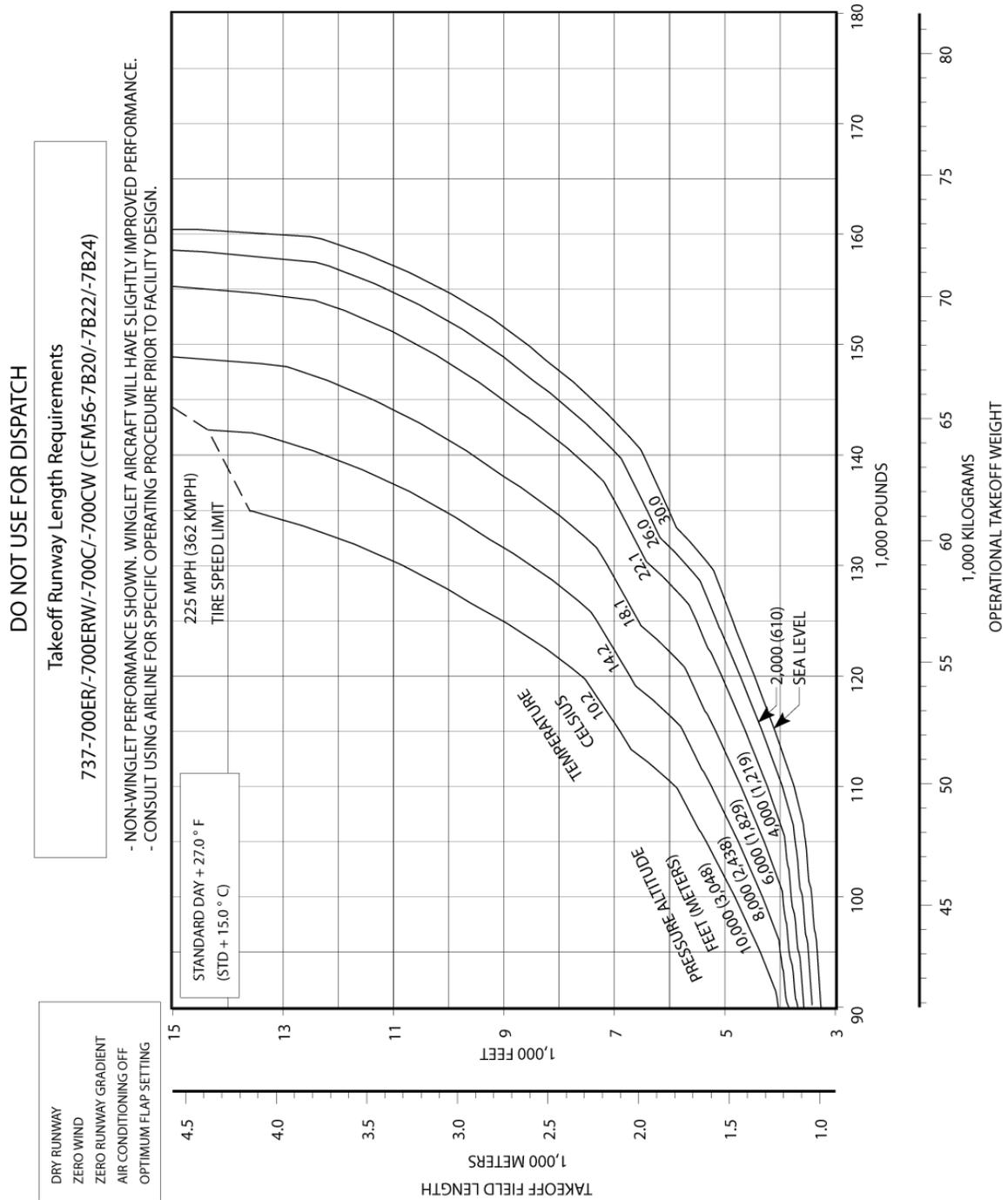
D6-58325-7

3.3.17 FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)

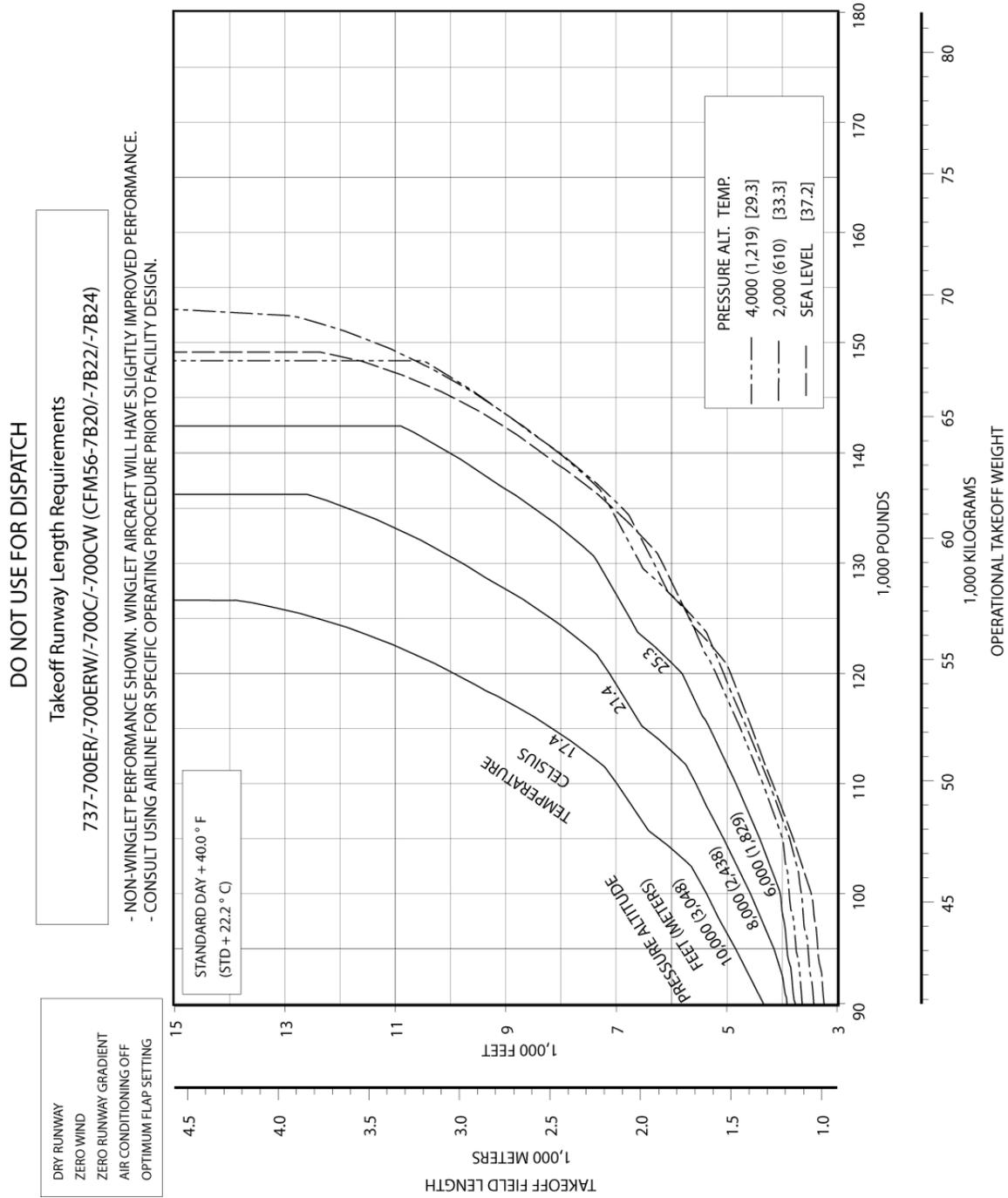


D6-58325-7

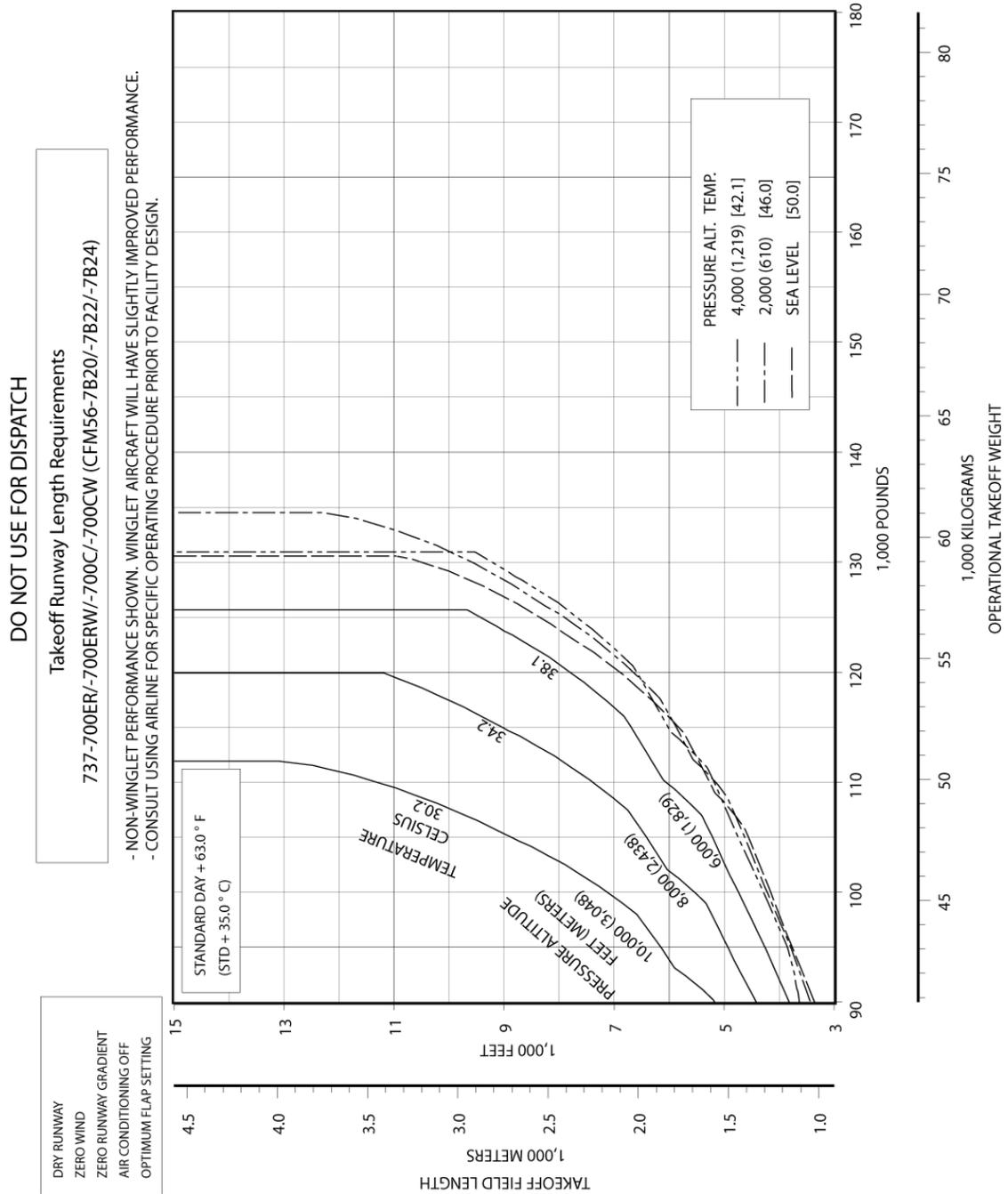
3.3.18 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW (CFM56-7B20/-7B22/-7B24)



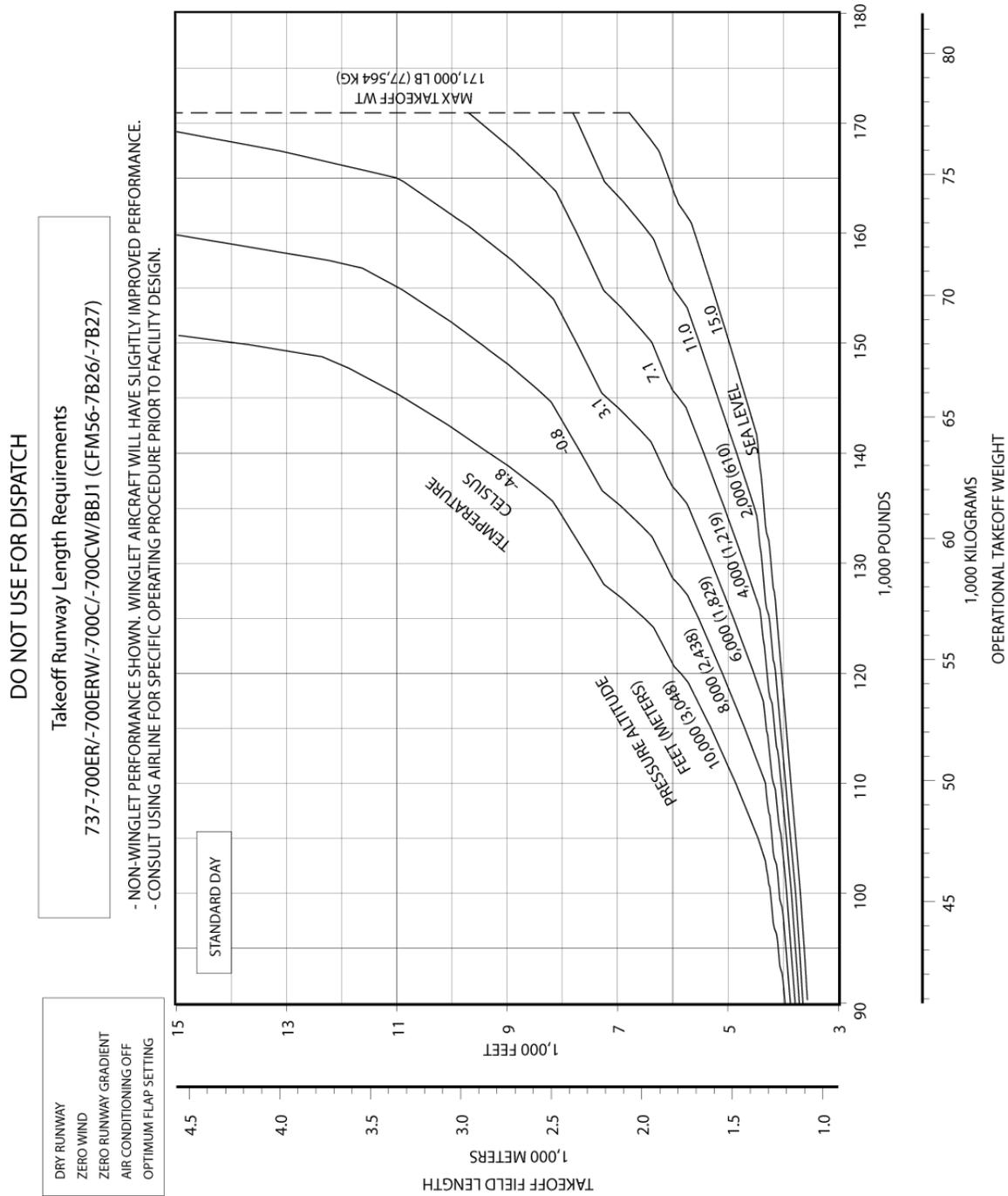
3.3.19 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 40°F (STD + 22.2°C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)



3.3.20 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW (CFM56-7B20/-7B22/-7B24 Engines at 20,000 LB SLST)

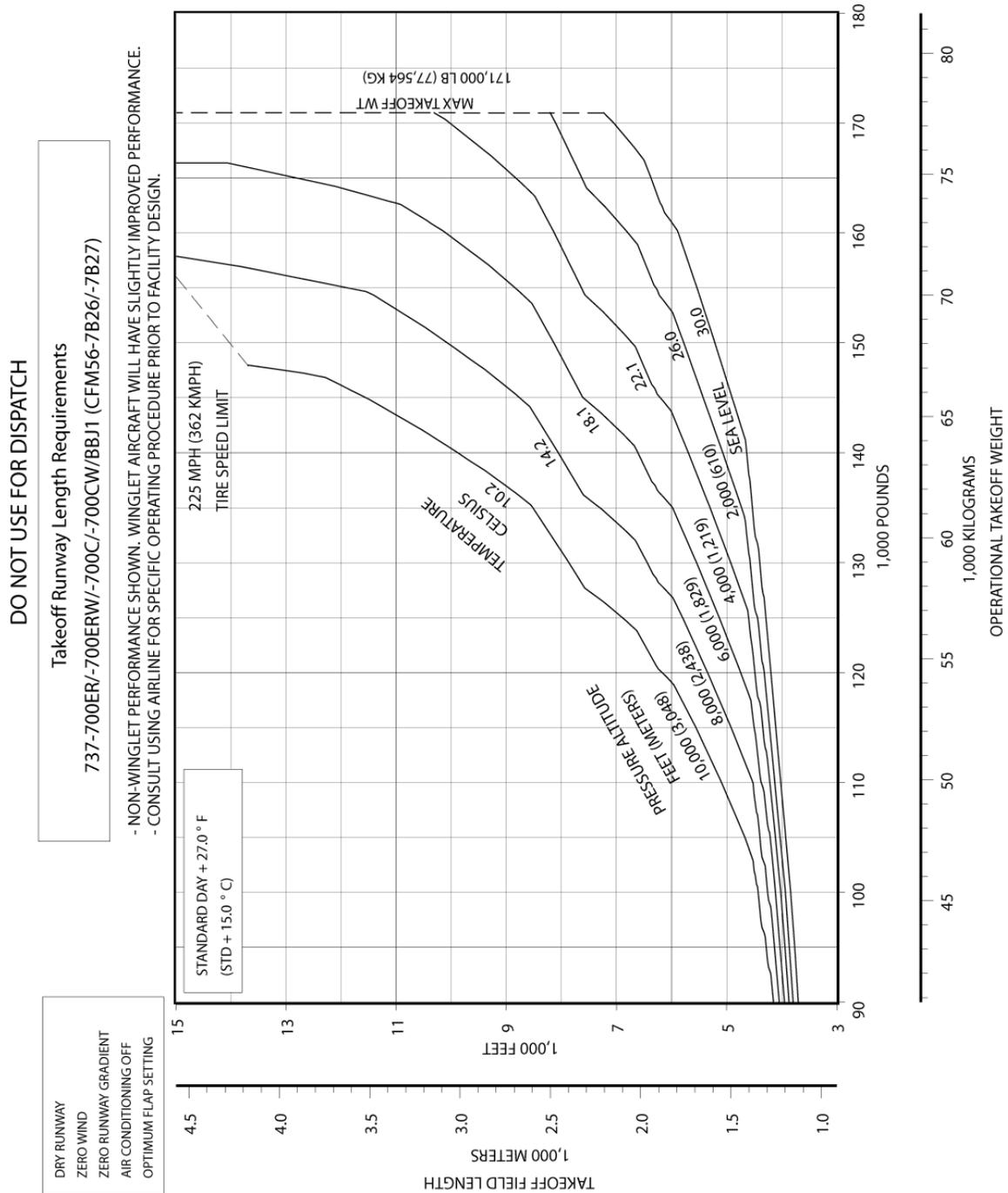


3.3.21 FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW, BBJ1 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)

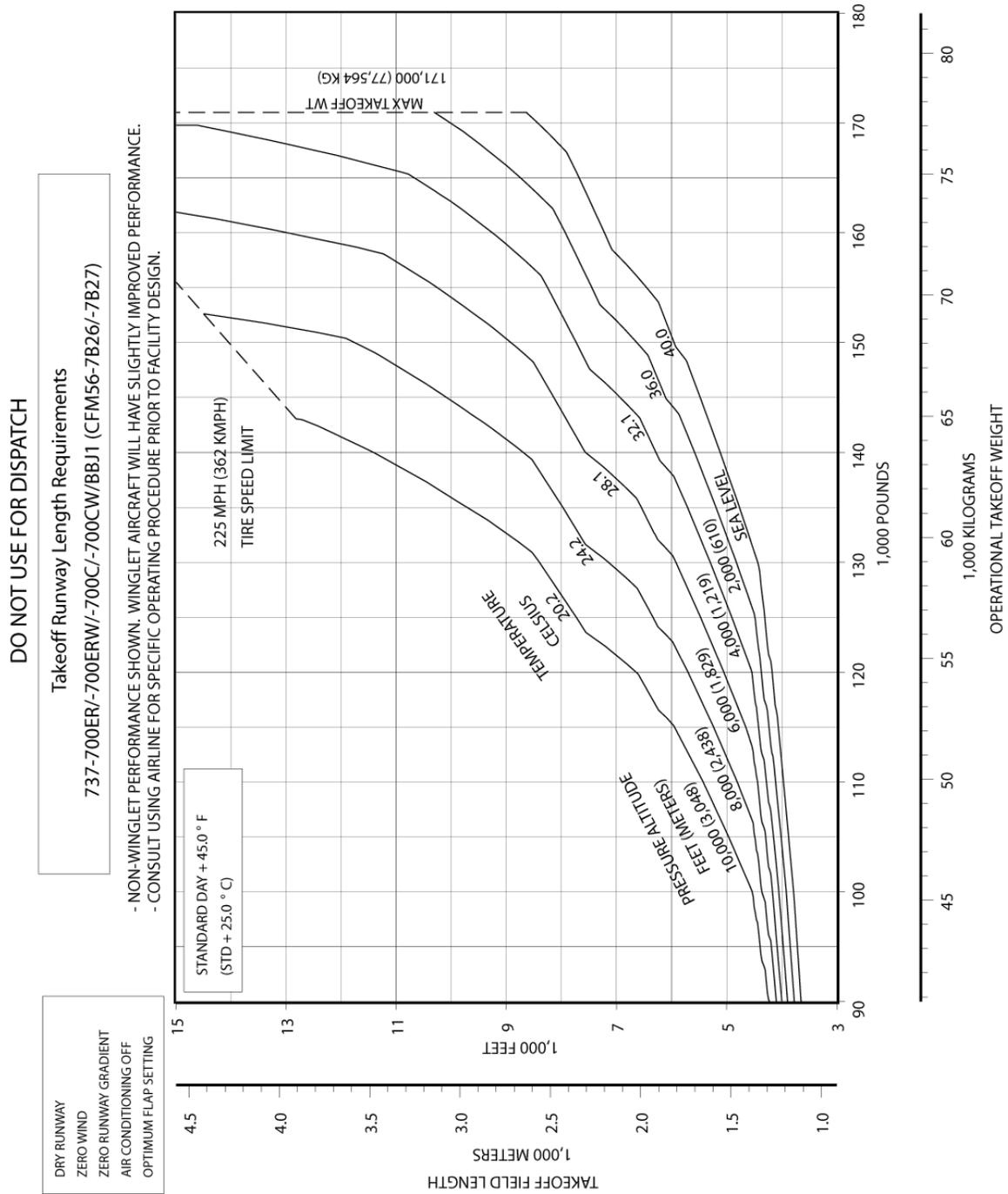


D6-58325-7

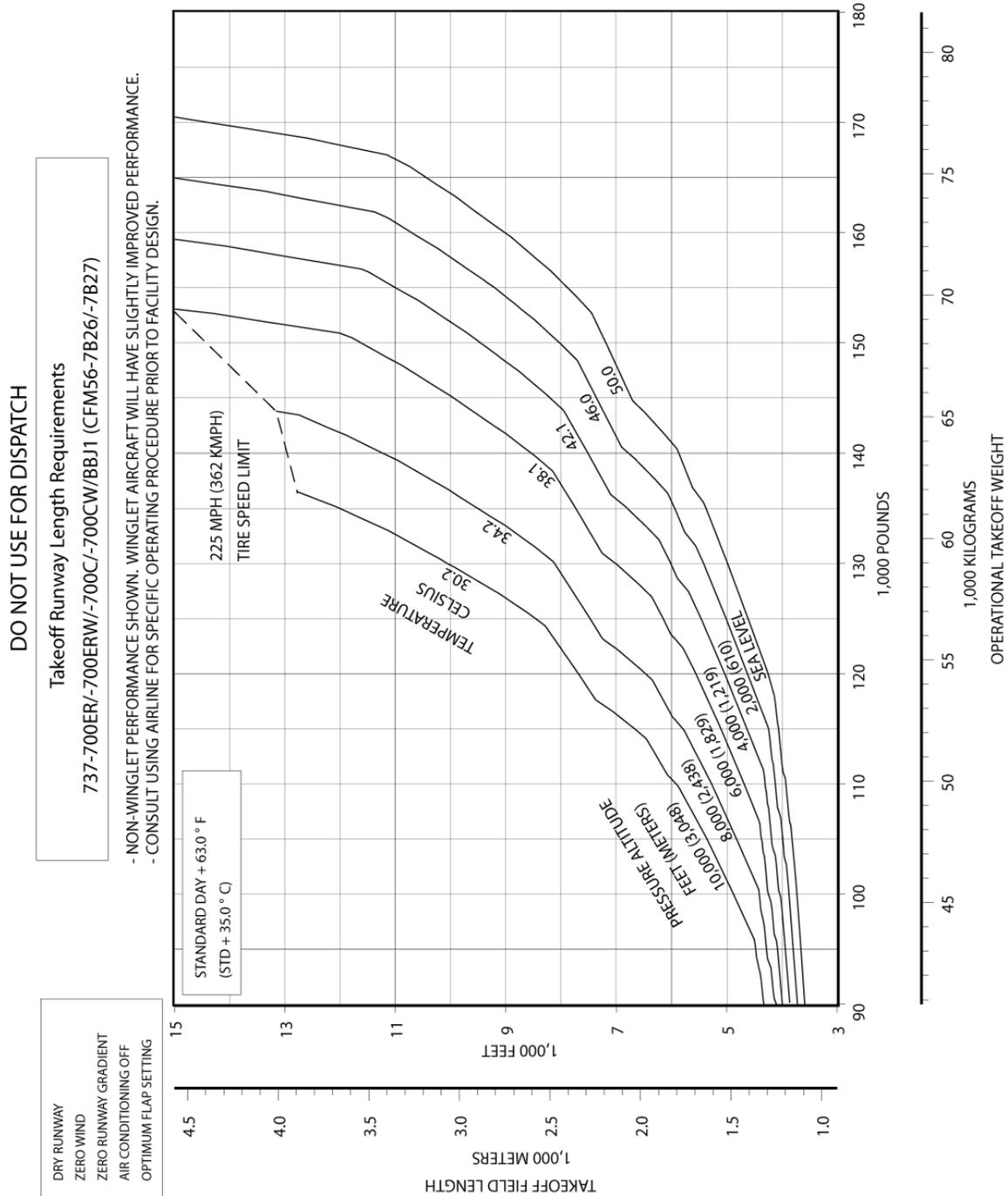
3.3.22 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW, BBJ1 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)



3.3.23 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW, BBJ1 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)



3.3.24 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-700ER, -700ERW, -700C, -700CW, BBJ1 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)



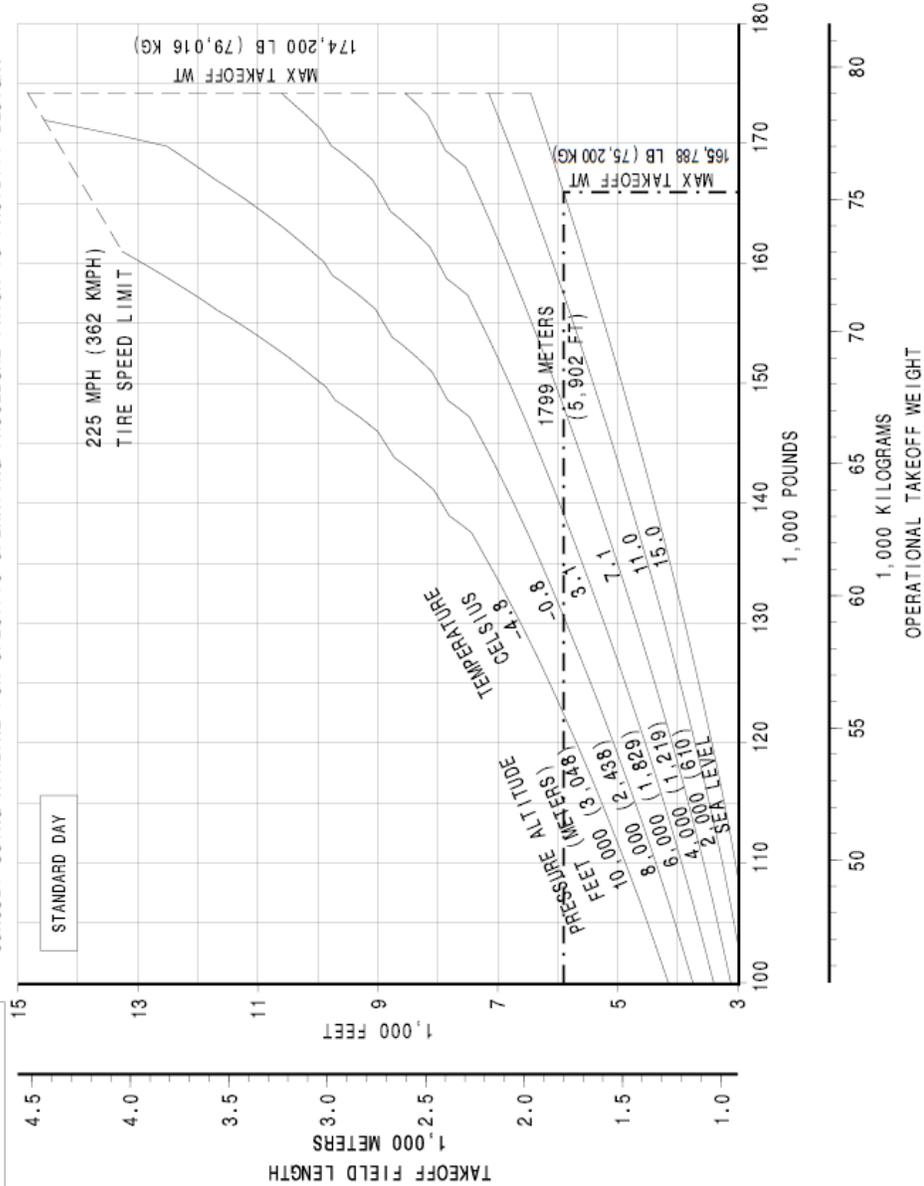
3.3.25 FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B27-B1 Engine at 26,000 LB SLST)

DO NOT USE FOR DISPATCH

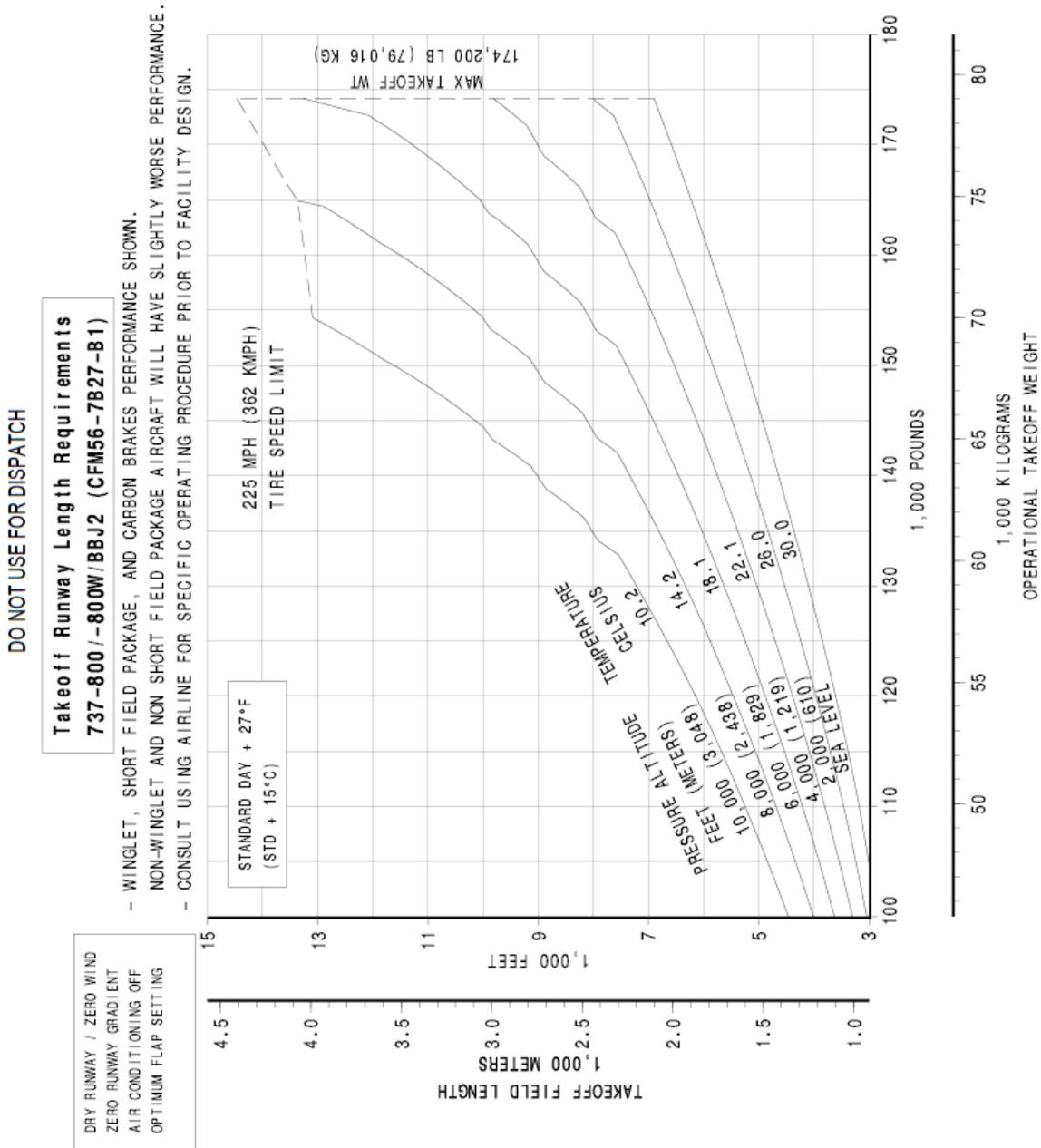
Takeoff Runway Length Requirements 737-800 / -800W/BBJ2 (CFM56-7B27-B1)

DRY RUNWAY / ZERO WIND
ZERO RUNWAY GRADIENT
AIR CONDITIONING OFF
OPTIMUM FLAP SETTING

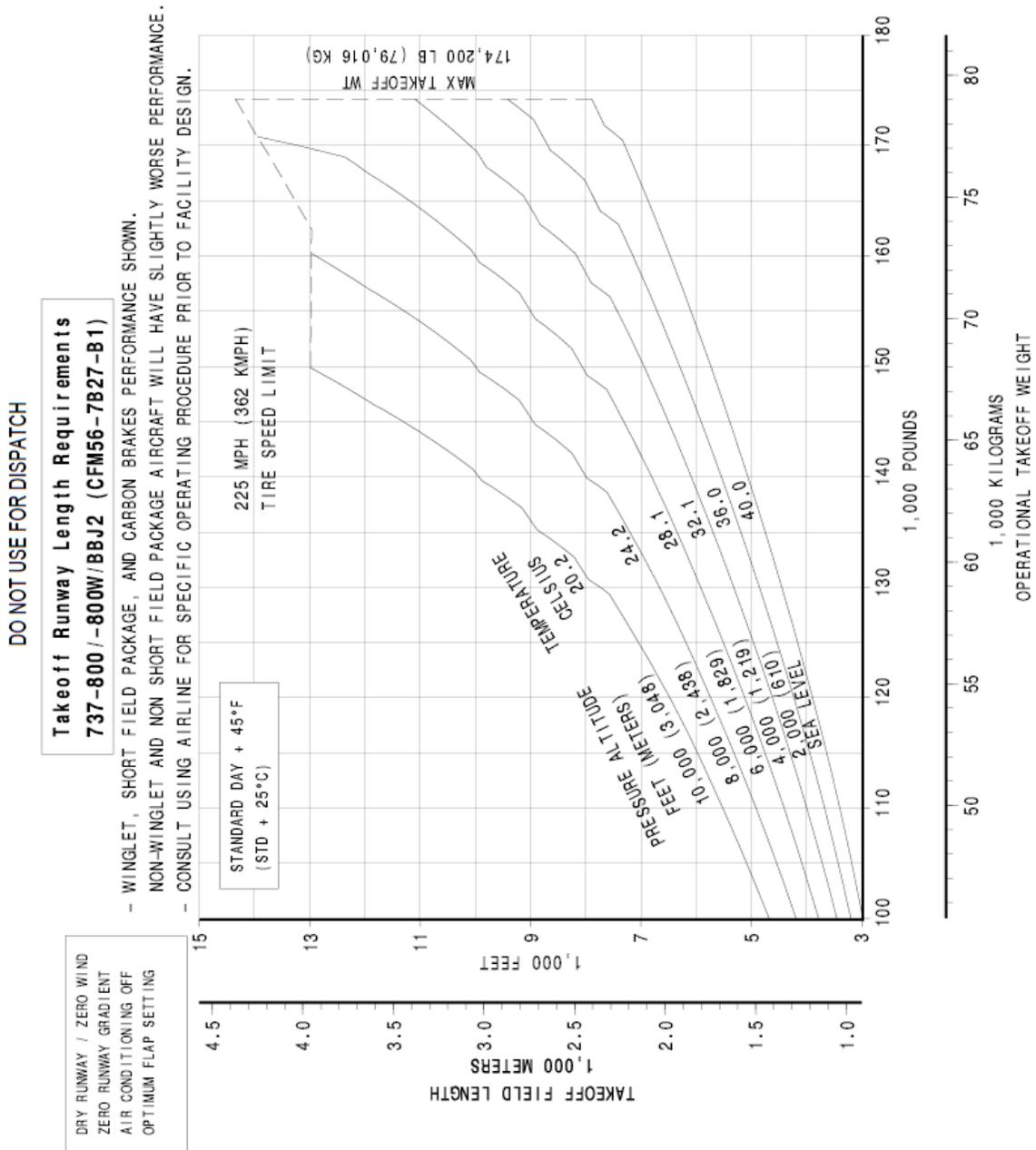
- WINGLET, SHORT FIELD PACKAGE, AND CARBON BRAKES PERFORMANCE SHOWN.
- NON-WINGLET AND NON SHORT FIELD PACKAGE AIRCRAFT WILL HAVE SLIGHTLY WORSE PERFORMANCE.
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN.



3.3.26 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B27-B1 Engine at 26,000 LB SLST)

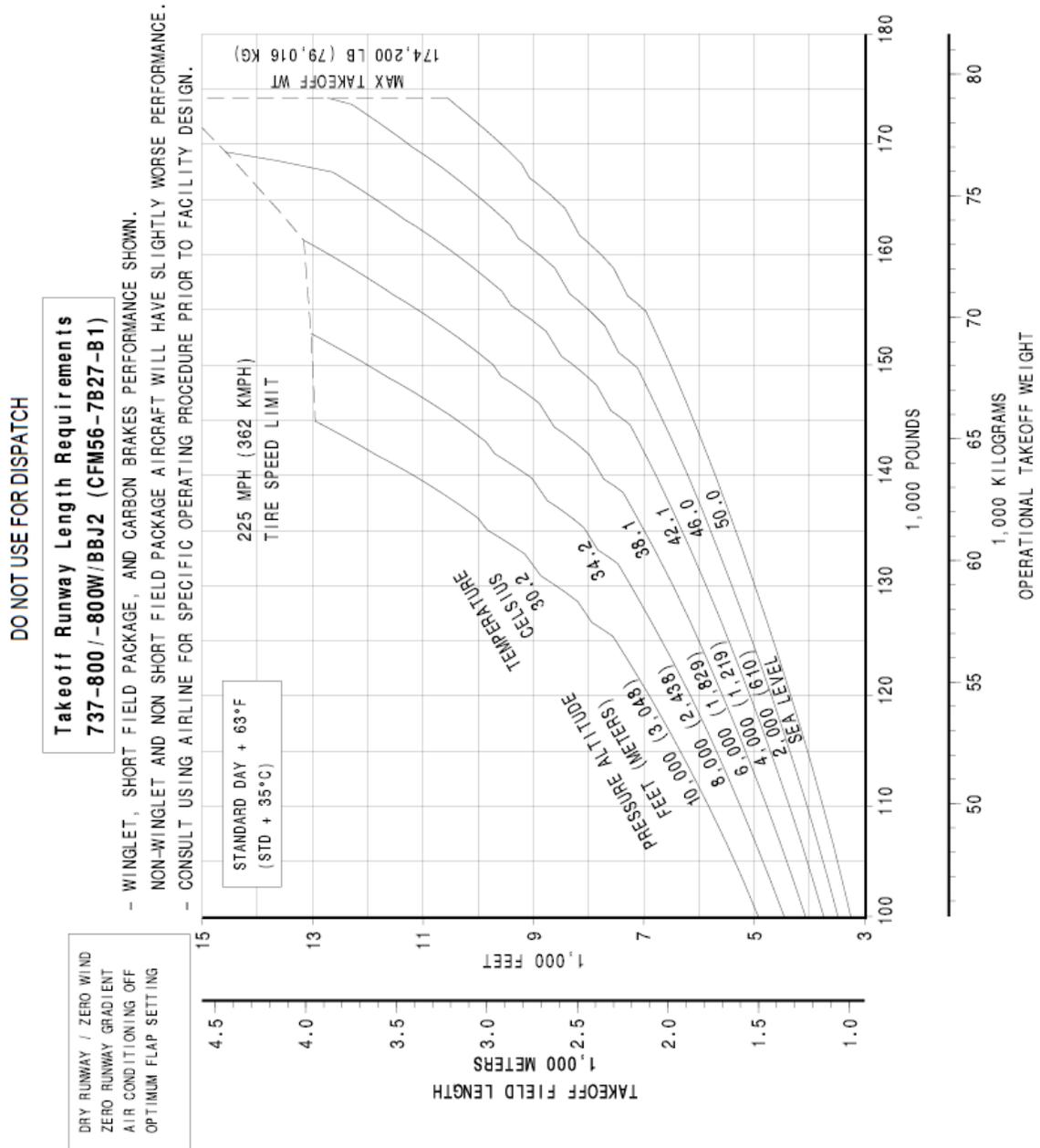


3.3.27 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B27-B1 Engine at 26,000 LB SLST)

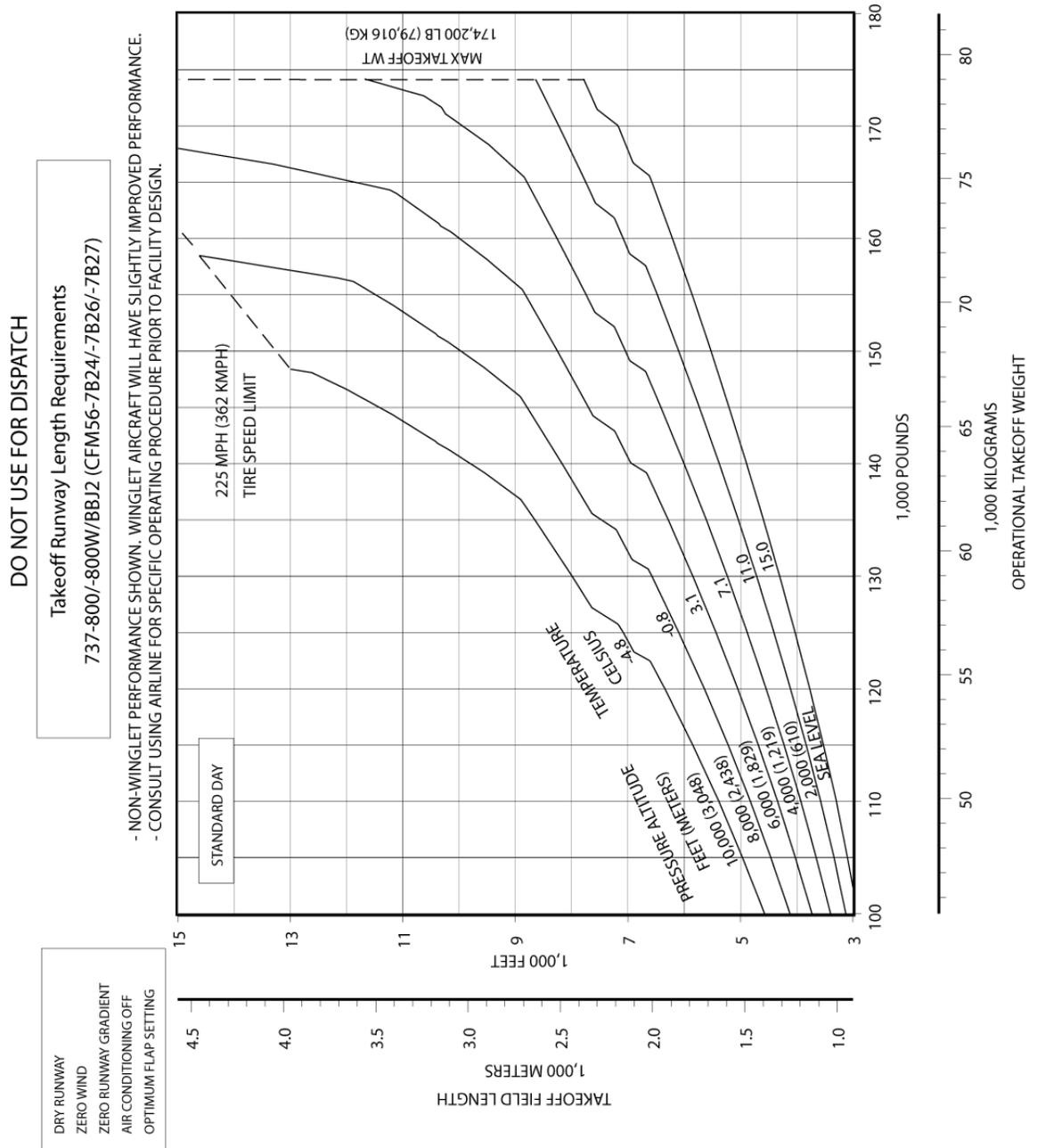


D6-58325-7

3.3.28 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35°C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B27-B1 Engine at 26,000 LB SLST)

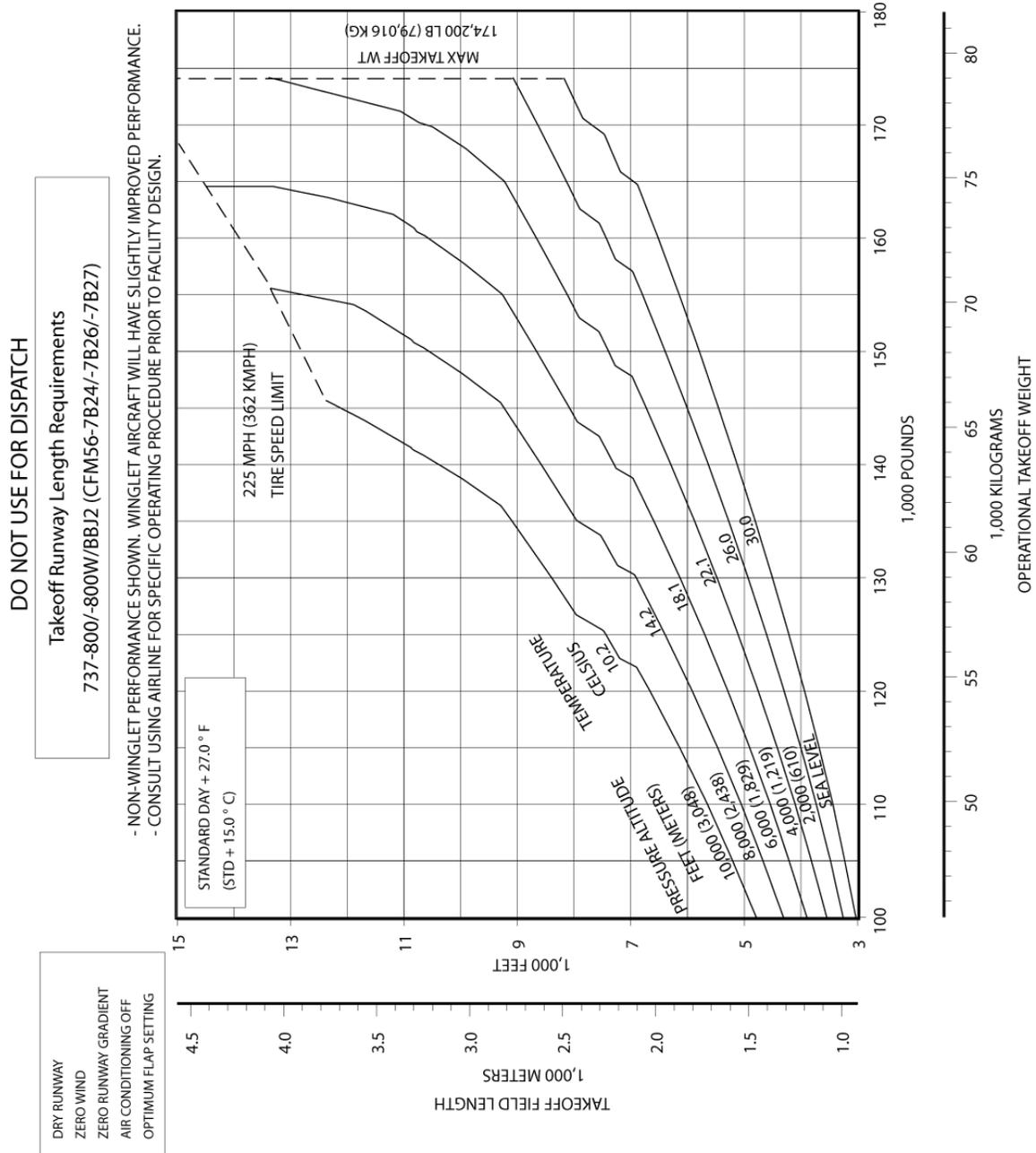


3.3.29 FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B24/-7B26/-7B27 Engines at 26,000 LB SLST)



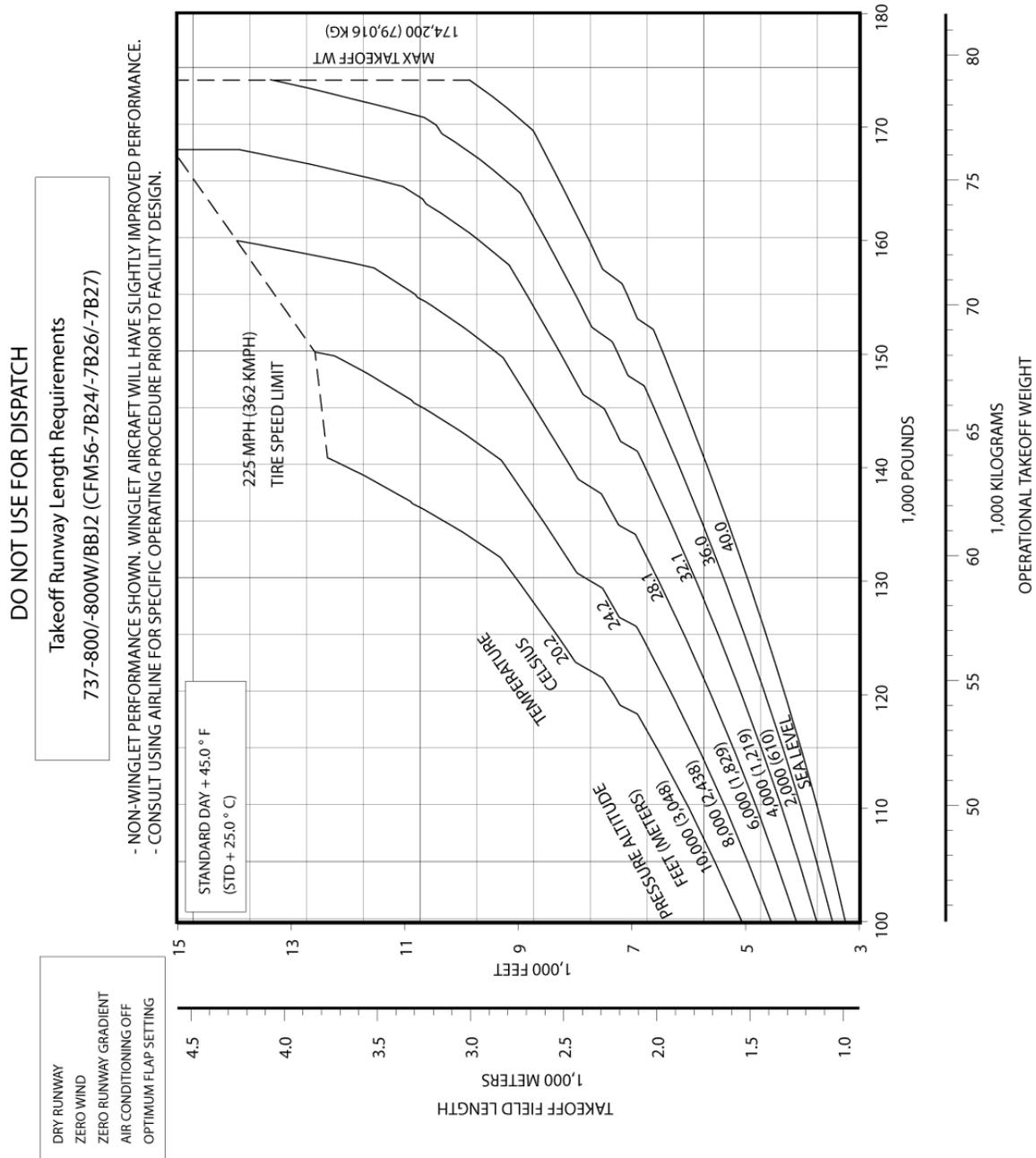
D6-58325-7

3.3.30 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B24/-7B26/-7B27 Engines at 26,000 LB SLST)

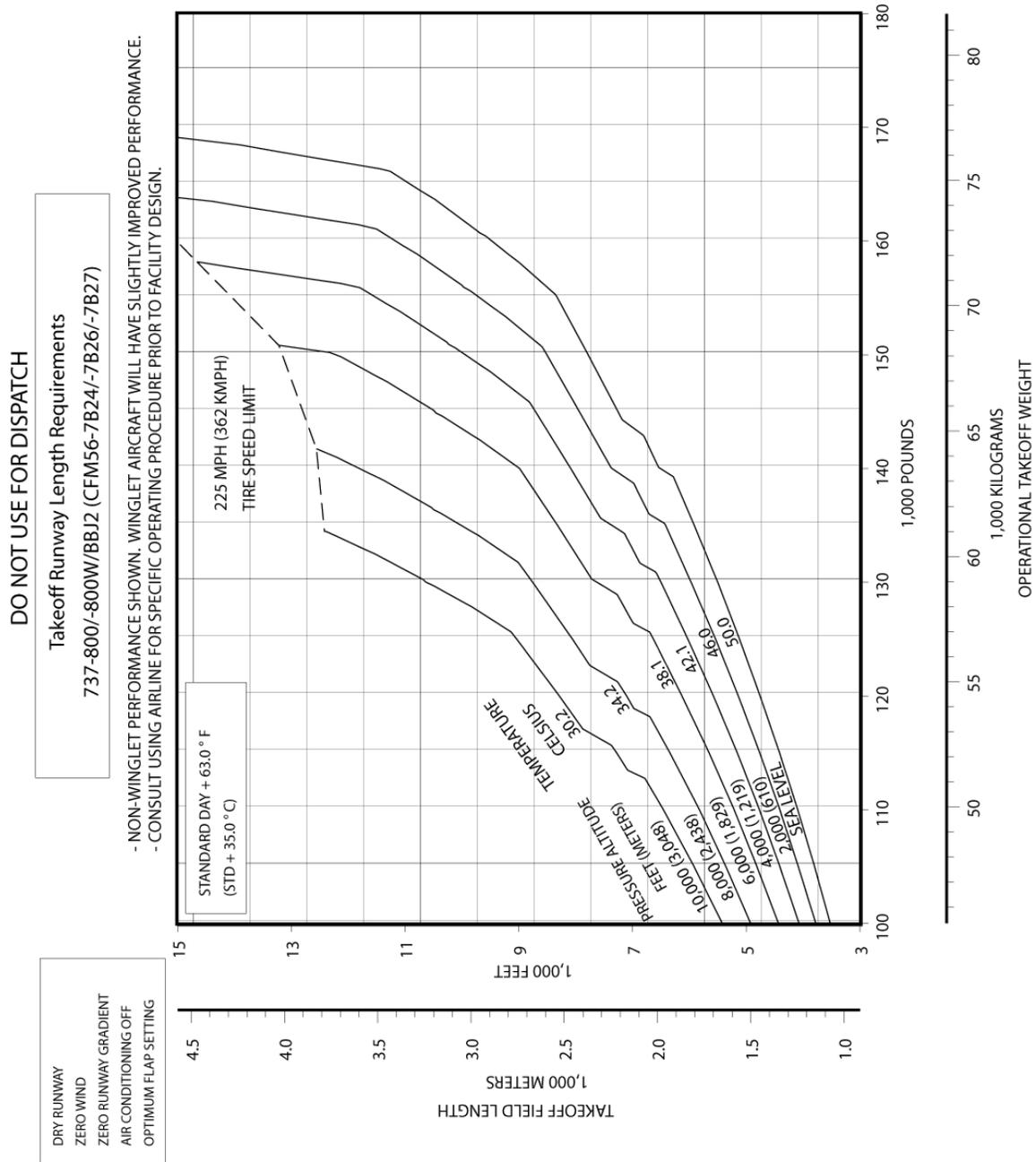


D6-58325-7

3.3.31 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B24/-7B26/-7B27 Engines at 26,000 LB SLST)

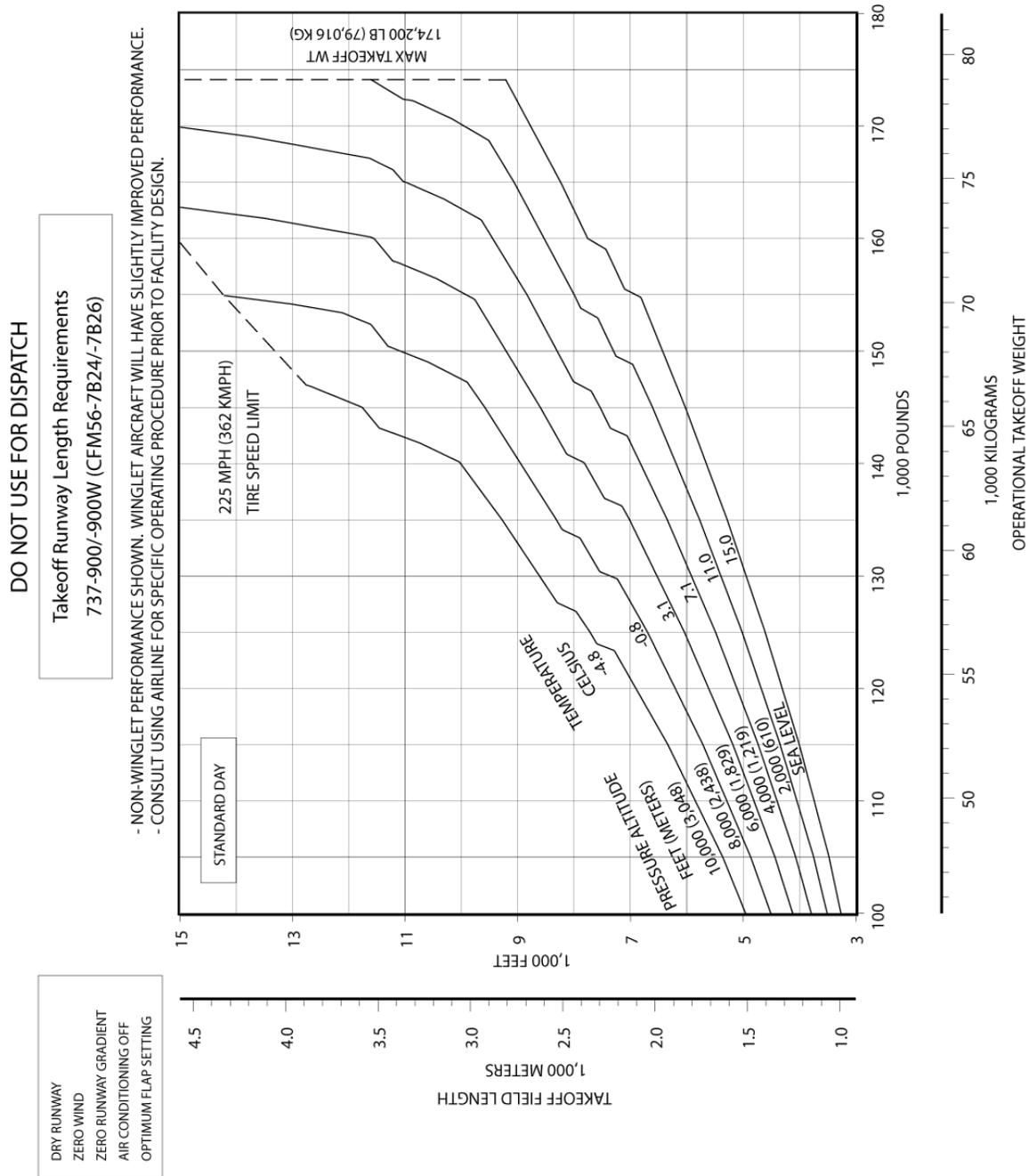


3.3.32 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-800, -800W, BBJ2, -800BCF (CFM56-7B24/-7B26/-7B27 Engines at 26,000 LB SLST)

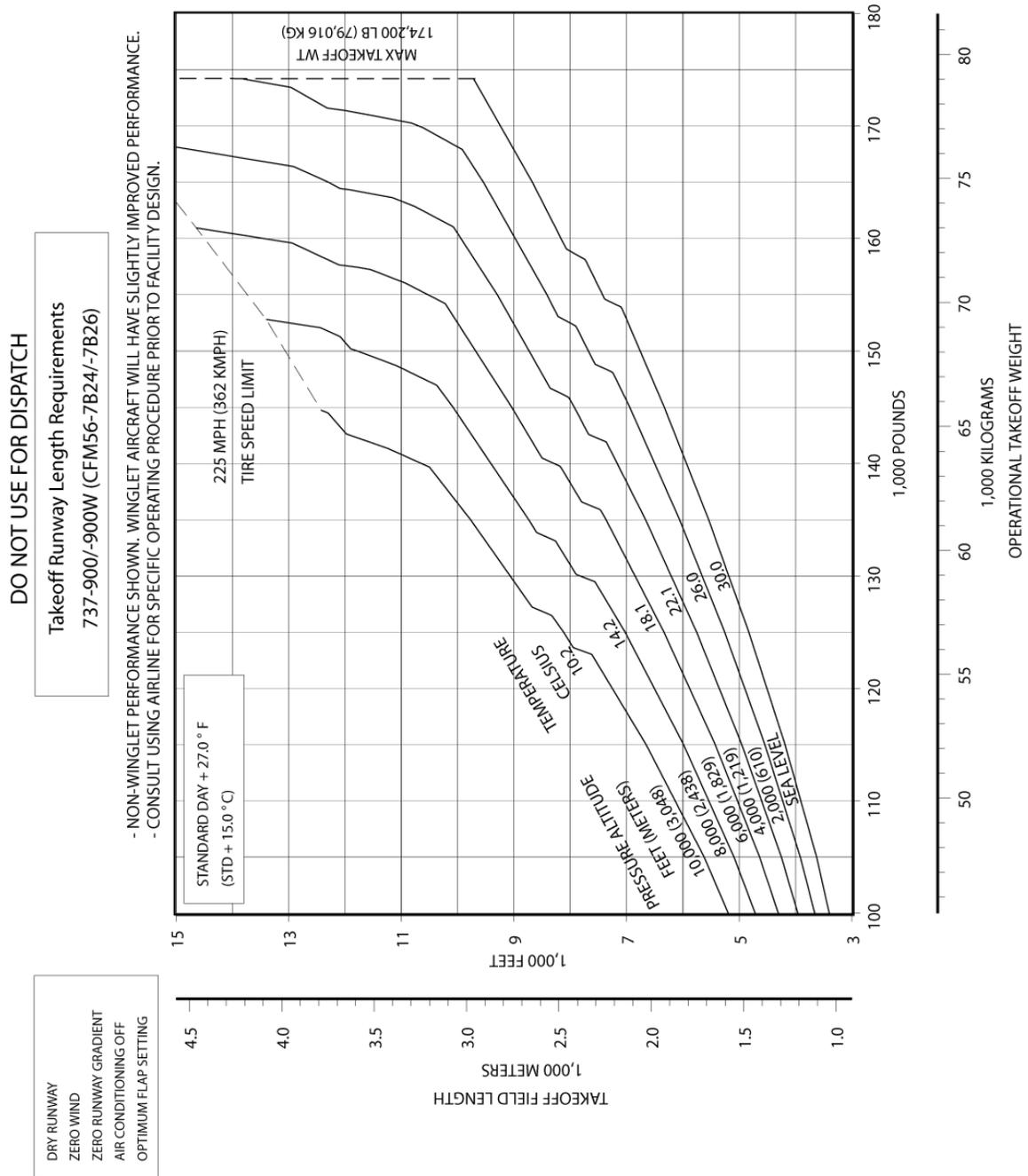


D6-58325-7

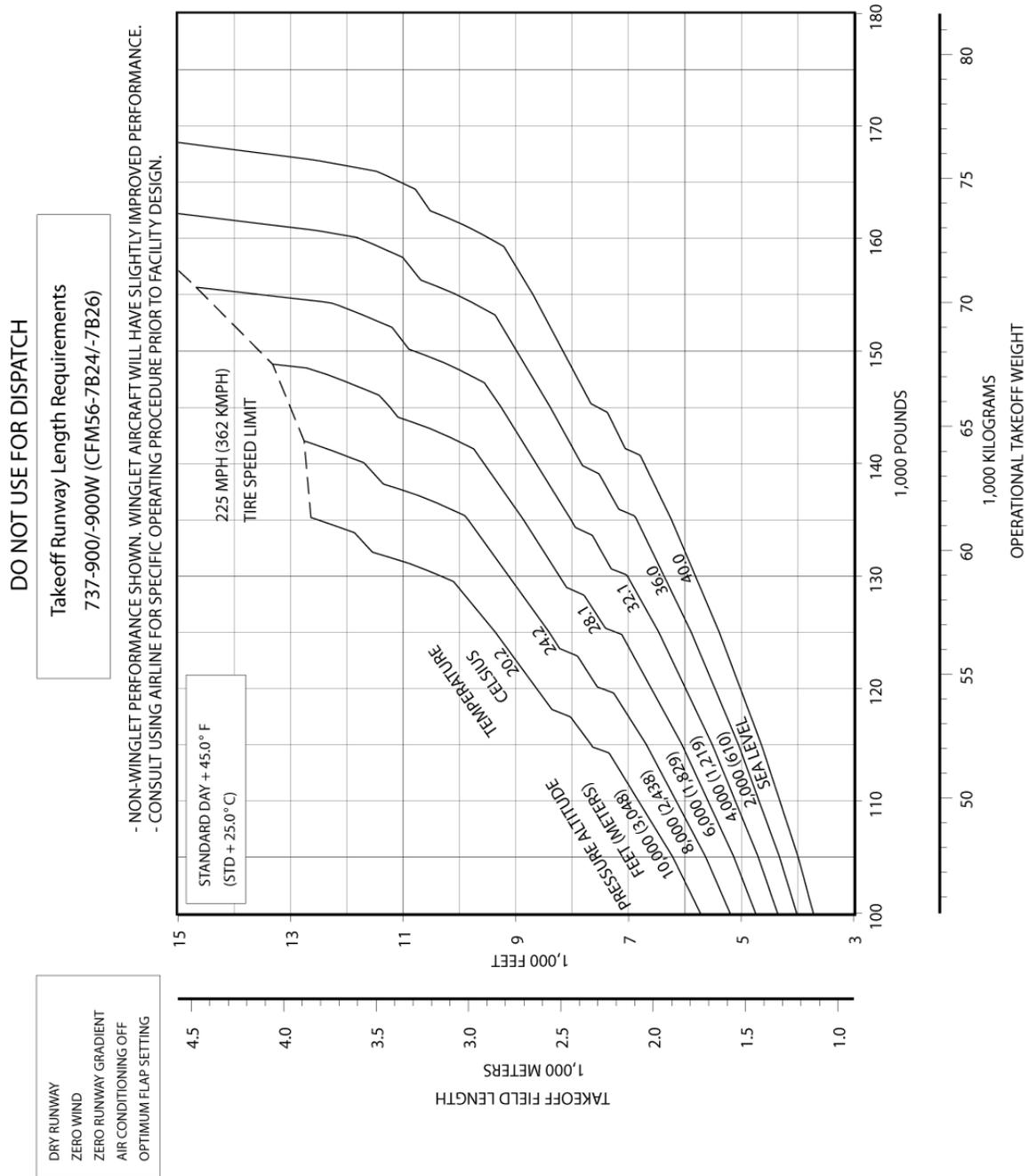
3.3.33 FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-900, -900W (CFM56-7B24/-7B26 Engines at 24,000 LB SLST)



3.3.34 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-900, -900W (CFM56-7B24/-7B26 Engines at 24,000 LB SLST)

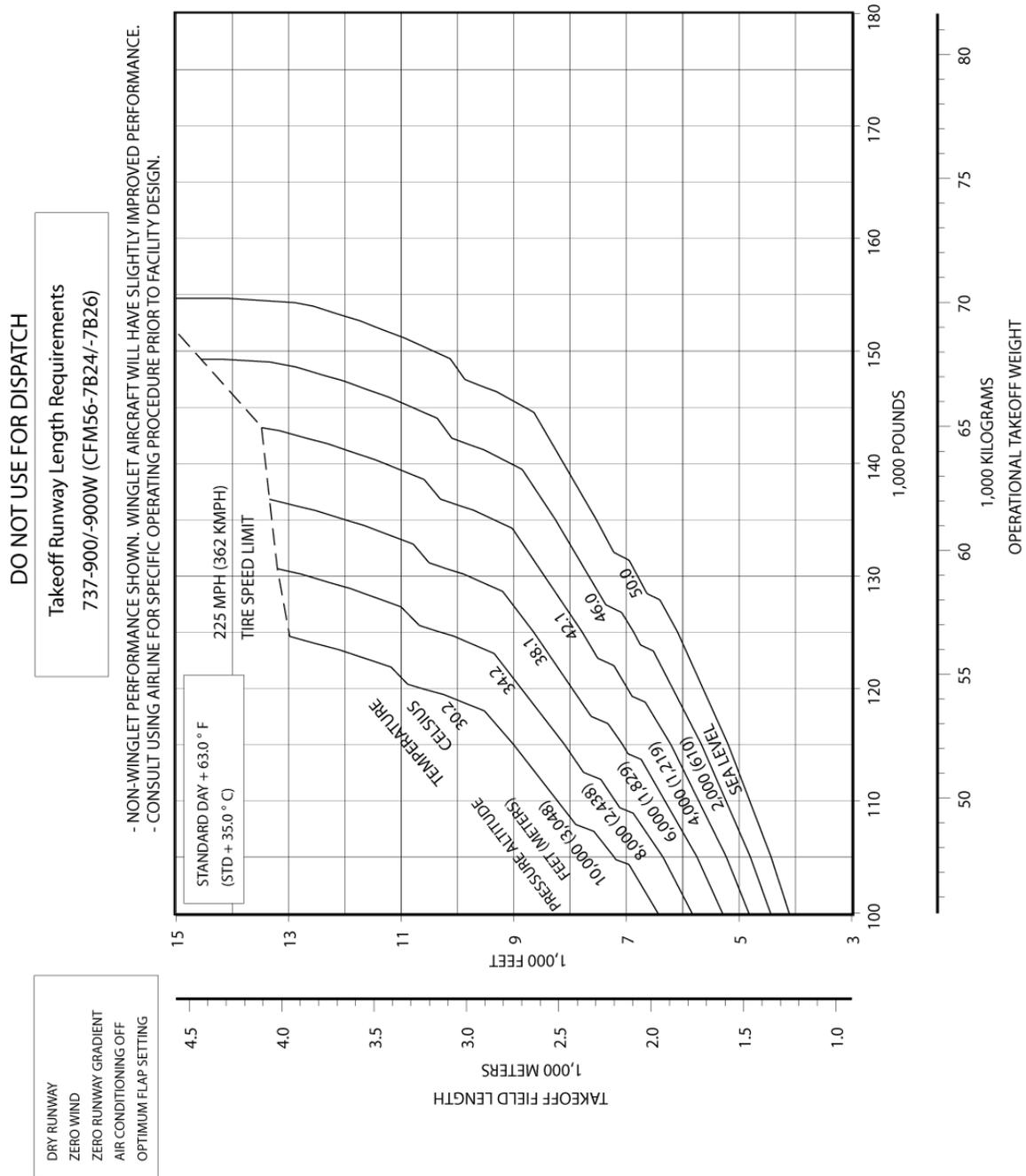


3.3.35 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-900, -900W (CFM56-7B24/-7B26 Engines at 24,000 LB SLST)



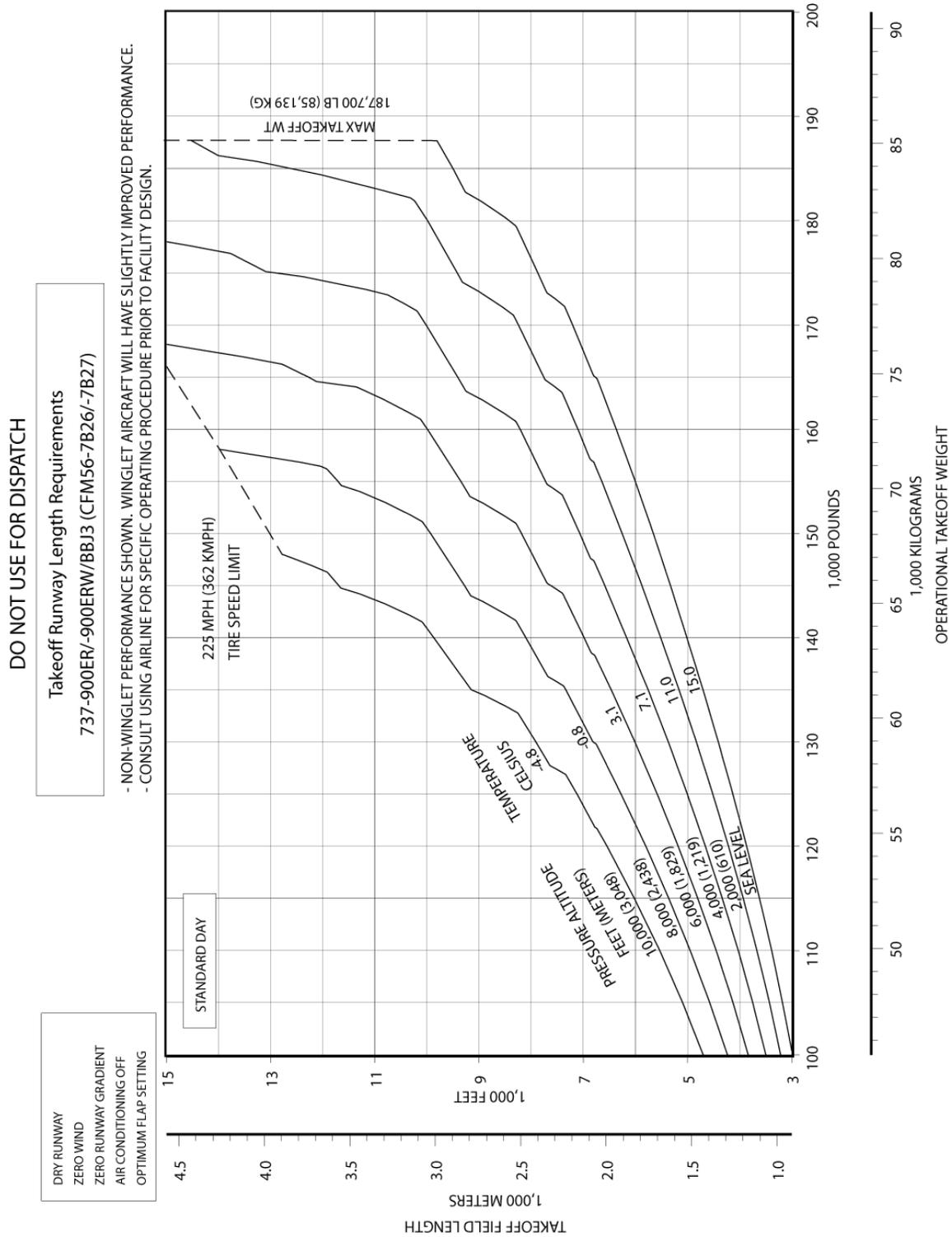
D6-58325-7

3.3.36 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-900, -900W (CFM56-7B24/-7B26) Engines at 24,000 LB SLST



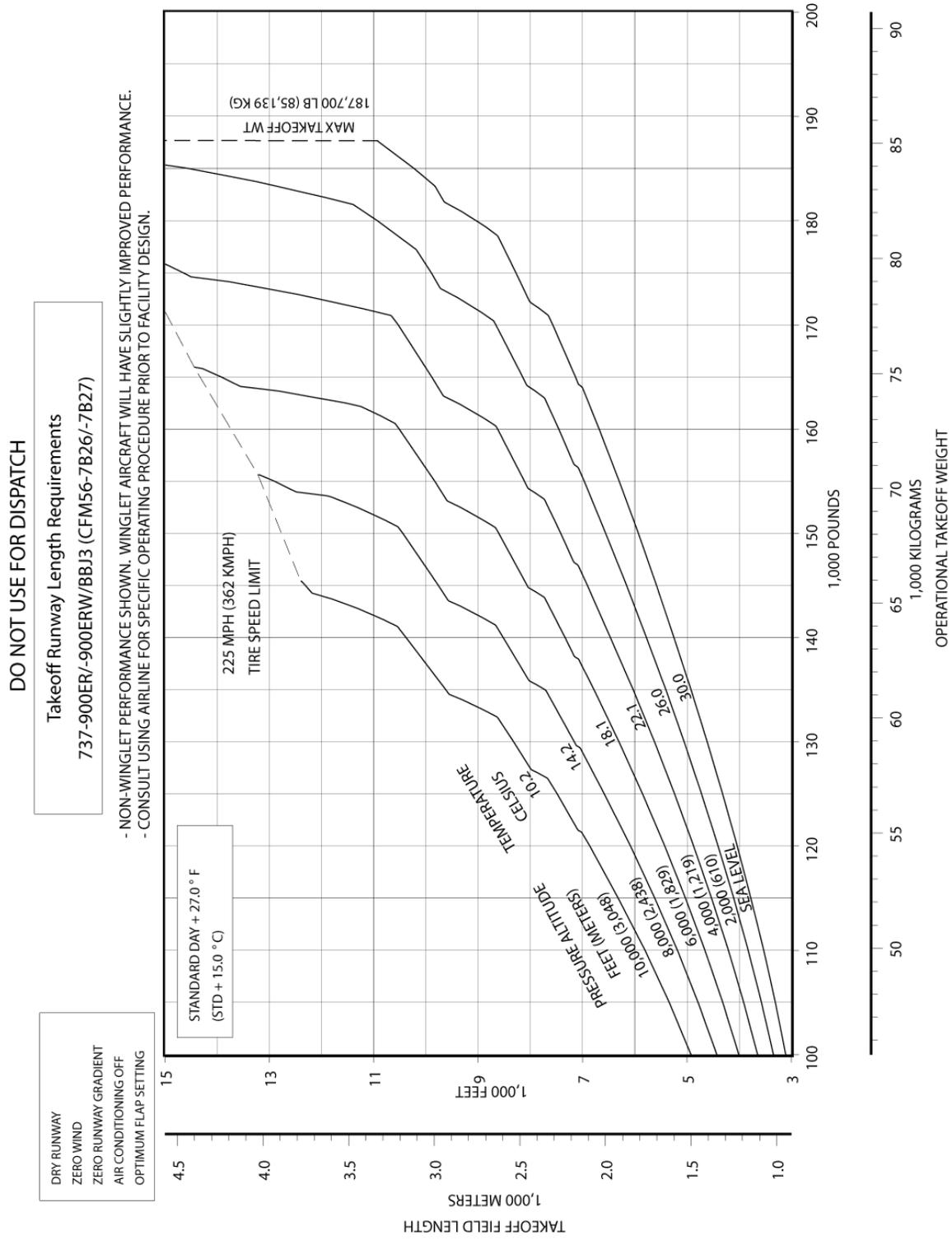
D6-58325-7

3.3.37 FAA/EASA Takeoff Runway Length Requirements - Standard Day, Dry Runway: Model 737-900ER, -900ERW, BBJ3 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)



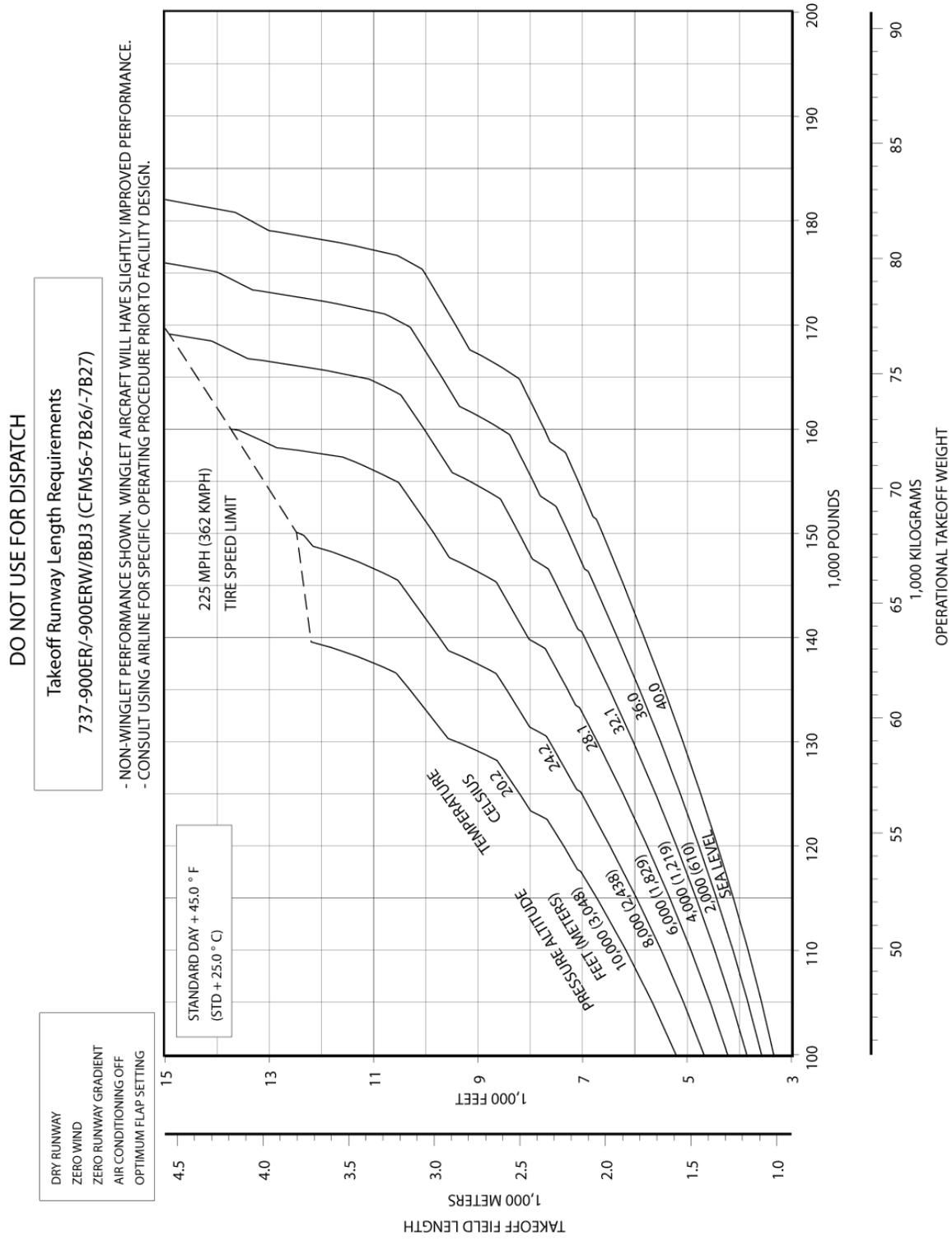
D6-58325-7

3.3.38 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 27°F (STD + 15°C), Dry Runway: Model 737-900ER, -900ERW, BBJ3 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)

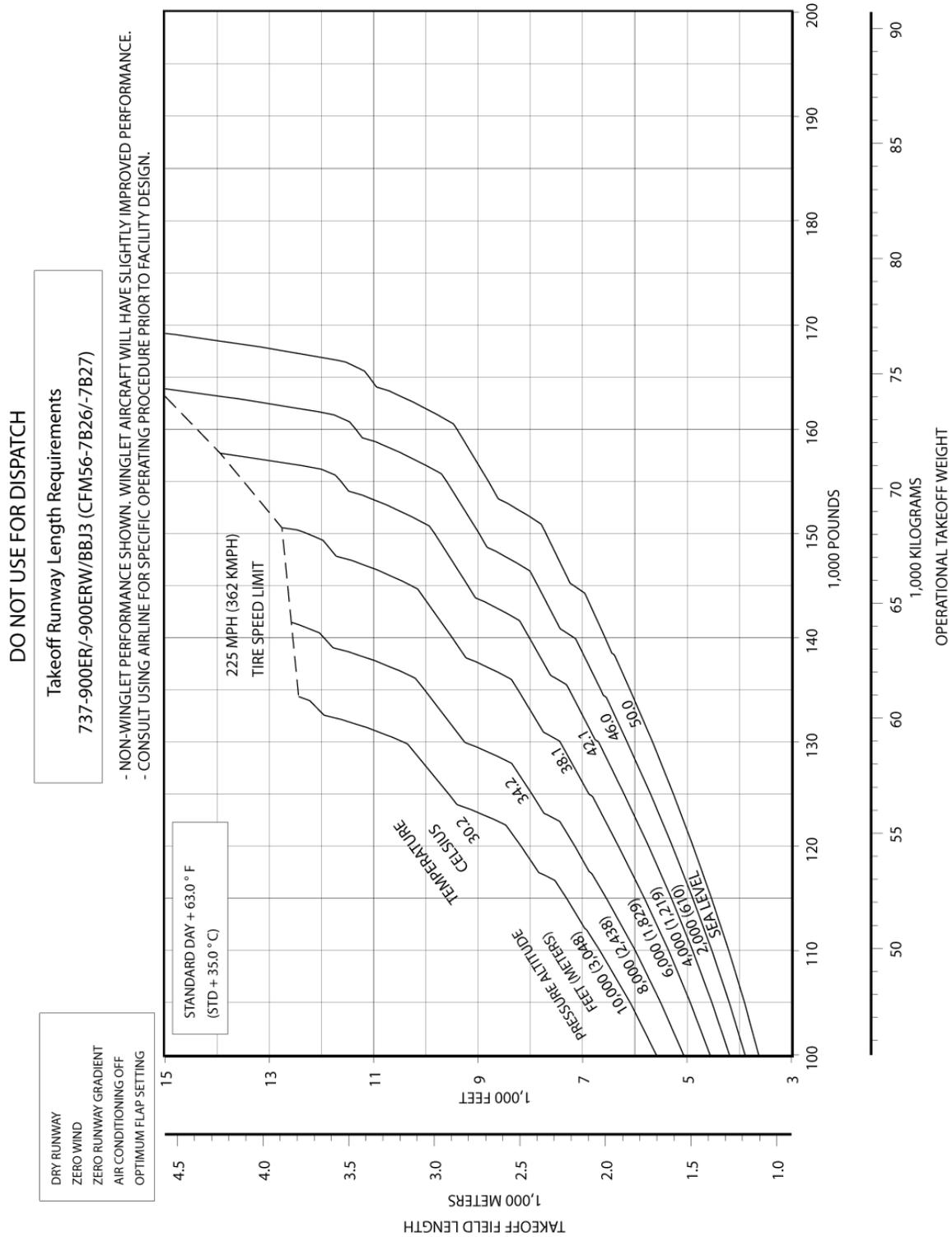


D6-58325-7

3.3.39 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 45°F (STD + 25°C), Dry Runway: Model 737-900ER, -900ERW, BBJ3 (CFM56-7B26/-7B27 Engines at 26,000 LB SLST)



3.3.40 FAA/EASA Takeoff Runway Length Requirements - Standard Day + 63°F (STD + 35 °C), Dry Runway: Model 737-900ER, -900ERW, BBJ3 (CFM56-7B26/-7B27 Engines at 6,000 LB SLST)



D6-58325-7

3.3.41 ICAO Aerodrome Reference Code – All Models

The airplane is certified to operate up to its maximum takeoff weight (MTOW). The airplane flight manual provides field length requirements up to MTOW. The airplane reference code can vary for some models based on the airplane takeoff weight up to MTOW.

The following table shows the ICAO Aerodrome Reference Code classification for all models.

AIRPLANE MODEL	TAKEOFF WEIGHT LB (KG)	AERODROME REFERENCE CODE
737-600	145,500 (65,997)	3C
737-700	154,500 (70,080)	3C
737-800	165,788 (75,200)	3C
737-800	174,200 (79,016)	4C
737-900	143,400 (65,000)	3C
737-900	174,200 (79,016)	4C

The reference takeoff weights are given for information only and not intended for dispatch purposes. Consult airline for specific operating procedures prior to facility design.

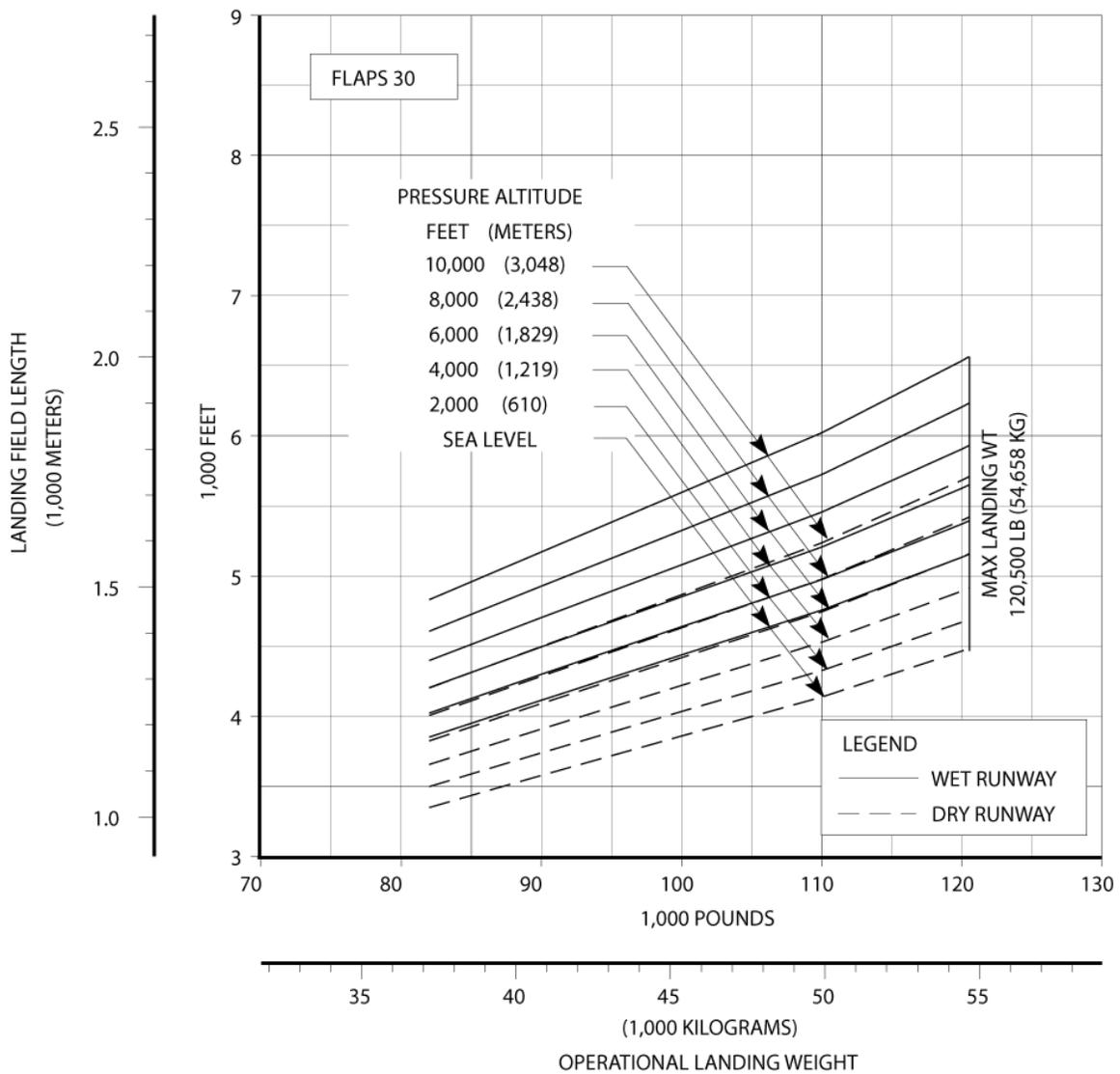
3.4 FAA/EASA LANDING RUNWAY LENGTH REQUIREMENTS

3.4.1 FAA/EASA Landing Runway Length Requirements - Flaps 30: Model 737-600

DO NOT USE FOR DISPATCH

Landing Field Length
737-600 (CFM56-7B Series)

- STANDARD DAY, ZERO WIND
- AUTO SPOILERS OPERATIVE
- ANTI-SKID OPERATIVE
- ZERO RUNWAY GRADIENT
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN



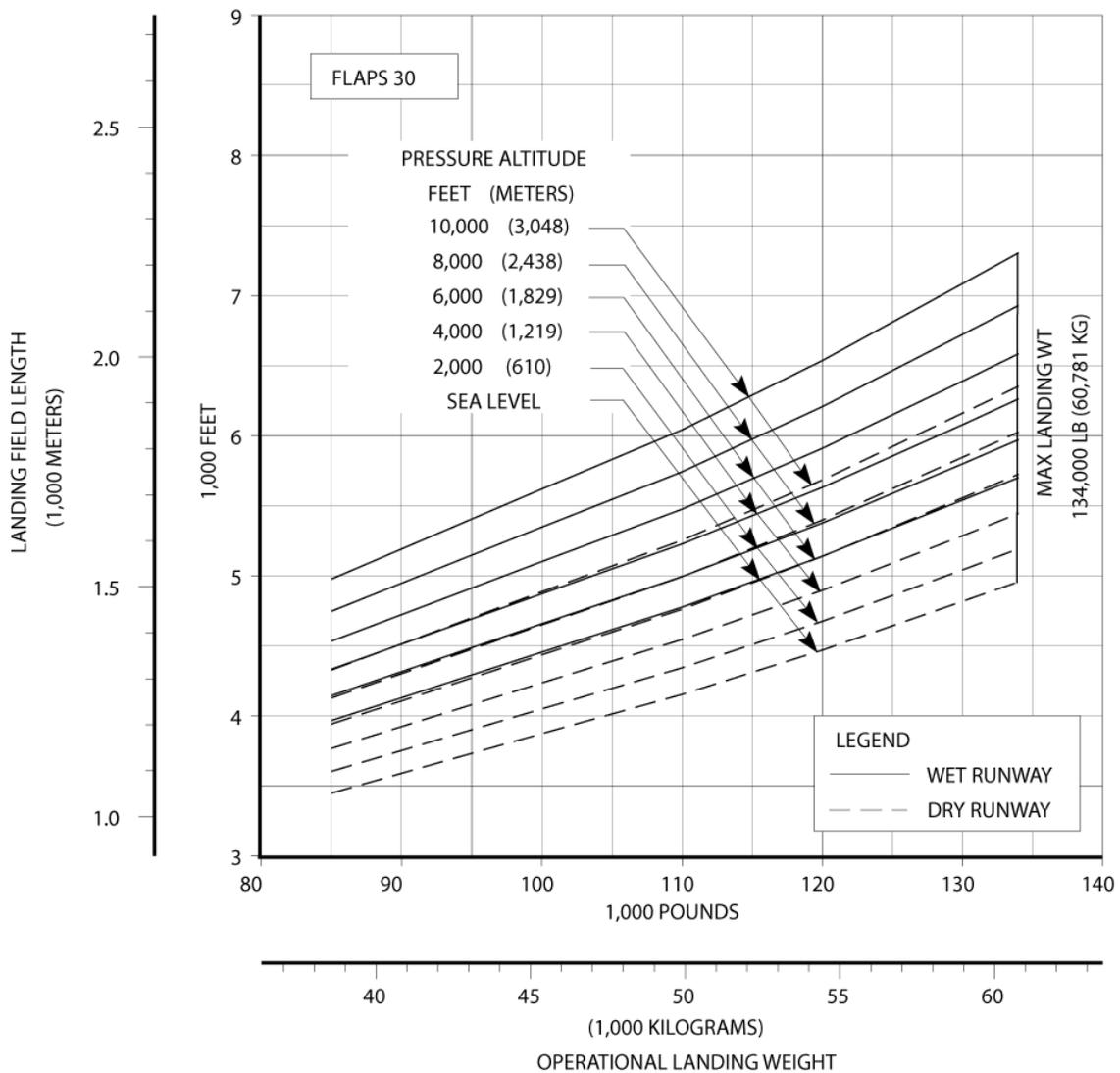
D6-58325-7

3.4.2 FAA/EASA Landing Runway Length Requirements - Flaps 30: Model 737-700, -700W, 700ER, -700ERW, 700C, -700CW, BBJ1

DO NOT USE FOR DISPATCH

Landing Field Length
737-700/-700W/-700ER/-700ERW/-700C/-700CW/BBJ1 (CFM56-7B Series)

- STANDARD DAY, ZERO WIND
- AUTO SPOILERS OPERATIVE
- ANTI-SKID OPERATIVE
- ZERO RUNWAY GRADIENT
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN



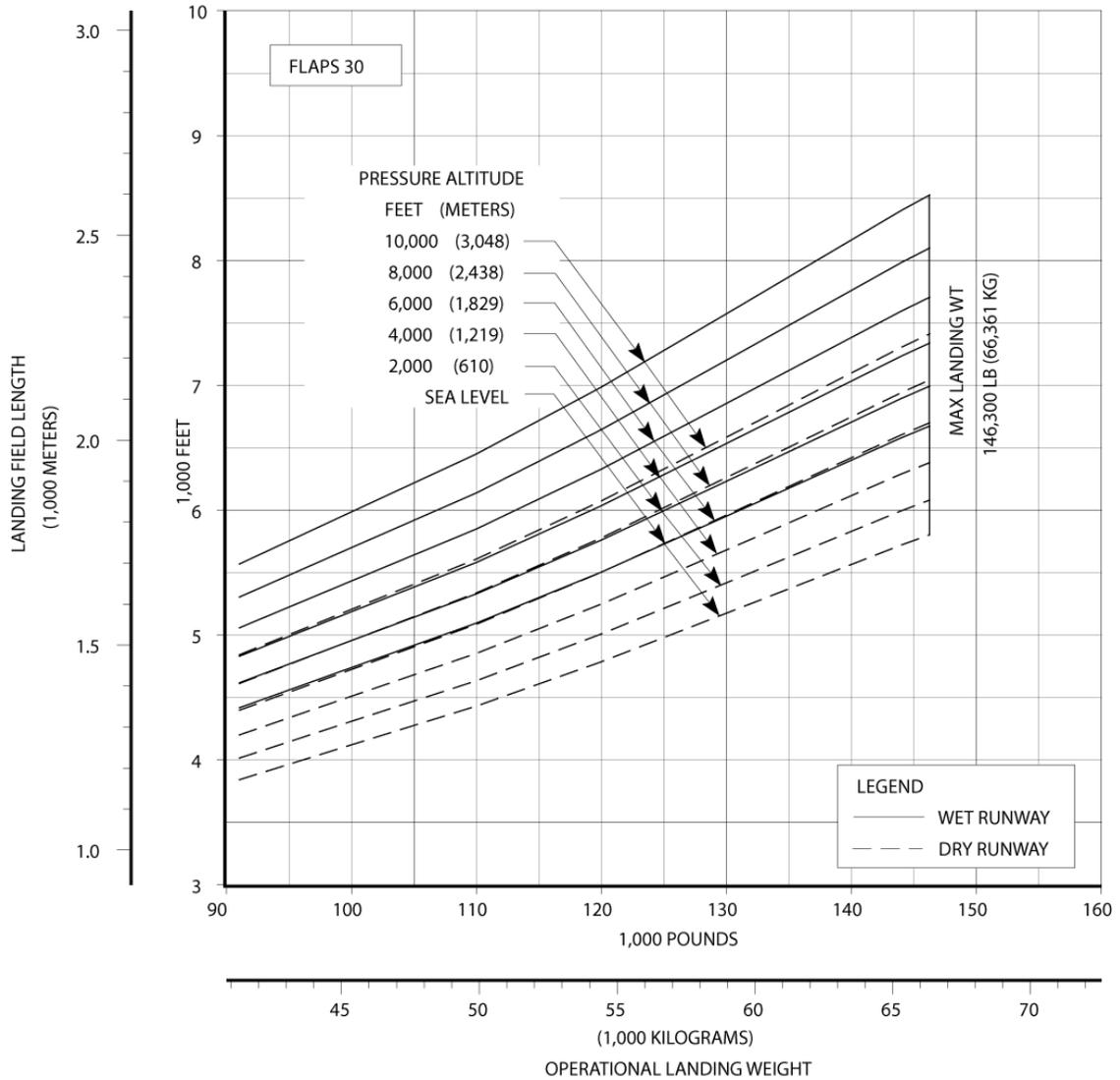
D6-58325-7

3.4.3 FAA/EASA Landing Runway Length Requirements - Flaps 30: Model 737-800, -800W, -800BCF, BBJ2

DO NOT USE FOR DISPATCH

Landing Field Length
737-800/-800W/BBJ2 (CFM56-7B Series)

- STANDARD DAY, ZERO WIND
- AUTO SPOILERS OPERATIVE
- ANTI-SKID OPERATIVE
- ZERO RUNWAY GRADIENT
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN



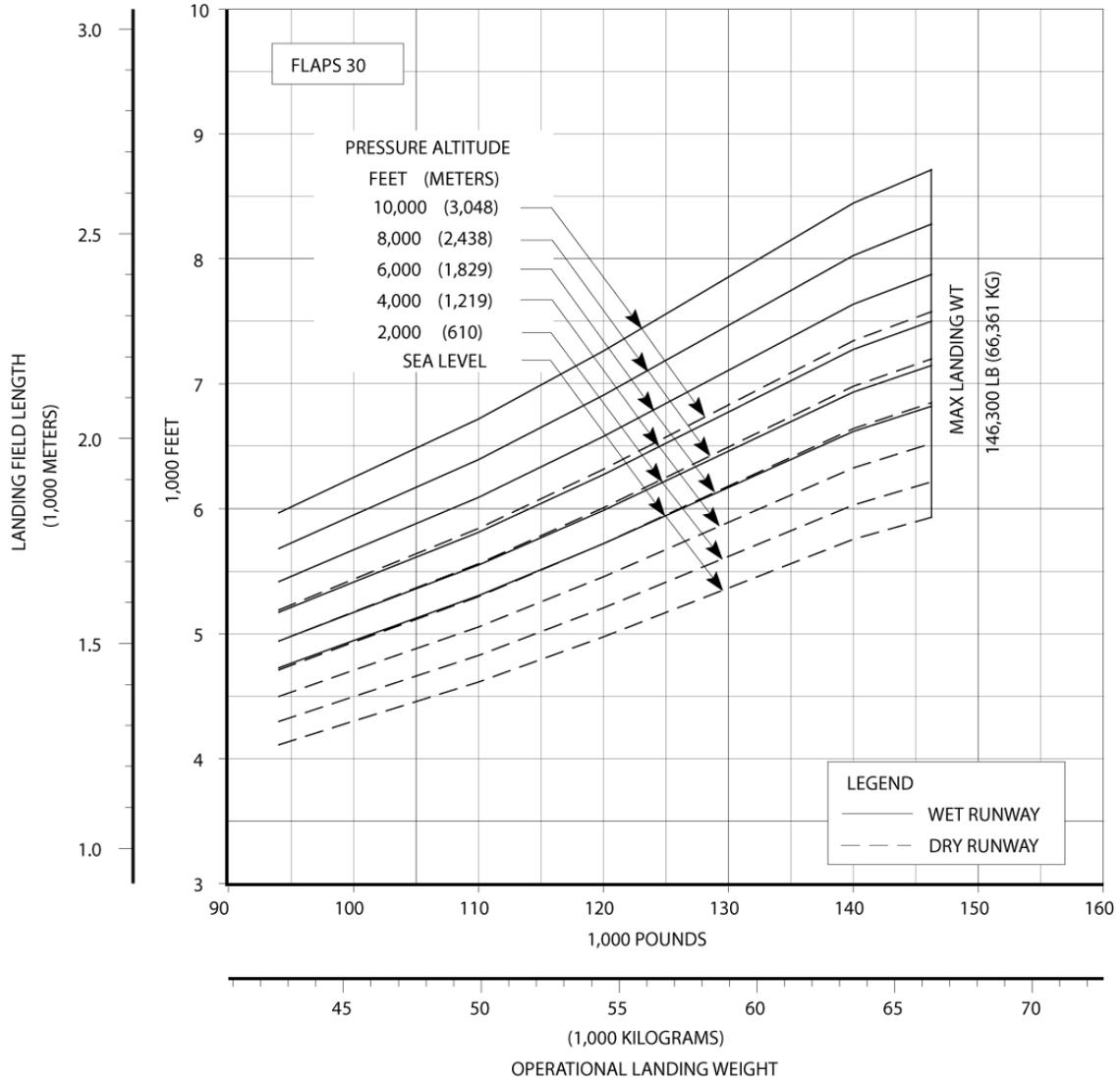
D6-58325-7

3.4.4 FAA/EASA Landing Runway Length Requirements - Flaps 30: Model 737-900, -900W

DO NOT USE FOR DISPATCH

Landing Field Length
737-900/-900W (CFM56-7B Series)

- STANDARD DAY, ZERO WIND
- AUTO SPOILERS OPERATIVE
- ANTI-SKID OPERATIVE
- ZERO RUNWAY GRADIENT
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN

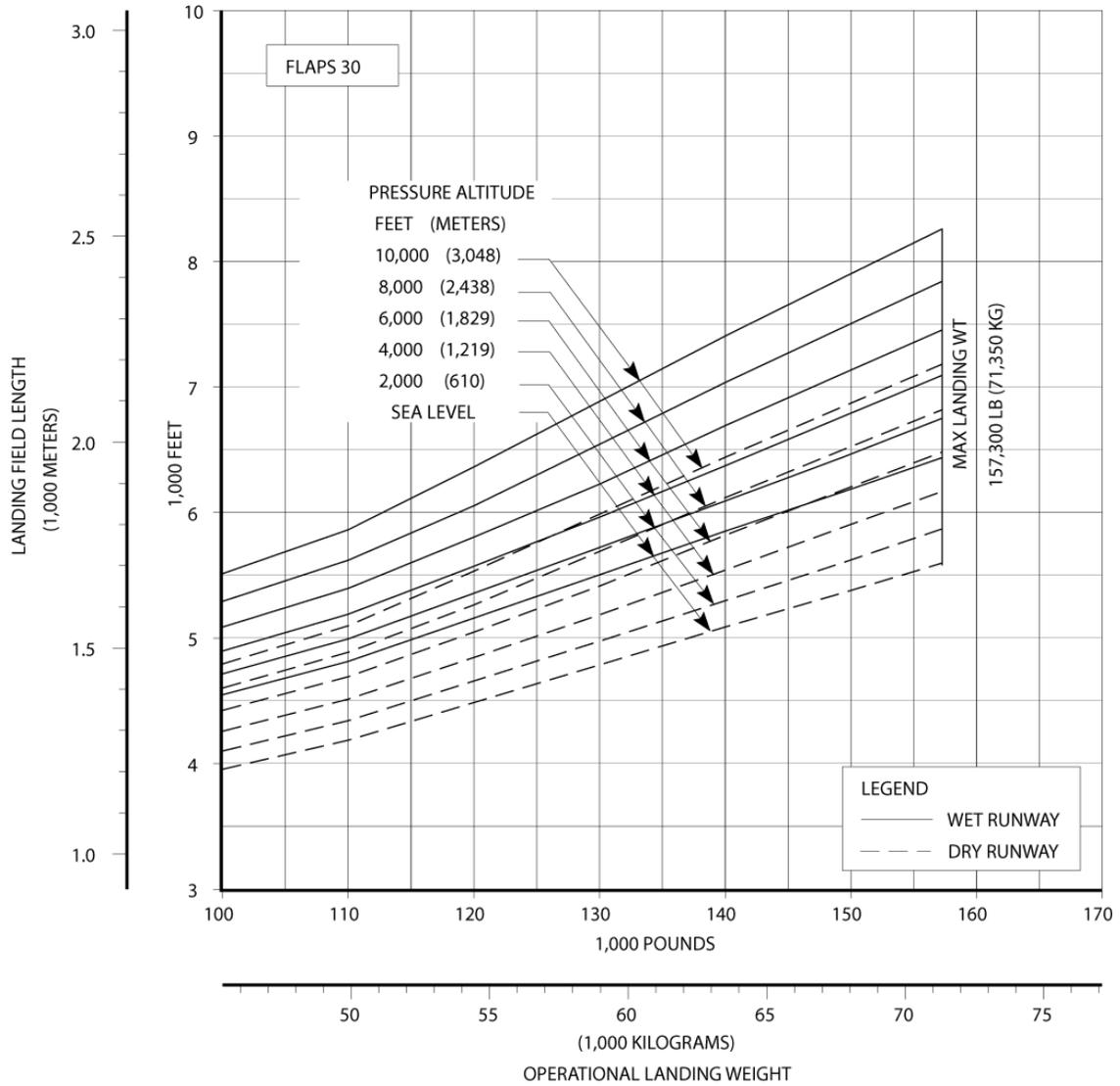


3.4.5 FAA/EASA Landing Runway Length Requirements - Flaps 30: Model 737-900ER, -900ERW, BBJ3

DO NOT USE FOR DISPATCH

Landing Field Length
737-900ER/-900ERW/BBJ3 (CFM56-7B Series)

- STANDARD DAY, ZERO WIND
- AUTO SPOILERS OPERATIVE
- ANTI-SKID OPERATIVE
- ZERO RUNWAY GRADIENT
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN



D6-58325-7

4.0 AIRPLANE PERFORMANCE

4.1 GENERAL INFORMATION

This section provides airplane turning capability and maneuvering characteristics.

For ease of presentation, these data have been determined from the theoretical limits imposed by the geometry of the aircraft, and where noted, provide for a normal allowance for tire slippage. As such, they reflect the turning capability of the aircraft in favorable operating circumstances. These data should be used only as guidelines for the method of determination of such parameters and for the maneuvering characteristics of this aircraft.

In the ground operating mode, varying airline practices may demand that more conservative turning procedures be adopted to avoid excessive tire wear and reduce possible maintenance problems. Airline operating procedures will vary in the level of performance over a wide range of operating circumstances throughout the world. Variations from standard aircraft operating patterns may be necessary to satisfy physical constraints within the maneuvering area, such as adverse grades, limited area, or high risk of jet blast damage. For these reasons, ground maneuvering requirements should be coordinated with the using airlines prior to layout planning.

Section 4.2 presents turning radii for various nose gear steering angles. Radii for the main and nose gears are measured from the turn center to the outside of the tire.

Section 4.3 shows data on minimum width of pavement required for 180° turn.

Section 4.4 provides pilot visibility data from the cockpit and the limits of ambinocular vision through the windows. Ambinocular vision is defined as the total field of vision seen simultaneously by both eyes.

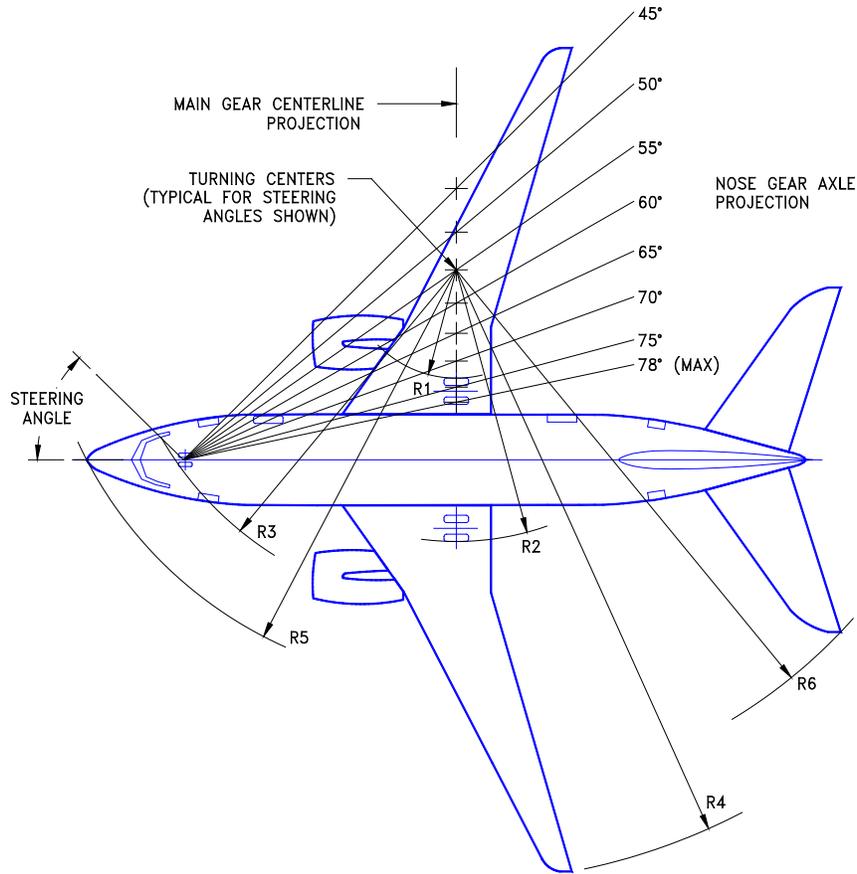
Section 4.5 shows approximate wheel paths for various runway and taxiway turn scenarios on a 100 ft (30 m) runway and 50 ft (15 m) taxiway system. Boeing 737 Series aircraft are capable of operating on 100 ft wide runways. However, for design purposes, the FAA and ICAO recommend that the minimum runway width for the 737 Series aircraft is 150 ft (45 m).

The pavement fillet geometries are based on the FAA's Advisory Circular (AC) 150/5300-13 (thru change 16). They represent typical fillet geometries built at many airports worldwide. ICAO and other civil aviation authorities publish many different fillet design methods. Prior to determining the size of fillets, airports are advised to check with the airlines regarding the operating procedures and aircraft types they expect to use at the airport. Further, given the cost of modifying fillets and the operational impact to ground movement and air traffic during construction, airports may want to design critical fillets for larger aircraft types to minimize future operational impacts.

Section 4.6 illustrates a typical runway holding bay configuration.

4.2 TURNING RADII

4.2.1 Turning Radii – No Slip Angle: Model 737-600

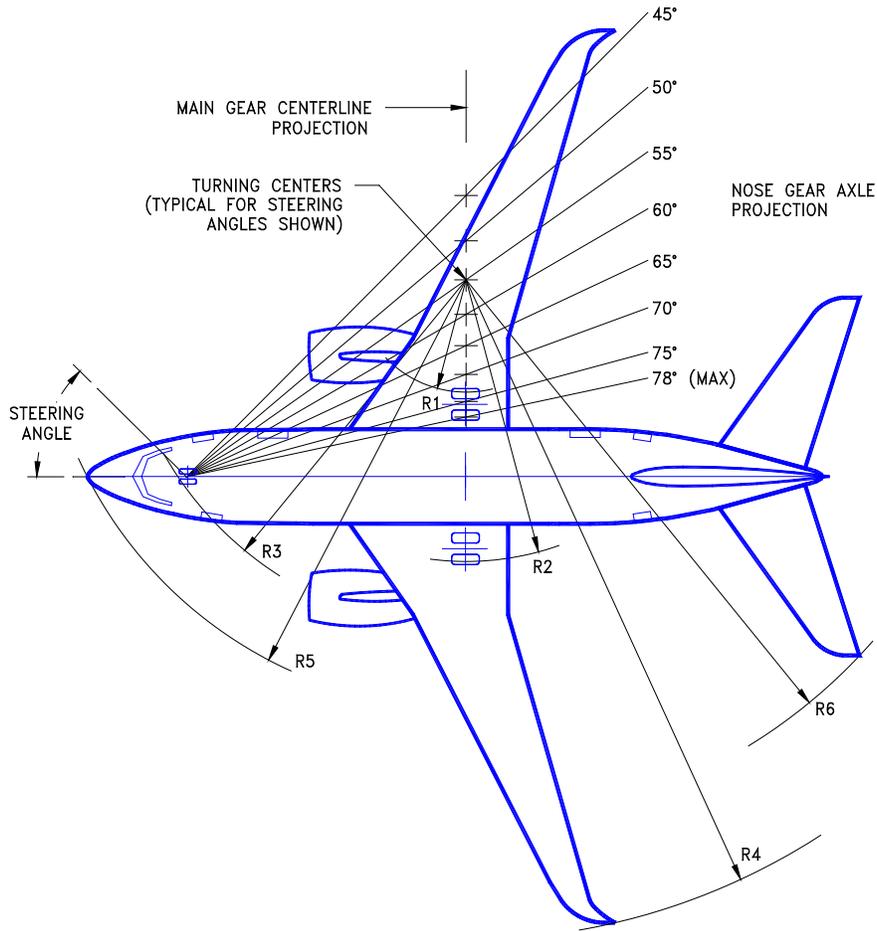


NOTES: * ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN
 * CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE

STEERING ANGLE (DEG)	R1 INNER GEAR		R2 OUTER GEAR		R3 NOSE GEAR		R4 WING TIP		R5 NOSE		R6 TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
30	52.1	15.9	75.2	22.9	74.0	22.6	121.2	36.9	81.0	24.7	101.7	31.0
35	40.9	12.5	64.0	19.5	64.6	19.7	110.2	33.6	72.6	22.1	92.3	28.1
40	32.2	9.8	55.3	16.9	57.8	17.6	101.6	31.0	66.6	20.3	85.3	26.0
45	25.2	7.7	48.3	14.7	52.7	16.1	94.7	28.9	62.2	19.0	79.9	24.3
50	26.2	5.9	42.4	12.9	48.7	14.9	88.8	27.1	58.9	17.9	75.5	23.0
55	14.2	4.3	37.3	11.4	45.7	13.9	83.8	25.6	56.4	17.2	71.9	21.9
60	9.7	2.9	32.8	10.0	43.3	13.2	79.4	24.2	54.5	16.6	68.9	21.0
65	5.6	1.7	28.7	8.7	41.4	12.6	75.5	23.0	53.0	16.2	66.3	20.2
70	1.8	0.6	24.9	7.6	40.0	12.2	71.8	21.9	51.9	15.8	64.1	19.5
78 (MAX)	-3.7	-1.1	19.4	5.9	38.5	11.7	66.4	20.2	50.8	15.5	61.0	18.6

D6-58325-7

4.2.2 Turning Radii – No Slip Angle: Model 737-600W

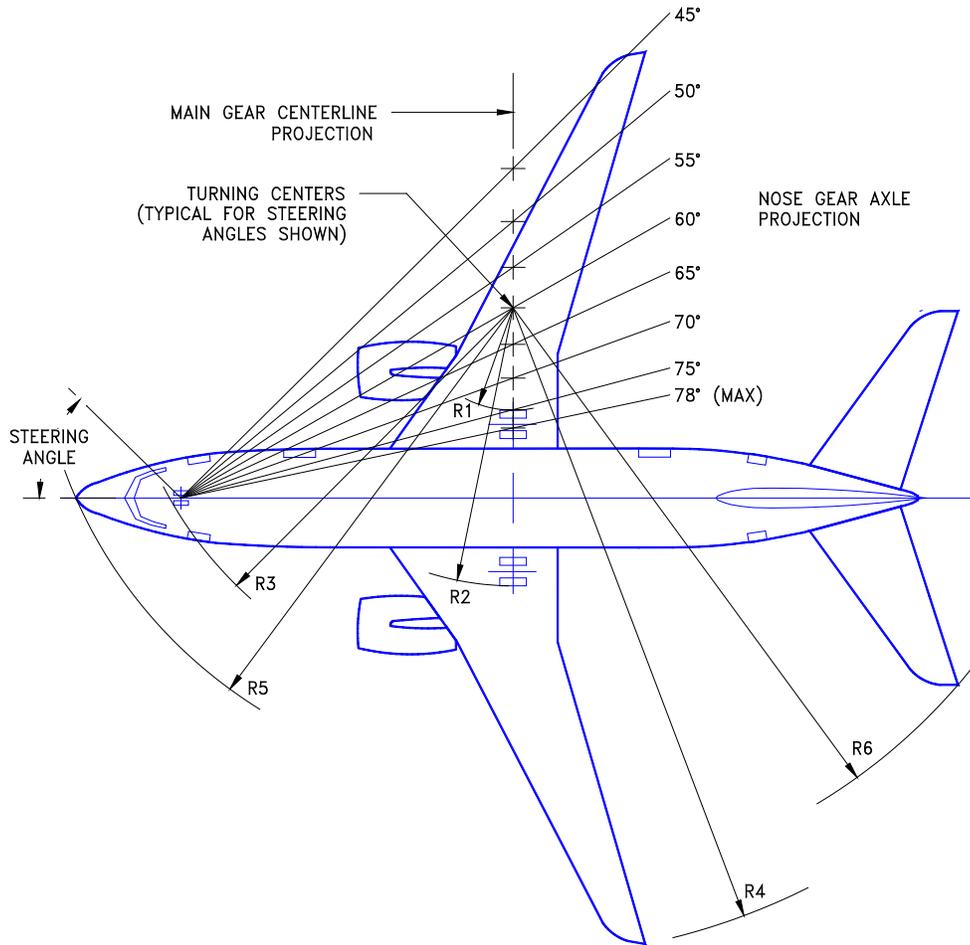


NOTES: * ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN
 * CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE

STEERING ANGLE	R1 INNER GEAR		R2 OUTER GEAR		R3 NOSE GEAR		R4 WING TIP		R5 NOSE		R6 TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
(DEG)												
30	52.7	16.1	75.8	23.1	75.1	22.9	124.7	38.0	81.7	24.9	75.8	23.1
35	41.4	12.6	64.5	19.7	65.6	20.0	113.5	34.6	73.2	22.3	64.5	19.7
40	32.7	10.0	55.8	17.0	58.7	17.9	104.9	32.0	67.1	20.5	55.8	17.0
45	25.5	7.8	48.6	14.8	53.4	16.3	98.0	29.9	62.7	19.1	48.6	14.8
50	19.6	6.0	42.7	13.0	49.4	15.1	92.1	28.1	59.3	18.1	42.7	13.0
55	14.4	4.4	37.5	11.4	46.2	14.1	87.1	26.6	56.8	17.3	37.5	11.4
60	9.9	3.0	33.0	10.0	43.8	13.3	82.7	25.2	54.9	16.7	33.0	10.0
65	5.7	1.8	28.8	8.8	41.9	12.8	78.7	24.0	53.4	16.3	28.8	8.8
70	2.0	.6	25.1	7.6	40.4	12.3	75.1	22.9	52.3	15.9	25.1	7.6
78 (MAX)	3.7	1.1	19.4	5.9	38.9	11.9	69.7	21.2	51.1	15.6	19.4	5.9

D6-58325-7

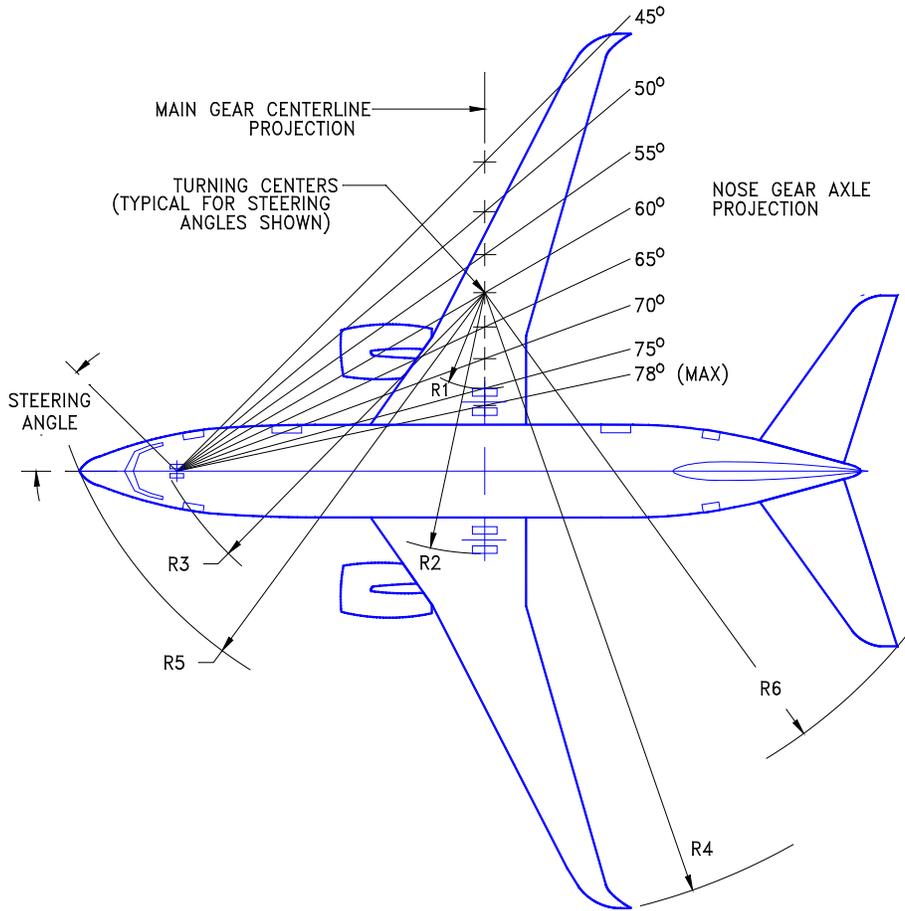
4.2.3 Turning Radii – No Slip Angle: Model 737-700



NOTES: * ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN
 * CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE

STEERING ANGLE (DEG)	R1 INNER GEAR		R2 OUTER GEAR		R3 NOSE GEAR		R4 WING TIP		R5 NOSE		R6 TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
30	59.9	18.3	83.0	25.3	83.0	25.3	128.9	39.3	90.0	27.4	110.1	33.6
35	47.4	14.4	70.5	21.5	72.5	22.1	116.5	35.5	80.4	24.5	99.5	30.3
40	37.6	11.5	60.7	18.5	64.8	19.8	106.9	32.6	73.5	22.4	91.6	27.9
45	29.7	9.1	52.8	16.1	59.0	18.0	99.1	30.2	68.5	20.9	85.5	26.0
50	23.0	7.0	46.2	14.1	54.6	16.7	92.6	28.2	64.7	19.7	80.5	24.5
55	17.3	5.3	40.4	12.3	51.2	15.6	86.9	26.5	61.8	18.8	76.5	23.3
60	12.3	3.7	35.4	10.8	48.5	14.8	82.0	25.0	59.6	18.2	73.1	22.3
65	7.7	2.3	30.8	9.4	46.4	14.2	77.5	23.6	58.0	17.7	70.2	21.4
70	3.5	1.1	26.6	8.2	44.8	13.7	73.4	22.4	56.7	17.3	67.7	20.6
78 (MAX)	-2.8	-0.8	20.3	6.2	43.1	13.1	67.3	20.5	55.4	16.9	64.4	19.6

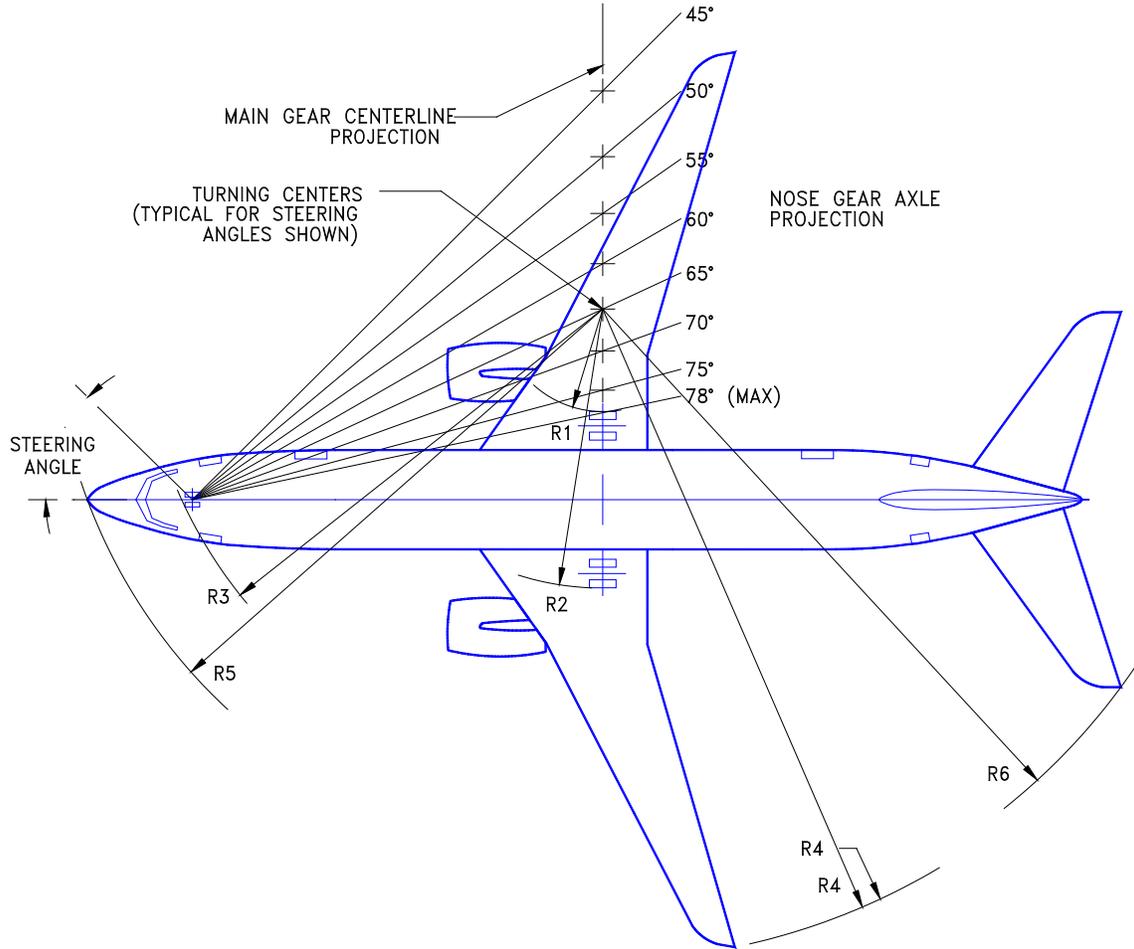
4.2.4 Turning Radii – No Slip Angle: Model 737-700W, BBJ1



NOTES: * ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN
 * CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE

STEERING ANGLE (DEG)	R1 INNER GEAR		R2 OUTER GEAR		R3 NOSE GEAR		R4 WING TIP		R5 NOSE		R6 TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
30	59.9	18.3	83.0	25.3	83.5	25.5	131.8	40.2	90.0	27.4	110.1	33.6
35	47.4	14.4	70.5	21.5	72.5	22.1	119.4	36.4	80.4	24.5	99.5	30.3
40	37.6	11.5	60.7	18.5	64.8	19.8	109.8	33.5	73.5	22.4	91.6	27.9
45	29.7	9.1	52.8	16.1	59.0	18.0	102.0	31.1	68.5	20.9	85.5	26.0
50	23.0	7.0	46.2	14.1	54.6	16.7	95.5	29.1	64.7	19.7	80.5	24.5
55	17.3	5.3	40.4	12.3	51.2	15.6	89.9	27.4	61.8	18.8	76.5	23.3
60	12.3	3.7	35.4	10.8	48.5	14.8	85.0	25.9	59.6	18.2	73.1	22.3
65	7.7	2.3	30.8	9.4	46.4	14.2	80.5	24.5	58.0	17.7	70.2	21.4
70	3.5	1.1	26.6	8.1	44.8	13.7	76.4	23.3	56.7	17.3	67.7	20.6
78 (MAX)	-2.8	-0.8	20.3	6.2	43.1	13.1	70.4	21.5	55.4	16.9	64.4	19.6

4.2.5 Turning Radii – No Slip Angle: Model 737-800

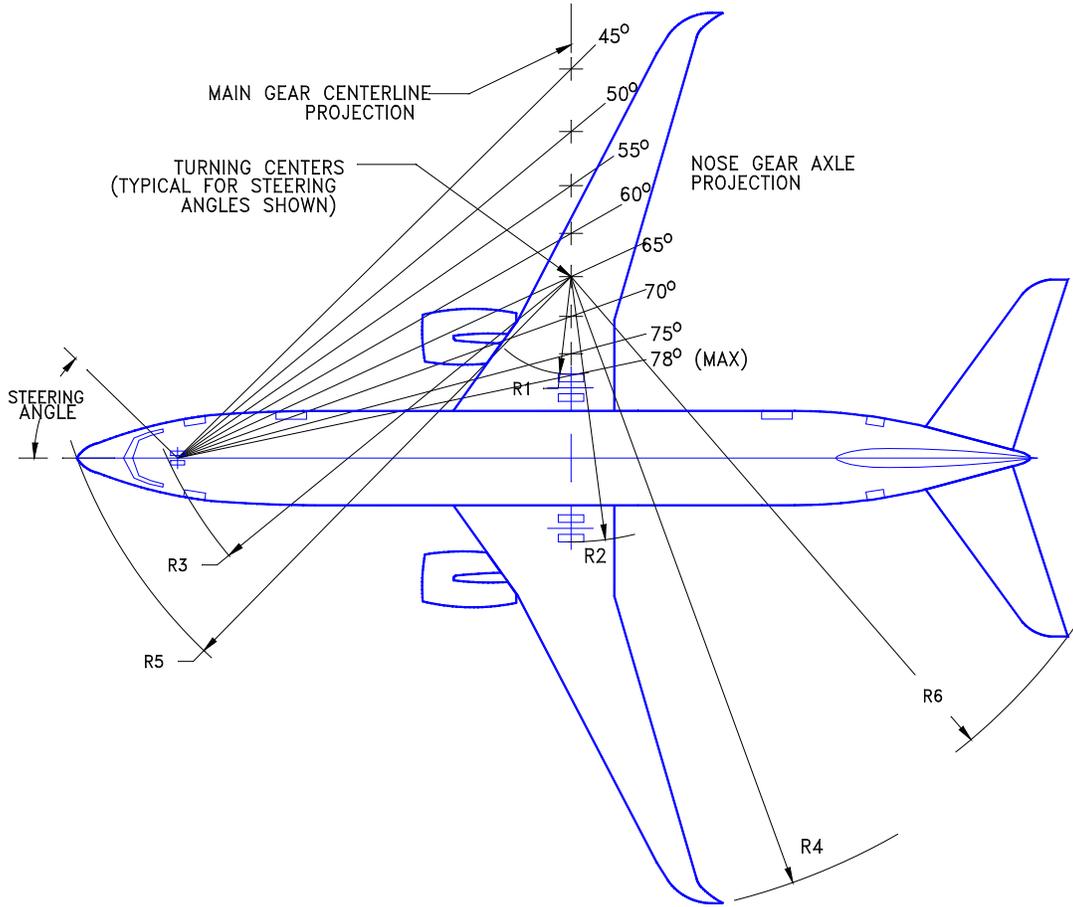


NOTES: * ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN
 * CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE

STEERING ANGLE (DEG)	R1 INNER GEAR		R2 OUTER GEAR		R3 NOSE GEAR		R4 WING TIP		R5 NOSE		R6 TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
30	76.9	23.4	100.0	30.5	102.7	31.3	145.8	44.4	109.5	33.4	129.5	39.5
35	61.4	18.7	84.5	25.8	89.6	27.3	130.4	39.7	97.4	29.7	116.4	35.5
40	49.3	15.0	72.4	22.1	80.1	24.4	118.5	36.1	88.7	27.0	106.6	32.5
45	39.5	12.0	62.6	19.1	72.9	22.2	108.8	33.2	82.3	25.1	99.0	30.2
50	18.2	9.5	54.4	16.6	67.4	20.6	100.7	30.7	77.4	23.6	93.0	28.3
55	24.2	7.4	47.3	14.4	63.2	19.3	93.7	28.6	73.8	22.5	88.0	26.8
60	17.9	5.5	41.0	12.5	59.8	18.3	87.5	26.7	70.9	21.6	83.9	25.6
65	12.3	3.7	35.4	10.8	57.3	17.5	82.0	25.0	68.8	21.0	80.4	24.5
70	7.0	2.1	30.1	9.2	55.3	16.9	76.9	23.4	67.1	20.5	77.5	23.6
78 (MAX)	-0.7	-0.2	22.4	6.8	53.2	16.2	69.4	21.1	65.4	19.9	73.6	22.4

D6-58325-7

4.2.6 Turning Radii – No Slip Angle: Model 737-800W, -800BCF, BBJ2

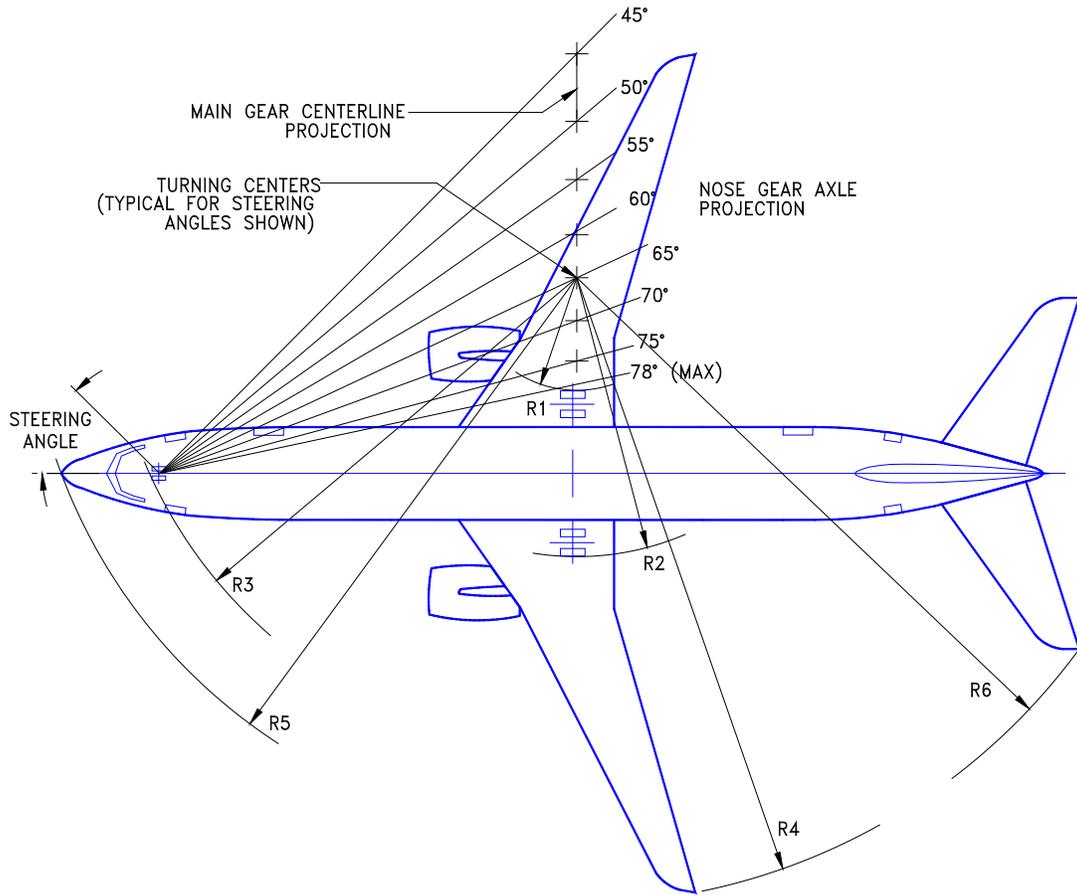


NOTES: * ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN
 * CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE

STEERING ANGLE (DEGREES)	R1		R2		R3		R4		R5		R6	
	INNER GEAR		OUTER GEAR		NOSE GEAR		WING TIP		NOSE		TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
30	77.5	23.6	100.6	30.7	103.7	31.6	149.1	45.4	110.1	33.6	129.8	39.6
35	61.9	18.9	85.0	25.9	90.6	27.6	133.6	4.07	97.9	29.8	116.6	35.5
40	49.7	15.2	72.8	22.2	80.9	24.7	121.6	37.1	89.2	27.2	106.7	32.5
45	39.8	12.1	62.9	19.2	73.6	22.4	111.9	34.1	82.7	25.2	99.0	30.2
50	31.6	9.6	54.7	16.7	68.0	20.7	103.8	31.6	77.8	23.7	92.9	28.3
55	24.4	7.4	47.5	14.5	63.7	19.43	96.8	29.5	74.1	22.6	87.9	26.8
60	18.1	5.5	41.2	12.6	60.3	18.4	90.6	27.6	71.3	21.7	83.8	25.5
65	12.4	3.8	35.8	10.8	57.7	17.6	85.1	25.9	69.1	21.1	80.3	24.5
70	7.2	2.2	30.3	9.2	55.6	17.0	80.0	24.4	67.4	20.6	77.3	23.6
78 (MAX)	-0.6	-0.2	22.5	6.9	53.5	16.3	72.5	22.1	65.7	20.0	73.3	22.3

D6-58325-7

4.2.7 Turning Radii – No Slip Angle: Model 737-900, -900ER

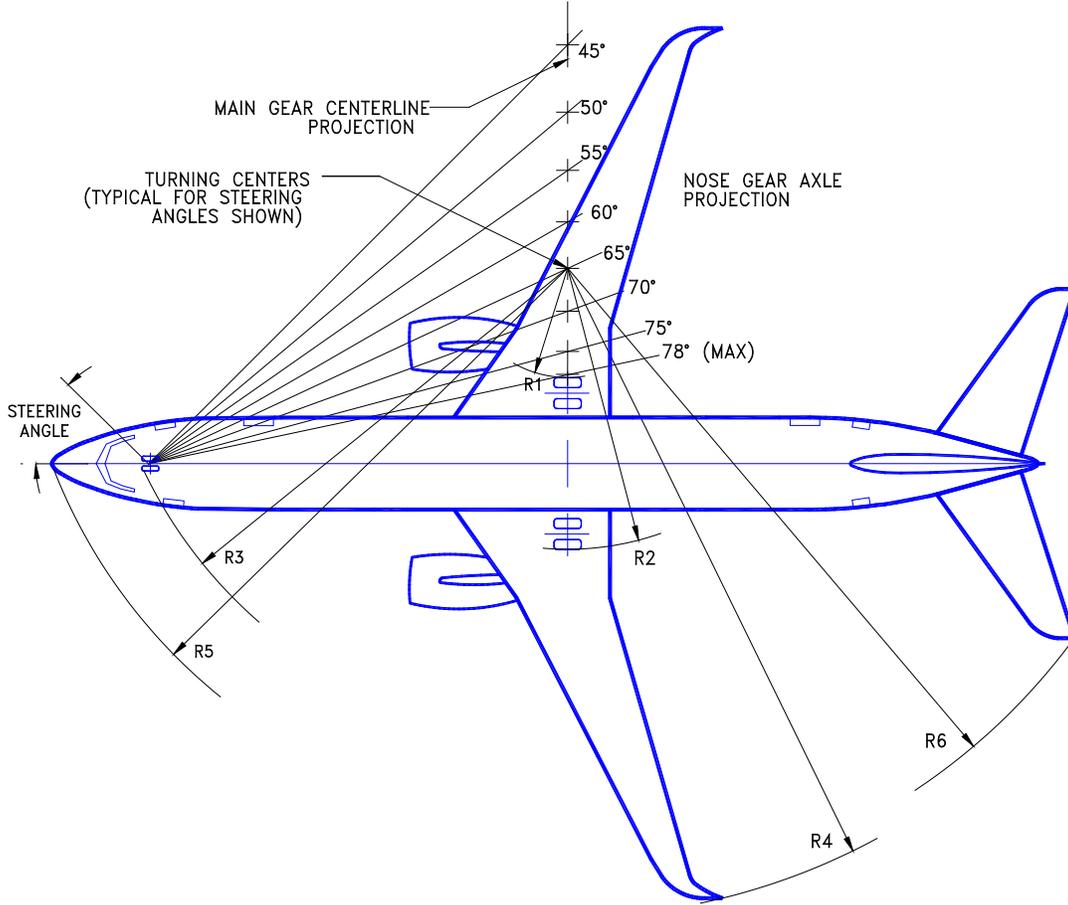


NOTES: * ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN
 * CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE

STEERING ANGLE (DEGREES)	R1		R2		R3		R4		R5		R6	
	INNER GEAR		OUTER GEAR		NOSE GEAR		WING TIP		NOSE		TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
30	86.0	26.2	109.1	33.2	113.5	34.6	154.8	47.2	119.9	36.5	138.8	42.3
35	68.9	21.0	92.0	28.0	99.1	30.2	137.8	42.0	106.4	32.4	124.1	37.8
40	55.5	16.9	78.6	24.0	88.5	27.0	124.6	38.0	96.7	29.5	113.2	34.5
45	44.7	13.6	67.8	20.7	80.6	24.6	113.9	34.7	89.6	27.3	104.8	31.9
50	35.7	10.9	58.8	17.9	74.4	22.7	105.0	32.0	84.2	25.7	98.0	29.9
55	27.9	8.9	51.0	15.5	69.7	21.2	97.3	29.7	80.1	24.4	92.5	28.2
60	21.0	6.4	44.1	13.4	66.0	20.1	90.5	27.6	76.9	23.4	88.0	26.9
65	14.7	4.5	37.8	11.5	63.1	19.2	84.4	25.7	74.5	22.7	84.1	25.6
70	8.9	2.7	32.0	9.8	60.9	18.6	78.7	24.0	72.6	22.1	80.8	24.6
78 (MAX)	0.4	0.1	23.5	7.2	58.5	17.8	70.4	21.5	70.7	21.5	76.5	23.4

D6-58325-7

4.2.8 Turning Radii – No Slip Angle: Model 737-900W, -900ERW



NOTES: * ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN
 * CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE

STEERING ANGLE (DEGREES)	R1		R2		R3		R4		R5		R6	
	INNER GEAR		OUTER GEAR		NOSE GEAR		WING TIP		NOSE		TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
30	86.0	26.2	109.1	33.2	113.5	34.6	157.6	48.0	119.9	36.5	138.8	42.3
35	68.9	21.0	92.0	28.0	99.1	30.2	140.6	42.9	106.4	32.4	124.1	37.8
40	55.5	16.9	78.6	24.0	88.5	27.0	127.5	38.8	96.7	29.5	113.2	34.5
45	44.7	13.6	67.8	20.7	80.6	24.6	118.8	35.6	89.6	27.3	104.8	31.9
50	35.7	10.9	58.8	17.9	74.4	22.7	107.9	32.9	84.2	25.7	98.0	29.9
55	27.9	8.9	51.0	15.5	69.7	21.2	100.2	30.6	80.1	24.4	92.5	28.2
60	21.0	6.4	44.1	13.4	66.0	20.1	93.5	28.5	76.9	23.4	88.0	26.9
65	14.7	4.5	37.8	11.5	63.1	19.2	87.4	26.6	74.5	22.7	84.1	25.6
70	8.9	2.7	32.0	9.8	60.9	18.6	81.8	24.9	72.6	22.1	80.8	24.6
78 (MAX)	0.4	0.1	23.5	7.2	58.5	17.8	73.6	22.4	70.7	21.5	76.5	23.4

D6-58325-7

REV A

March 2023

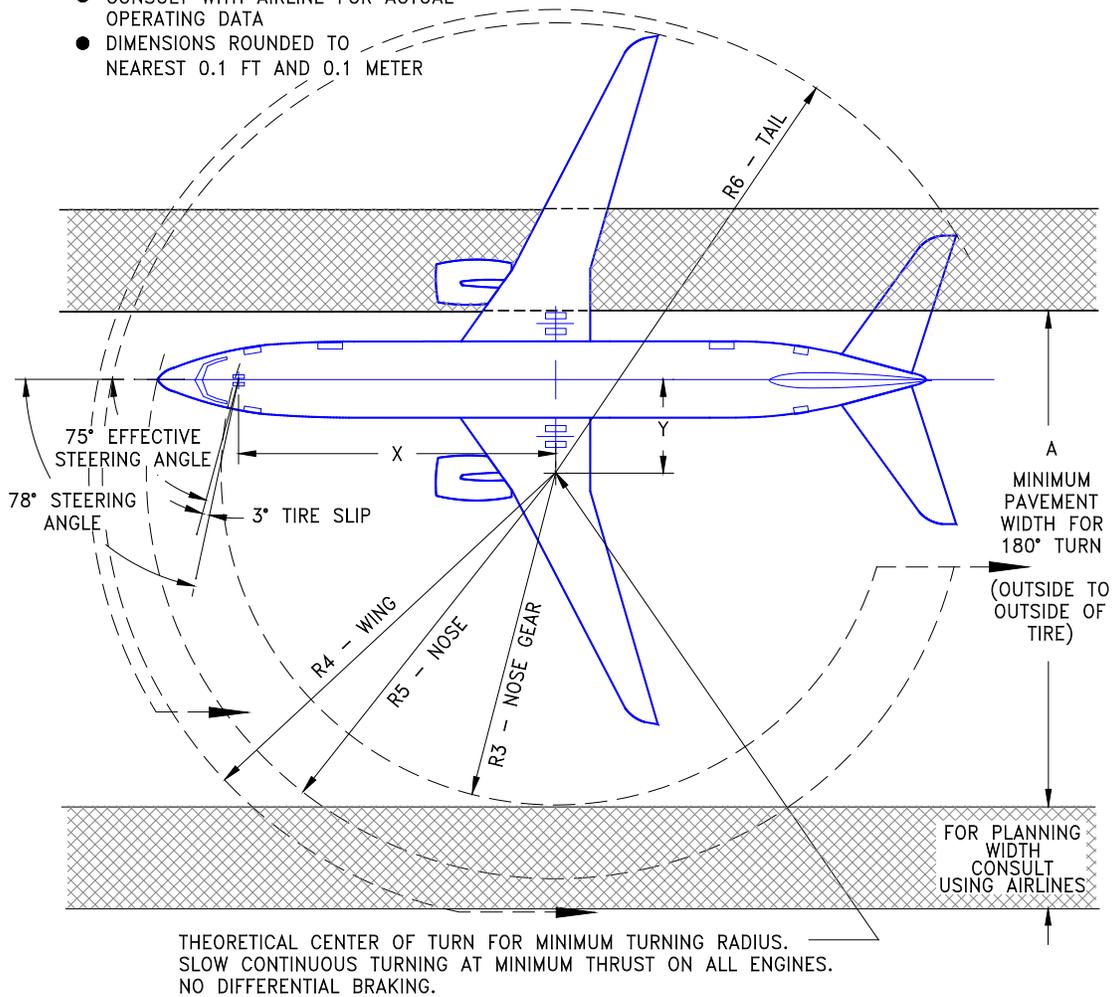
4-9

4.3 CLEARANCE RADII

4.3.1 Minimum Turning Radii – 3° Slip Angle: Model 737-600, -700, -800, -900, -900ER

NOTES:

- 3° TIRE SLIP ANGLE APPROXIMATE ONLY FOR 78° STEERING ANGLE
- CONSULT WITH AIRLINE FOR ACTUAL OPERATING DATA
- DIMENSIONS ROUNDED TO NEAREST 0.1 FT AND 0.1 METER



AIRPLANE MODEL	EFFECTIVE TURNING ANGLE (DEG)	X		Y		A		R3		R4		R5		R6	
		FT	M	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
737-600	75	36.8	11.2	9.9	3.0	60.8	18.5	39.6	12.1	68.4	20.9	51.2	15.6	62.0	18.9
737-700	75	41.3	12.6	11.1	3.4	66.9	20.4	44.3	13.5	69.6	21.2	55.9	17.0	65.5	20.0
737-800	75	51.2	15.6	13.7	4.2	79.7	24.3	54.5	16.6	72.1	22.0	66.0	20.1	74.8	22.8
737-900, -900ER	75	56.3	17.2	15.1	4.6	86.4	26.3	59.8	18.2	73.5	22.4	71.4	21.8	78.6	23.9

D6-58325-7

REV A

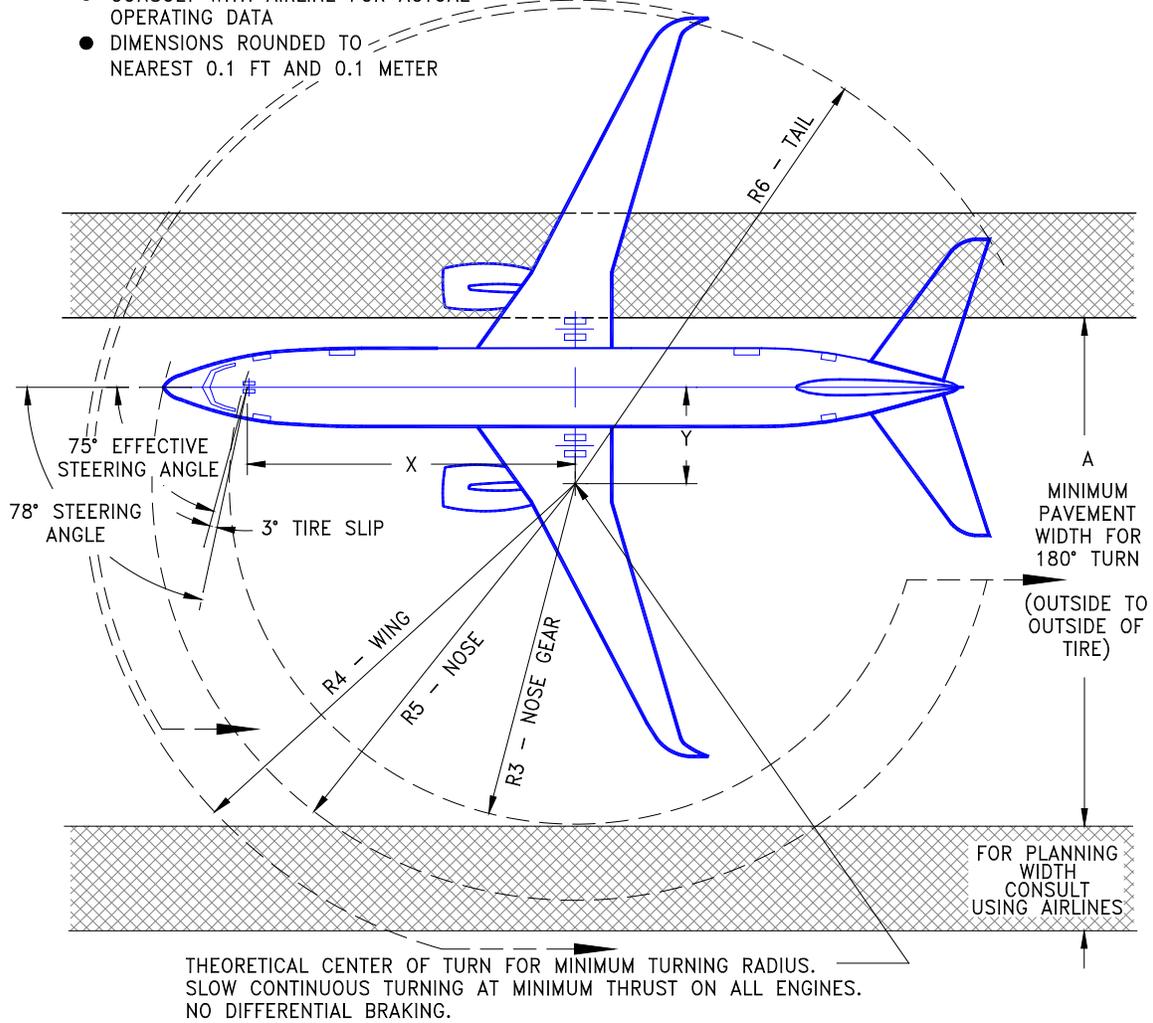
March 2023

4-10

4.3.2 Minimum Turning Radii – 3” Slip Angle: Model 737-600W, -700W, -800W, -800BCF, -900W, -900ERW, BBJ1, BBJ2

NOTES:

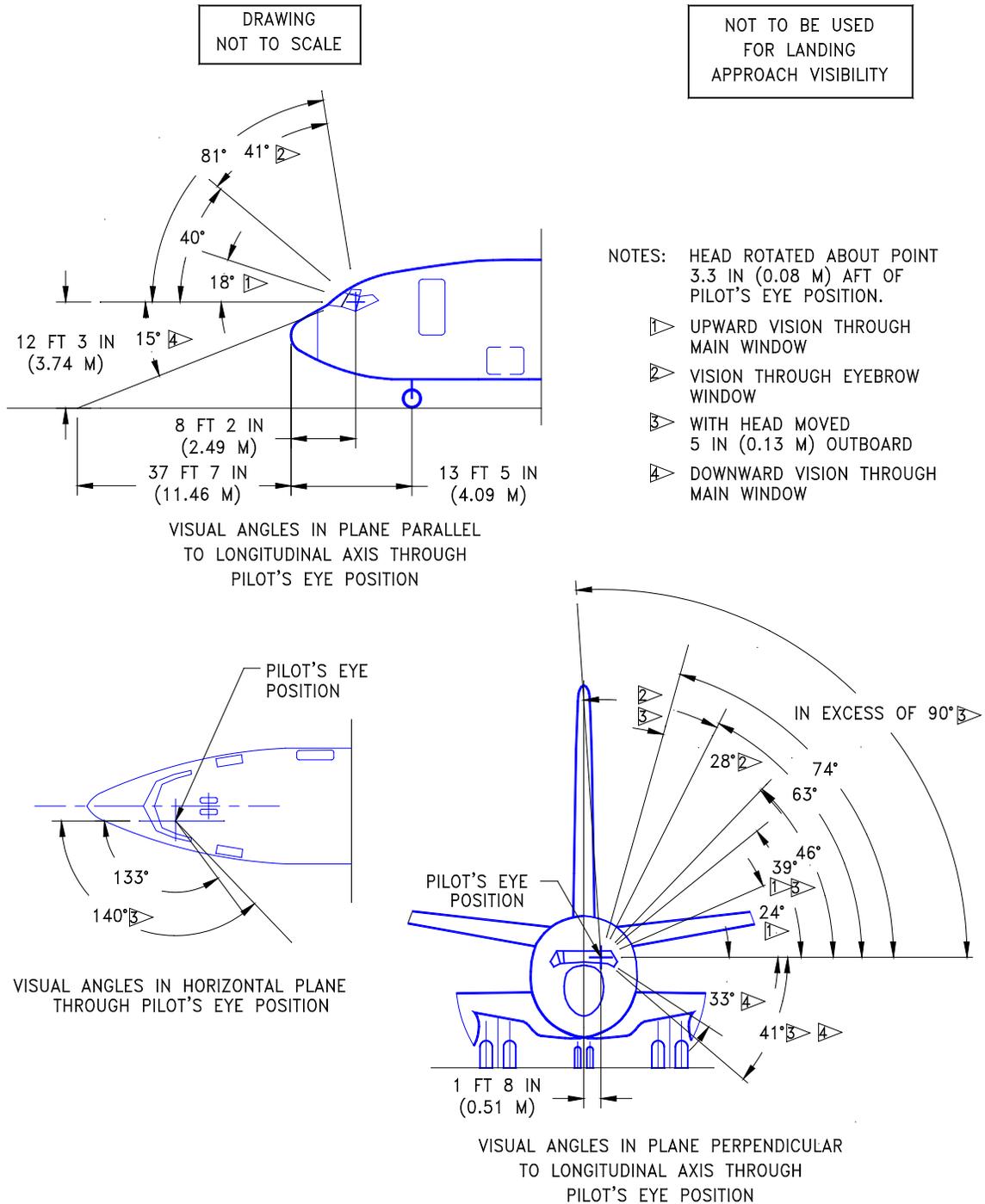
- 3° TIRE SLIP ANGLE APPROXIMATE ONLY FOR 78° STEERING ANGLE
- CONSULT WITH AIRLINE FOR ACTUAL OPERATING DATA
- DIMENSIONS ROUNDED TO NEAREST 0.1 FT AND 0.1 METER



AIRPLANE MODEL	EFFECTIVE TURNING ANGLE (DEG)	X		Y		A		R3		R4		R5		R6	
		FT	M	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
737-600	75	36.8	11.2	9.9	3.0	60.8	18.5	39.6	12.1	71.7	21.8	51.2	15.6	62.0	18.9
737-700 737BBJ	75	41.3	12.6	11.1	3.4	66.9	20.4	44.3	13.5	72.8	22.2	55.9	17.0	65.5	20.0
737-800 737 BBJ2	75	51.2	15.6	13.7	4.2	79.7	24.3	54.5	16.6	75.3	23.0	66.0	20.1	74.8	22.8
737-900, -900ER	75	56.3	17.2	15.1	4.6	86.4	26.3	59.8	18.2	76.7	23.4	71.4	21.8	78.6	23.9

D6-58325-7

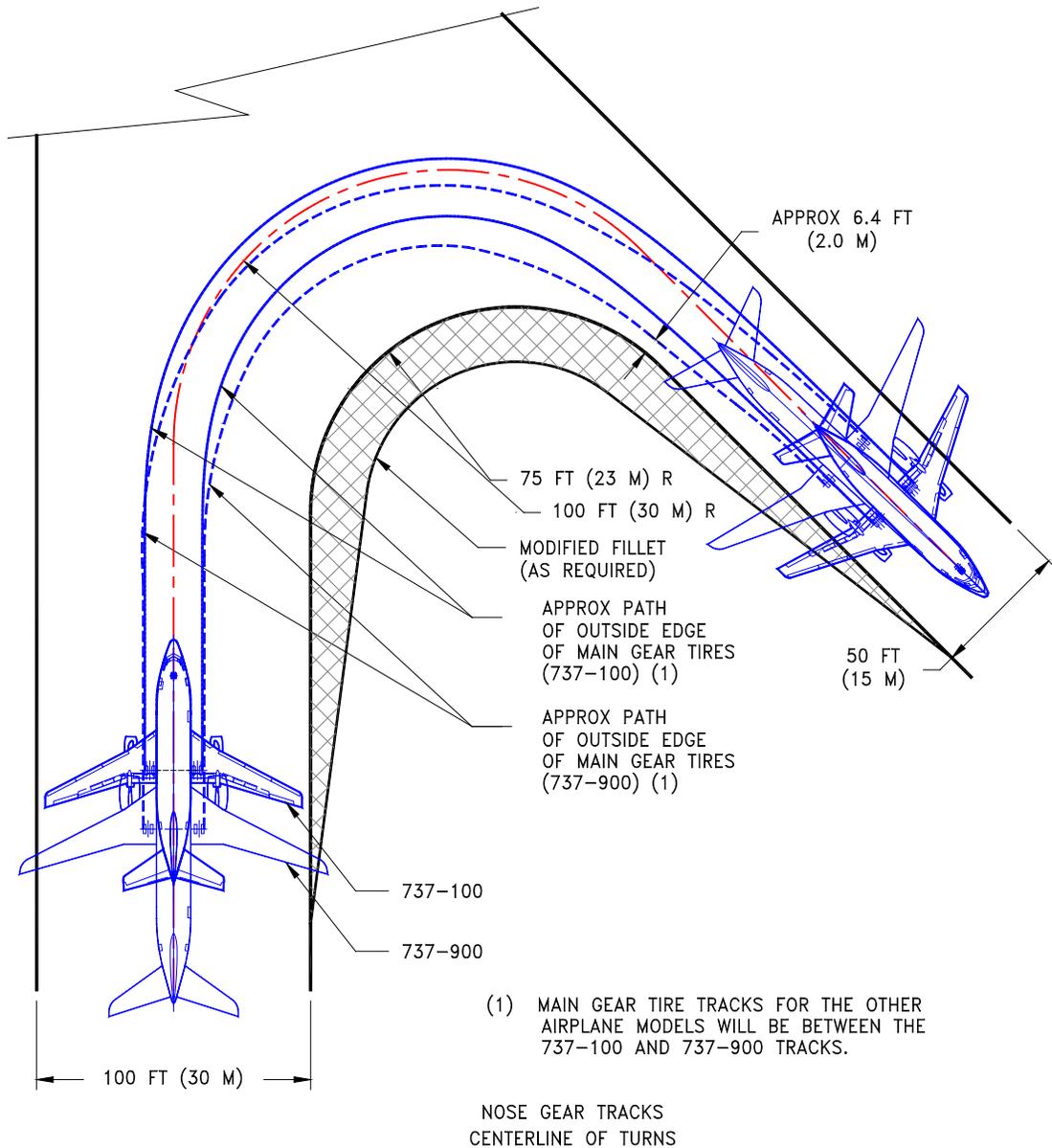
4.4 VISIBILITY FROM COCKPIT IN STATIC POSITION: MODEL 737, ALL MODELS



4.5 RUNWAY AND TAXIWAY TURN PATHS

4.5.1 Runway and Taxiway Turn Paths - Runway-to-Taxiway, More Than 90 Degrees, Nose Gear Tracks Centerline: Model 737, All Models

NOTE:
BEFORE DETERMINING THE SIZE OF THE INTERSECTION FILLET, CHECK WITH THE AIRLINES REGARDING THE OPERATING PROCEDURES THAT THEY USE AND THE TYPES OF AIRCRAFT THAT ARE EXPECTED TO SERVE THE AIRPORT.



D6-58325-7

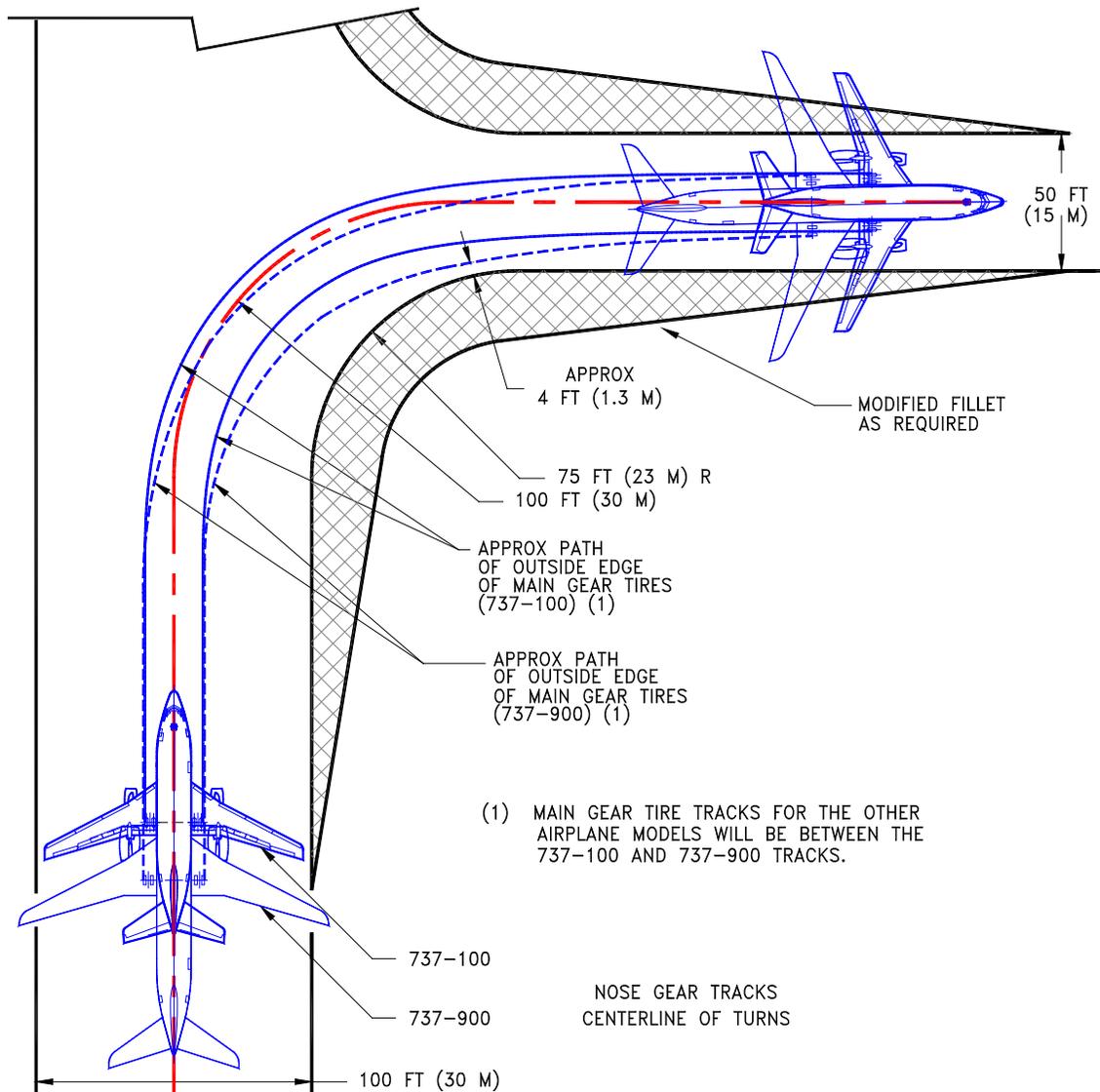
REV A

March 2023

4-13

4.5.2 Runway and Taxiway Turn Paths - Runway-to-Taxiway, 90 Degrees, Nose Gear Tracks Centerline: Model 737, All Models

NOTE:
BEFORE DETERMINING THE SIZE OF THE INTERSECTION FILLET, CHECK WITH THE AIRLINES REGARDING THE OPERATING PROCEDURES THAT THEY USE AND THE TYPES OF AIRCRAFT THAT ARE EXPECTED TO SERVE THE AIRPORT.



D6-58325-7

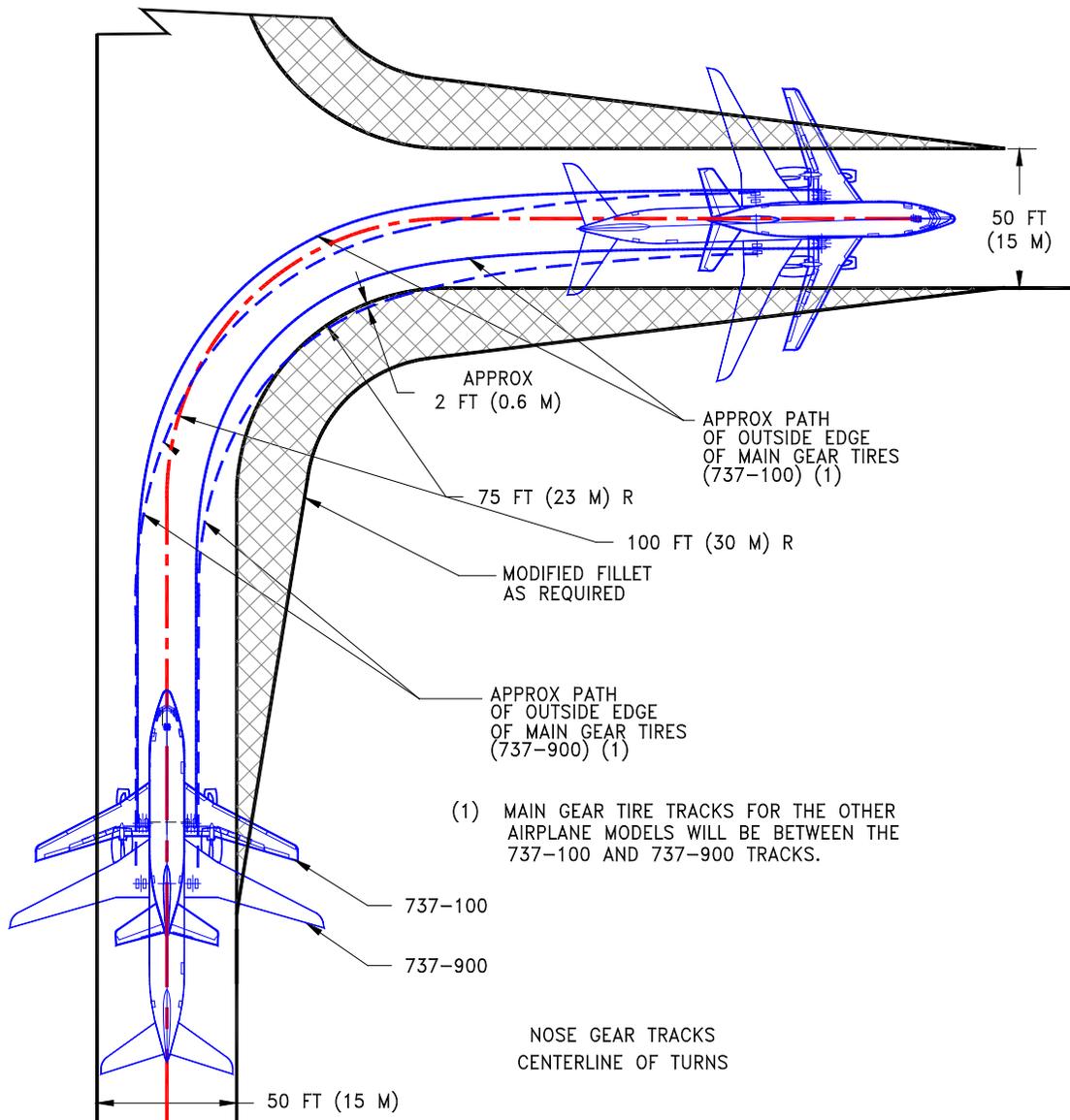
REV A

March 2023

4-14

4.5.3 Runway and Taxiway Turn Paths - Taxiway-to-Taxiway, 90 Degrees, Nose Gear Tracks Centerline: Model 737, All Models

NOTE:
BEFORE DETERMINING THE SIZE OF THE INTERSECTION FILLET, CHECK WITH THE AIRLINES REGARDING THE OPERATING PROCEDURES THAT THEY USE AND THE TYPES OF AIRCRAFT THAT ARE EXPECTED TO SERVE THE AIRPORT.



D6-58325-7

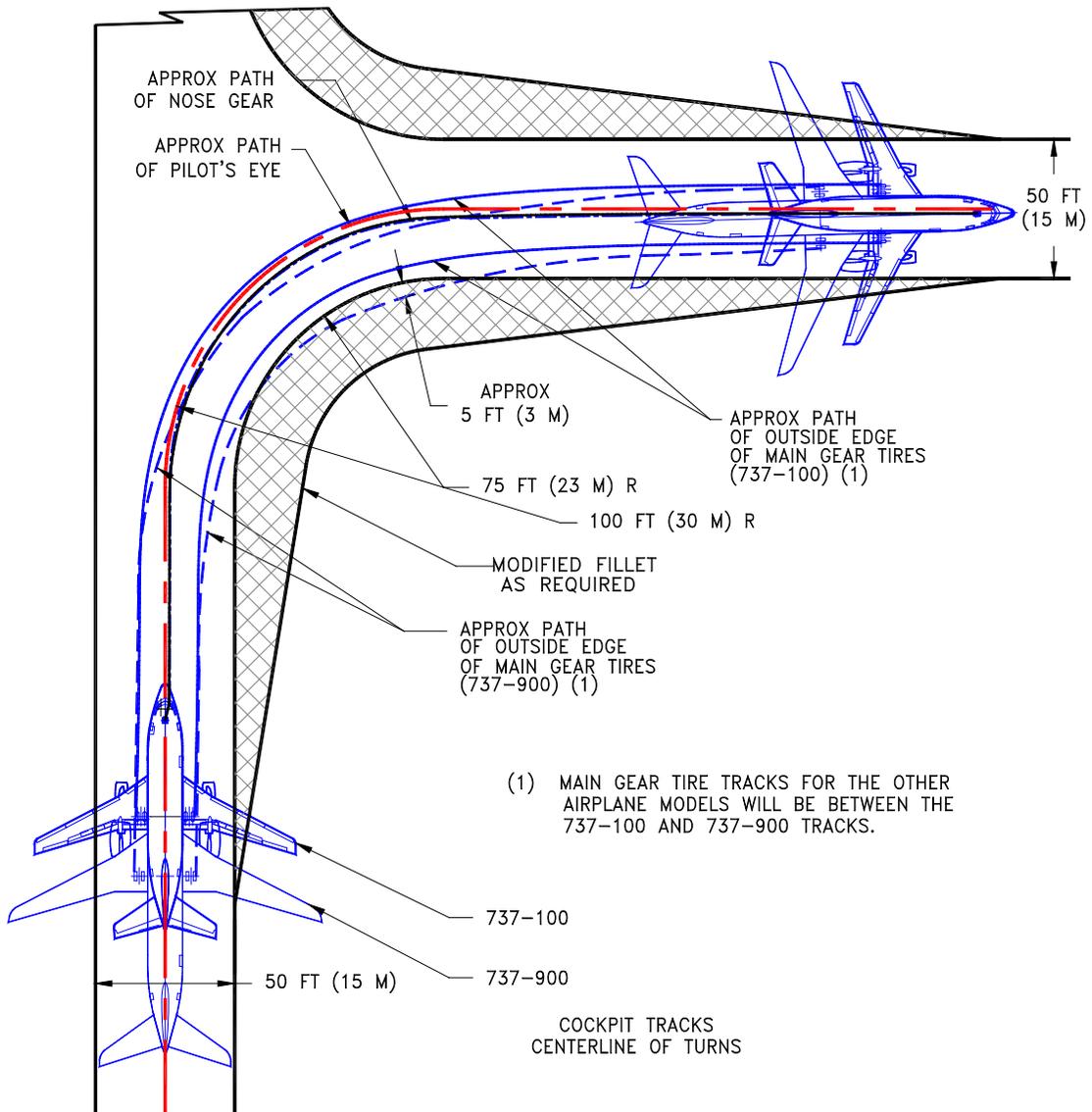
REV A

March 2023

4-15

4.5.4 Runway and Taxiway Turn Paths - Taxiway-to-Taxiway, 90 Degrees, Cockpit Tracks Centerline: Model 737, All Models

NOTE:
BEFORE DETERMINING THE SIZE OF THE INTERSECTION FILLET, CHECK WITH THE AIRLINES REGARDING THE OPERATING PROCEDURES THAT THEY USE AND THE TYPES OF AIRCRAFT THAT ARE EXPECTED TO SERVE THE AIRPORT.



D6-58325-7

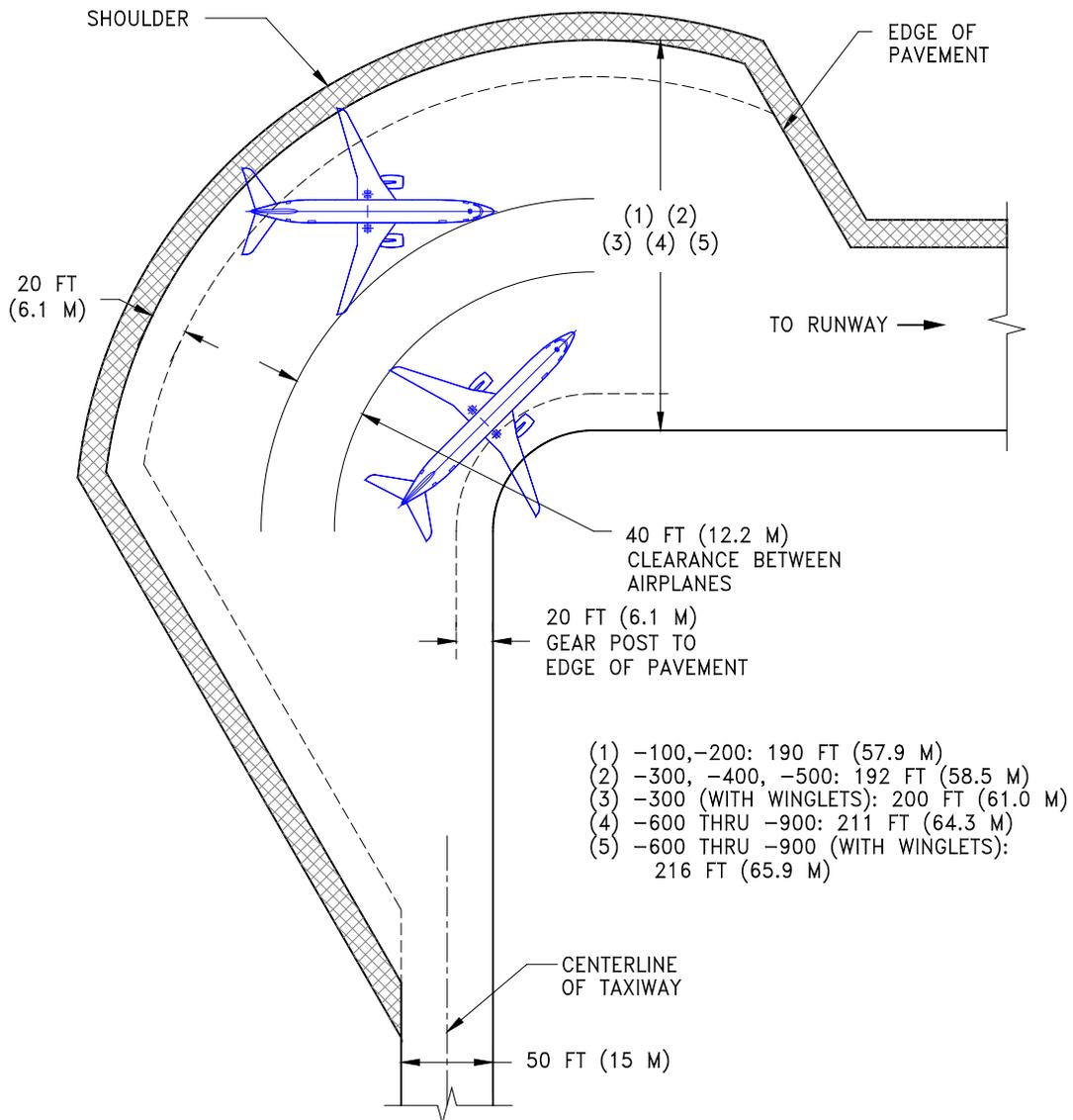
REV A

March 2023

4-16

4.6 RUNWAY HOLDING BAY: MODEL 737, ALL MODELS

NOTE:
BEFORE DETERMINING THE SIZE OF THE PAVEMENT AND SHOULDER, CHECK WITH THE AIRLINES REGARDING THE OPERATING PROCEDURES THAT THEY USE AND THE AIRCRAFT TYPES THAT ARE EXPECTED TO SERVE THE AIRPORT.



D6-58325-7

REV A

March 2023

4-17

5.0 TERMINAL SERVICING

During turnaround at the terminal, certain services must be performed on the aircraft, usually within a given time, to meet flight schedules. This section shows service vehicle arrangements, schedules, locations of service points, and typical service requirements. The data presented in this section reflect ideal conditions for a single airplane. Service requirements may vary according to airplane condition and airline procedure.

Section 5.1 shows typical arrangements of ground support equipment during turnaround. As noted, if the auxiliary power unit (APU) is used, the electrical, air start, and air-conditioning service vehicles would not be required. Passenger loading bridges or portable passenger stairs could be used to load or unload passengers.

Sections 5.2 and 5.3 show typical service times at the terminal. These charts give typical schedules for performing service on the airplane within a given time. Service times could be rearranged to suit availability of personnel, airplane configuration, and degree of service required.

Section 5.4 shows the locations of ground service connections in graphic and in tabular forms. Typical capacities and service requirements are shown in the tables. Services with requirements that vary with conditions are described in subsequent sections.

Section 5.5 shows typical sea level air pressure and flow requirements for starting different engines. The curves are based on an engine start time of 90 seconds.

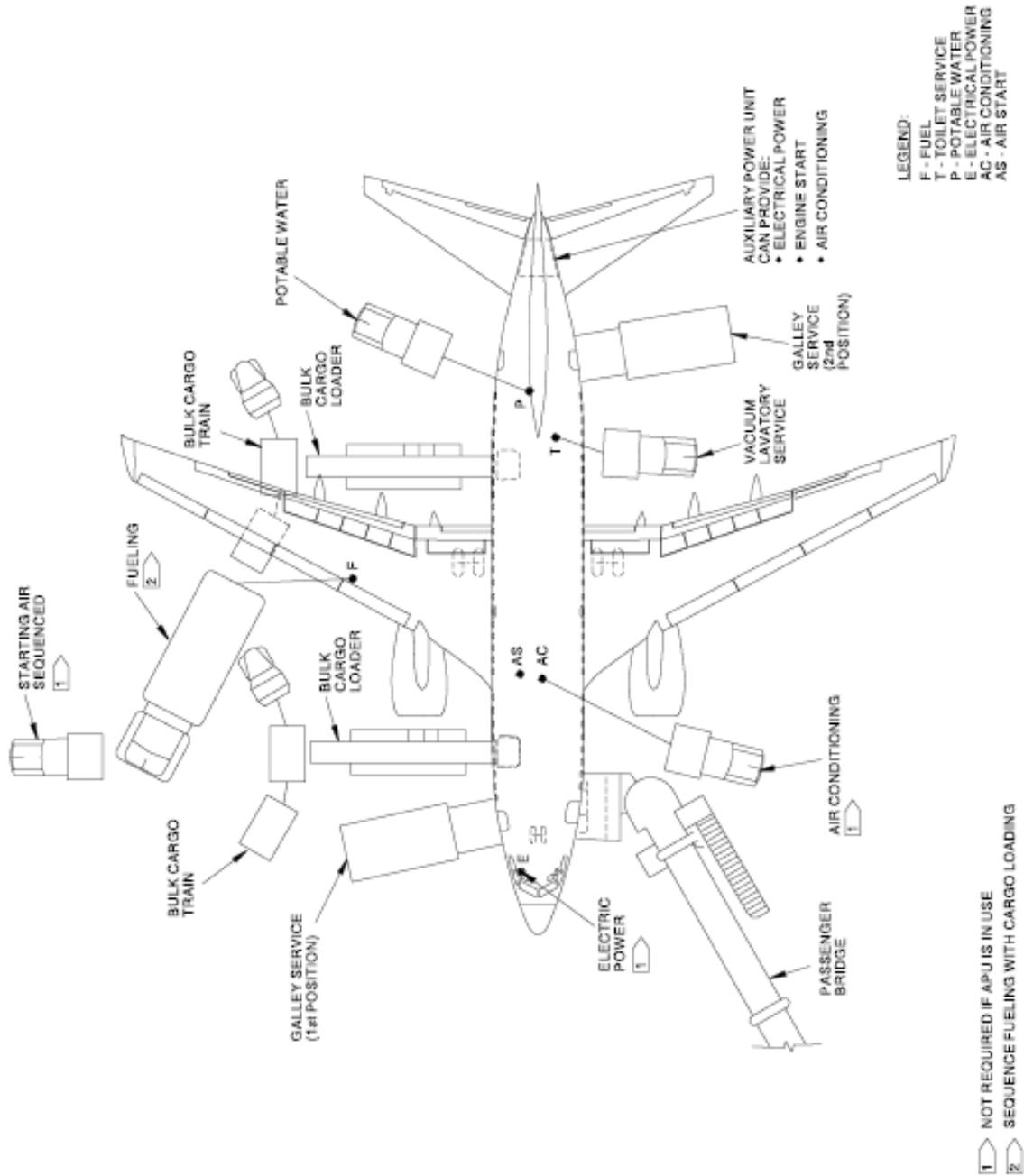
Section 5.6 shows pneumatic requirements for heating and cooling (air conditioning) using high pressure air to run the air cycle machine. The curves show airflow requirements to heat or cool the airplane within a given time and ambient conditions. Maximum allowable pressure and temperature for air cycle machine operation are 60 psia and 450°F, respectively.

Section 5.7 shows pneumatic requirements for heating and cooling the airplane, using low pressure conditioned air. This conditioned air is supplied through an 8-in ground air connection (GAC) directly to the passenger cabin, bypassing the air cycle machines.

Section 5.8 shows ground towing requirements for various ground surface conditions.

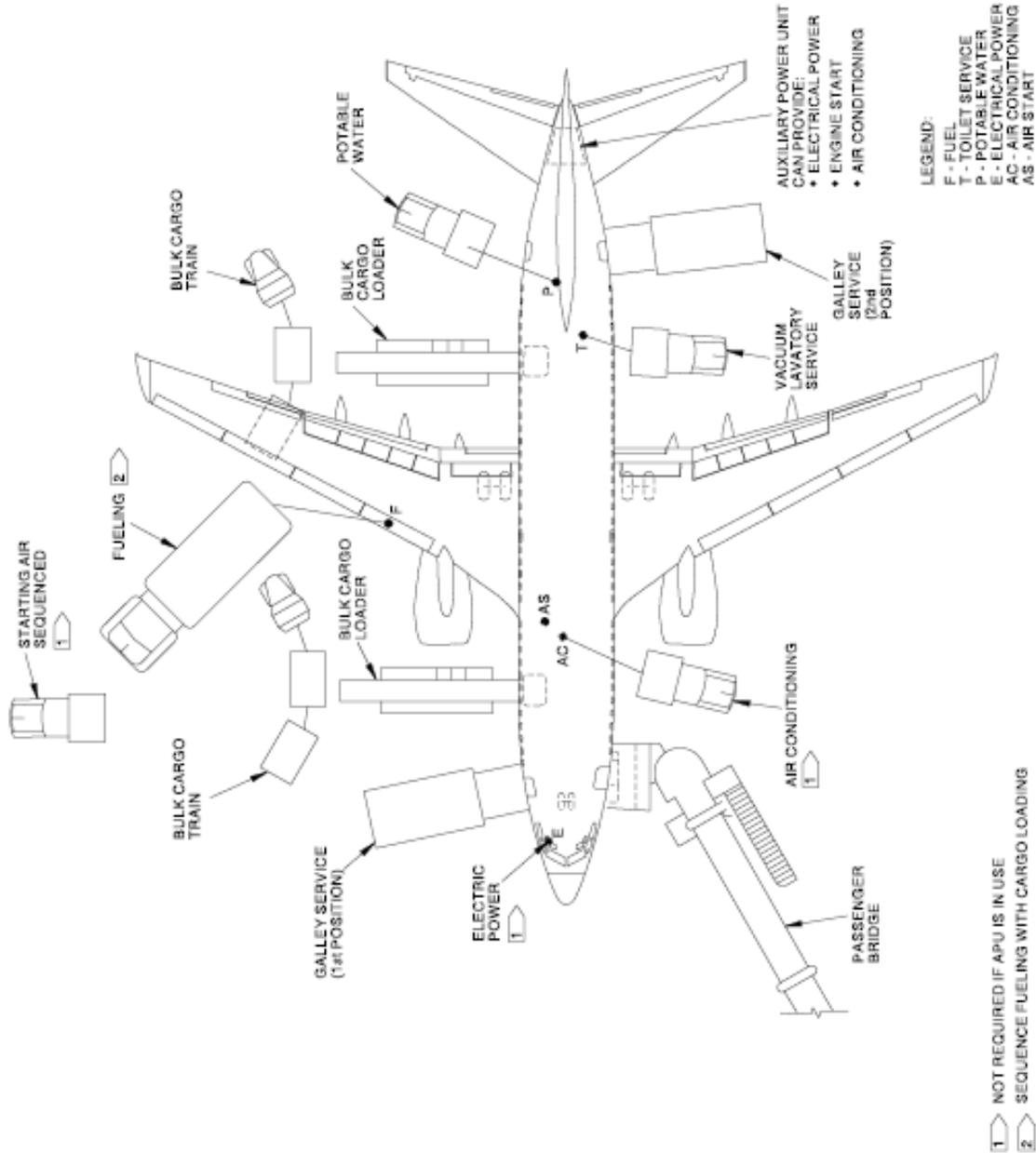
5.1 AIRPLANE SERVICING ARRANGEMENT - TYPICAL TURNAROUND

5.1.1 Airplane Servicing Arrangement - Typical Turnaround: Model 737-600



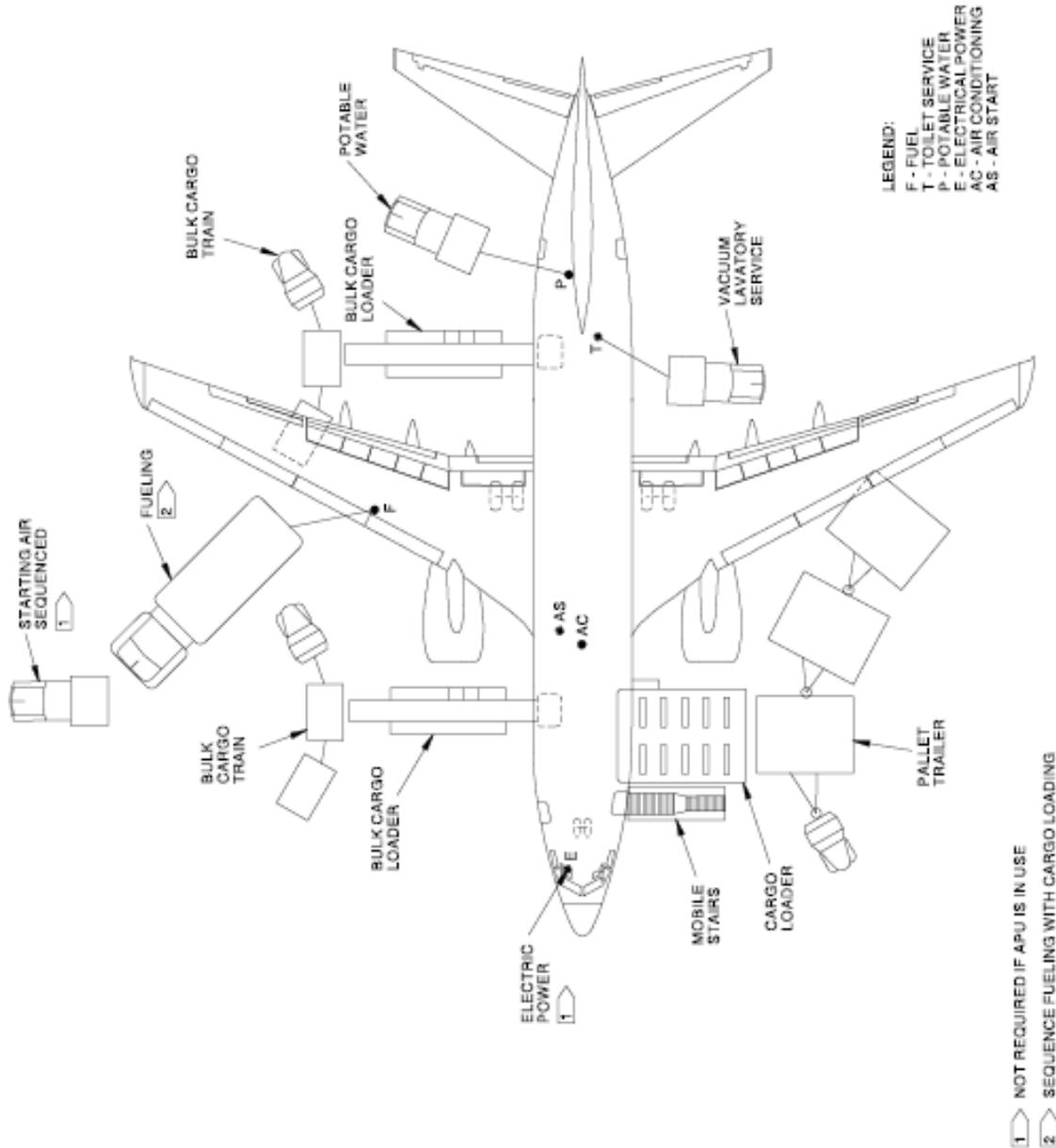
D6-58325-7

5.1.2 Airplane Servicing Arrangement - Typical Turnaround: Model 737-700, -700W



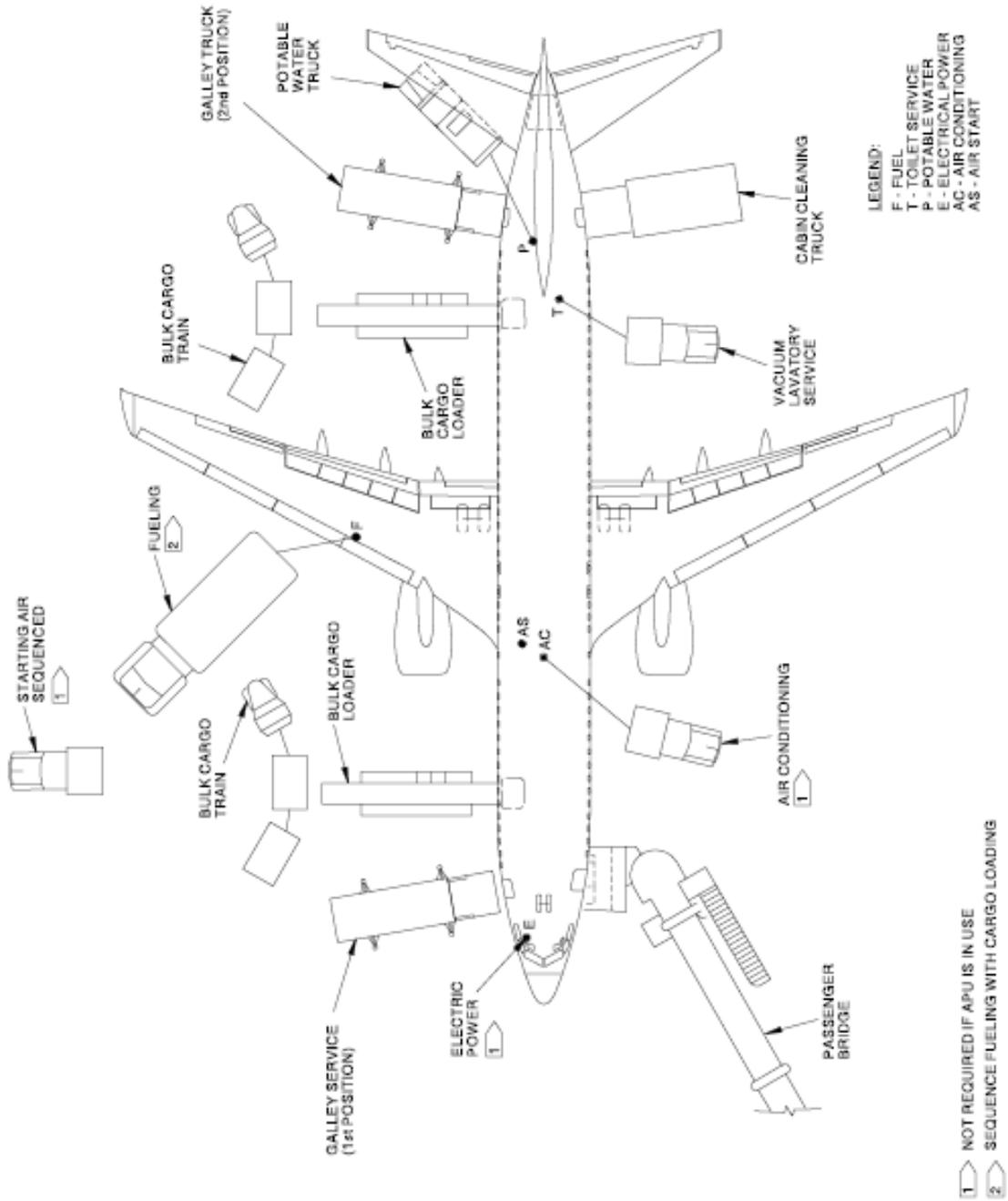
D6-58325-7

5.1.3 Airplane Servicing Arrangement - Typical Turnaround: Model 737-700C, -700QC, -800BCF



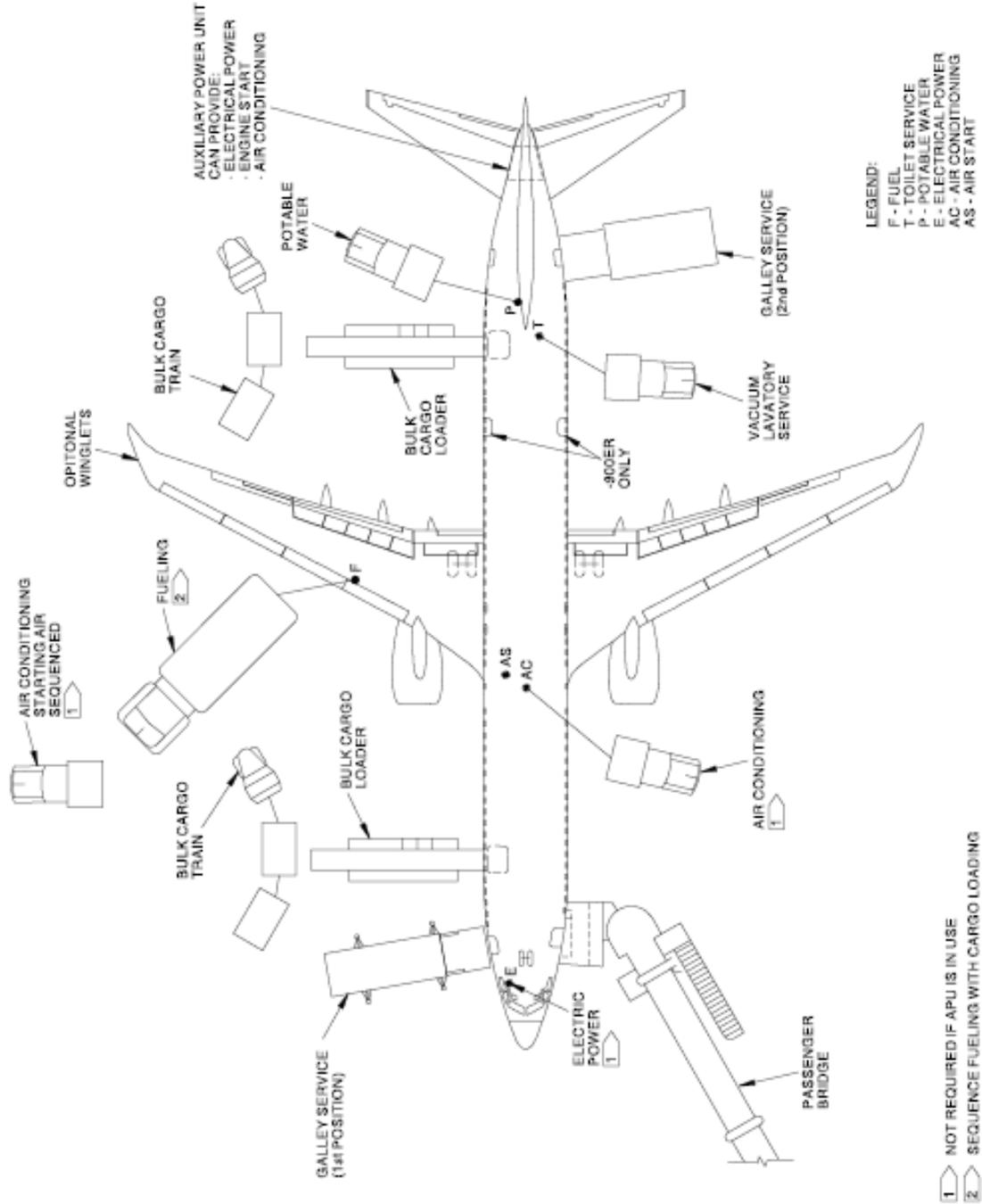
D6-58325-7

5.1.4 Airplane Servicing Arrangement - Typical Turnaround: Model 737-800, -800W



D6-58325-7

5.1.5 Airplane Servicing Arrangement - Typical Turnaround: Model 737-900, -900ER, With and Without Winglets



D6-58325-7

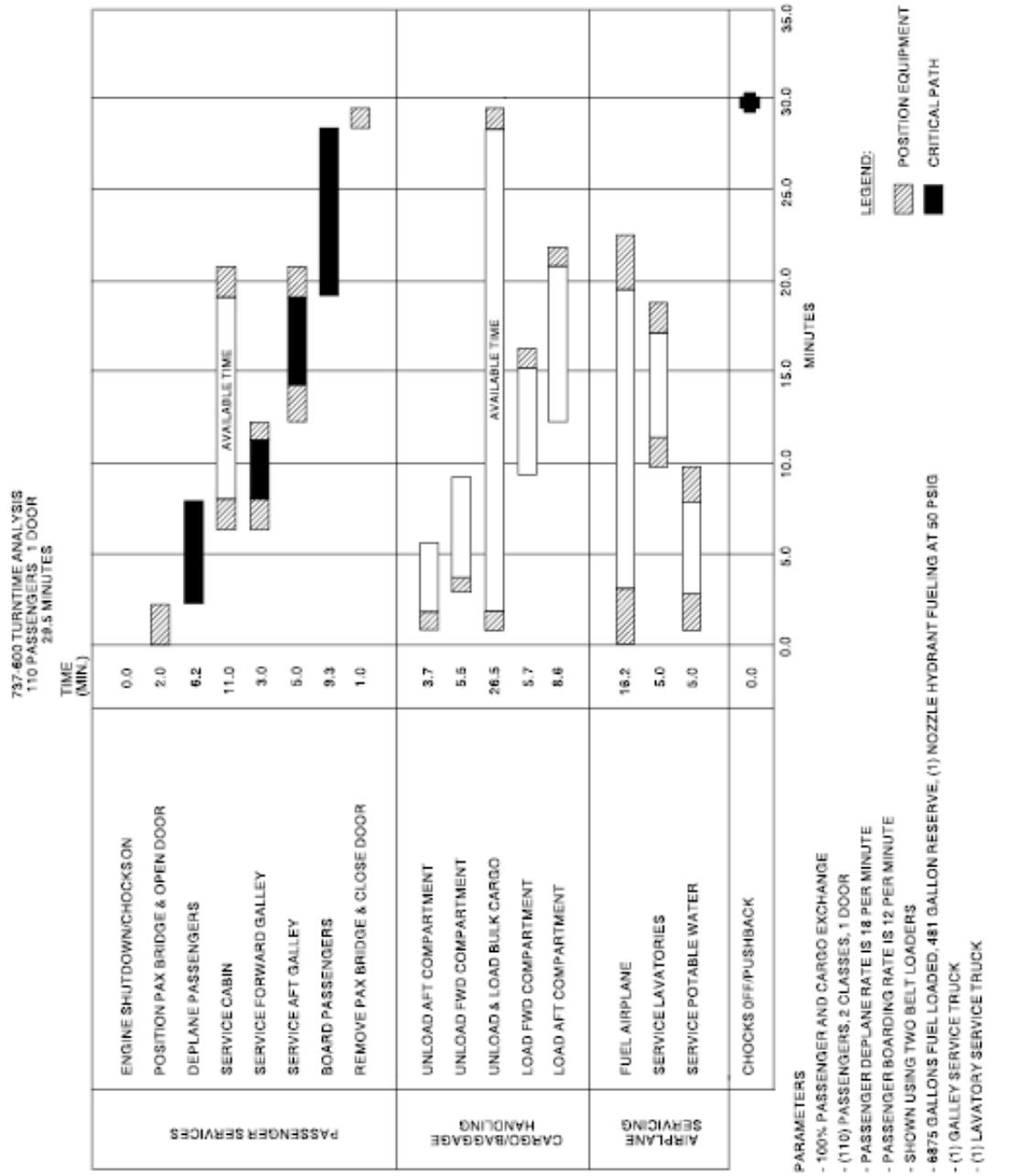
**5.1.6 Airplane Servicing Arrangement - Typical Turnaround: Model 737
BBJ1, BBJ2**

NOTE

AIRPLANE SERVICING ARRANGEMENT CHARTS
ARE NOT INCLUDED IN THIS DOCUMENT
BECAUSE THE DIFFERENT CONFIGURATIONS
OF BOEING BUSINESS JET AIRPLANES
HAVE INDIVIDUAL REQUIREMENTS.
CONSULT AIRCRAFT USER/OPERATOR FOR CURRENT
REQUIREMENTS

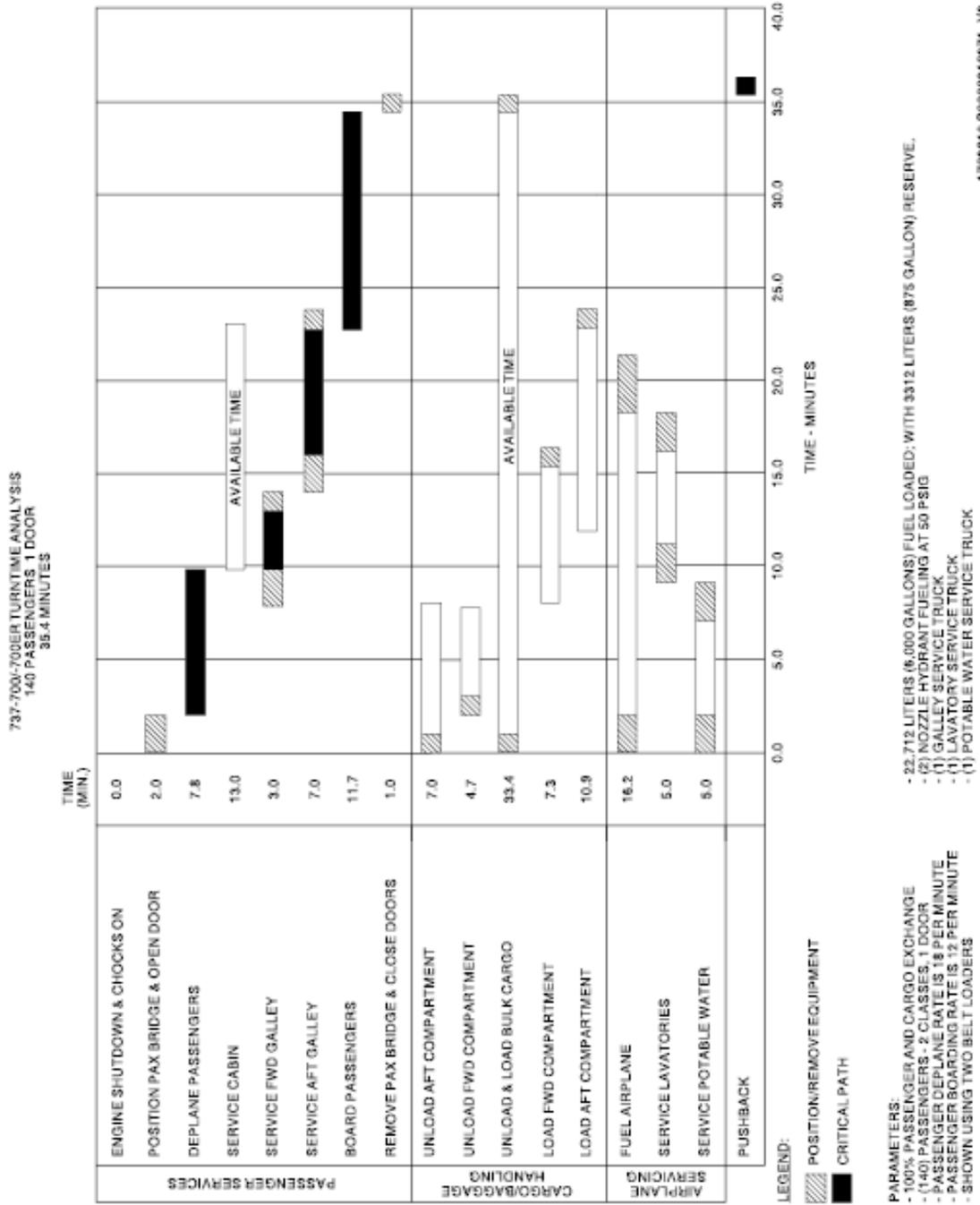
5.2 TERMINAL OPERATIONS - TURNAROUND STATION

5.2.1 Terminal Operations – Turnaround Station: Model 737-600



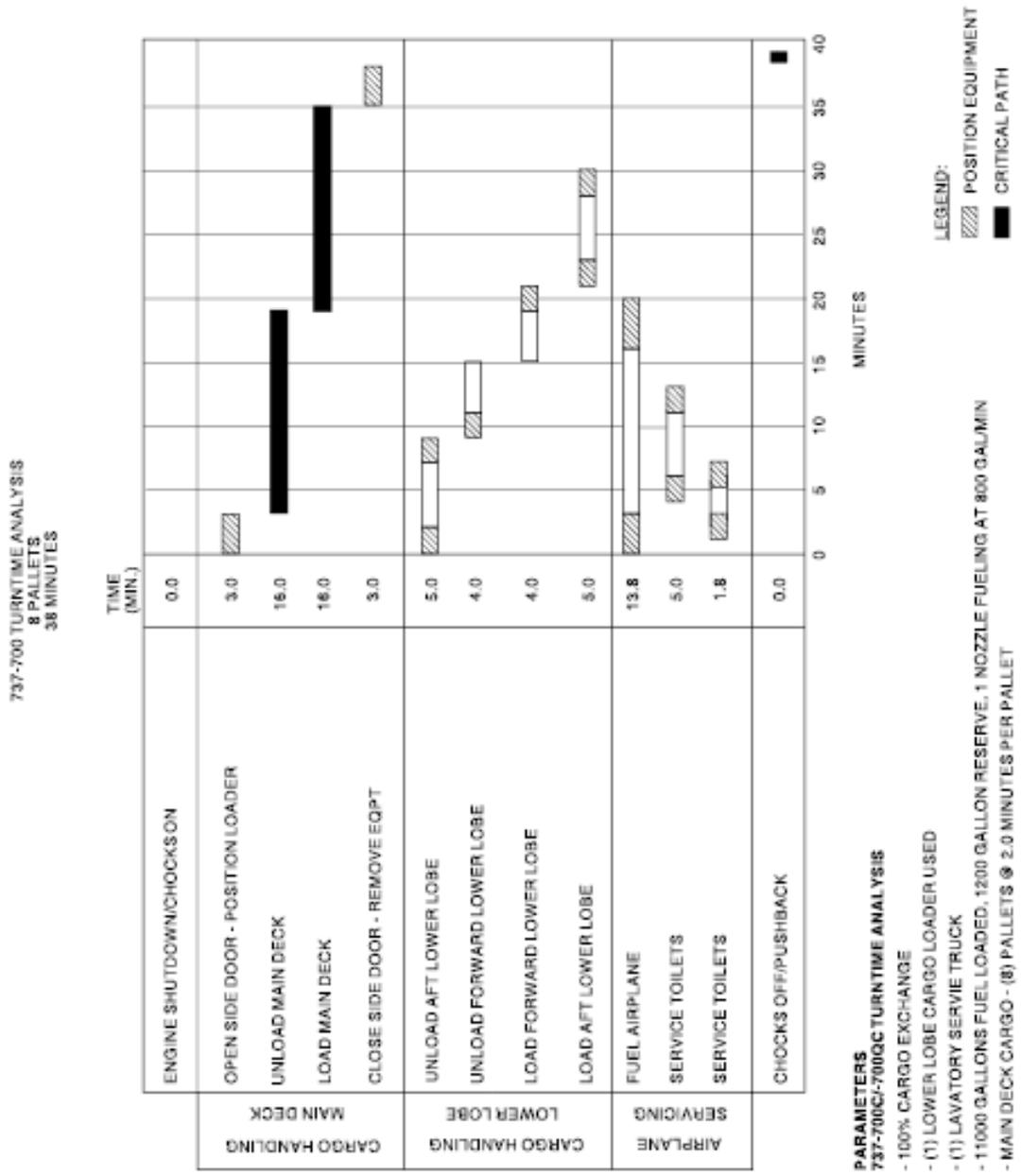
D6-58325-7

5.2.2 Terminal Operations – Turnaround Station: Model 737-700, -700W

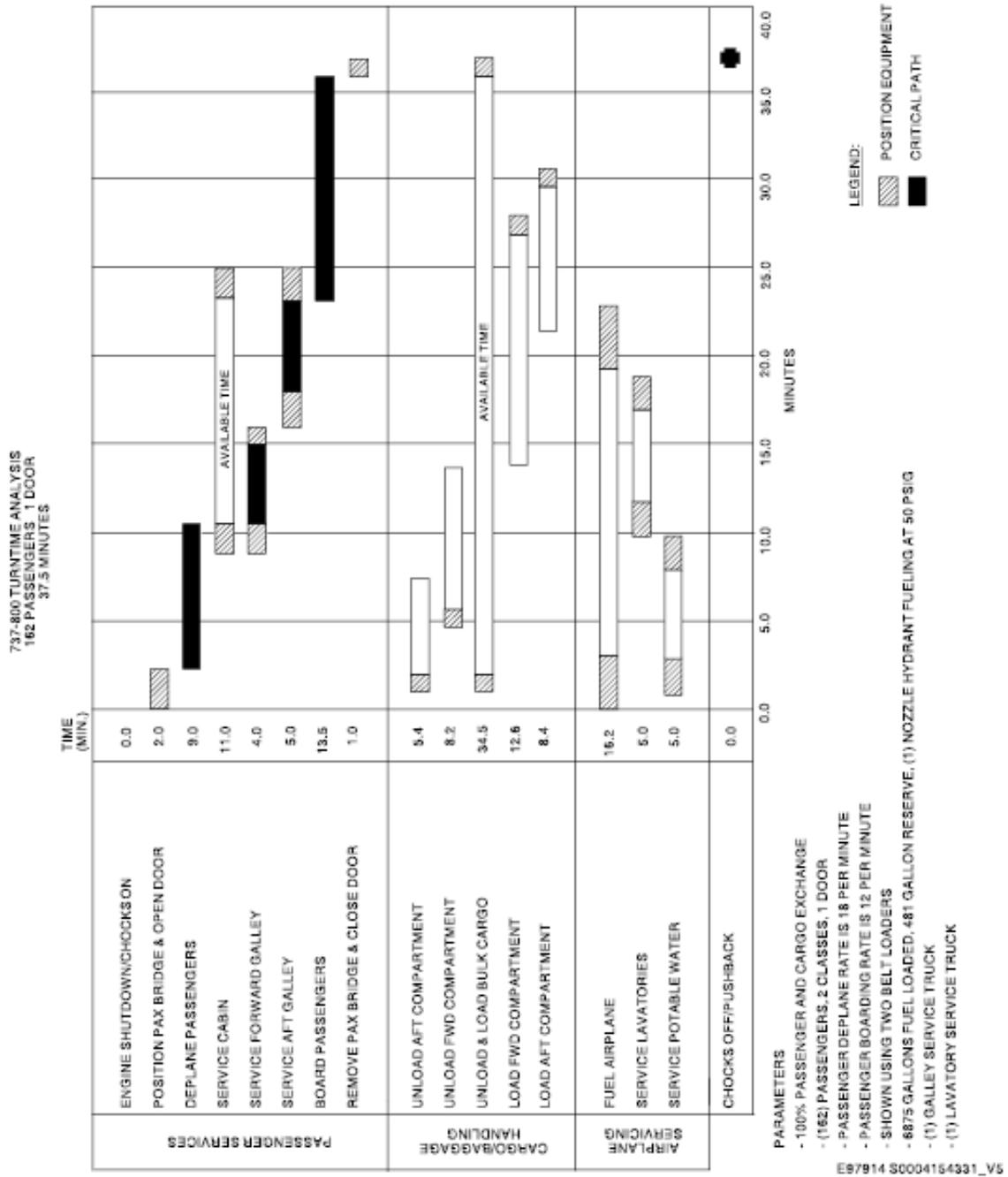


D6-58325-7

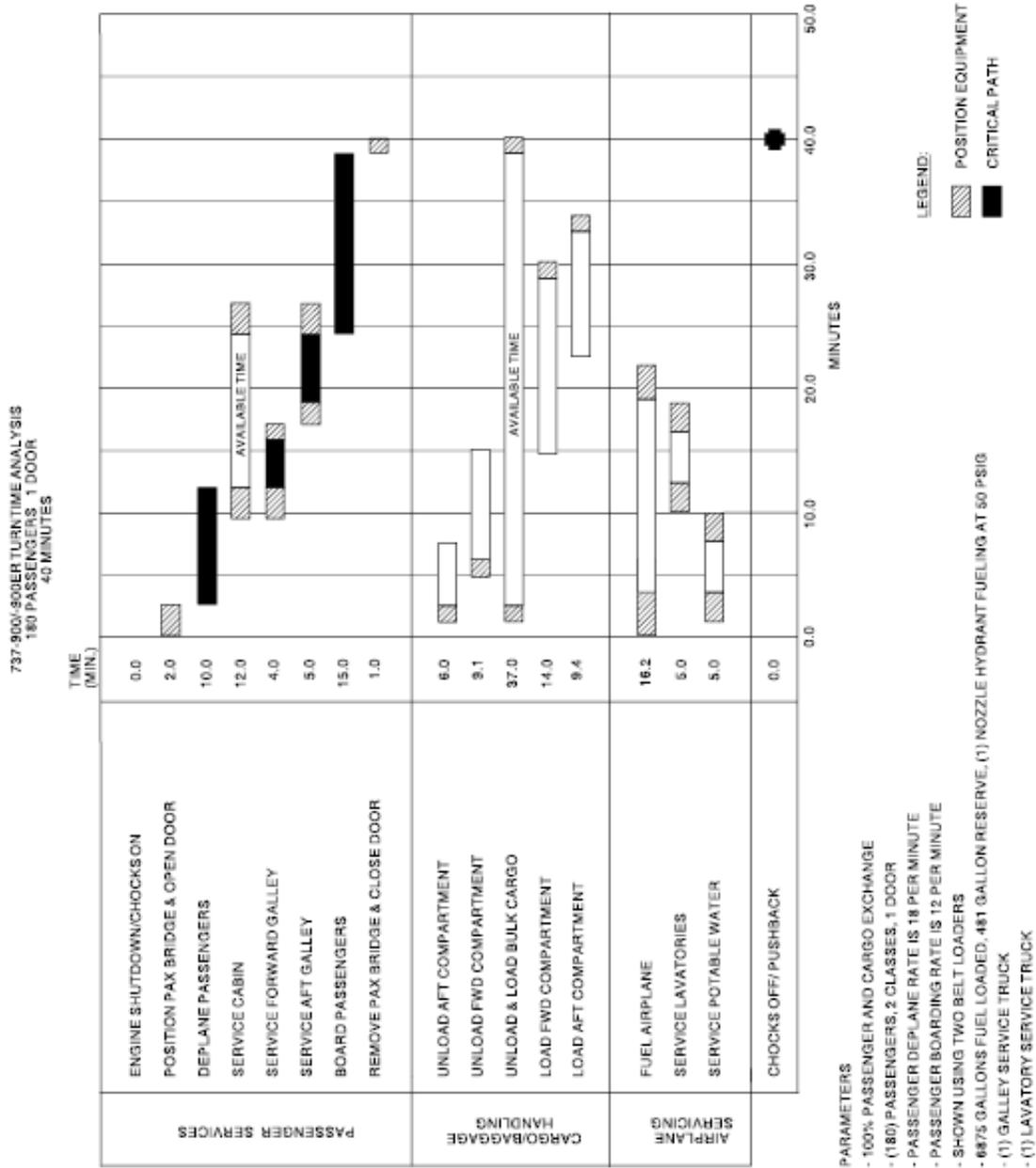
5.2.3 Terminal Operations – Turnaround Station: Model 737-700C, -700QC



5.2.4 Terminal Operations – Turnaround Station: Model 737-800, -800W



5.2.5 Terminal Operations – Turnaround Station: Model 737-900, -900ER, With and Without Winglets



D6-58325-7

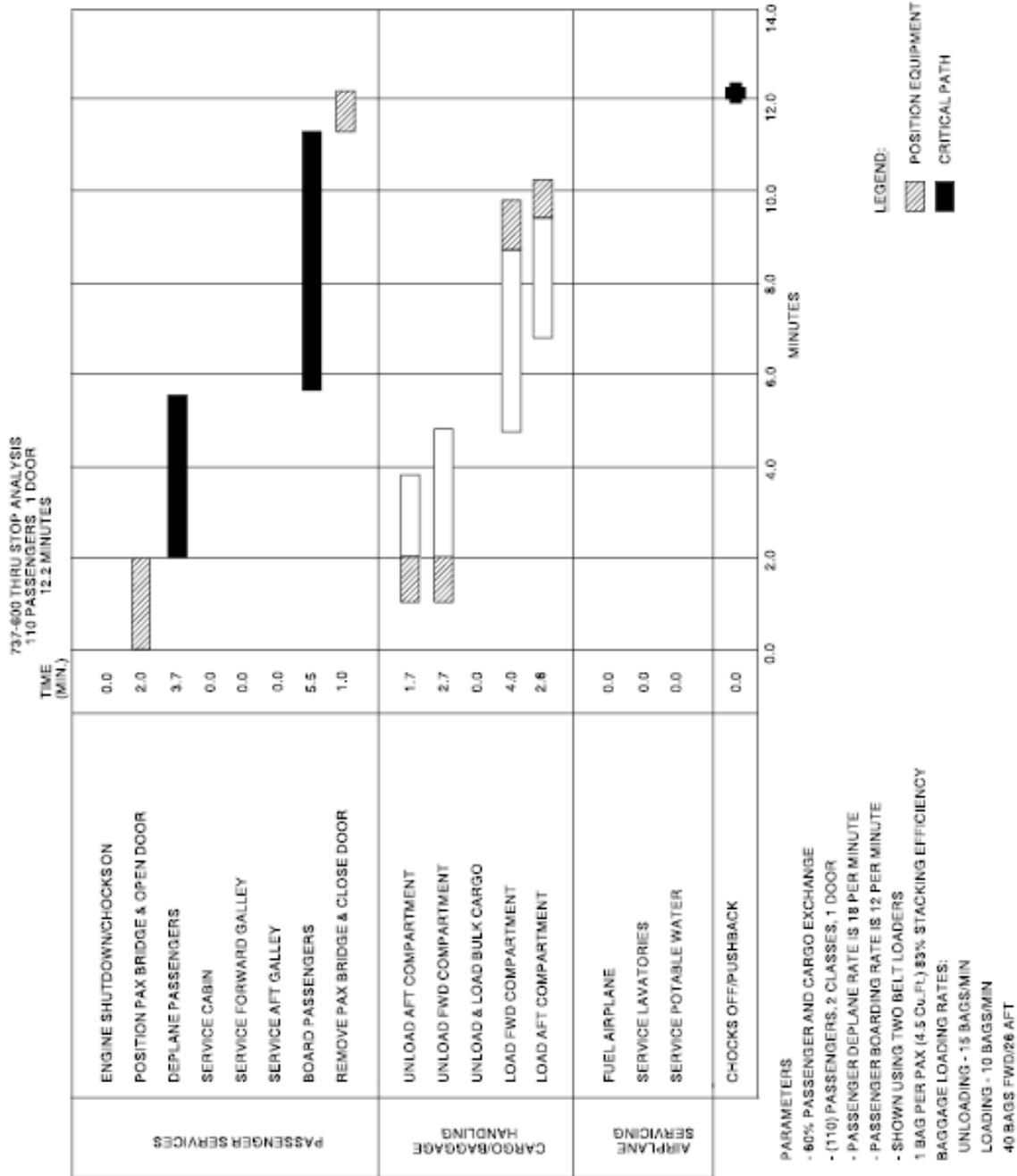
5.2.6 Terminal Operations – Turnaround Station: Model 737 BBJ1, BBJ2

NOTE

TURNAROUND STATION TIME CHARTS
ARE NOT INCLUDED IN THIS DOCUMENT
BECAUSE THE DIFFERENT CONFIGURATIONS
OF BOEING BUSINESS JET AIRPLANES
HAVE INDIVIDUAL REQUIREMENTS.
CONSULT AIRCRAFT USER/OPERATOR FOR CURRENT
REQUIREMENTS

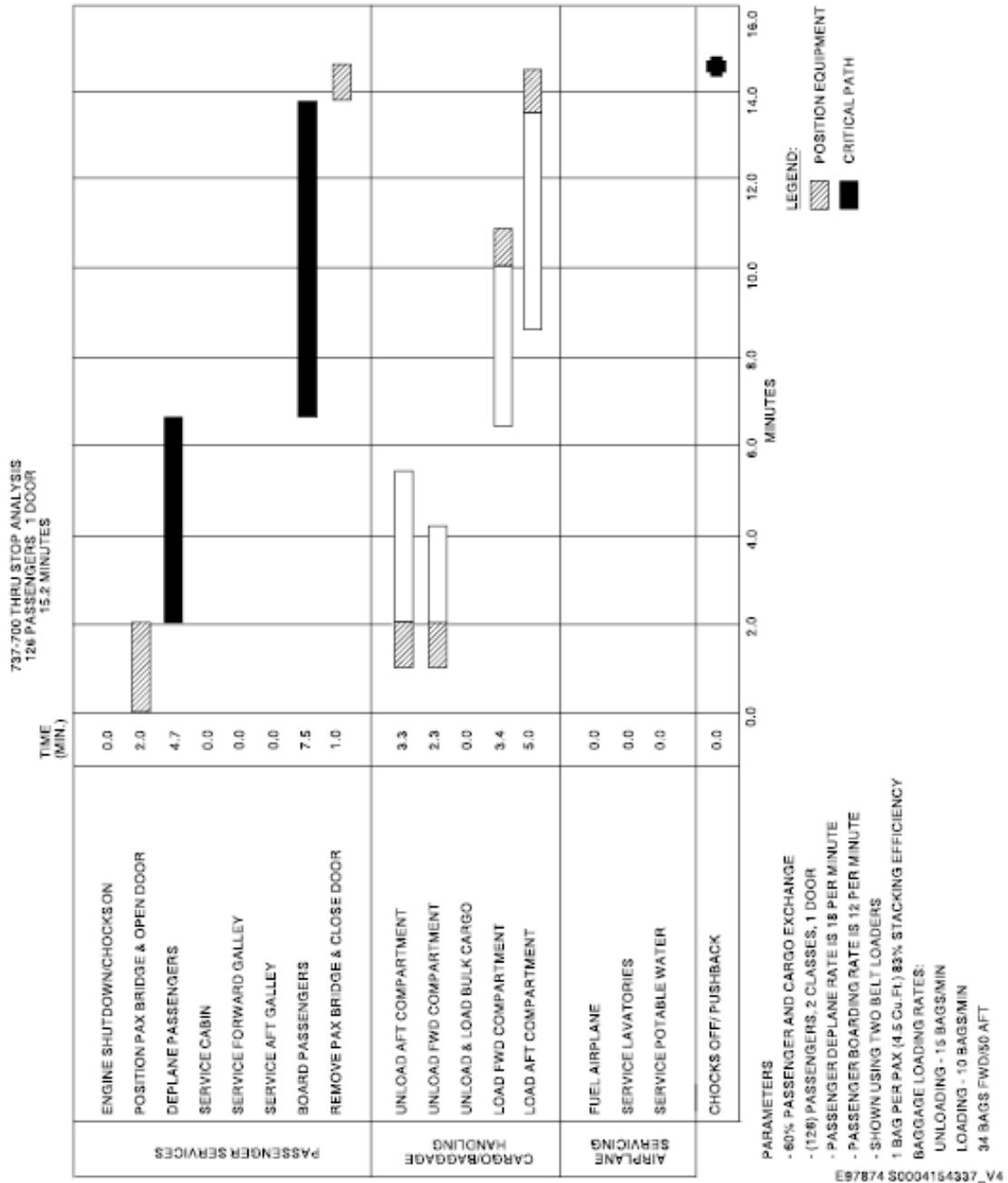
5.3 TERMINAL OPERATIONS - EN ROUTE STATION

5.3.1 Terminal Operations - En Route Station: Model 737-600

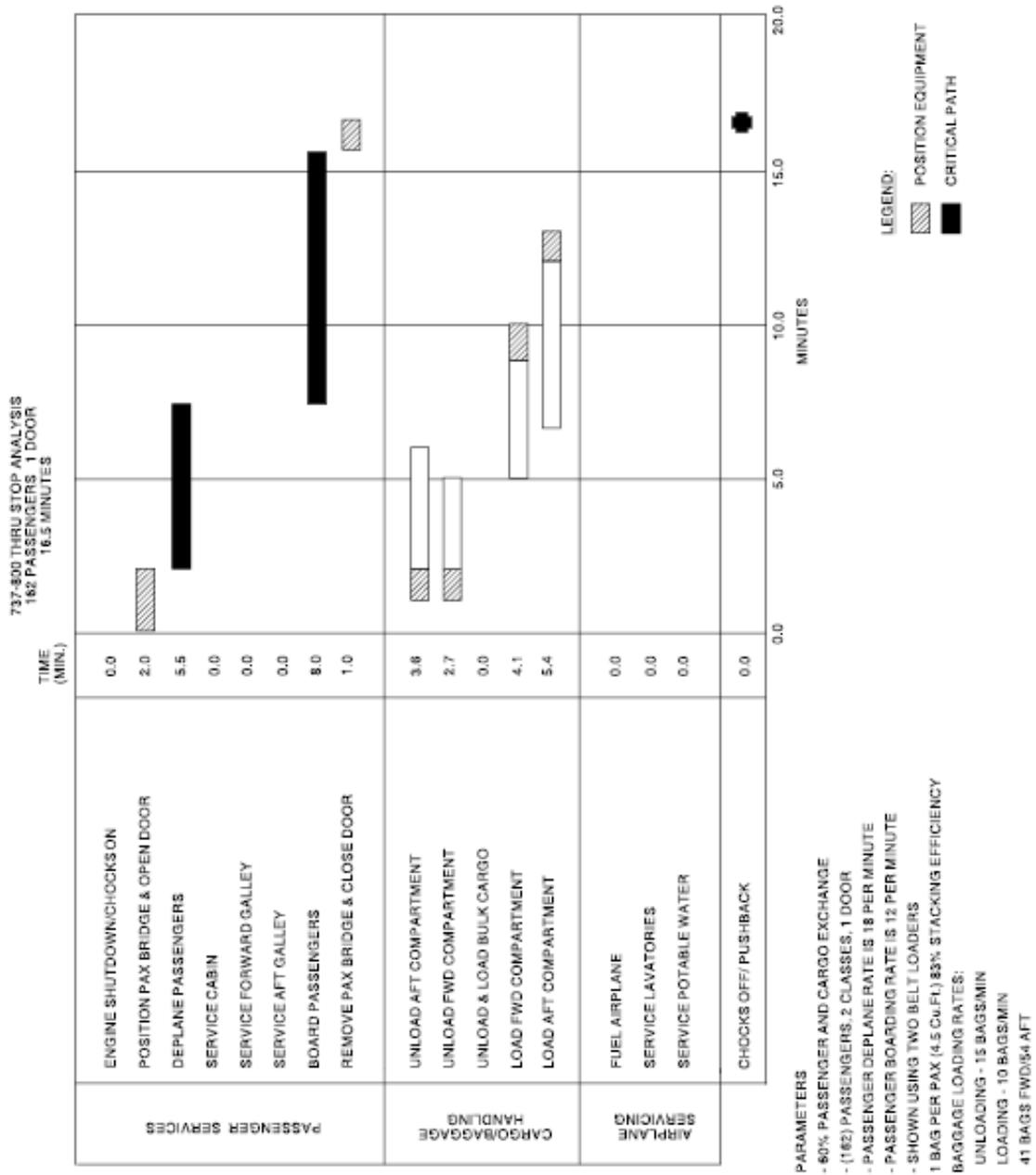


D6-58325-7

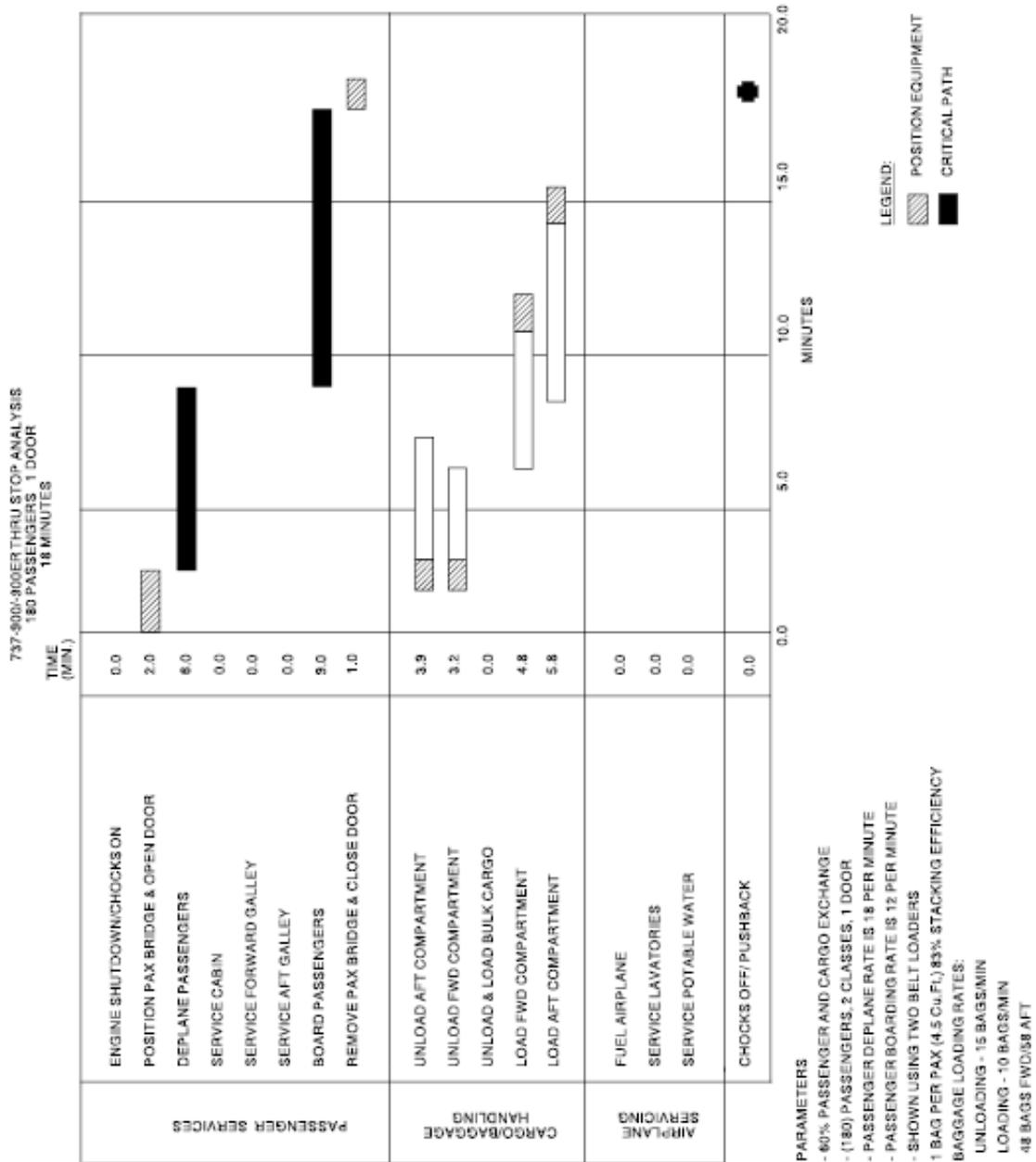
5.3.2 Terminal Operations - En Route Station: Model 737-700, -700W



5.3.3 Terminal Operations - En Route Station: Model 737-800, -800W



5.3.4 Terminal Operations - En Route Station: Model 737-900, -900ER, With and Without Winglets



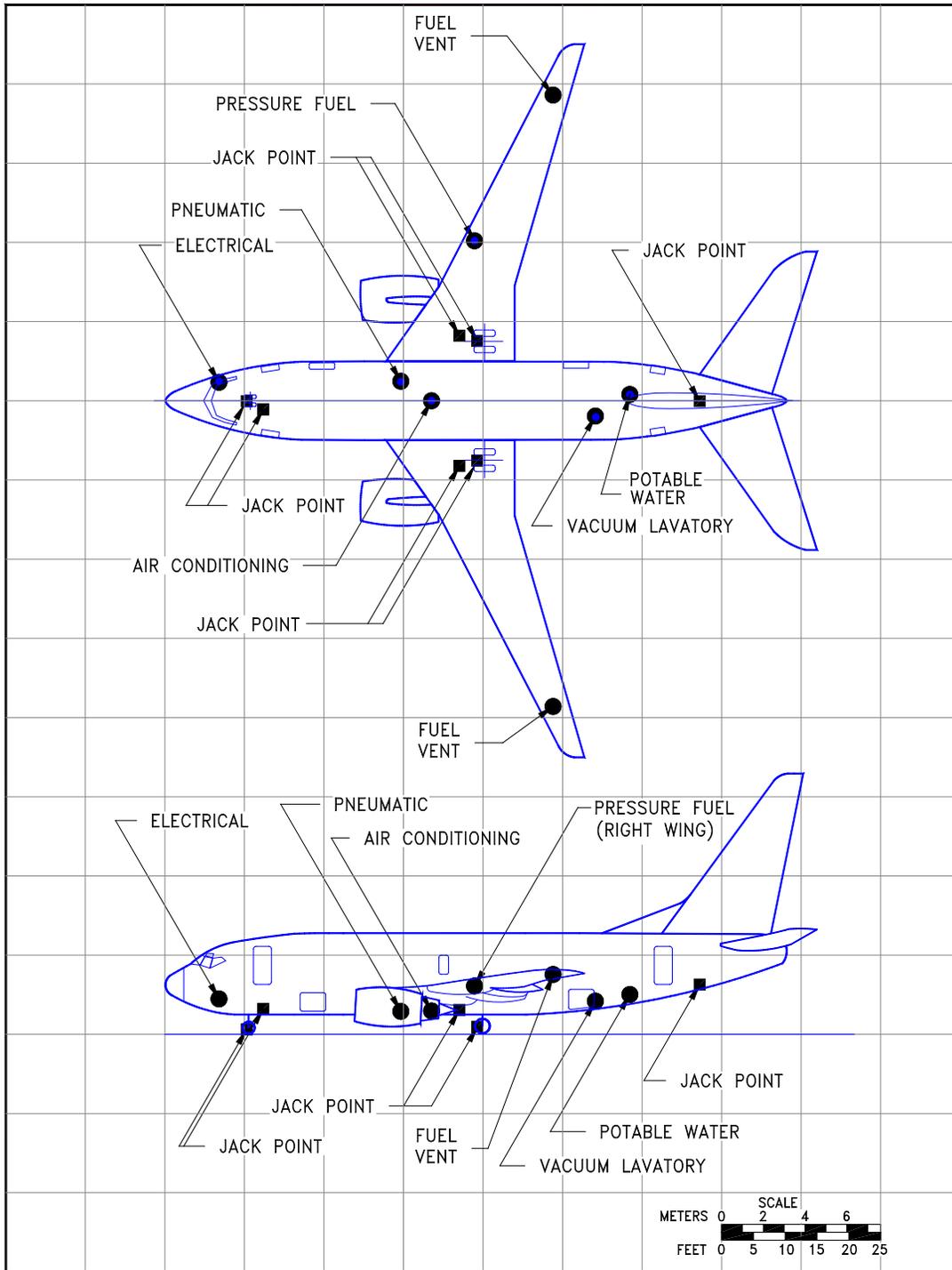
5.3.5 Terminal Operations - En Route Station: Model 737 BBJ1, BBJ2

NOTE

ENROUTE TERMINAL OPERATIONS TIME CHARTS
ARE NOT INCLUDED IN THIS DOCUMENT
BECAUSE THE DIFFERENT CONFIGURATIONS
OF BOEING BUSINESS JET AIRPLANES
HAVE INDIVIDUAL REQUIREMENTS.
CONSULT AIRCRAFT USER/OPERATOR FOR CURRENT
REQUIREMENTS

5.4 GROUND SERVICING CONNECTIONS

5.4.1 Ground Service Connections: Model 737-600



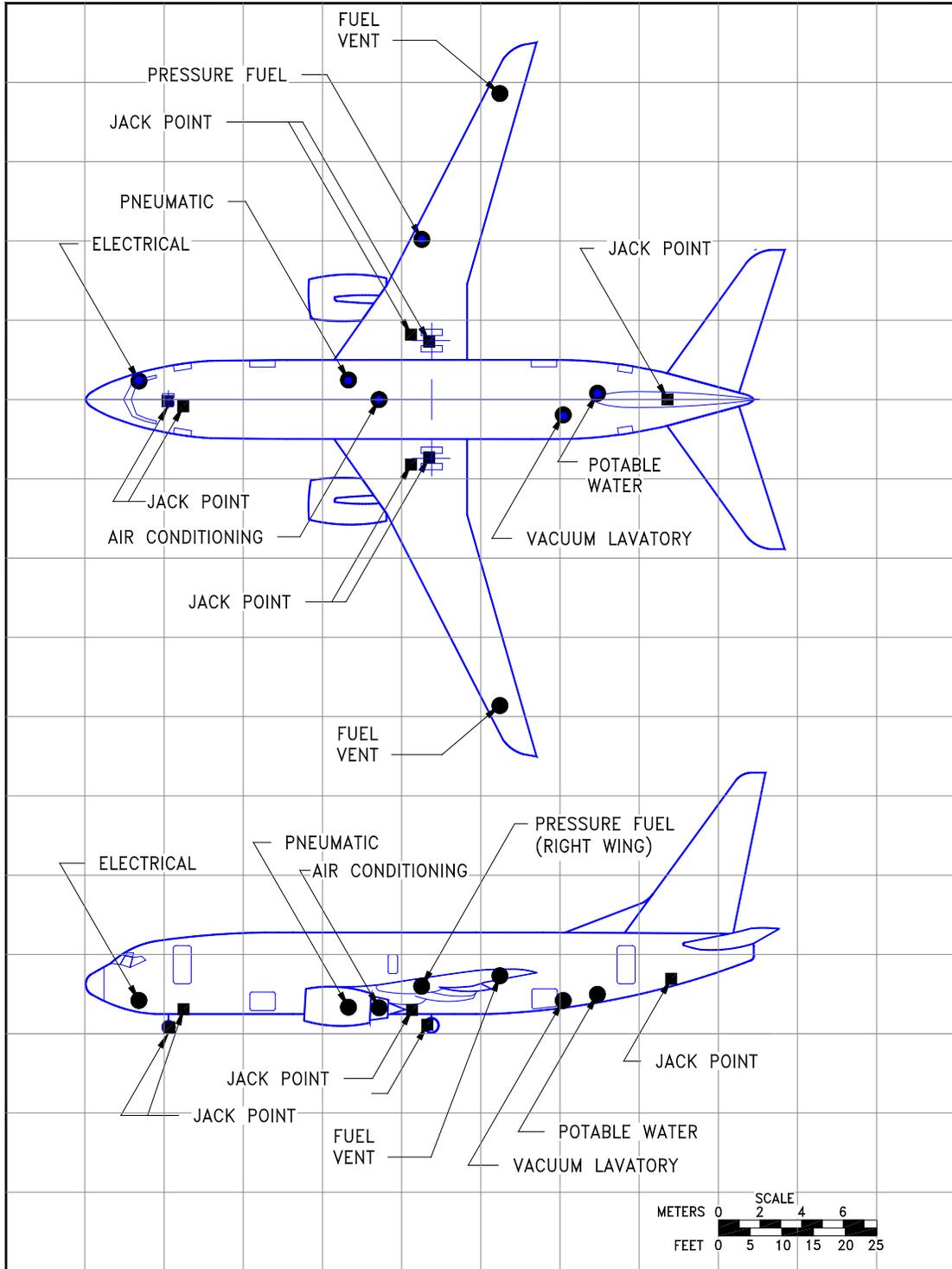
D6-58325-7

REV A

March 2023

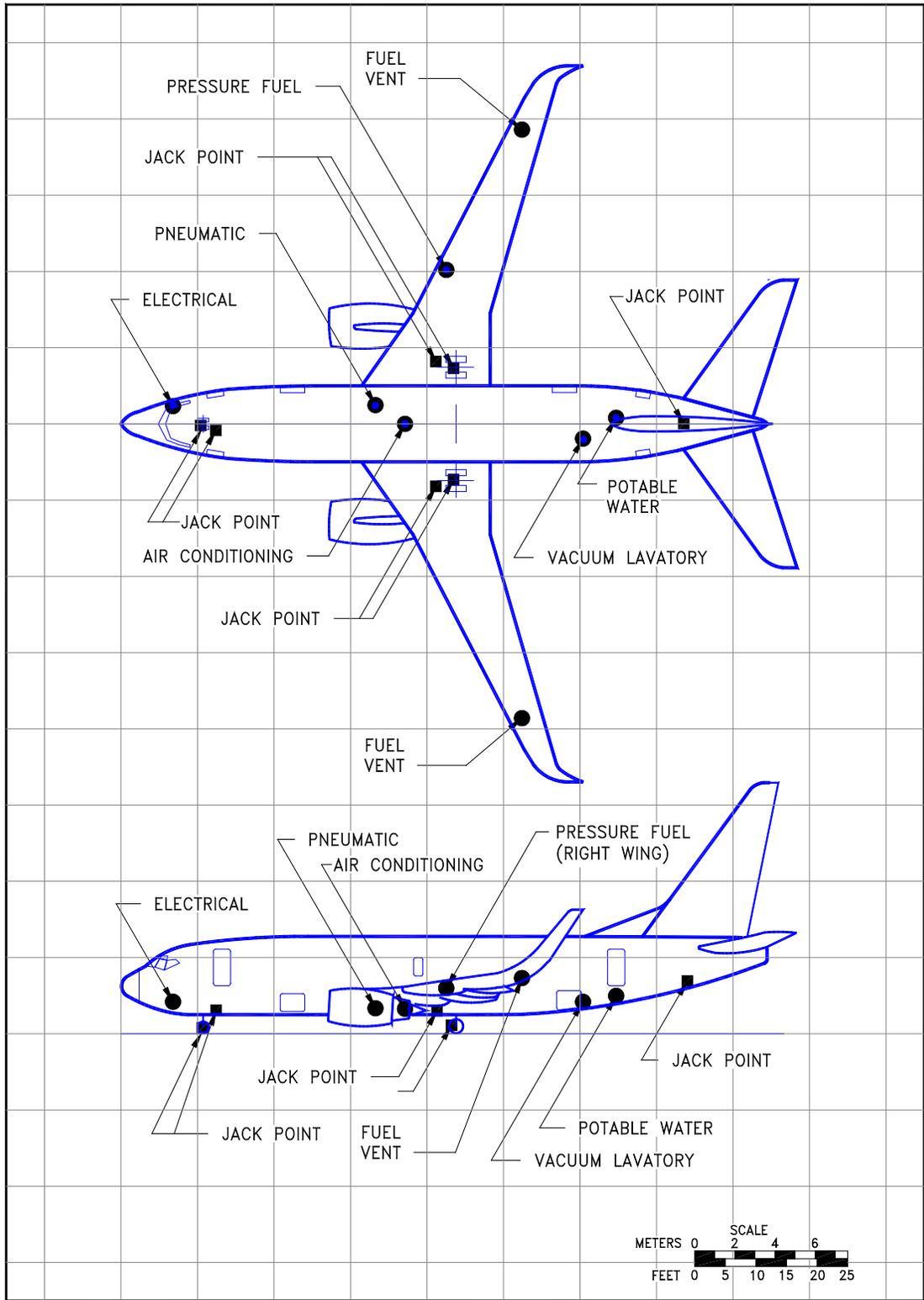
5-19

5.4.2 Ground Service Connections: Model 737-700



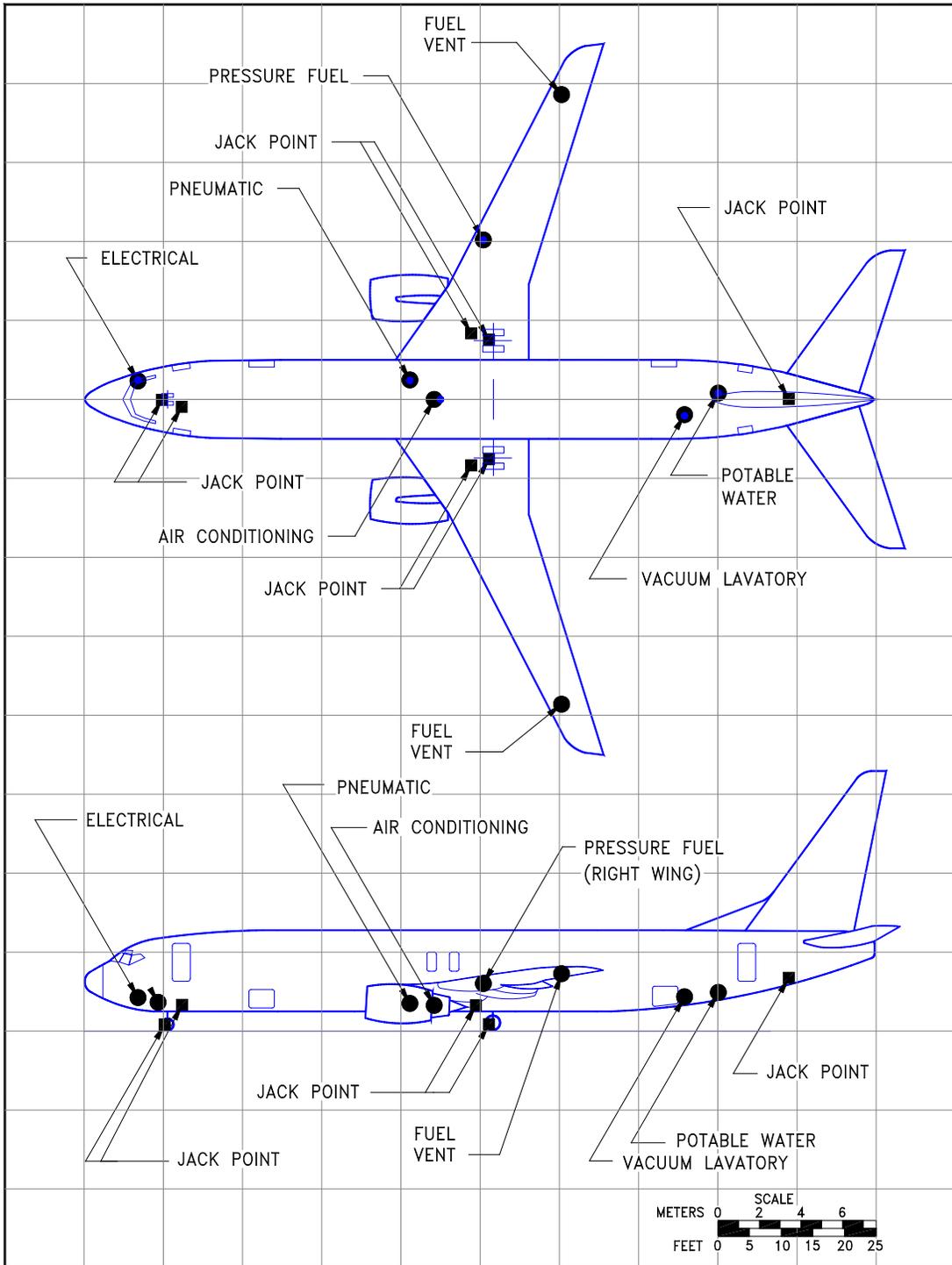
D6-58325-7

5.4.3 Ground Service Connections: Model 737-700W, BBJ 1



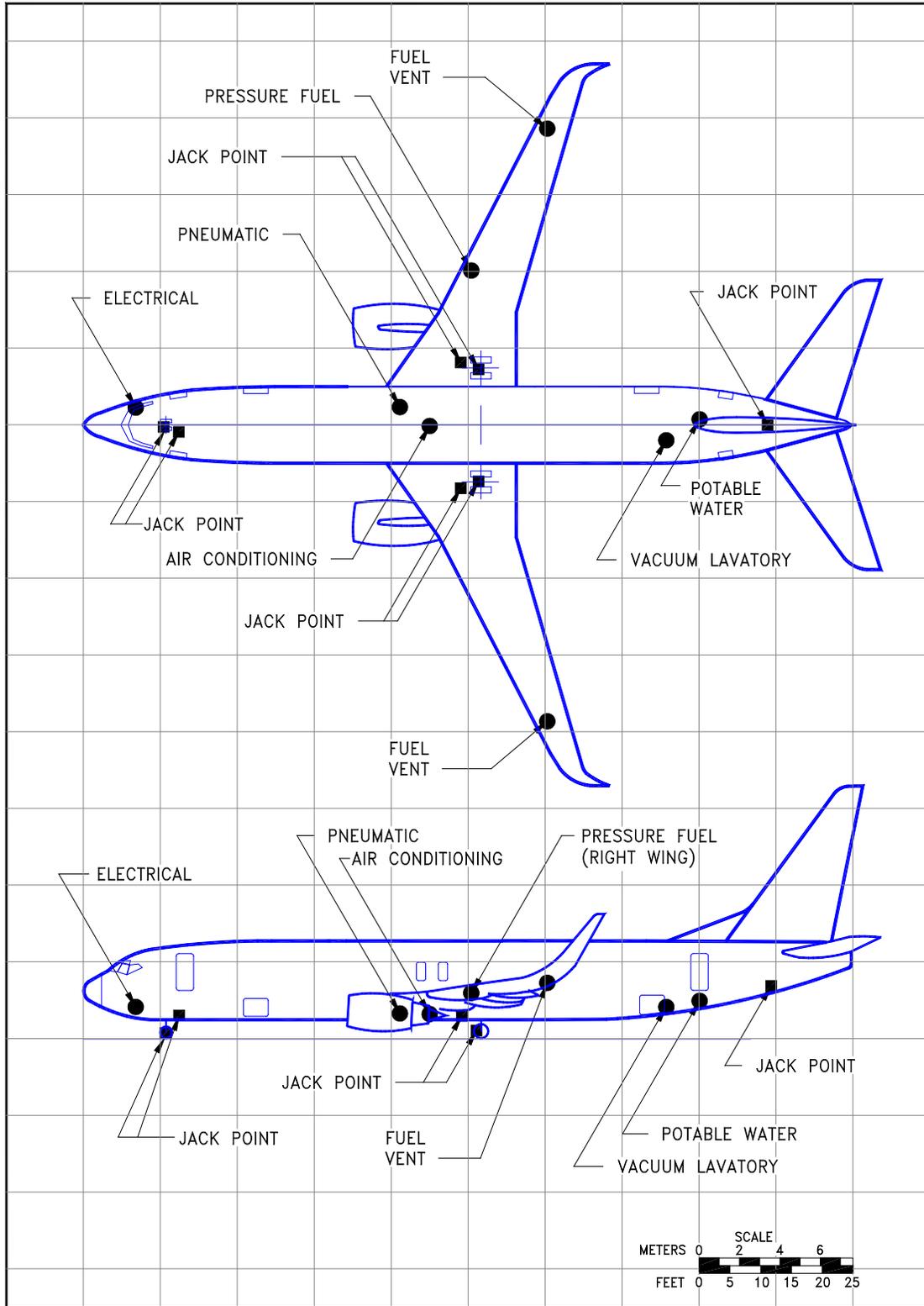
D6-58325-7

5.4.4 Ground Service Connections: Model 737-800



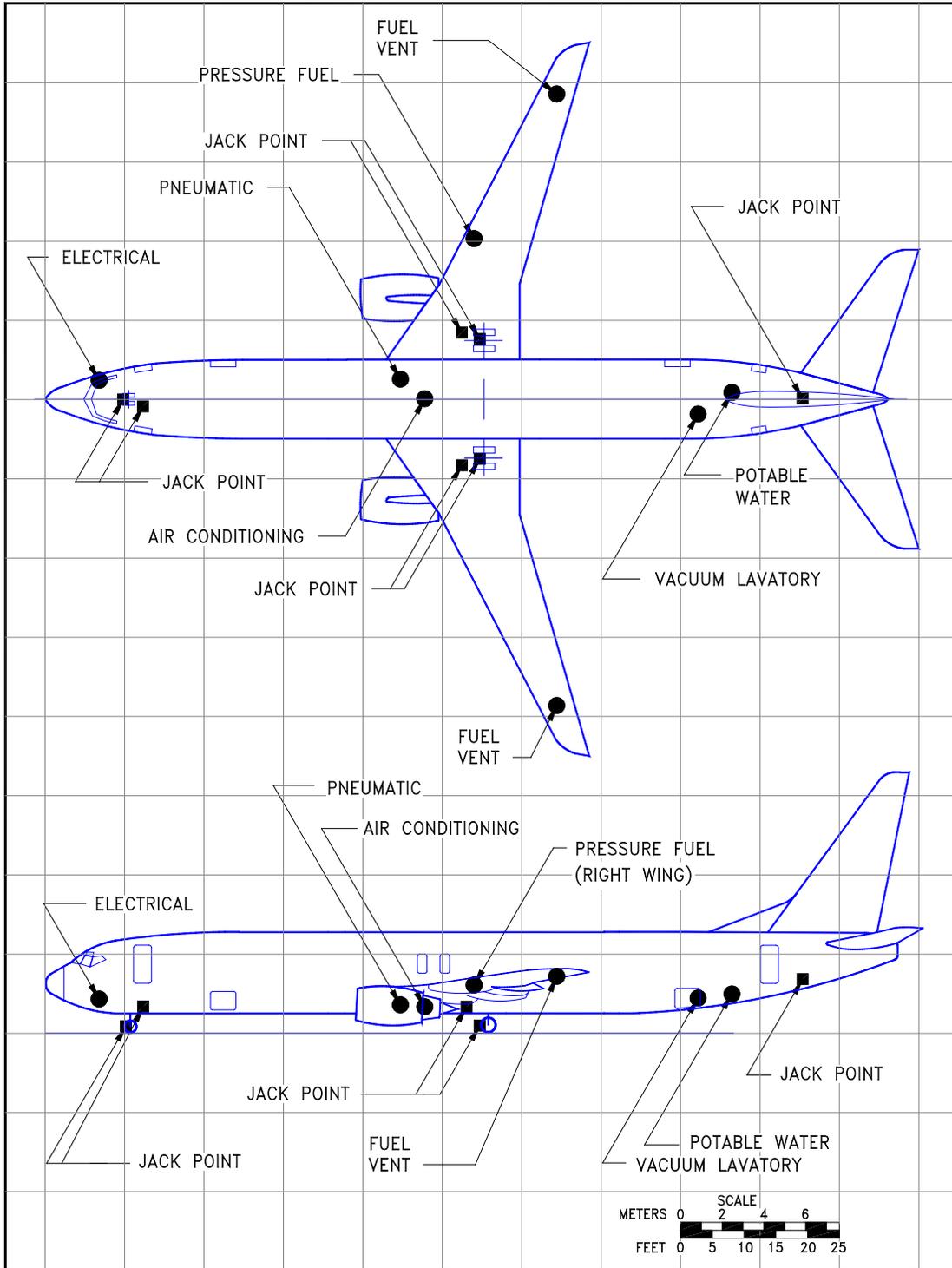
D6-58325-7

5.4.5 Ground Service Connections: Model 737-800W, -800BCF, BBJ2



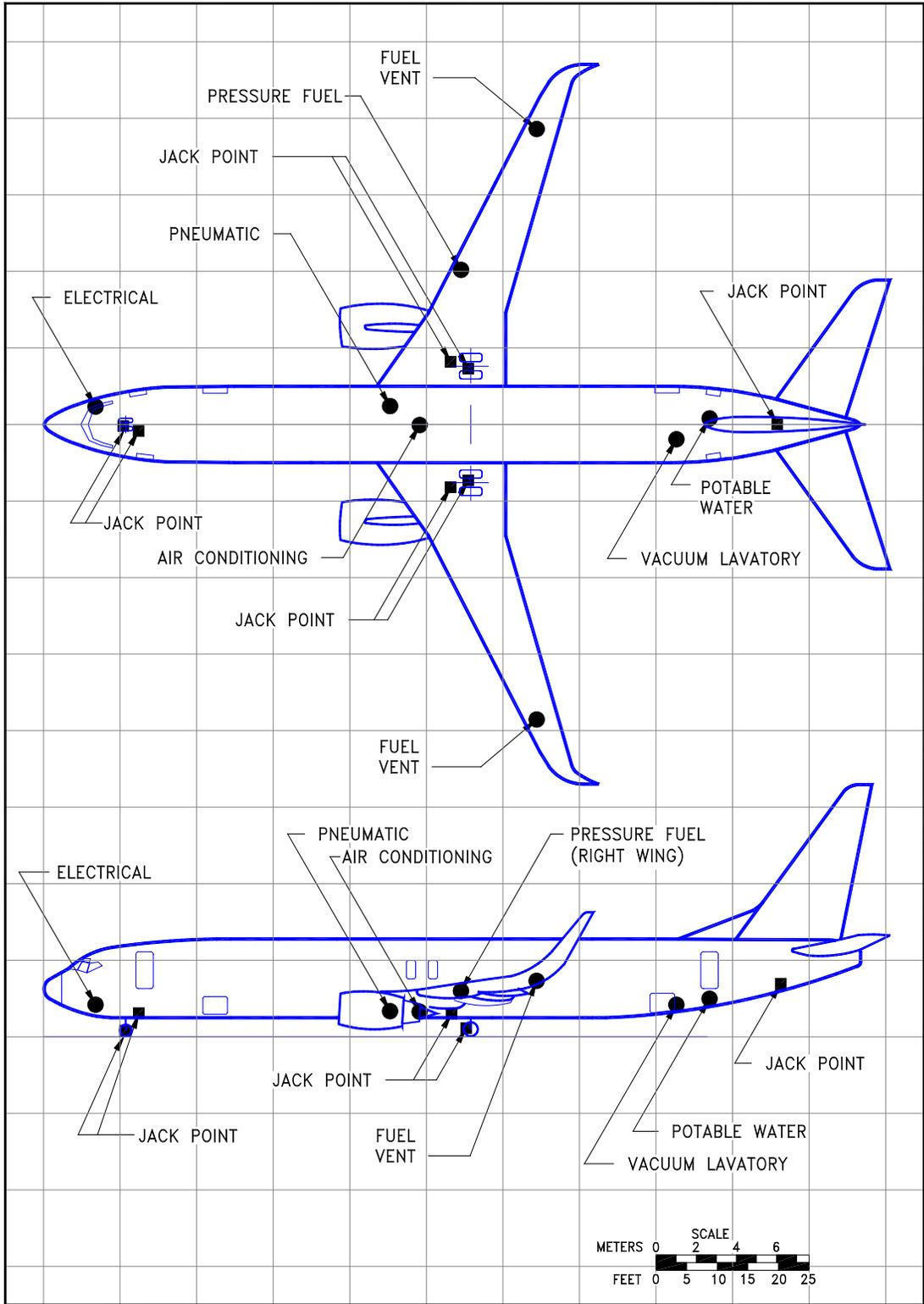
D6-58325-7

5.4.6 Ground Service Connections: Model 737-900, -900ER



D6-58325-7

5.4.7 Ground Service Connections: Model 737-900W, -900ERW



D6-58325-7

5.4.8 Ground Servicing Connections and Capacities: Model 737, All Models

SYSTEM	MODEL	DISTANCE AFT OF NOSE		DISTANCE FROM AIRPLANE CENTERLINE				MAX HEIGHT ABOVE GROUND	
		FT - IN	M	LH SIDE		RH SIDE		FT - IN	M
				FT - IN	M	FT - IN	M		
CONDITIONED AIR ONE 8-IN (20.3 CM) PORT	737-600	35 - 3	10.7	0	0	0	0	4 - 4	1.3
	737-700	39 - 9	12.1	0	0	0	0	4 - 3	1.3
	737-800	49 - 7	15.1	0	0	0	0	4 - 3	1.3
	737-900	54 - 9	16.7	0	0	0	0	4 - 3	1.3
ELECTRICAL ONE CONNECTION - 60 KVA, 200/115 V AC 400 HZ, 3-PHASE EACH	737-600	8 - 6	2.6	-	-	3 - 1	0.9	7 - 5	2.3
	737-700	8 - 6	2.6	-	-	3 - 1	0.9	7 - 4	2.2
	737-800	8 - 6	2.6	-	-	3 - 1	0.9	7 - 5	2.3
	737-900	8 - 6	2.6	-	-	3 - 1	0.9	7 - 4	2.2
FUEL ONE UNDERWING- PRESSURE CONNECTOR ON RIGHT WING (SEE SEC 2.1 FOR CAPACITY)	737-600	48 - 8	14.8	-	-	25 - 3	7.7	9 - 9	3.0
	737-700	53 - 2	16.2	-	-	25 - 3	7.7	9 - 9	3.0
	737-800	63 - 0	19.2	-	-	25 - 3	7.7	9 - 8	2.9
	737-900	68 - 2	20.8	-	-	25 - 3	7.7	9 - 8	2.9
FUEL FUEL VENT ON UNDERSIDE OF BOTH WINGTIPS	737-600	61 - 0	18.6	48 - 3	14.7	48 - 3	14.7	UNDERSIDE OF WING	
	737-700	65 - 6	20.0	48 - 3	14.7	48 - 3	14.7		
	737-800	75 - 4	22.0	48 - 3	14.7	48 - 3	14.7		
	737-900	80 - 6	24.5	48 - 3	14.7	48 - 3	14.7		
LAVATORY ONE CONNECTION FOR VACUUM LAVATORY	737-600	67 - 9	20.7	2 - 7	0.8	-	-	6 - 3	1.9
	737-700	75 - 7	23.0	2 - 7	0.8	-	-	6 - 4	1.9
	737-800	94 - 9	28.9	2 - 7	0.8	-	-	6 - 3	1.9
	737-900	103 - 5	31.5	2 - 7	0.8	-	-	6 - 3	1.9
OXYGEN INDIVIDUAL CANISTERS IN EACH PASSENGER SERVICE UNIT	737-600	18 - 11	5.8	-	-	0 - 10	0.3	6 - 5	2.0
	737-700	18 - 11	5.8	-	-	0 - 10	0.3	6 - 4	1.9
	737-800	18 - 11	5.8	-	-	0 - 10	0.3	6 - 5	2.0
	737-900	18 - 11	5.8	-	-	0 - 10	0.3	6 - 4	1.9
PNEUMATIC ONE 3-IN (7.6-CM) PORT FOR ENGINE START AND AIRCONDITIONING PACKS	737-600	37 - 1	11.3	-	-	3 - 0	0.9	4 - 8	1.4
	737-700	41 - 7	12.7	-	-	3 - 0	0.9	4 - 8	1.4
	737-800	51 - 5	15.7	-	-	3 - 0	0.9	4 - 8	1.4
	737-900	56 - 7	17.3	-	-	3 - 0	0.9	4 - 7	1.4
POTABLE WATER ONE SERVICE CONNECTION 0.75-IN (1.9 CM)	737-600	73 - 1	22.3	-	-	1 - 0	0.3	6 - 10	2.1
	737-700	80 - 11	24.7	-	-	1 - 0	0.3	6 - 10	2.1
	737-800	100 - 1	30.5	-	-	1 - 0	0.3	6 - 9	2.1
	737-900	108 - 9	33.2	-	-	1 - 0	0.3	6 - 9	2.1

NOTES:

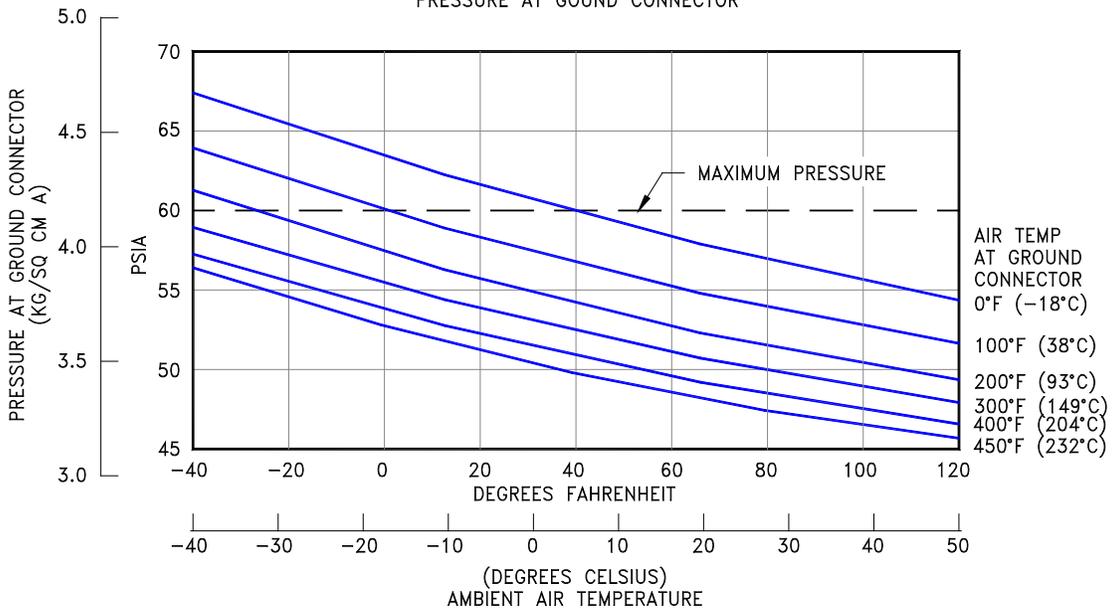
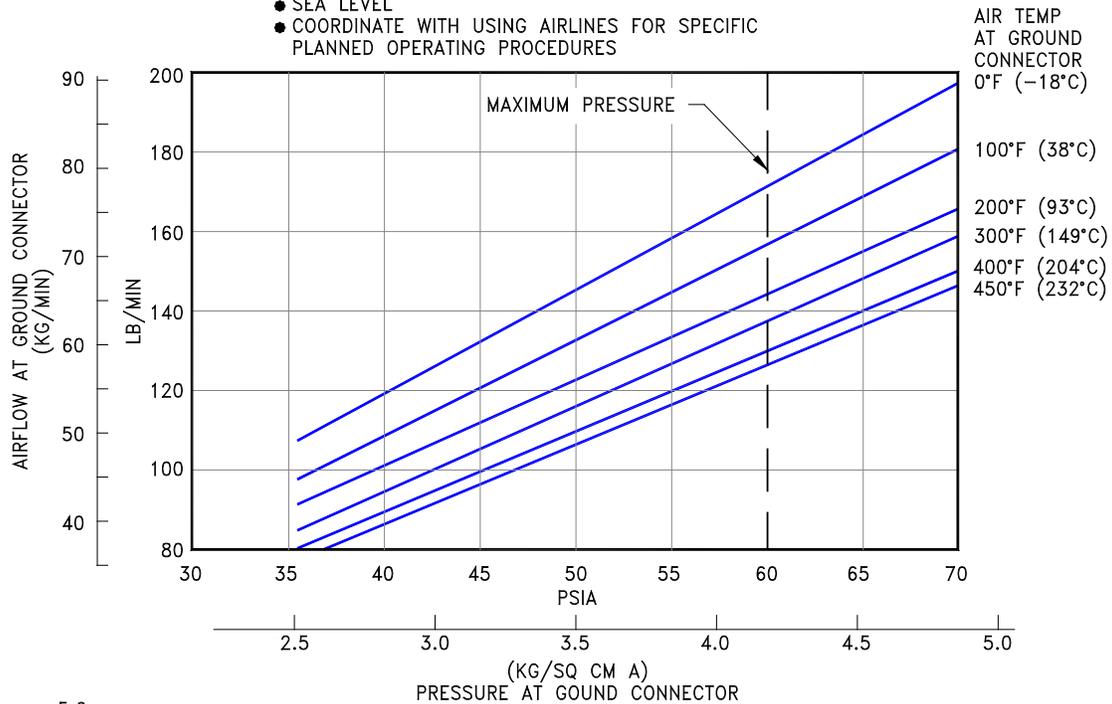
- DISTANCES ROUNDED TO THE NEAREST INCH AND 0.1 METER.
- AIRPLANE MODEL DESIGNATIONS ALSO INCLUDE ALL DERIVATIVES.

5.5 ENGINE STARTING PNEUMATIC REQUIREMENTS

5.5.1 Engine Start Pneumatic Requirements - Sea Level: Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets, BBJ1, BBJ2

NOTES:

- MINIMUM STARTING REQUIREMENTS
- SEA LEVEL
- COORDINATE WITH USING AIRLINES FOR SPECIFIC PLANNED OPERATING PROCEDURES

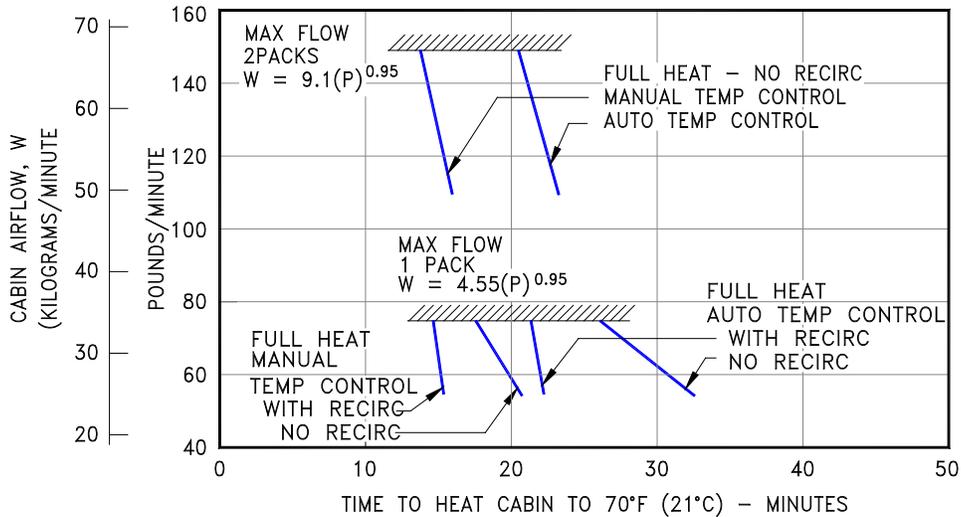


5.6 GROUND PNEUMATIC POWER REQUIREMENTS

5.6.1 Ground Pneumatic Power Requirements - Heating/Cooling: Model 737-600, -700, With and Without Winglets

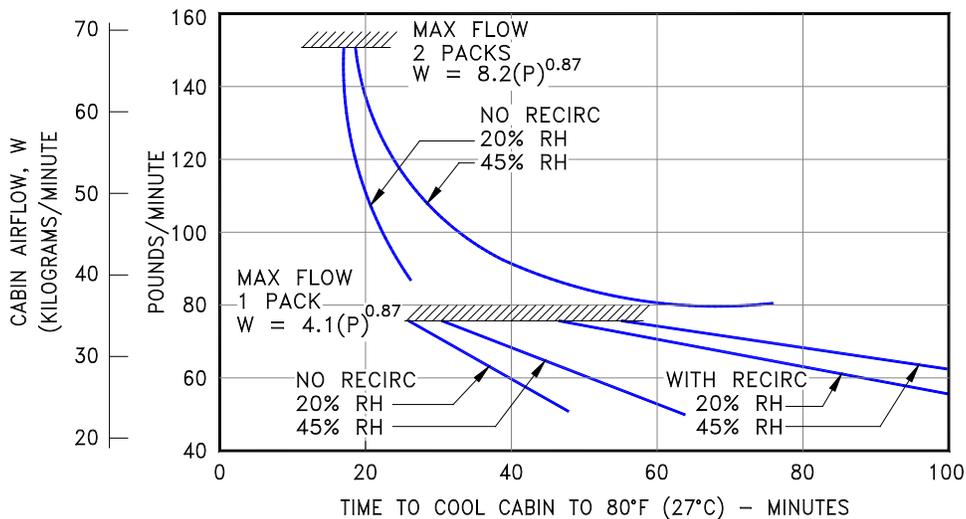
HEATING (PULL-UP)

- INITIAL CABIN TEMPERATURE - 0°F (-18°C)
- NO GALLEY LOAD
- NO ELECTRICAL LOAD
- $W_{CART} = 1.23 \times W$
- P = PRESSURE AT GROUND CONNECTION
- TEMP AT GROUND CONNECTION 200°F (66°C) TO 450°F (323°C)



COOLING (PULLDOWN)

- INITIAL CABIN TEMPERATURE - 103°F (39°C)
- OUTSIDE AIR TEMPERATURE - 103°F (39°C)
- SOLAR LOAD - 4,800 BTU/HR (1,210 KCAL/HR)
- NO GALLEY LOAD
- TEMP AT GROUND CONNECTION - LESS THAN 450°F (232°C)
- $W_{CART} = 1.26 \times W$
- P = PRESSURE AT GROUND CONNECTION, PSIG
- NO ELECTRICAL LOAD
- RH = RELATIVE HUMIDITY

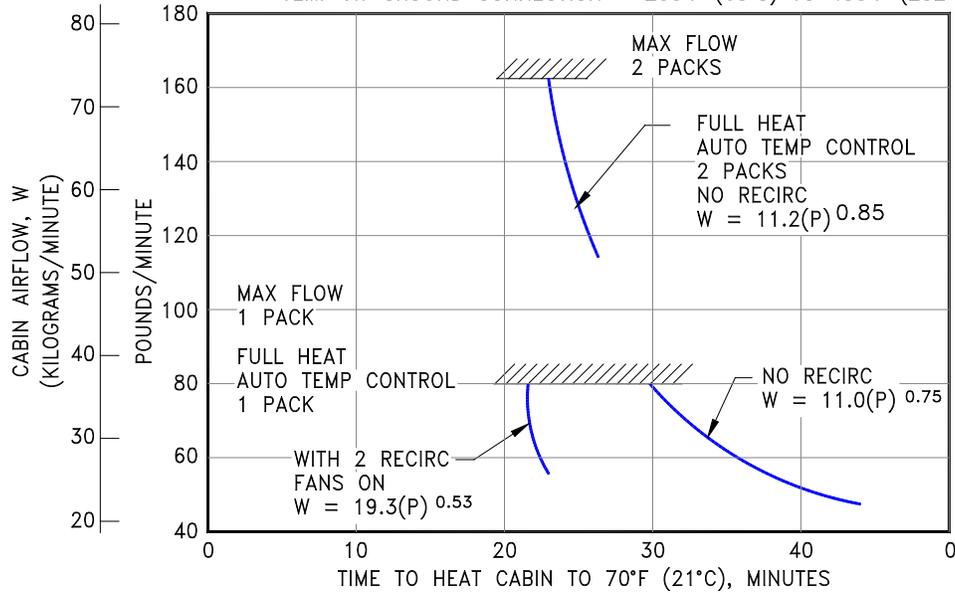


D6-58325-7

5.6.2 Ground Pneumatic Power Requirements - Heating/Cooling: Model 737-800, -800BCF, -900, -900ER, With and Without Winglets

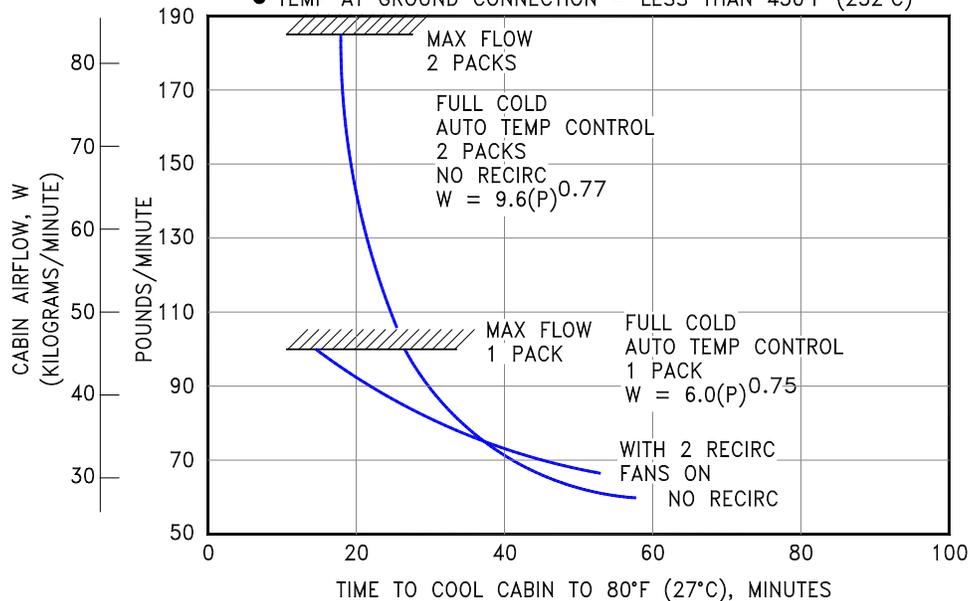
HEATING (PULL-UP)

- INITIAL CABIN TEMPERATURE - 0°F (-18°C)
- OUTSIDE AIR TEMPERATURE - 0°F (-18°C)
- NO GALLEY LOAD, NO ELECTRICAL LOAD
- $W_{CART} = 1.14 \times W$
- P = PRESSURE AT GROUND CONNECTION
- TEMP AT GROUND CONNECTION - 200°F (65°C) TO 450°F (232°C)



COOLING (PULL-DOWN)

- INITIAL CABIN TEMPERATURE - 103°F (39°C)
- OUTSIDE AIR TEMPERATURE - 103°F (39°C)
- SOLAR LOAD - 7,741 BTU/HR (1,951 KCAL/HR)
- NO GALLEY LOAD, NO ELECTRICAL LOAD
- $W_{CART} = 11.7 \times W$
- P = PRESSURE AT GROUND CONNECTION, PSIG
- TEMP AT GROUND CONNECTION - LESS THAN 450°F (232°C)



D6-58325-7

5.7 CONDITIONED AIR REQUIREMENTS

5.7.1 Conditioned Air Flow Requirements: Model 737-600, -700, With and Without Winglets

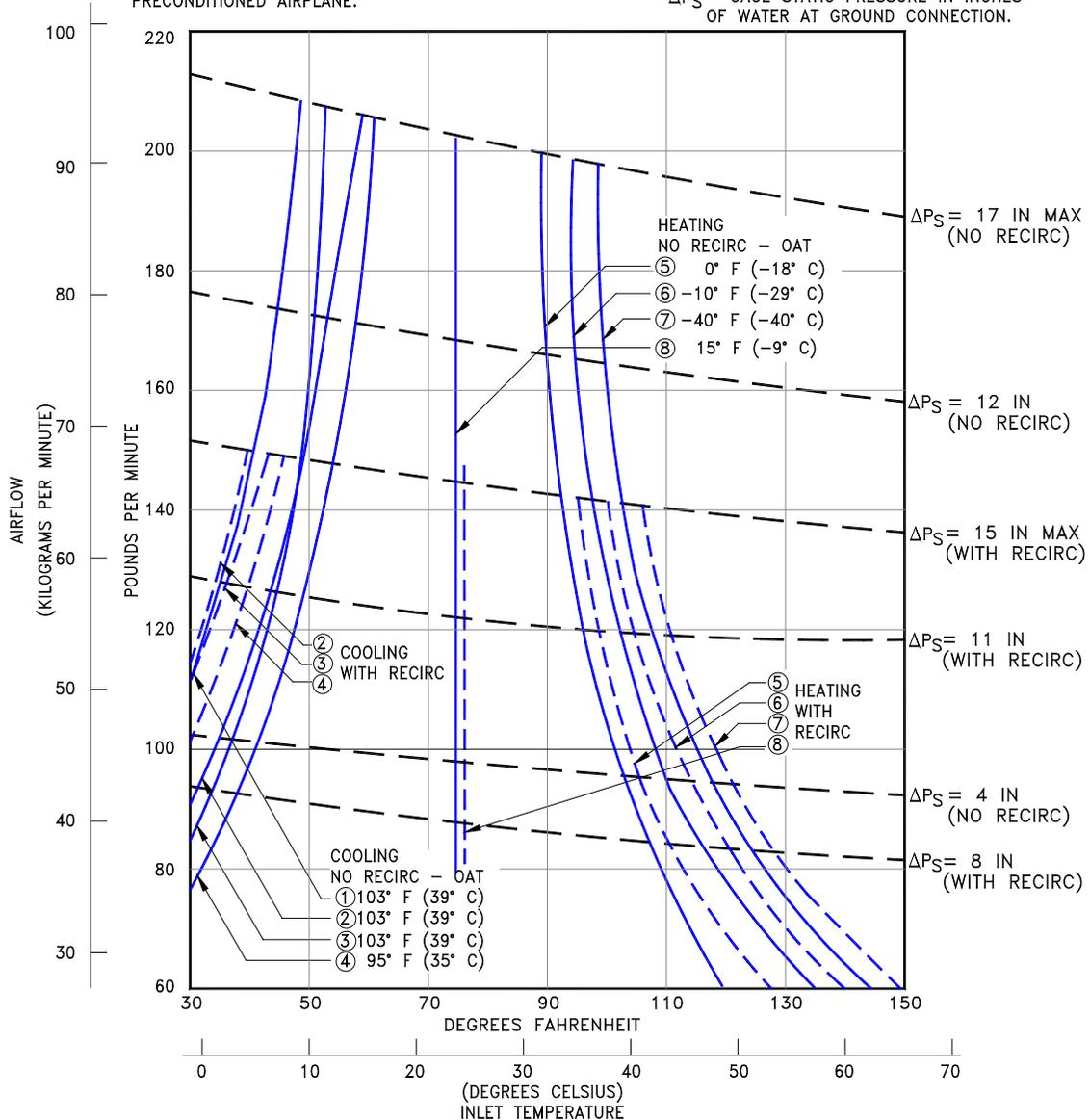
COOLING:

- ① CABIN AT 75° F (24° C); 138 PASSENGERS AND CREW; NO GALLEY LOAD; SOLAR LOAD 4,800 BTU/HR; ELECTRICAL LOAD 6,984 BTU/HR.
- ② CABIN AT 80° F (27° C); OTHERWISE SAME AS IN ①.
- ③ CABIN AT 70° F (21° C); 2 CREW MEMBERS; GALLEY LOAD 8,200 BTU/HR; SOLAR LOAD 4,800 BTU/HR; ELECTRICAL LOAD 6984 BTU/HR.
- ④ CABIN AT 80° F (27° C); 98 PASSENGERS AND CREW; NO GALLEY LOAD; SOLAR LOAD 4,800 BTU/HR; ELECTRICAL LOAD 6,984 BTU/HR. PRECONDITIONED AIRPLANE.

HEATING:

- ⑤ CABIN AT 75° F (24° C); NO CREW OR PASSENGERS; NO OTHER HEAT LOADS.
- ⑥ CABIN AT 75° F (24° C); NO CREW OR PASSENGERS; NO OTHER HEAT LOADS.
- ⑦ CABIN AT 75° F (24° C); NO CREW OR PASSENGERS; NO OTHER HEAT LOADS.
- ⑧ CABIN AT 75° F (24° C); 98 PASSENGERS AND CREW; NO GALLEY LOAD; NO SOLAR LOAD; ELECTRICAL LOAD 6,984 BTU/HR; PRECONDITIONED AIRPLANE.

ΔP_S = GAGE STATIC PRESSURE IN INCHES OF WATER AT GROUND CONNECTION.



D6-58325-7

5.7.2 Conditioned Air Flow Requirements: Model 737-800, -800BCF, -900, -900ER, With and Without Winglets

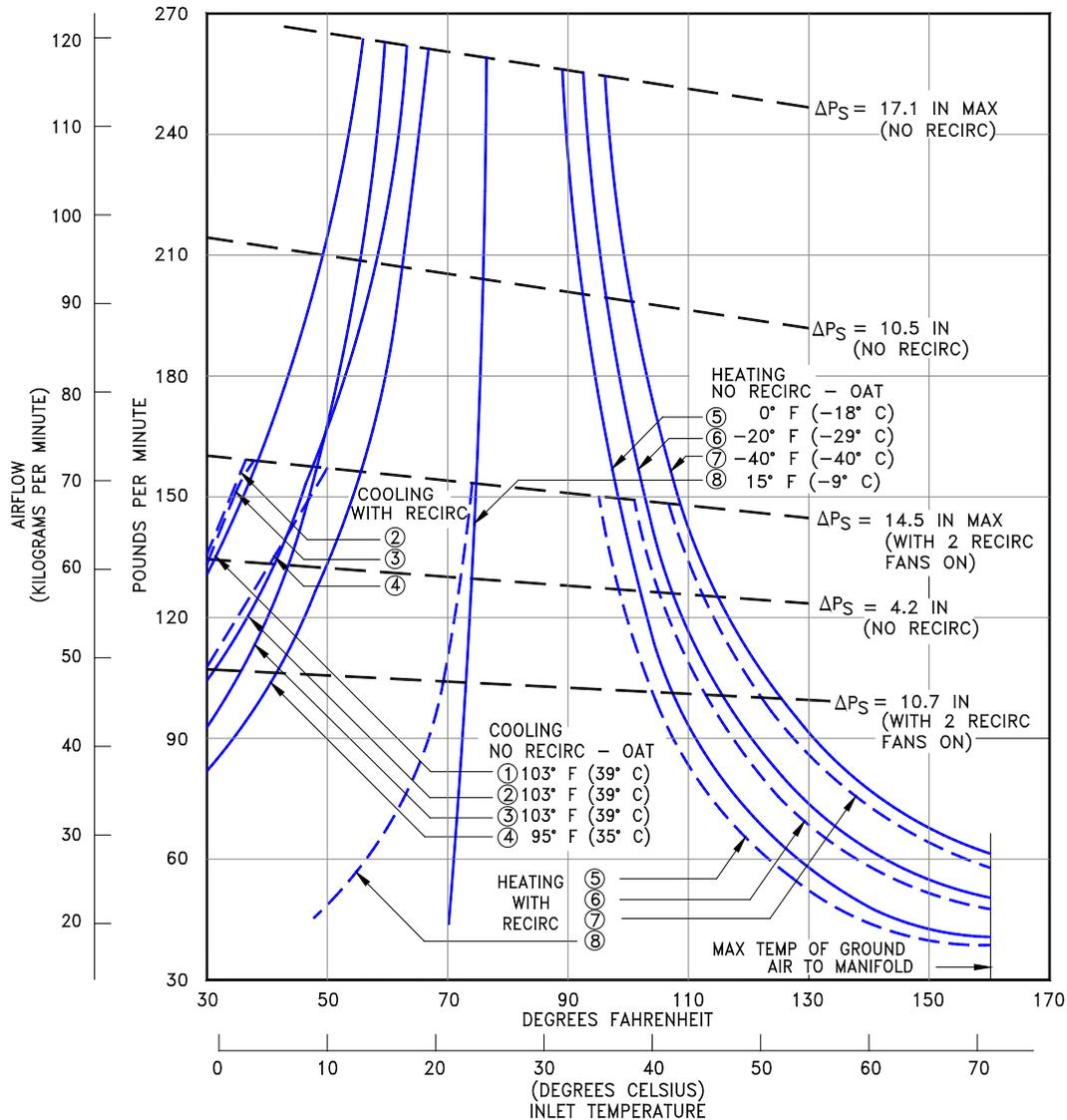
COOLING:

- ① CABIN AT 75° F (24° C); 185 PASSENGERS AND CREW; NO GALLEY LOAD; SOLAR LOAD 7,741 BTU/HR; ELECTRICAL LOAD 10,955 BTU/HR.
- ② CABIN AT 80° F (27° C); OTHERWISE SAME AS IN ①
- ③ CABIN AT 70° F (21° C); 2 CREW MEMBERS; GALLEY LOAD 8,200 BTU/HR; SOLAR LOAD 7,741 BTU/HR; ELECTRICAL LOAD 10,955 BTU/HR.
- ④ CABIN AT 80° F (27° C); 117 PASSENGERS AND CREW; NO GALLEY LOAD; SOLAR LOAD 7,741 BTU/HR; ELECTRICAL LOAD 10,955 BTU/HR; PRECONDITIONED AIRPLANE.

HEATING:

- ⑤ CABIN AT 75° F (24° C); NO CREW OR PASSENGERS; NO OTHER HEAT LOADS.
- ⑥ CABIN AT 75° F (24° C); NO CREW OR PASSENGERS; NO OTHER HEAT LOADS.
- ⑦ CABIN AT 75° F (24° C); NO CREW OR PASSENGERS; NO OTHER HEAT LOADS.
- ⑧ CABIN AT 75° F (24° C); 117 PASSENGERS AND CREW; NO GALLEY LOAD; NO SOLAR LOAD; ELECTRICAL LOAD 10,955 BTU/HR; PRECONDITIONED AIRPLANE.

ΔP_S = GAGE STATIC PRESSURE IN INCHES OF WATER AT GROUND CONNECTION.



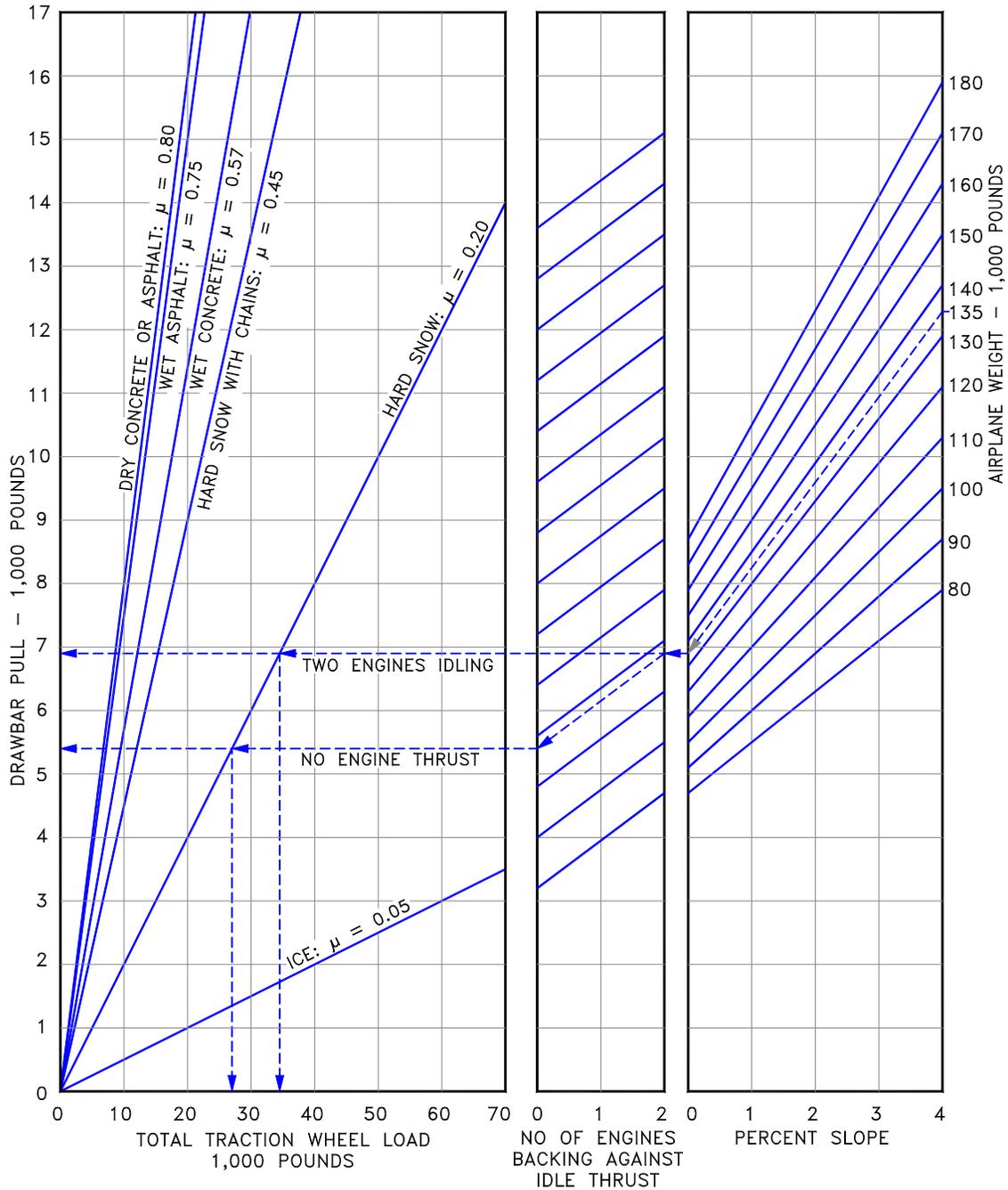
D6-58325-7

5.8 GROUND TOWING REQUIREMENTS

5.8.1 Ground Towing Requirements - English Units: Model 737, All Models

NOTES:

- UNUSUAL BREAKAWAY CONDITIONS NOT REFLECTED
- ESTIMATED FOR RUBBER-TIRED TOW VEHICLES
- COEFFICIENT OF FRICTION (μ) APPROXIMATE

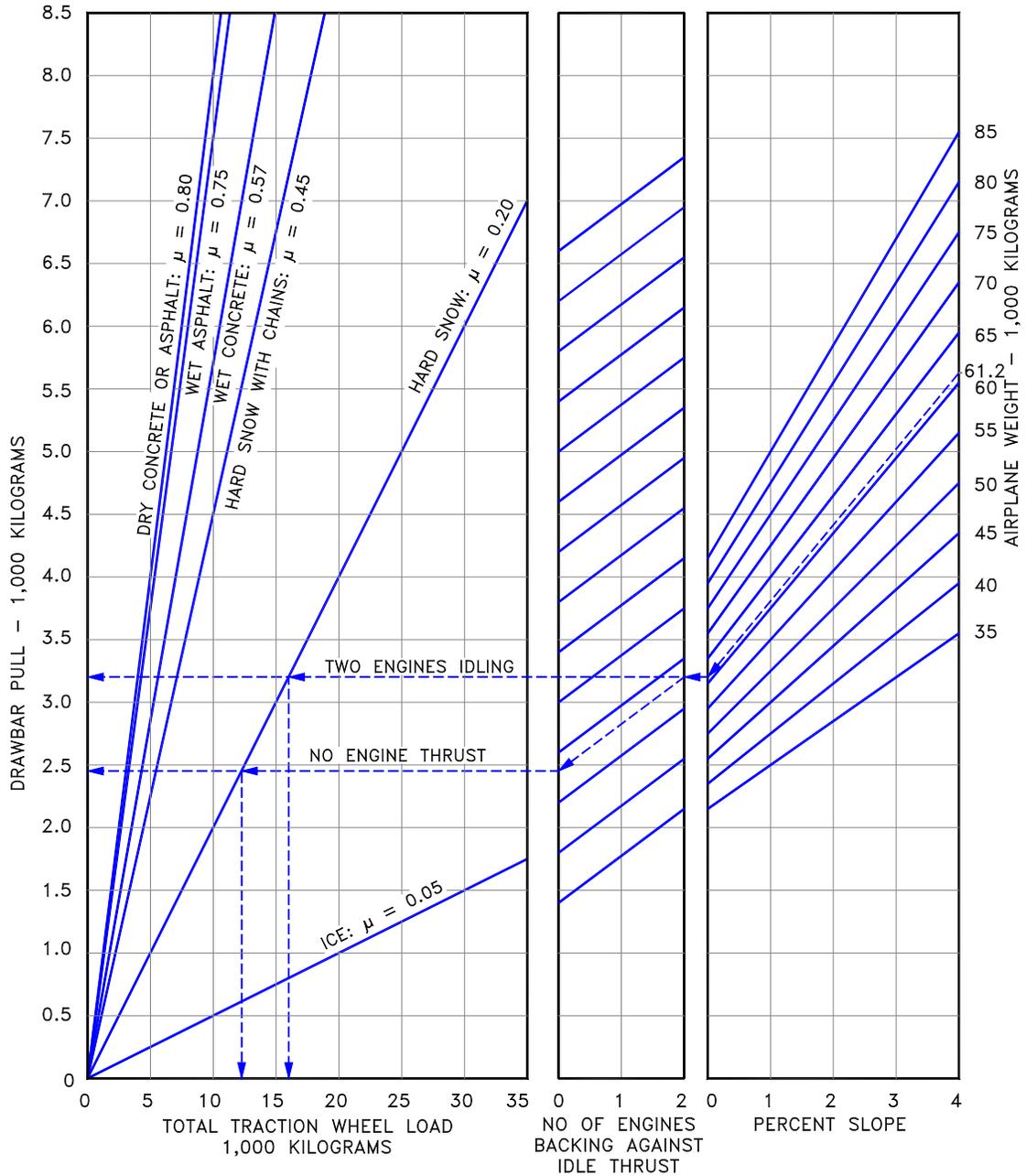


D6-58325-7

5.8.2 Ground Towing Requirements - Metric Units: Model 737, All Models

NOTES:

- UNUSUAL BREAKAWAY CONDITIONS NOT REFLECTED
- ESTIMATED FOR RUBBER-TIRED TOW VEHICLES
- COEFFICIENT OF FRICTION (μ) APPROXIMATE



6.0 JET ENGINE WAKE AND NOISE DATA

6.1 JET ENGINE EXHAUST VELOCITIES AND TEMPERATURES

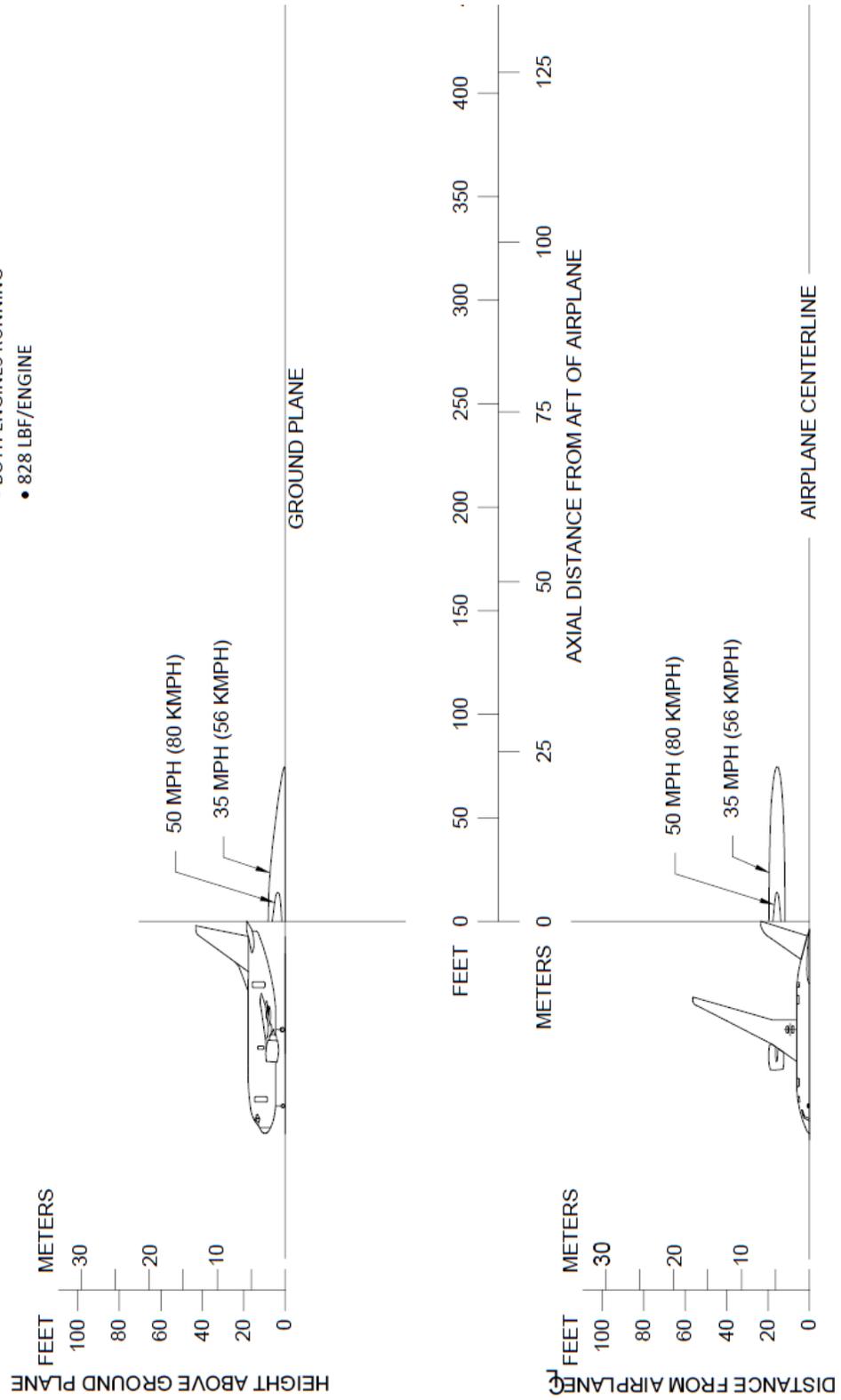
This section shows jet engine exhaust velocity and temperature contours aft of the 737 Series of airplanes. The contours were calculated from a standard computer analysis using three-dimensional viscous flow equations with mixing of primary, fan, and free-stream flow. The presence of the ground plane is included in the calculations as well as engine tilt and toe-in. Mixing of flows from the engines is also calculated. The analysis does not include thermal buoyancy effects which tend to elevate the jet wake above the ground plane. The buoyancy effects are considered to be small relative to the exhaust velocity and therefore are not included.

The graphs show jet wake velocity and temperature contours for representative engines. The results are valid for sea level, static, standard day conditions. The effect of wind on jet wakes is not included. There is evidence to show that a downwind or an upwind component does not simply add or subtract from the jet wake velocity, but rather carries the whole envelope in the direction of the wind. Crosswinds may carry the jet wake contour far to the side at large distances behind the airplane.

It should be understood, these exhaust velocity contours reflect steady-state, at maximum taxi weight, and not transient-state exhaust velocities. A steady-state is achieved with the aircraft in a fixed location, engine running at a given thrust level and measured when the contours stop expanding and stabilize in size, which could take several seconds. The steady-state condition, therefore, is conservative. Contours shown also do not account for performance variables such as ambient temperature or field elevation. For the terminal area environment, the transient-state is a more accurate representation of the actual exhaust contours when the aircraft is in motion and encountering static air with forward or turning movement, but it is very difficult to model on a consistent basis due to aircraft weight, weather conditions, the high degree of variability in terminal and apron configurations, and intensive numerical calculations. If the contours presented here are overly restrictive for terminal operations, The Boeing Company recommends conducting an analysis of the actual exhaust contours experienced by the using aircraft at the airport.

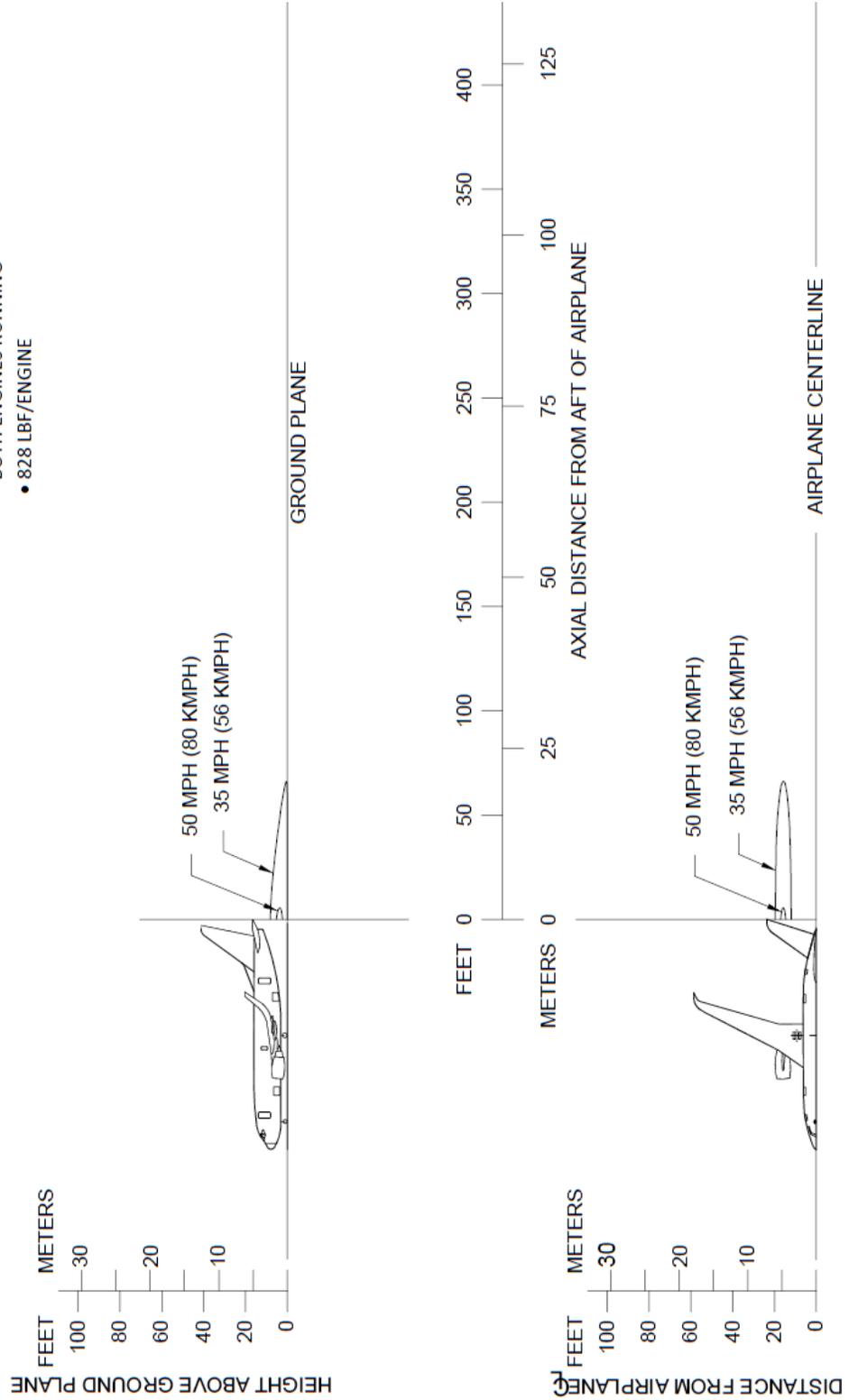
6.1.1 Jet Engine Exhaust Velocity Contours – Idle Thrust: Model 737-600

- NOTES:
- ENGINE THRUST AT IDLE SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - BOTH ENGINES RUNNING
 - 828 LBF/ENGINE



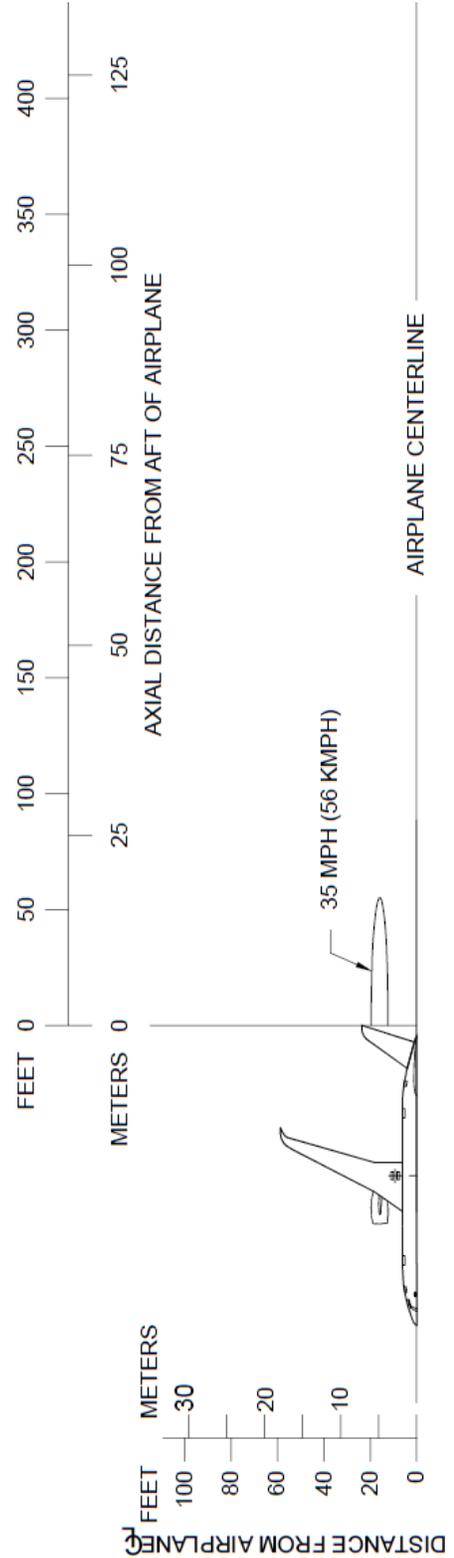
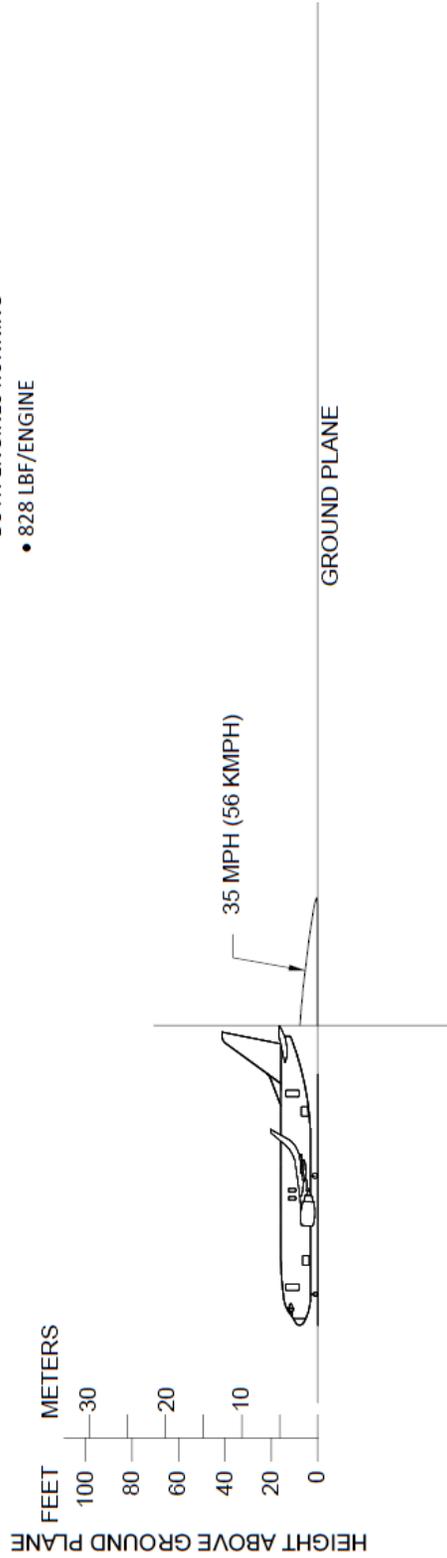
6.1.2 Jet Engine Exhaust Velocity Contours – Idle Thrust: Model 737-700, -700W

- NOTES:
- ENGINE THRUST AT IDLE SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - BOTH ENGINES RUNNING
 - 828 LBF/ENGINE



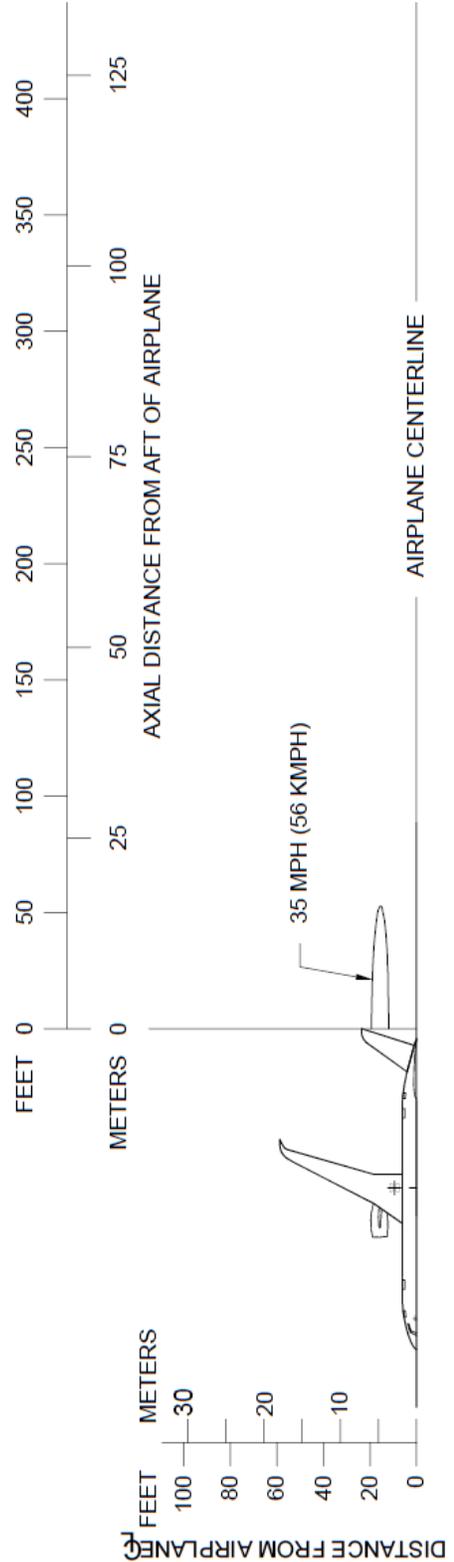
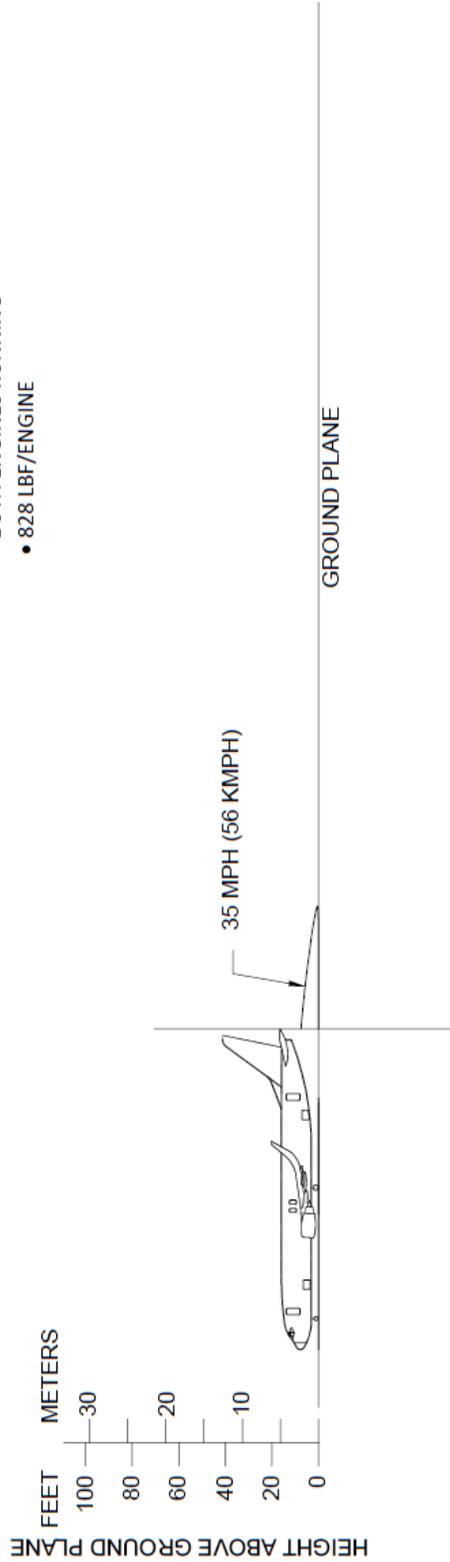
6.1.3 Jet Engine Exhaust Velocity Contours – Idle Thrust: Model 737-800, -800W, -800BCF

- NOTES:
- ENGINE THRUST AT IDLE SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - BOTH ENGINES RUNNING
 - 828 LBF/ENGINE



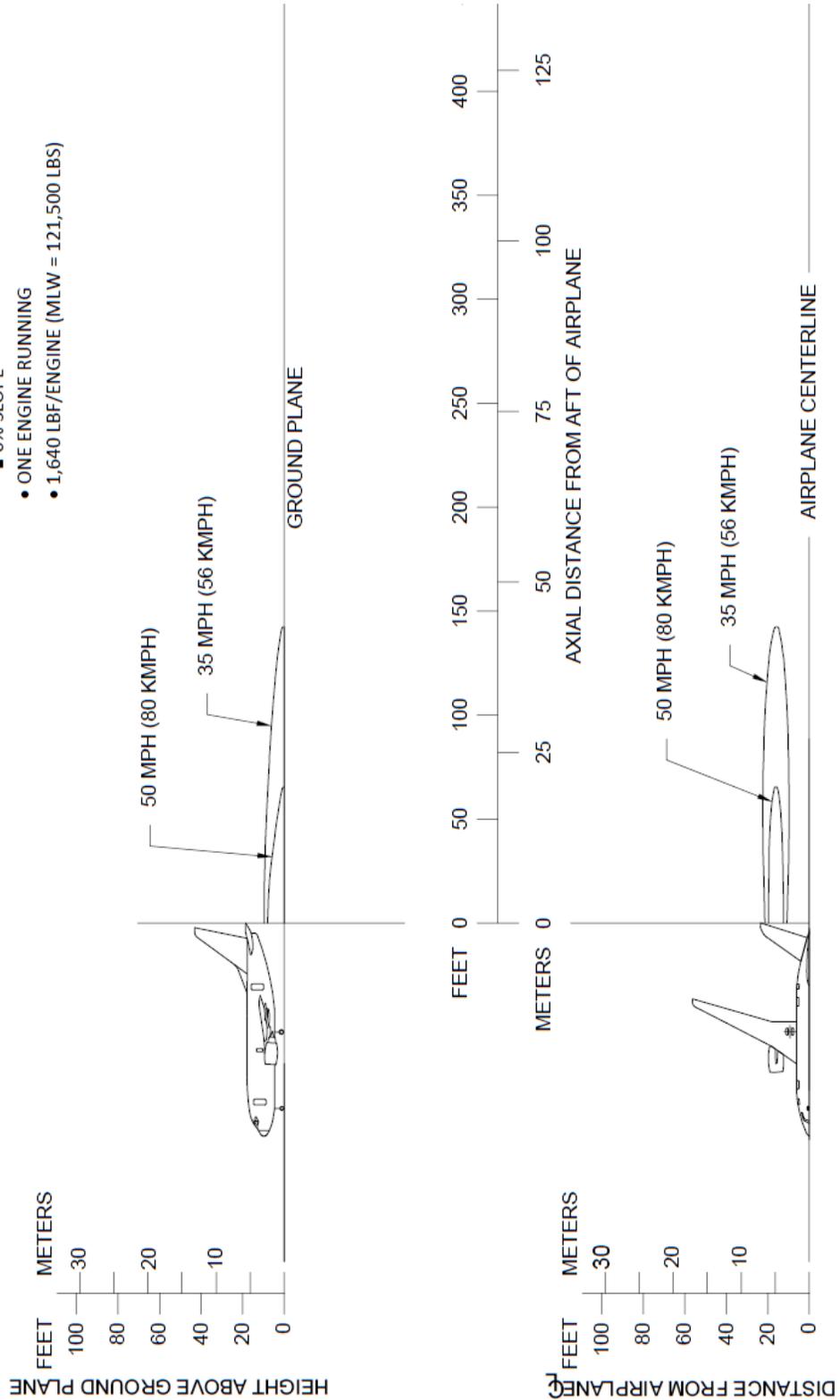
6.1.4 Jet Engine Exhaust Velocity Contours – Idle Thrust: Model 737-900, -900ER, With and Without Winglets

- NOTES:
- ENGINE THRUST AT IDLE SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - BOTH ENGINES RUNNING
 - 828 LBF/ENGINE



6.1.5 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MLW: Model 737-600

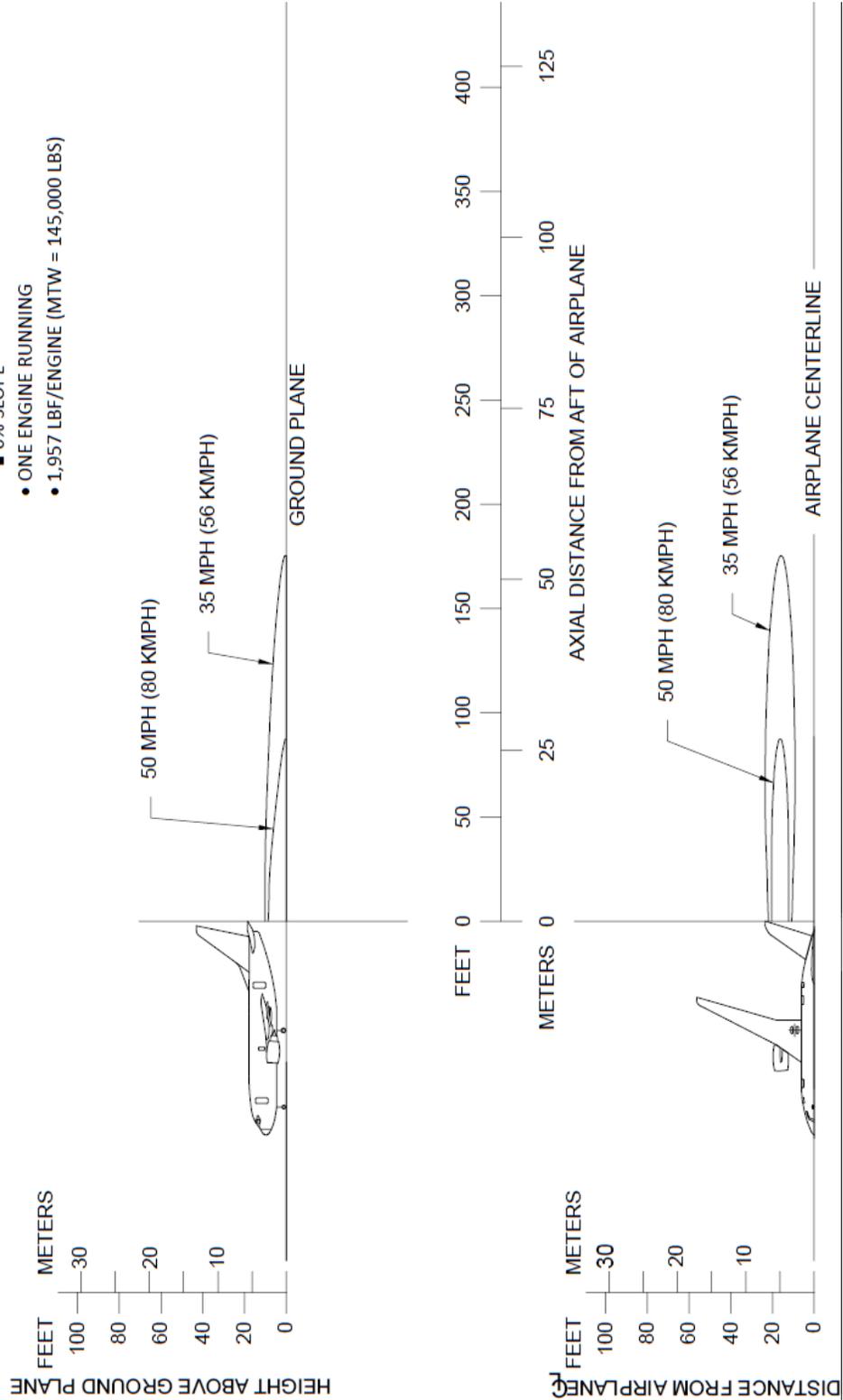
- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - ONE ENGINE RUNNING
 - 1,640 LBF/ENGINE (MLW = 121,500 LBS)



D6-58325-7

6.1.6 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MTW: Model 737-600

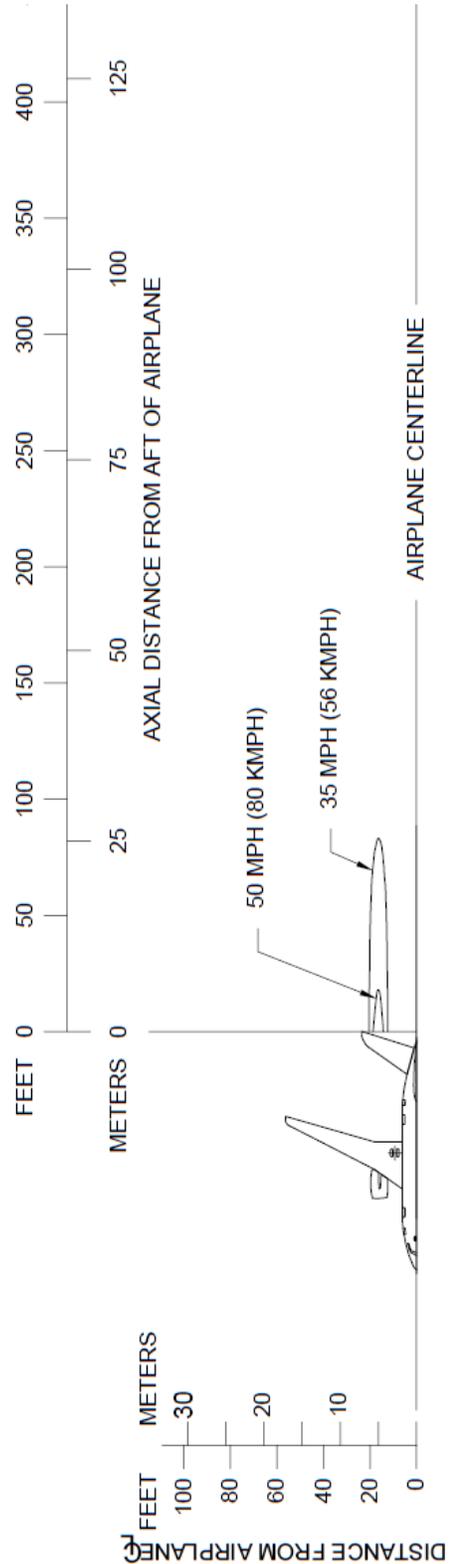
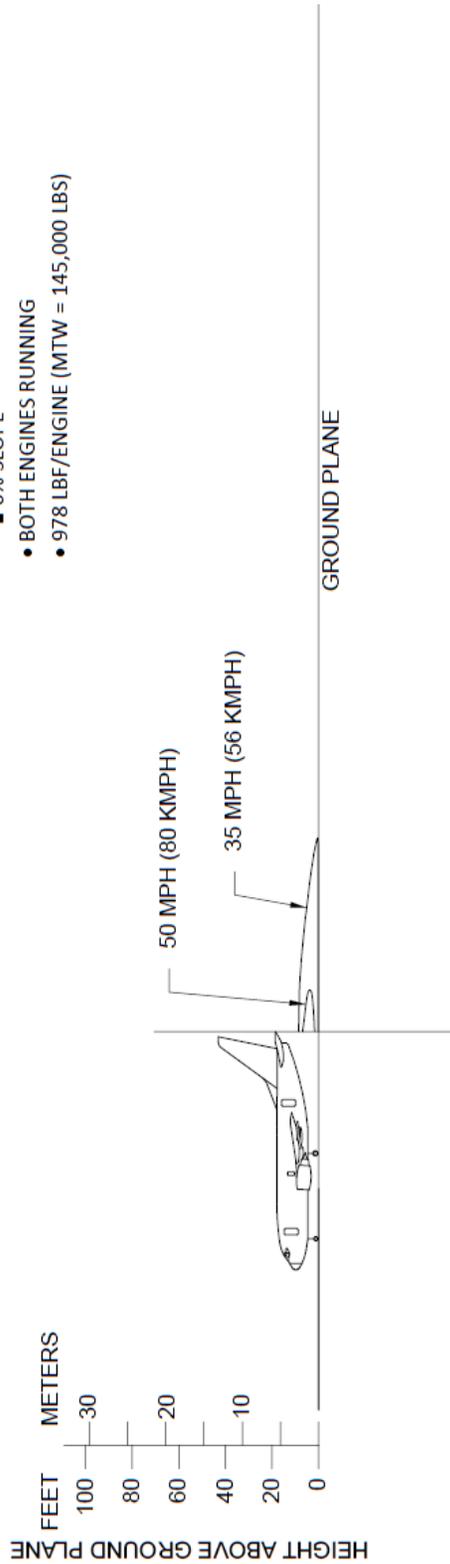
- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - ONE ENGINE RUNNING
 - 1,957 LBF/ENGINE (MTW = 145,000 LBS)



D6-58325-7

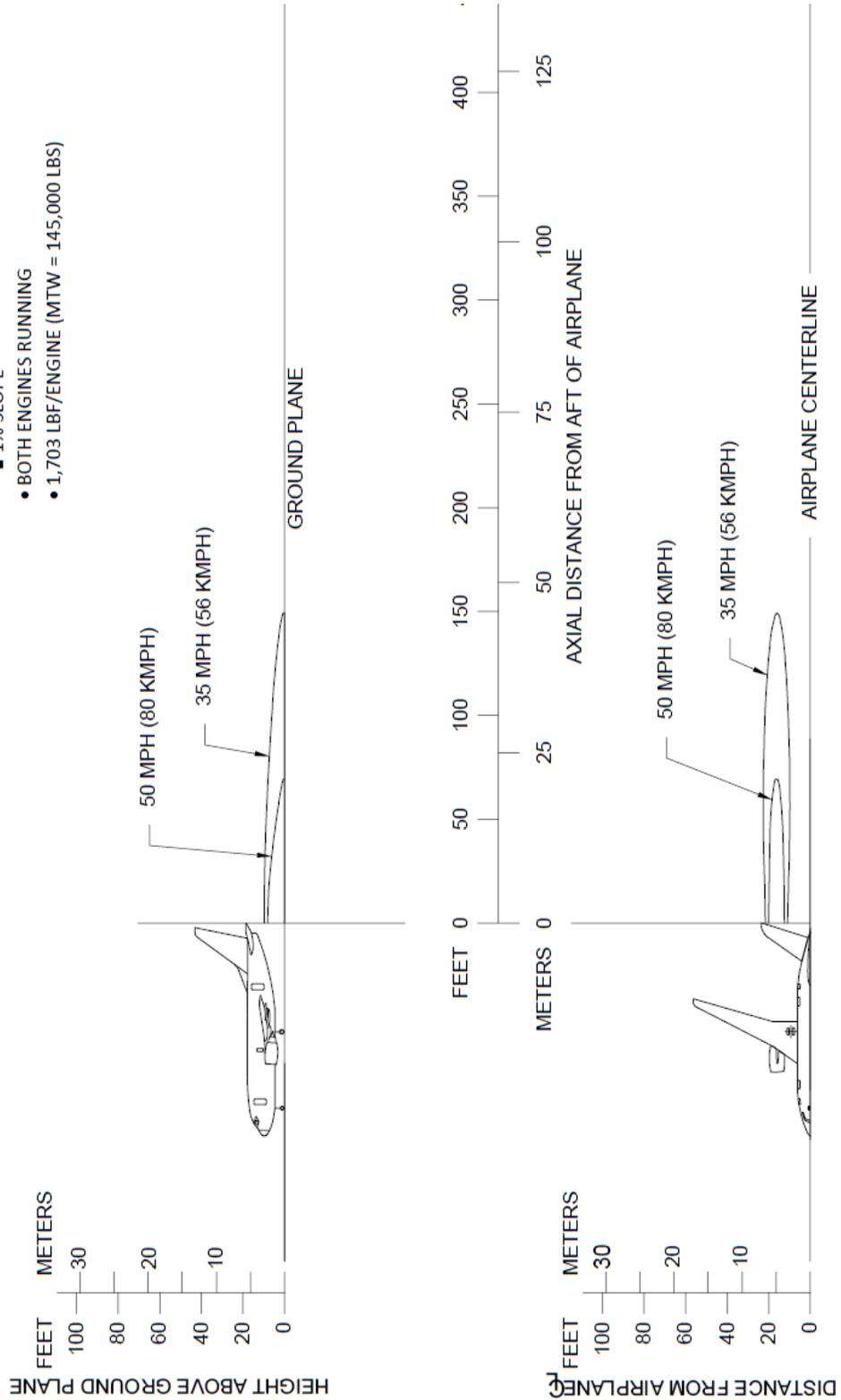
6.1.7 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / Both Engines / MTW: Model 737-600

- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - BOTH ENGINES RUNNING
 - 978 LBF/ENGINE (MTW = 145,000 LBS)



6.1.8 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 1% Slope / Both Engines / MTW: Model 737-600

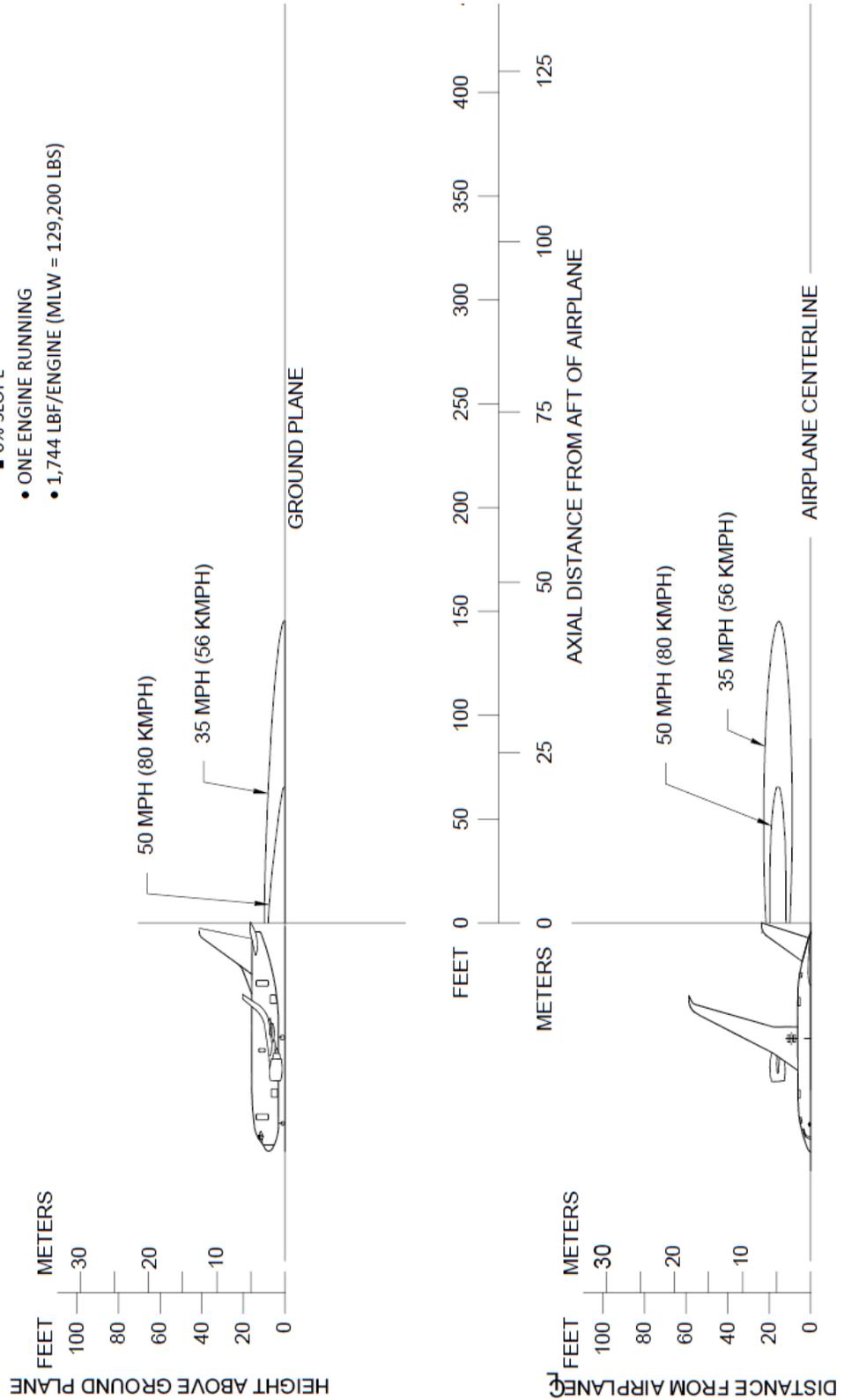
- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 1% SLOPE
 - BOTH ENGINES RUNNING
 - 1,703 LBF/ENGINE (MTW = 145,000 LBS)



D6-58325-7

6.1.9 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MLW: Model 737-700, -700W

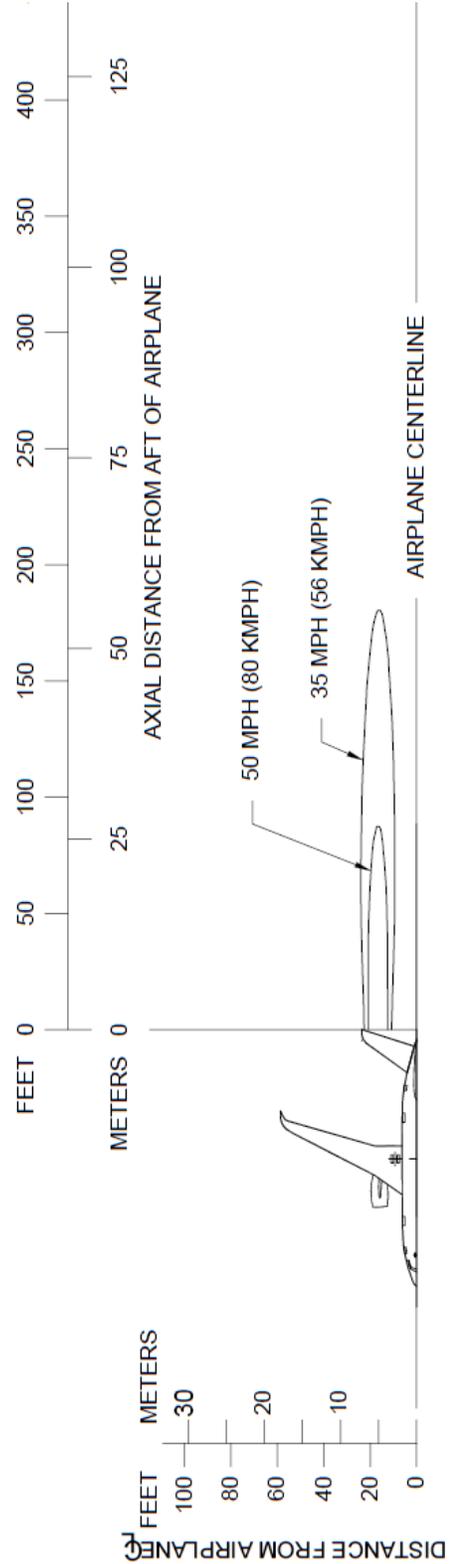
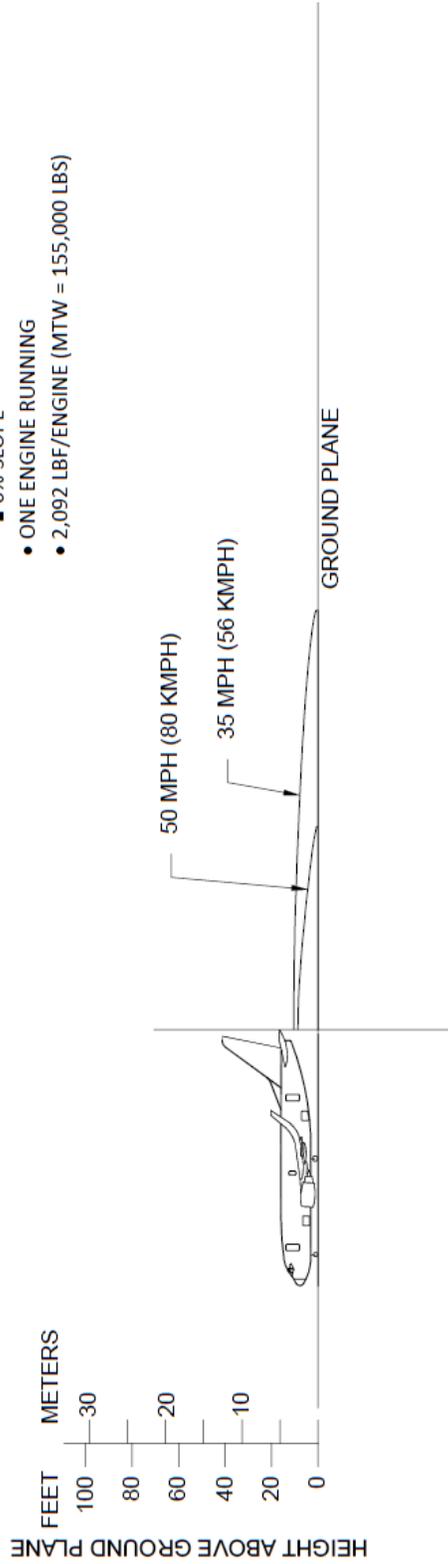
- TABLE 1
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - ONE ENGINE RUNNING
 - 1,744 LBF/ENGINE (MLW = 129,200 LBS)



D6-58325-7

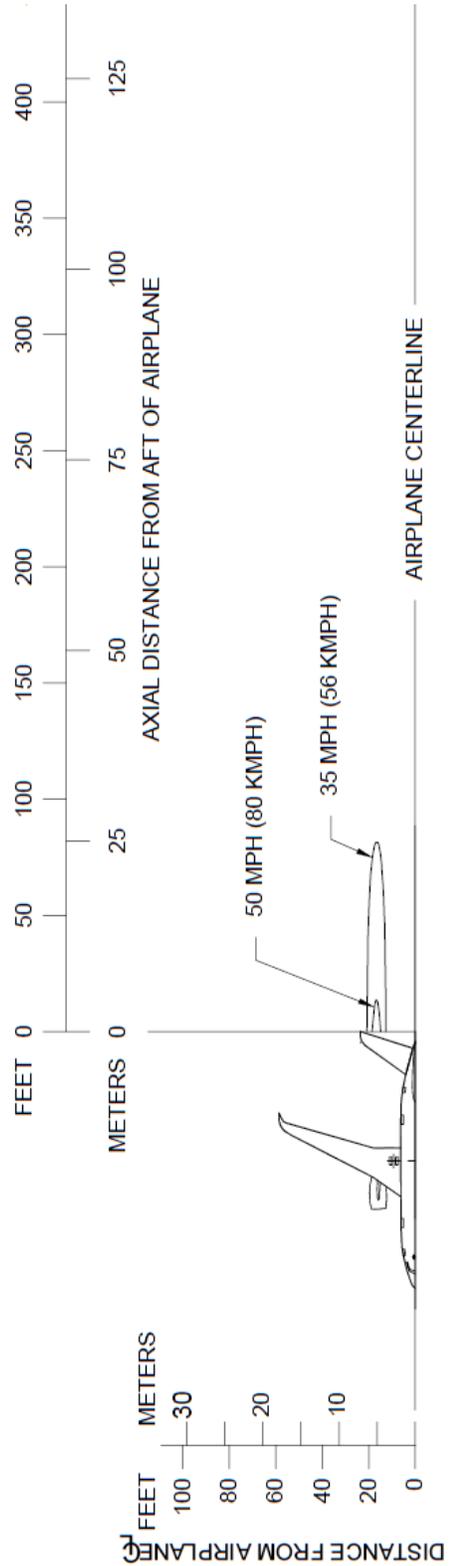
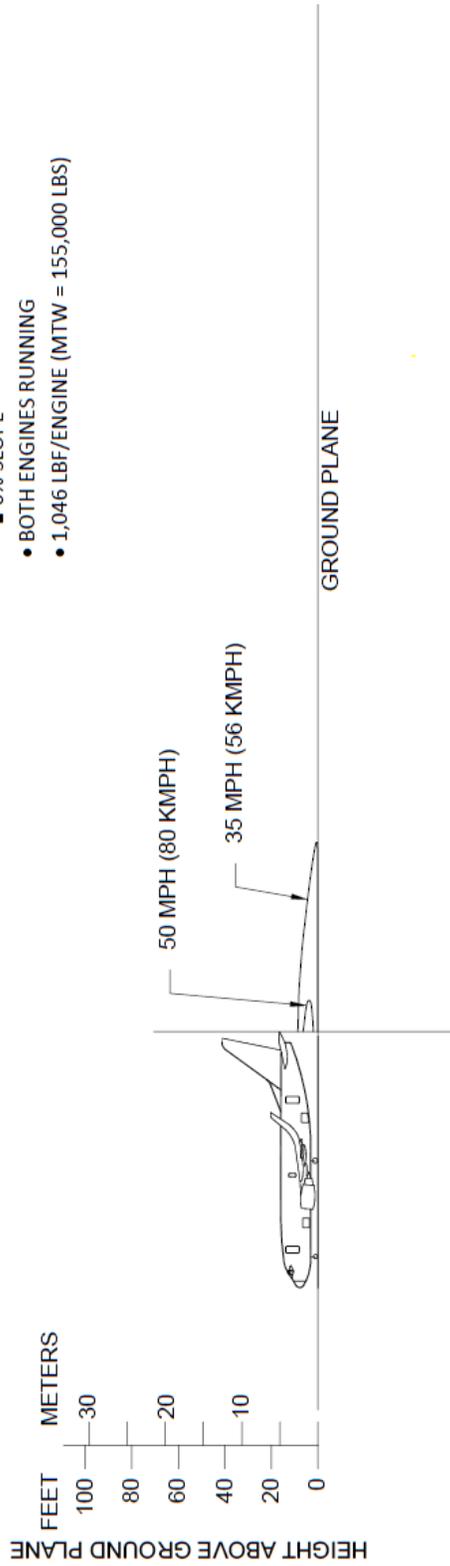
6.1.10 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MTW: Model 737-700, -700W

- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - ONE ENGINE RUNNING
 - 2,092 LBF/ENGINE (MTW = 155,000 LBS)



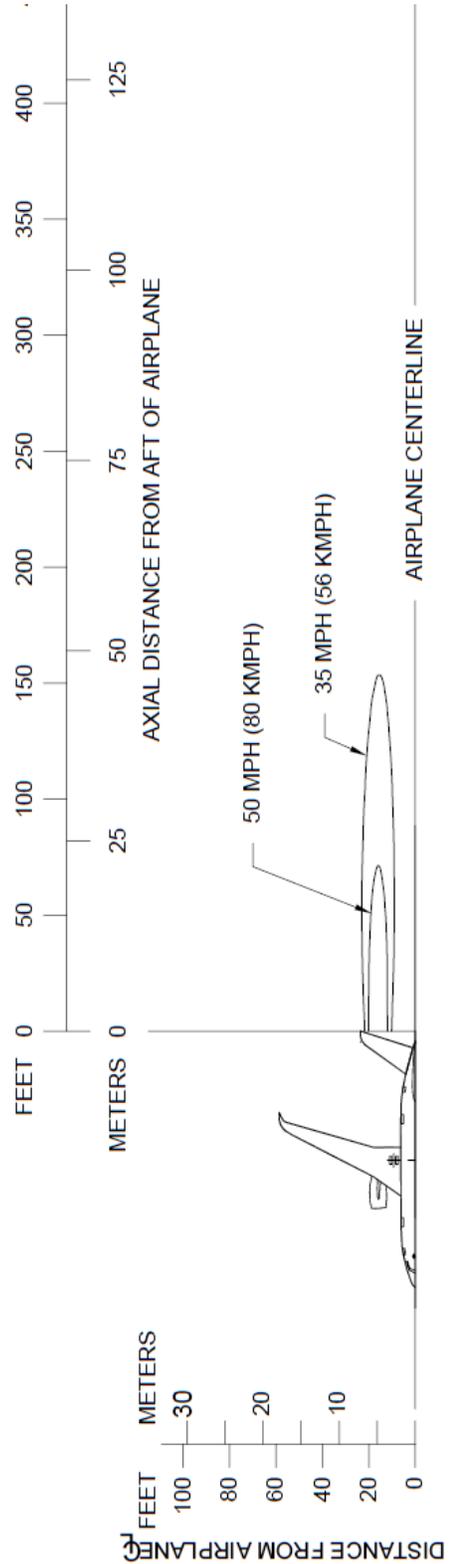
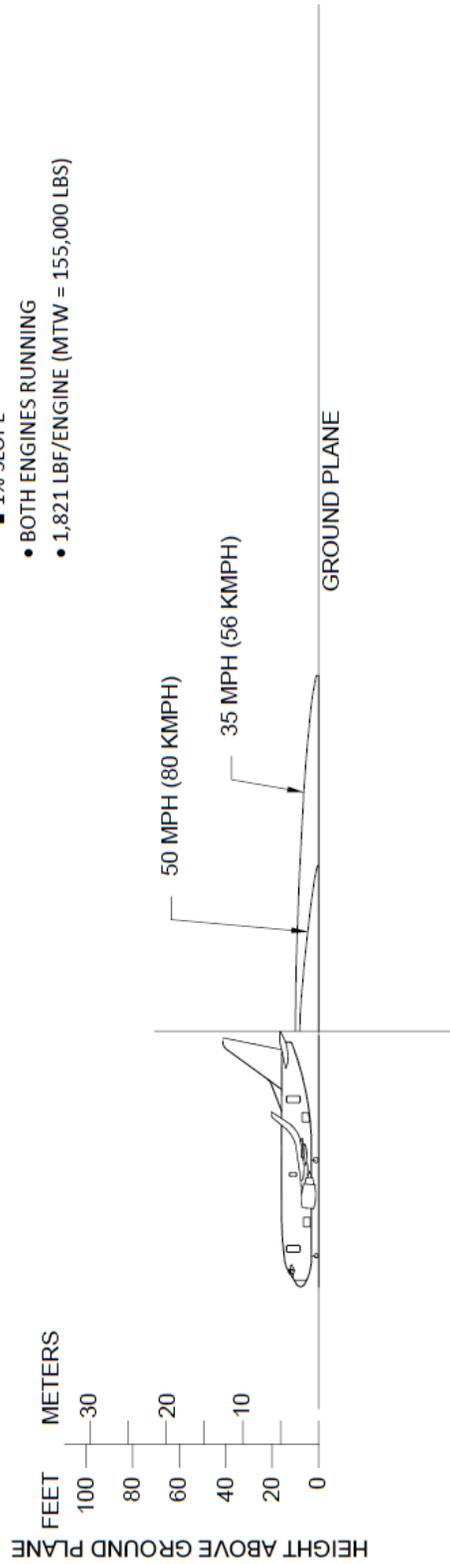
6.1.11 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / Both Engines / MTW: Model 737-700, -700W

- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - BOTH ENGINES RUNNING
 - 1,046 LBF/ENGINE (MTW = 155,000 LBS)



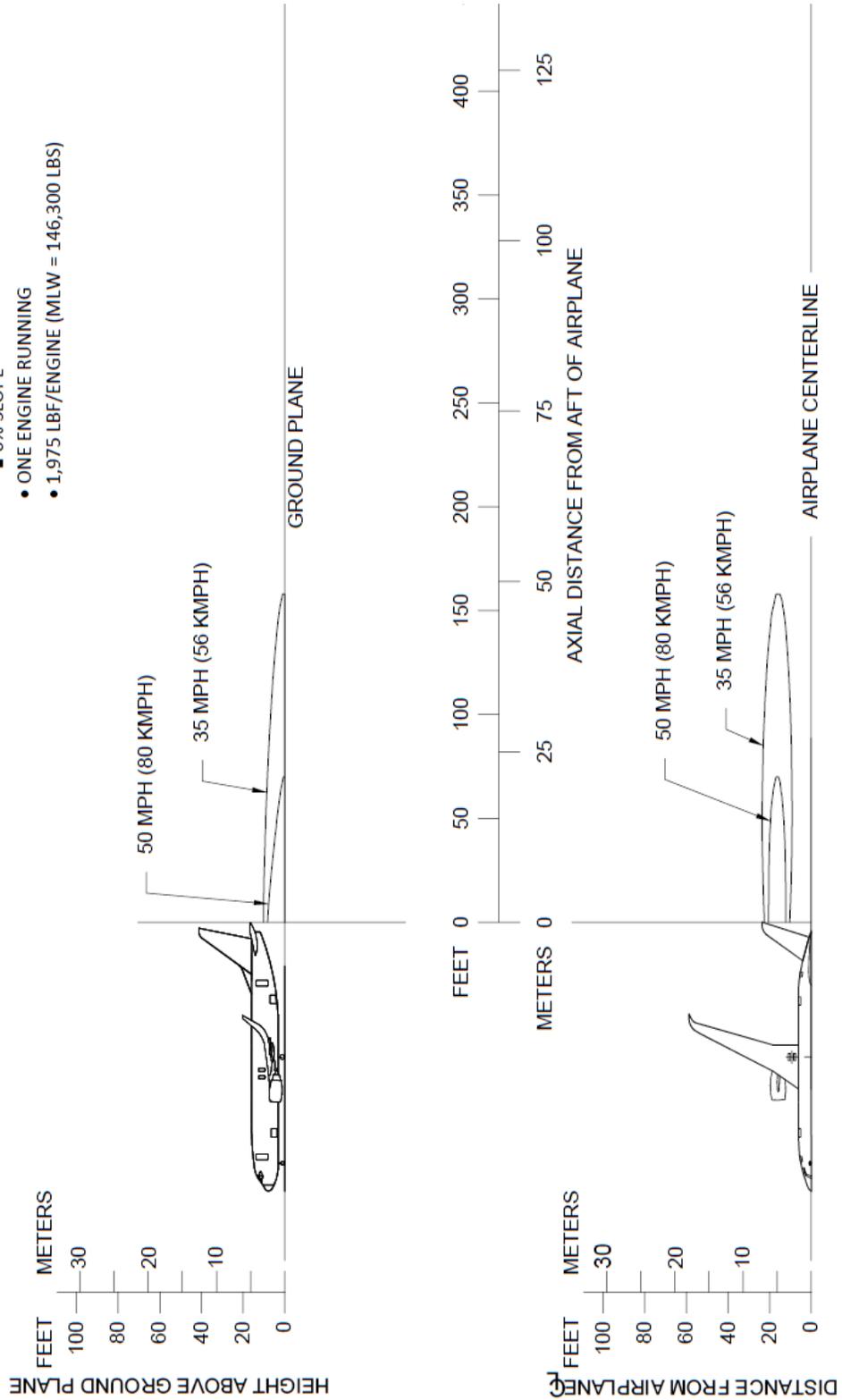
6.1.12 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 1% Slope / Both Engines / MTW: Model 737-700, -700W

- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 1% SLOPE
 - BOTH ENGINES RUNNING
 - 1,821 LBF/ENGINE (MTW = 155,000 LBS)



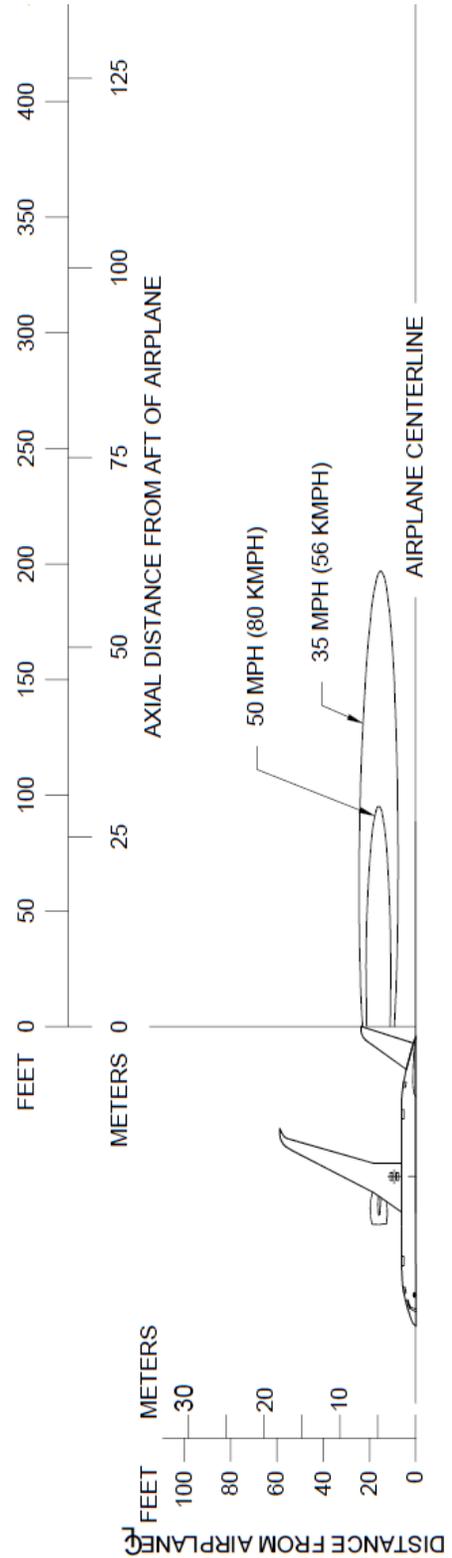
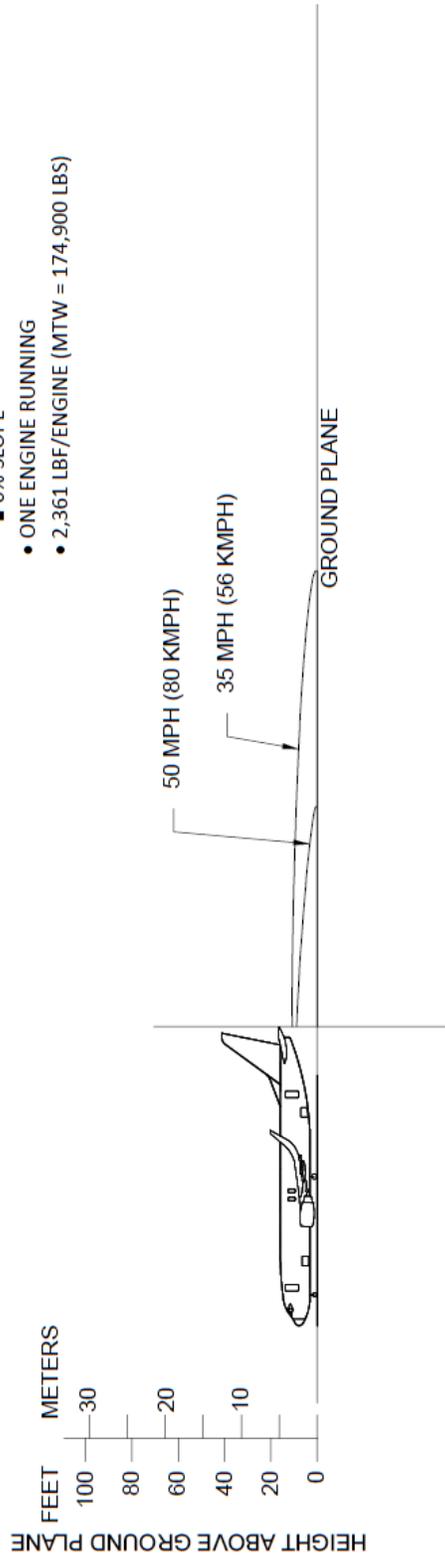
6.1.13 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MLW: Model 737-800, -800W, -800BCF

- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - ONE ENGINE RUNNING
 - 1,975 LBF/ENGINE (MLW = 146,300 LBS)



6.1.14 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MTW: Model 737-800, -800W, -800BCF

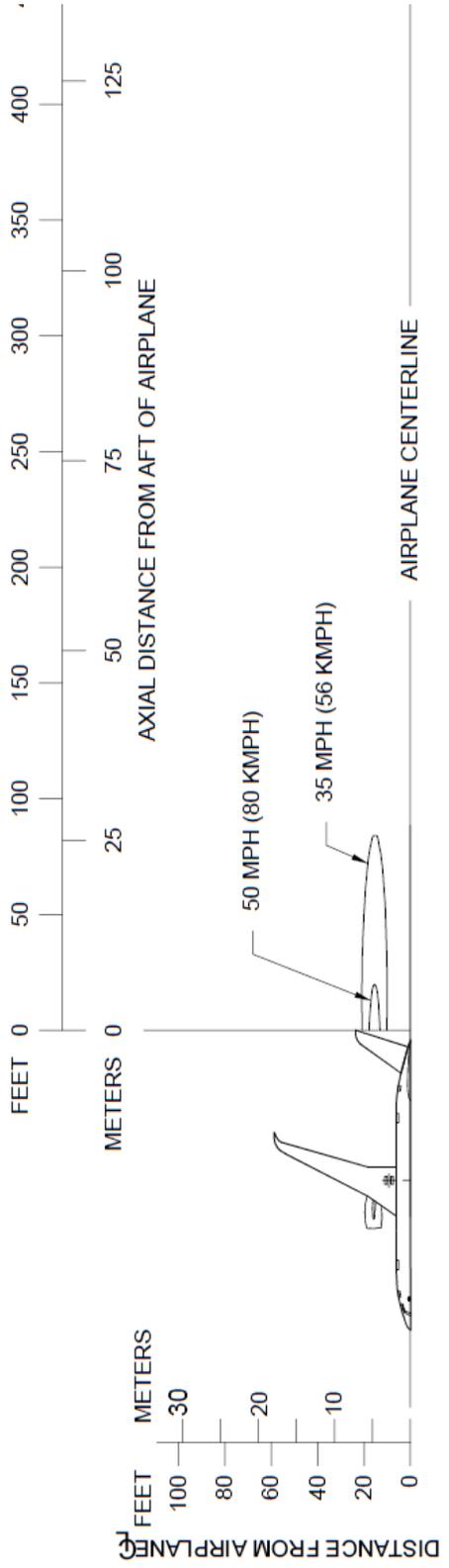
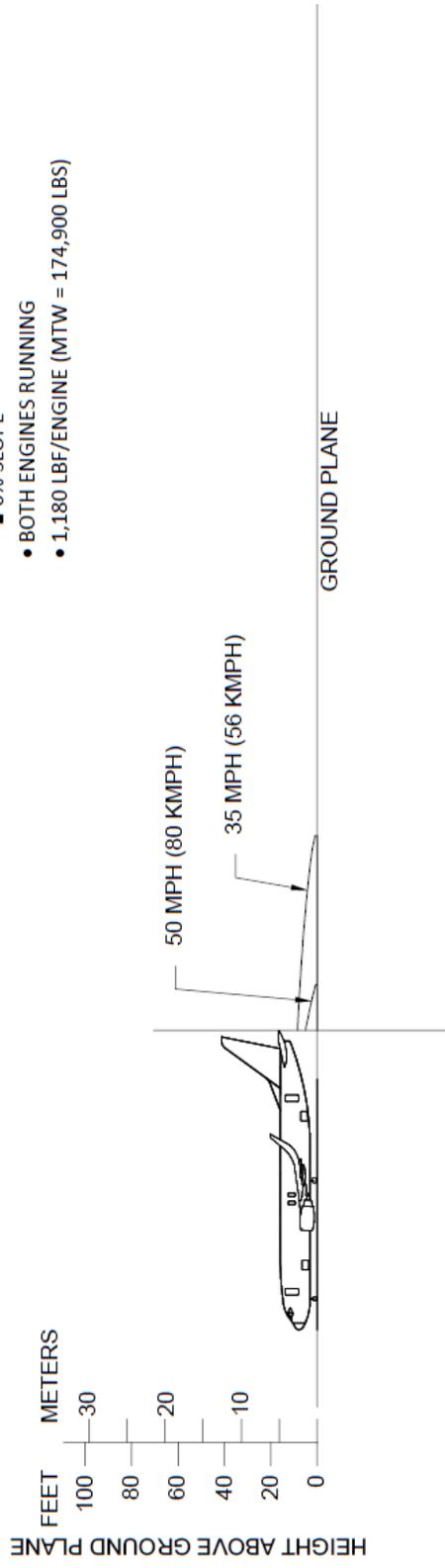
- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - ONE ENGINE RUNNING
 - 2,361 LBF/ENGINE (MTW = 174,900 LBS)



D6-58325-7

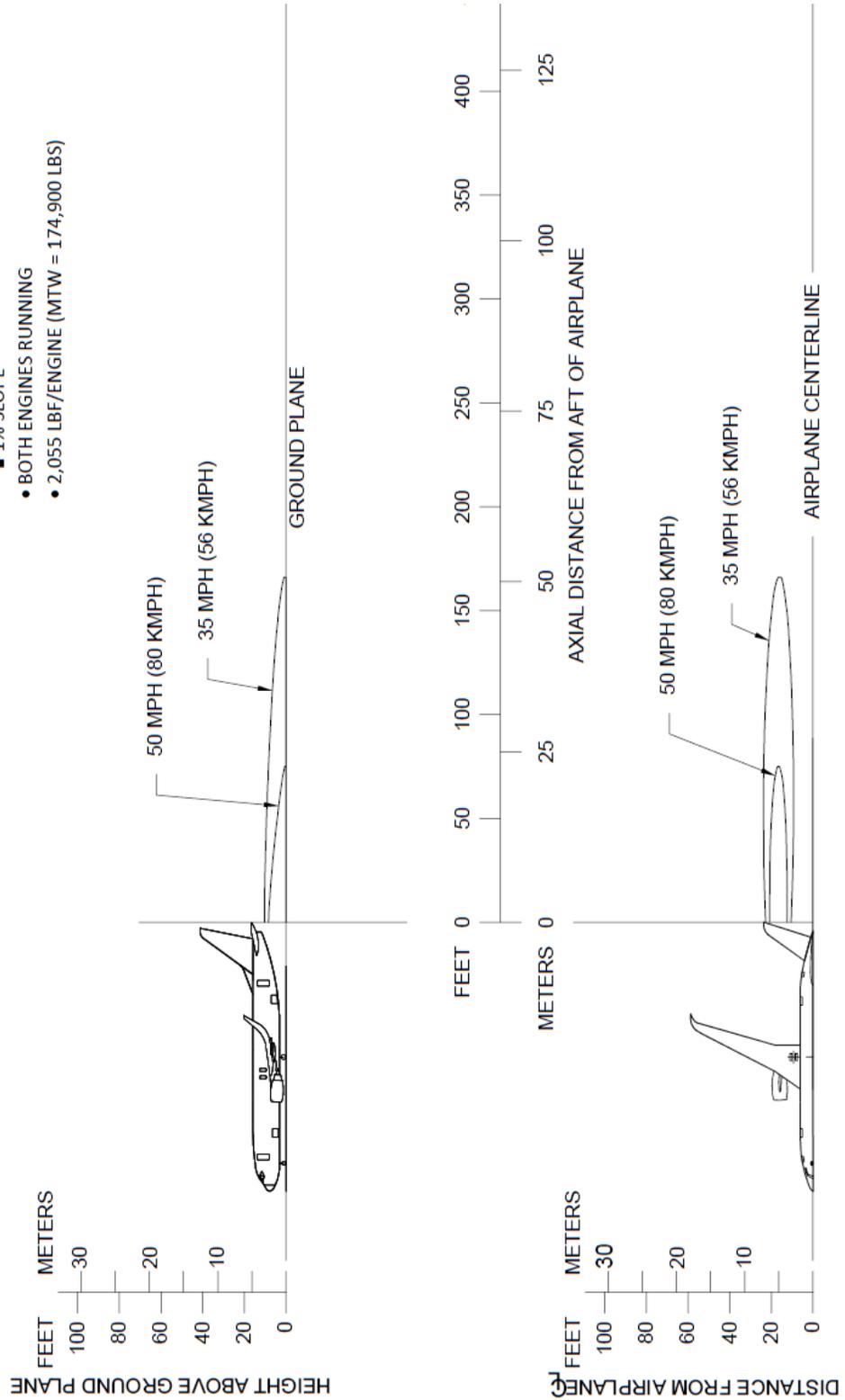
6.1.15 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / Both Engines / MTW: Model 737-800, -800W, -800BCF

- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - BOTH ENGINES RUNNING
 - 1,180 LBF/ENGINE (MTW = 174,900 LBS)



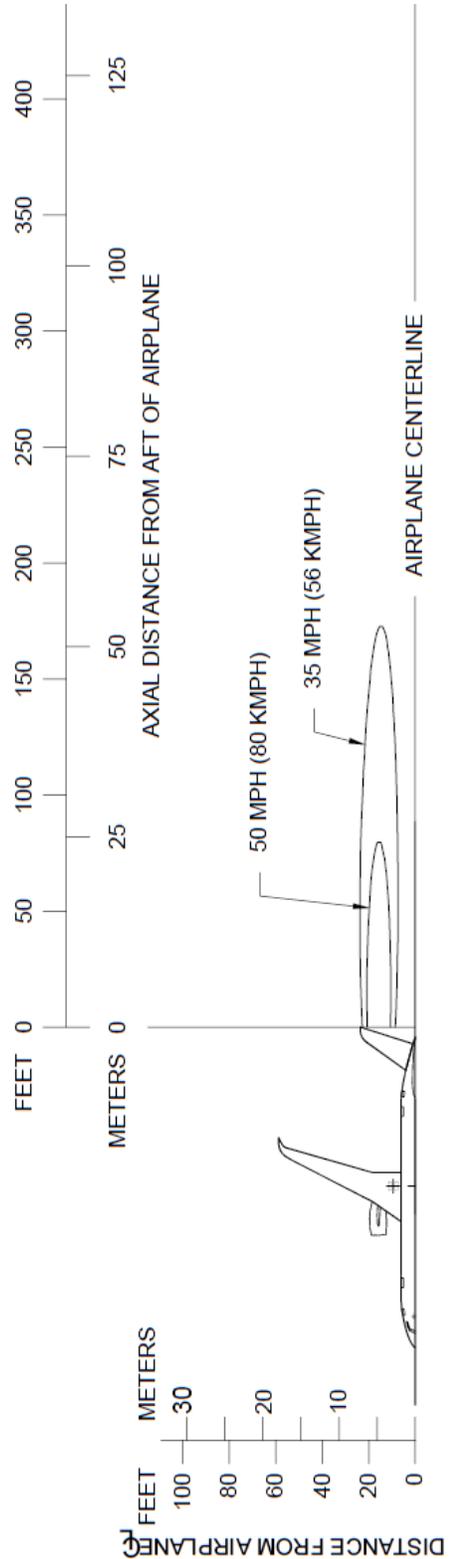
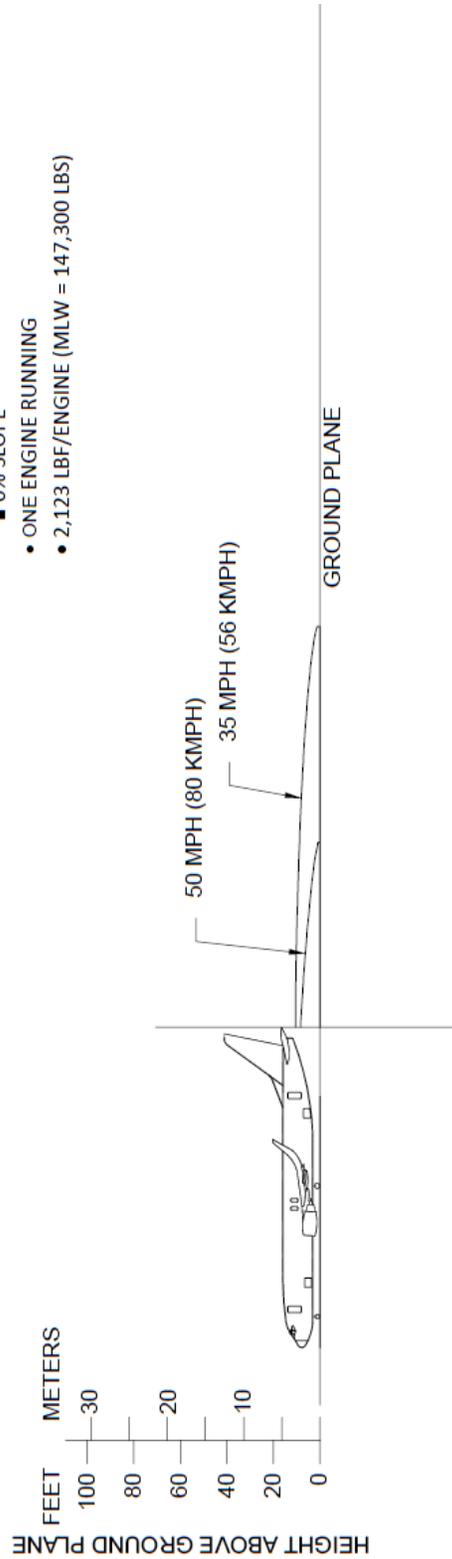
6.1.16 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 1% Slope / Both Engines / MTW: Model 737-800, -800W, -800BCF

- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 1% SLOPE
 - BOTH ENGINES RUNNING
 - 2,055 LBF/ENGINE (MTW = 174,900 LBS)



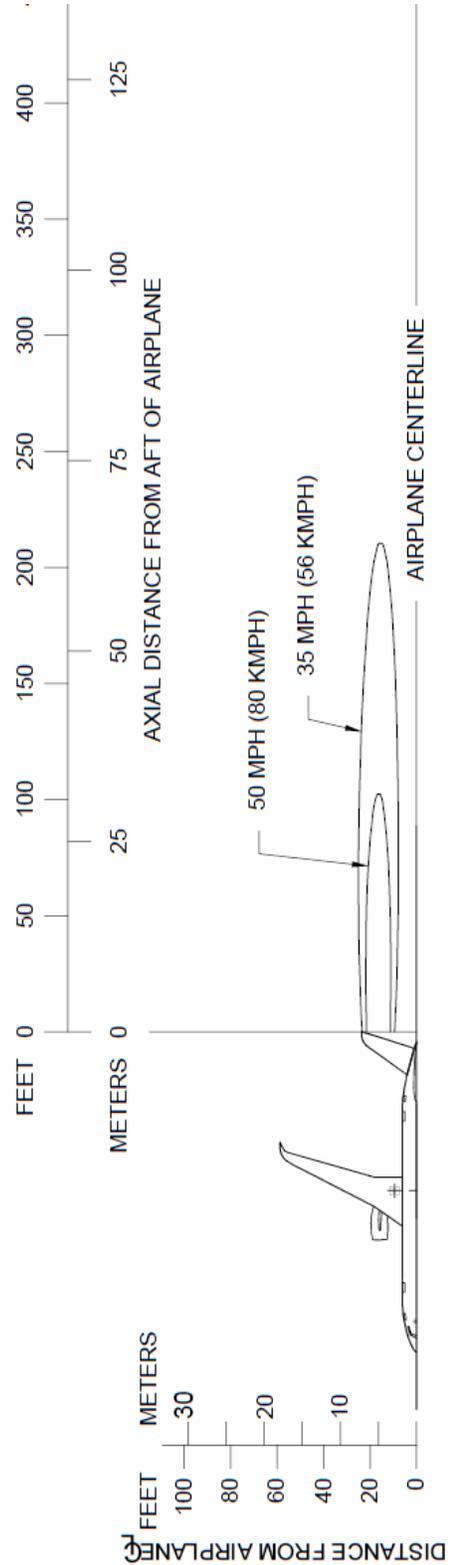
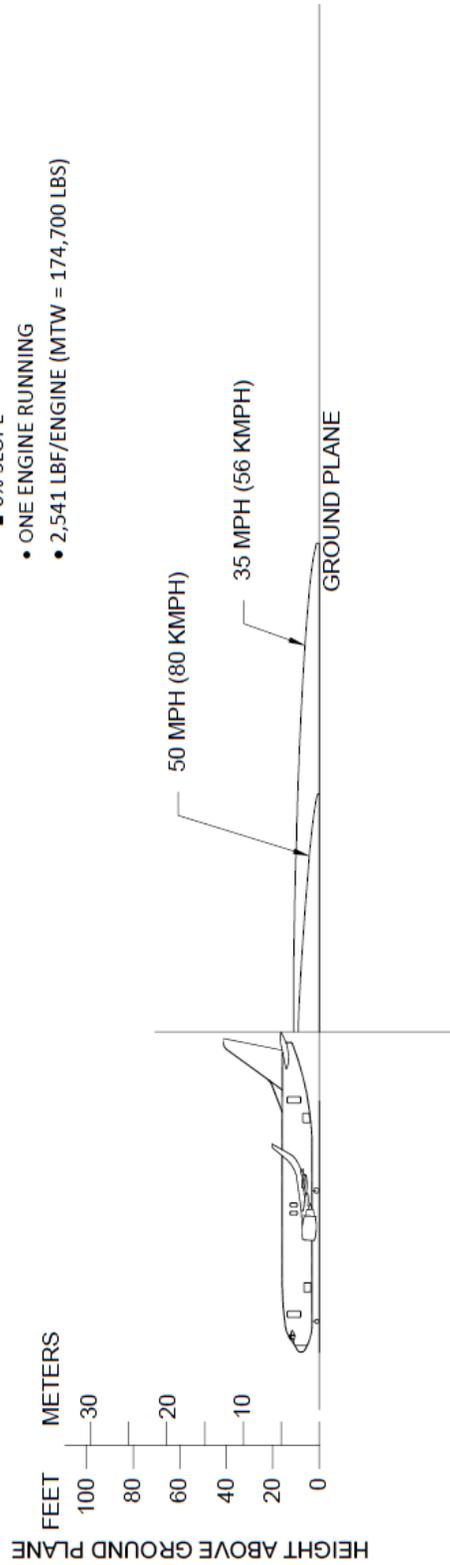
6.1.17 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MLW: Model 737-900, -900ER, With and Without Winglets

- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - ONE ENGINE RUNNING
 - 2,123 LBF/ENGINE (MLW = 147,300 LBS)



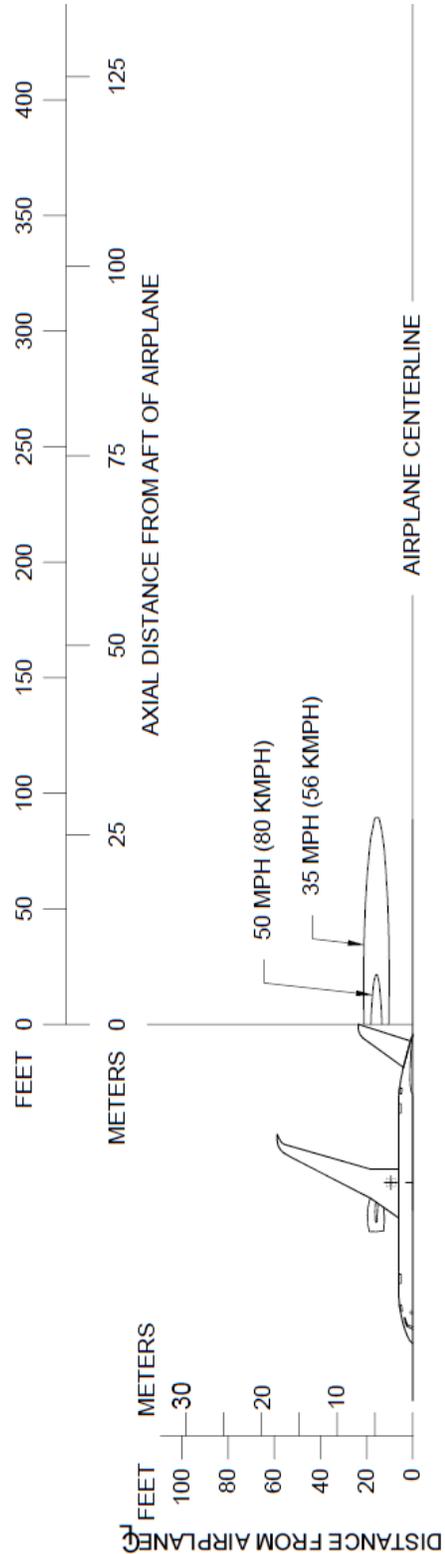
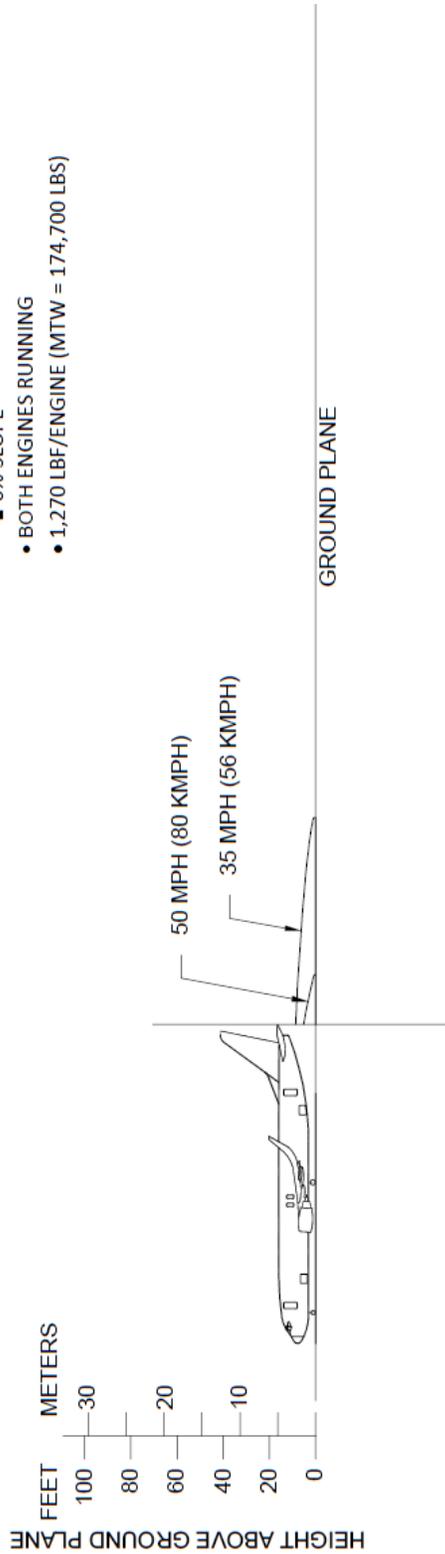
6.1.18 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / One Engine / MTW: Model 737-900, -900ER, With and Without Winglets

- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - ONE ENGINE RUNNING
 - 2,541 LBF/ENGINE (MTW = 174,700 LBS)



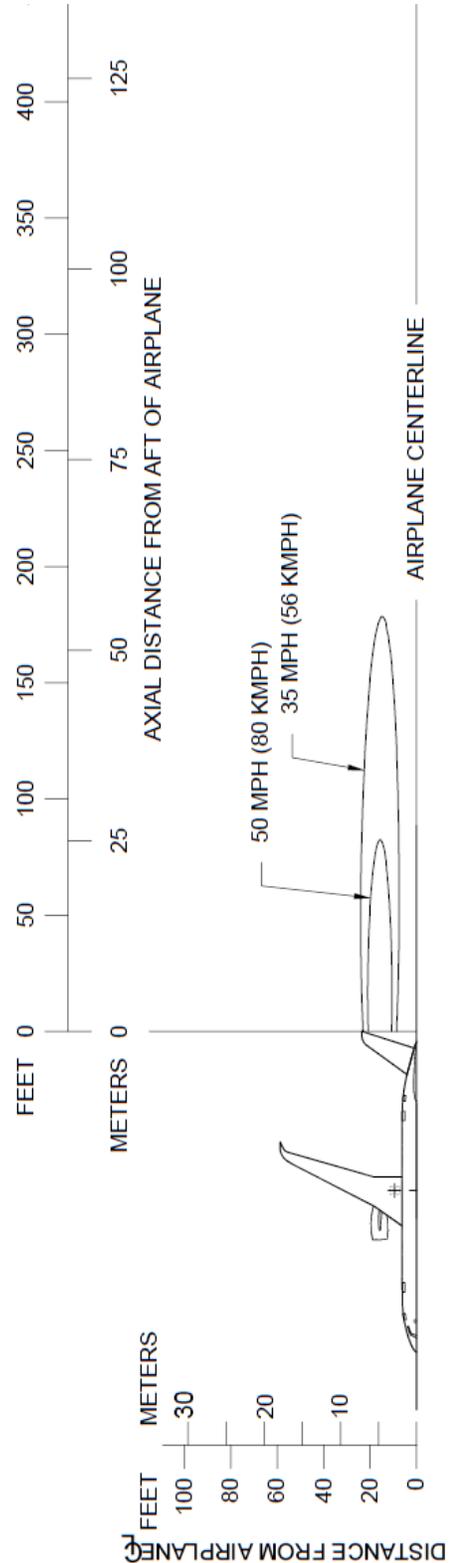
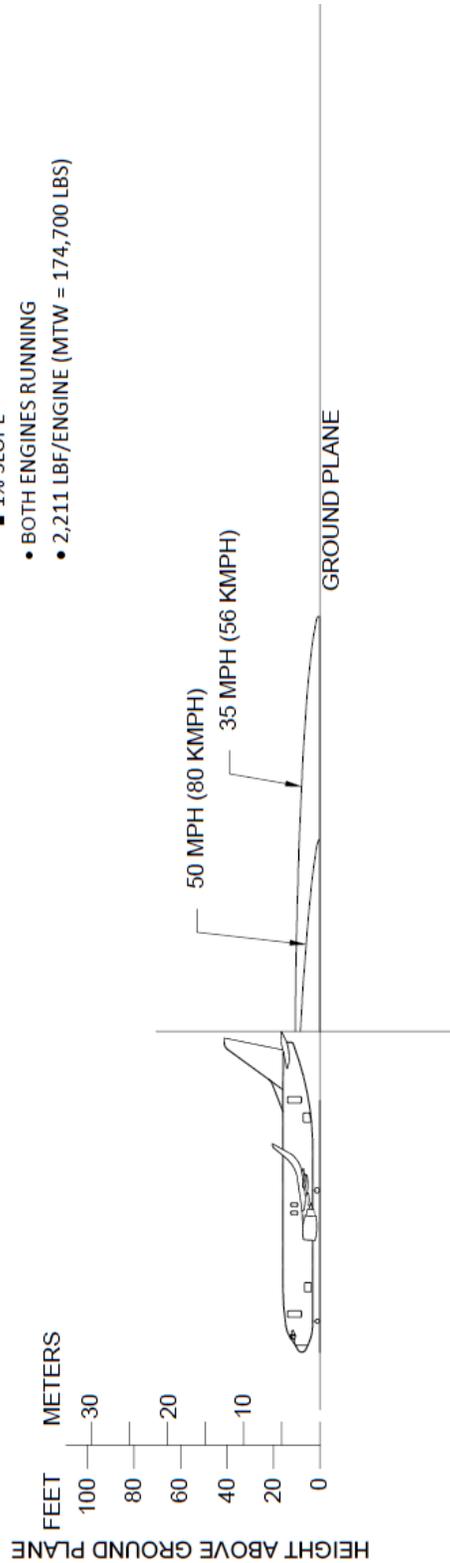
6.1.19 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 0% Slope / Both Engines / MTW: Model 737-900, -900ER, With and Without Winglets

- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 0% SLOPE
 - BOTH ENGINES RUNNING
 - 1,270 LBF/ENGINE (MTW = 174,700 LBS)



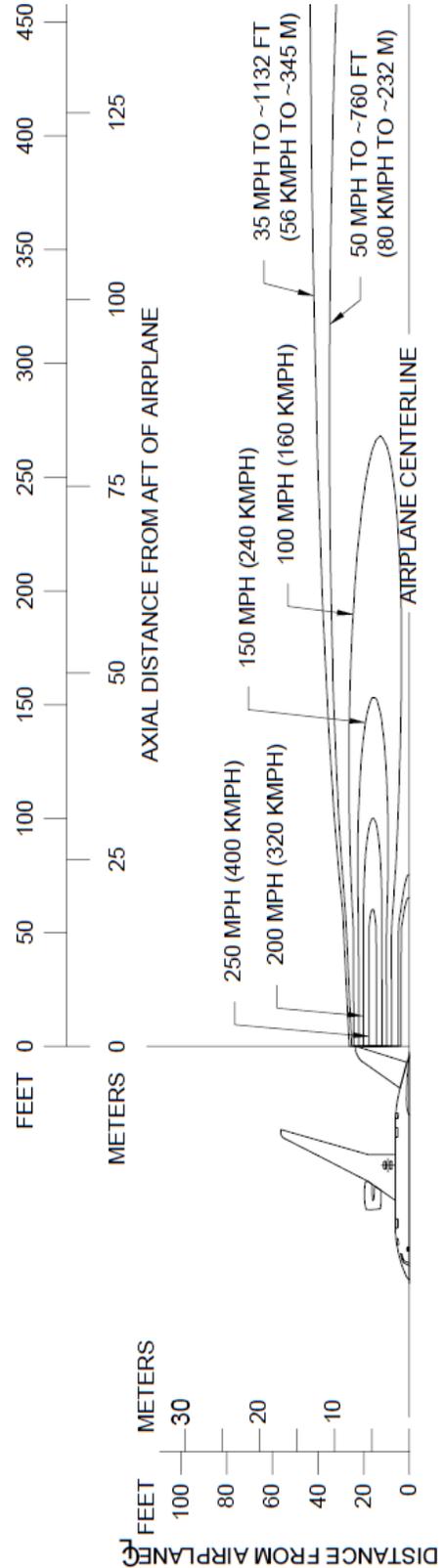
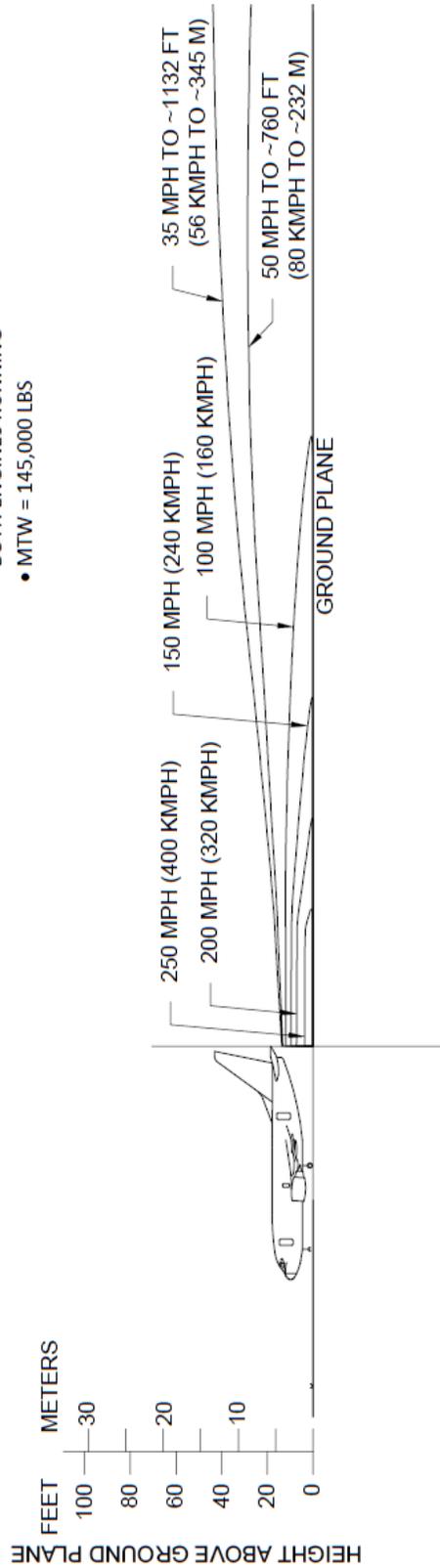
6.1.20 Jet Engine Exhaust Velocity Contours - Breakaway Thrust / 1% Slope / Both Engines / MTW: Model 737-900, -900ER, With and Without Winglets

- NOTES:
- ENGINE THRUST AT BREAKAWAY SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - 1% SLOPE
 - BOTH ENGINES RUNNING
 - 2,211 LBF/ENGINE (MTW = 174,700 LBS)



6.1.21 Jet Engine Exhaust Velocity Contours - Takeoff Thrust: Model 737-600

- NOTES:
- ENGINE THRUST AT TAKEOFF SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - BOTH ENGINES RUNNING
 - MTW = 145,000 LBS



6.1.22 Jet Engine Exhaust Velocity Contours - Takeoff Thrust: Model 737-700, -700W

- NOTES:
- ENGINE THRUST AT TAKEOFF SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA

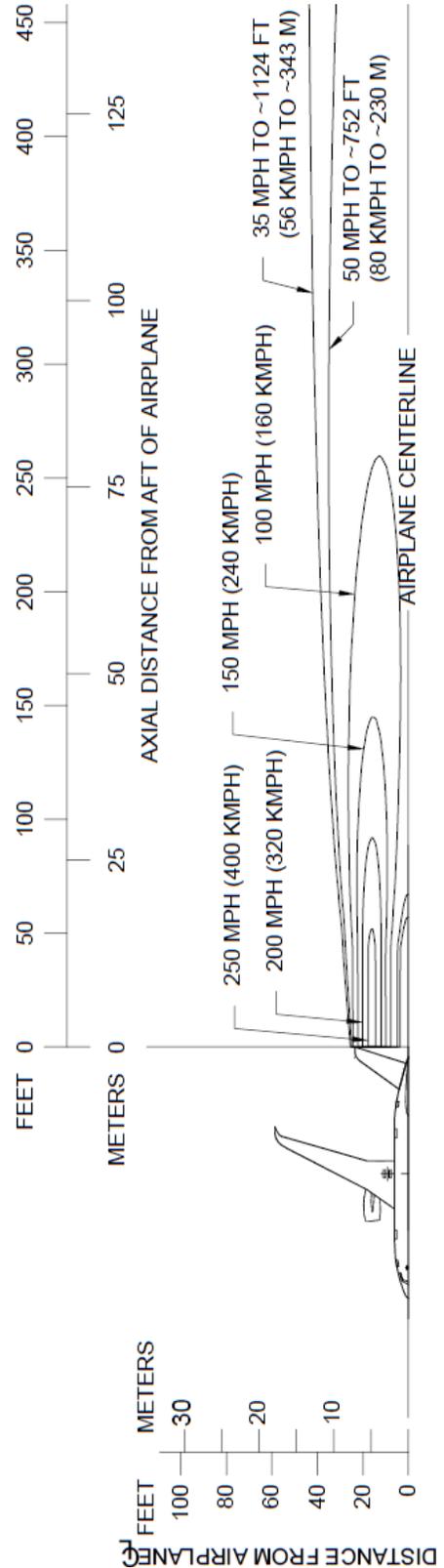
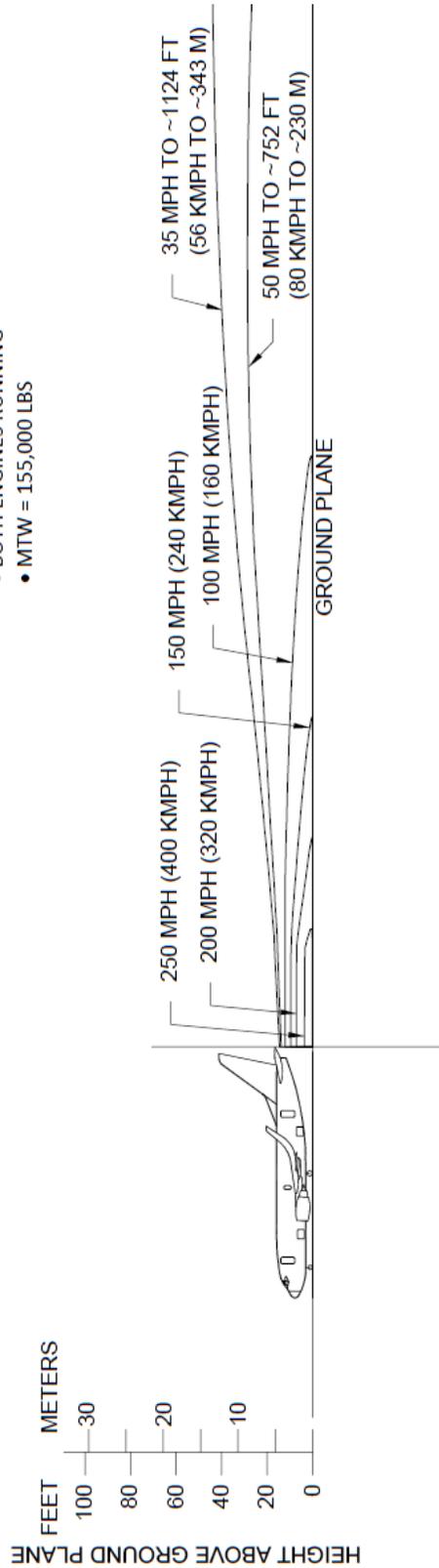
■ STANDARD DAY

■ SEA LEVEL

■ NO WIND

• BOTH ENGINES RUNNING

• MTW = 155,000 LBS



D6-58325-7

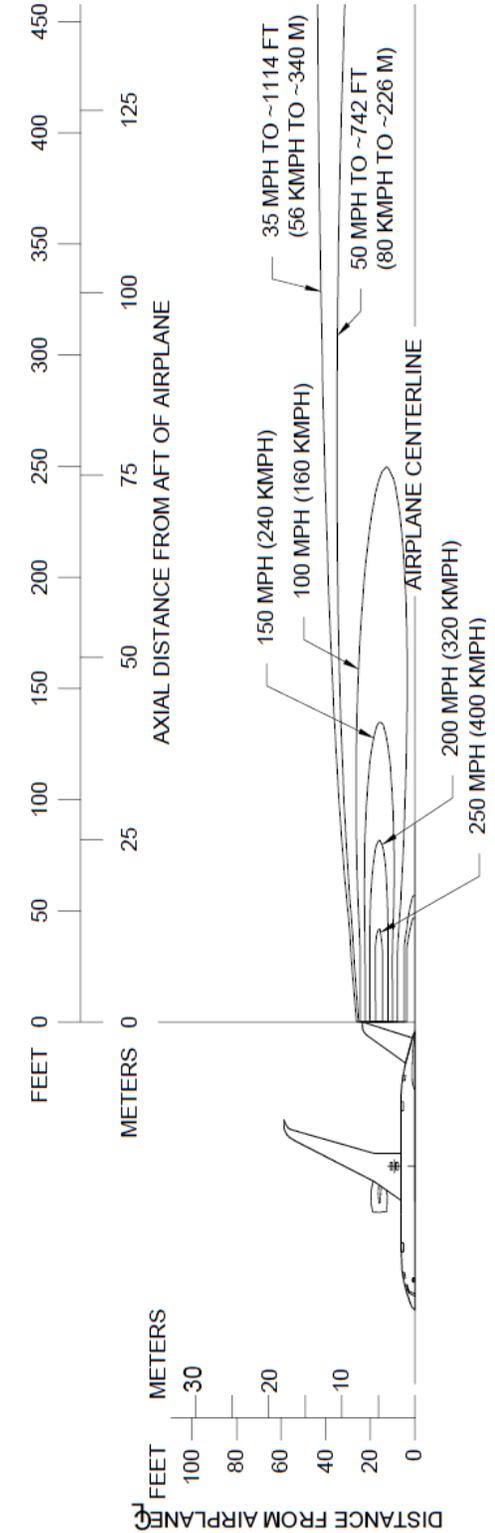
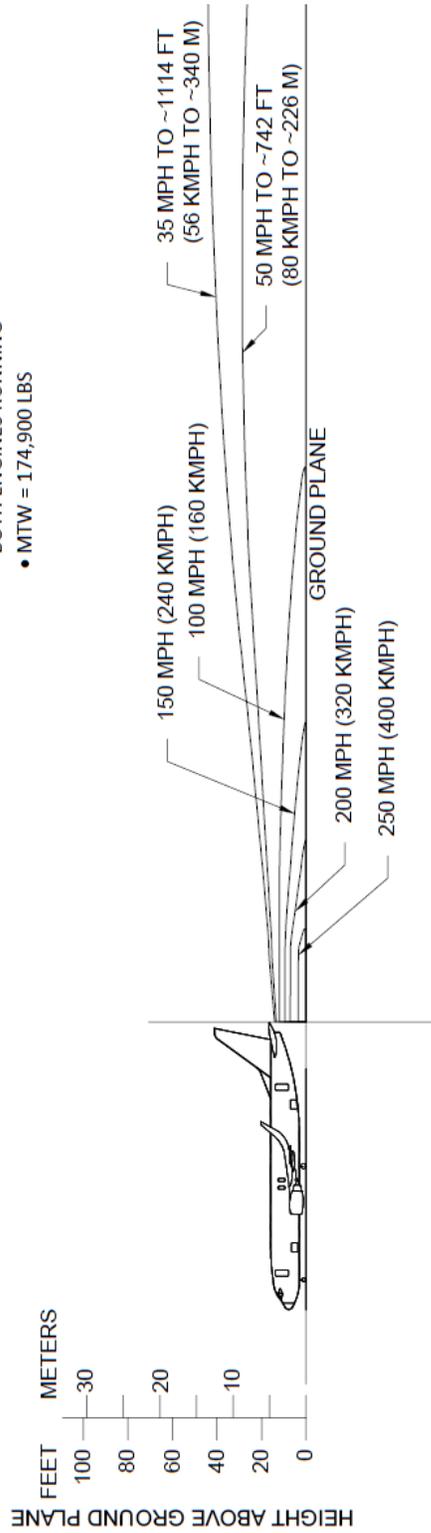
REV A

March 2023

6-23

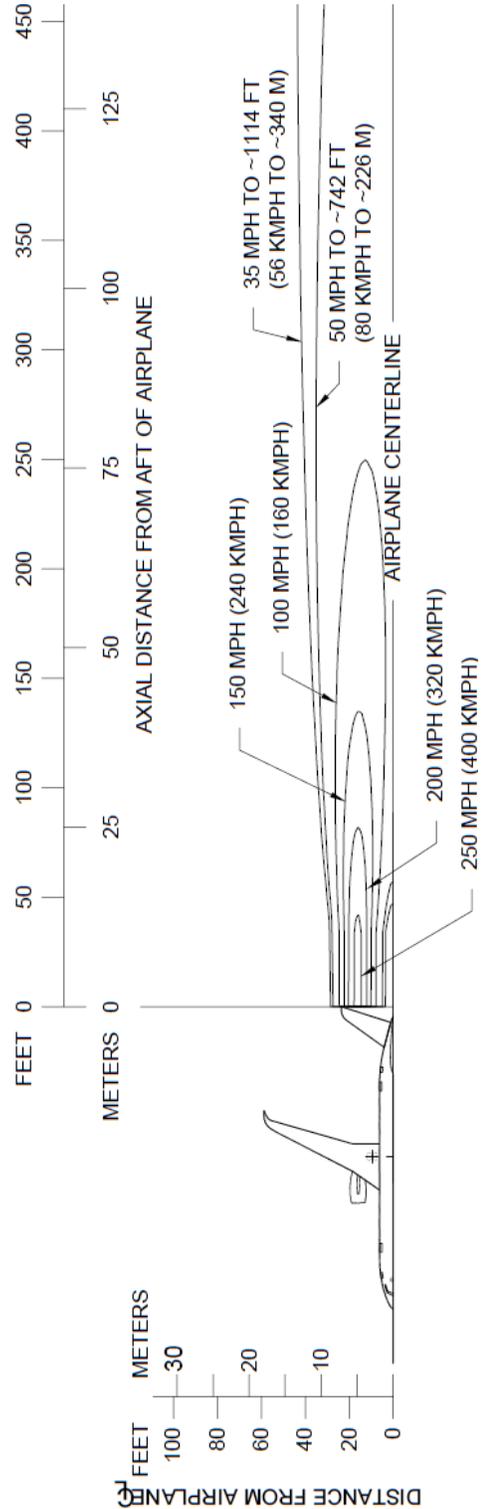
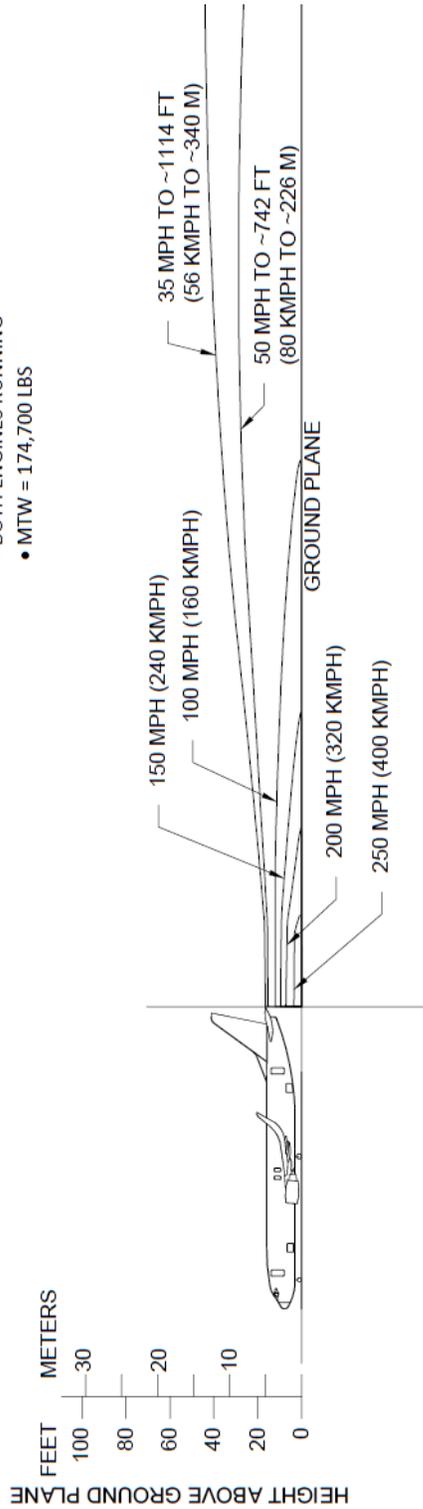
6.1.23 Jet Engine Exhaust Velocity Contours - Takeoff Thrust: Model 737-800, -800W, -800BCF

- NOTES:
- ENGINE THRUST AT TAKEOFF SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - BOTH ENGINES RUNNING
 - MTW = 174,900 LBS



6.1.24 Jet Engine Exhaust Velocity Contours - Takeoff Thrust: Model 737-900, -900ER, With and Without Winglets

- NOTES:
- ENGINE THRUST AT TAKEOFF SETTING
 - CONTOURS CALCULATED FROM COMPUTER DATA
 - STANDARD DAY
 - SEA LEVEL
 - NO WIND
 - BOTH ENGINES RUNNING
 - MTW = 174,700 LBS



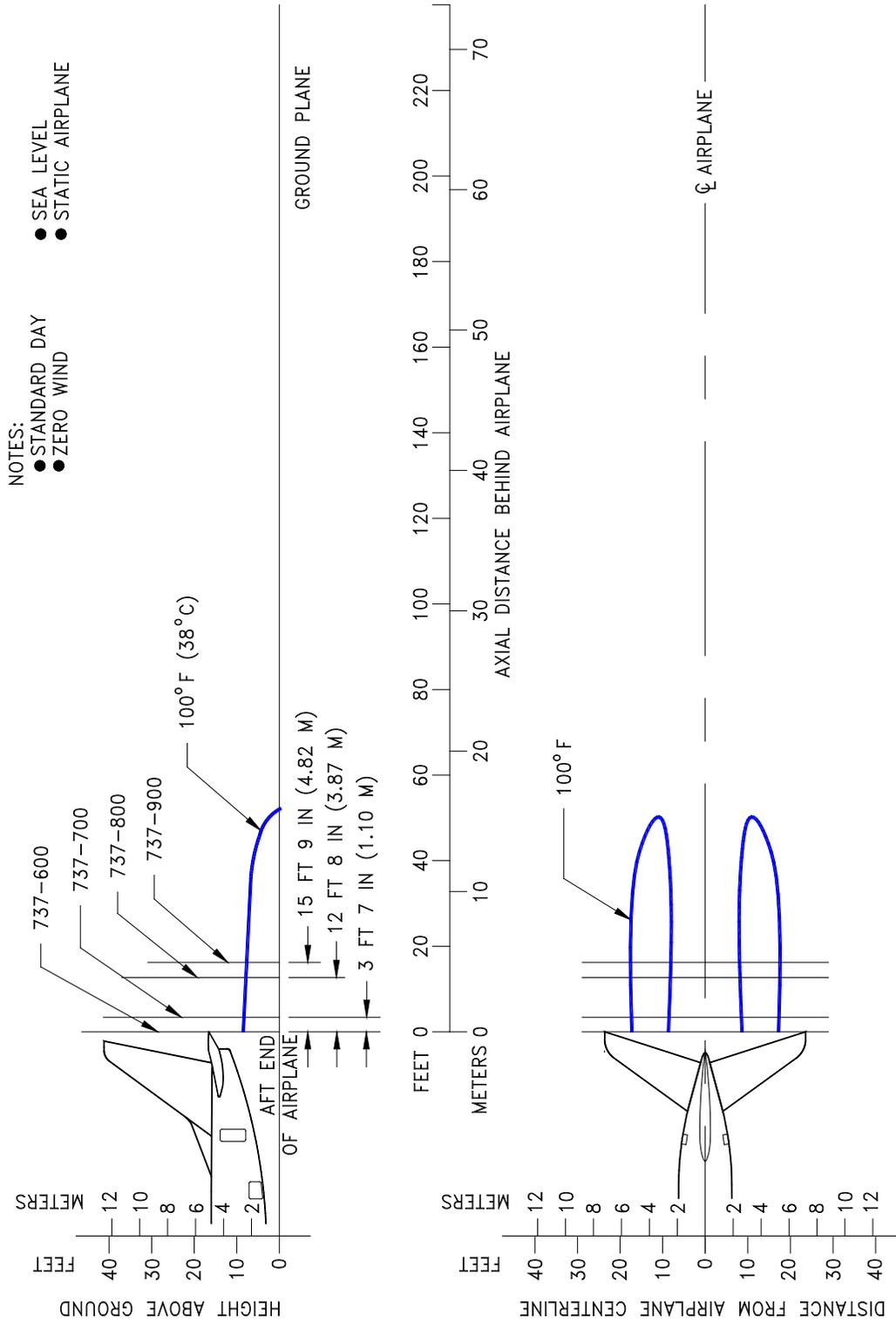
6.1.25 Jet Engine Exhaust Temperature Contours - Idle Thrust: Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets

Temperature contours for idle power conditions are not shown as the maximum temperature aft of the 737-600, -700, -800, -900, -900ER is predicated to be less than 100° F (38° C) for standard day conditions of 59° F (15° C).

**6.1.26 Jet Engine Exhaust Temperature Contours – Breakaway Thrust:
Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without
Winglets**

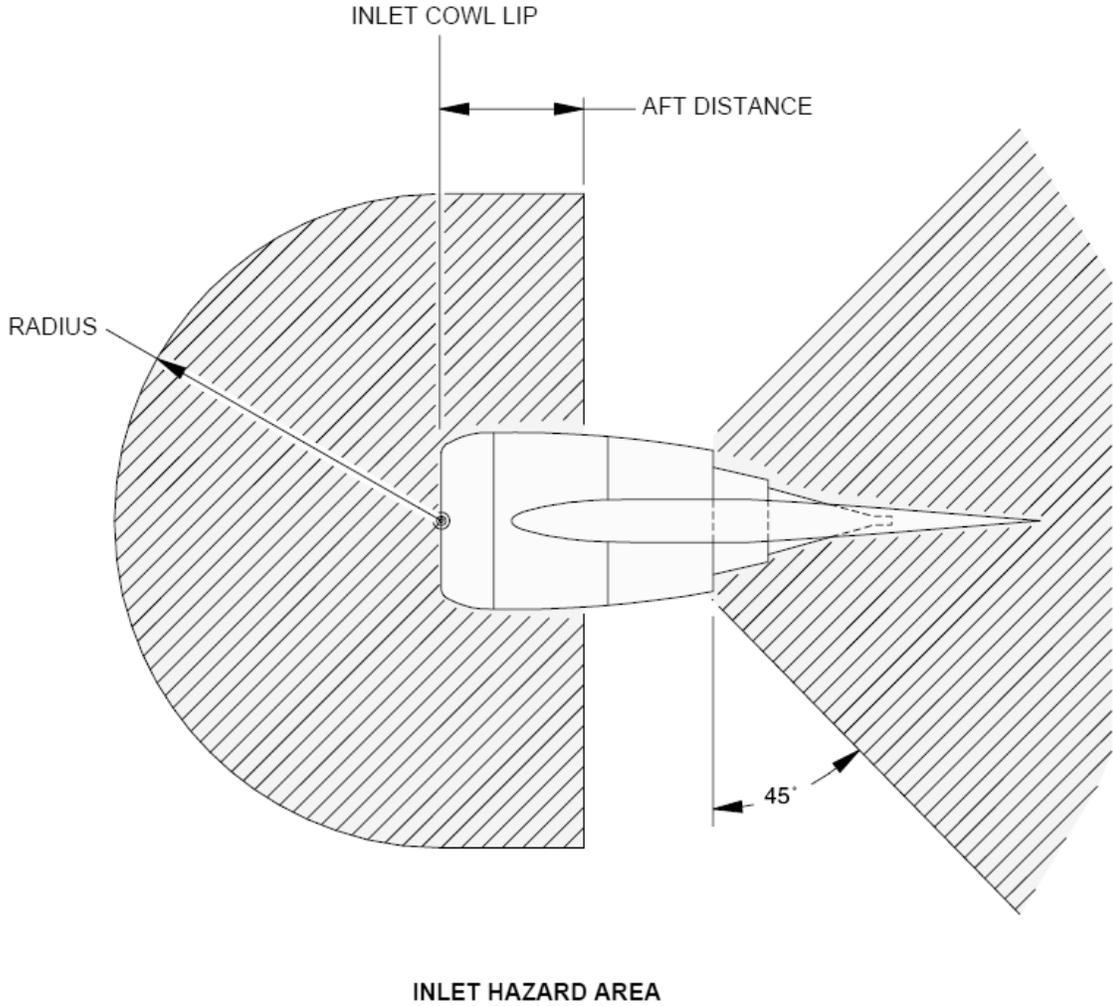
Temperature contours for breakaway power conditions are not shown as the maximum temperature aft of the 737-600, -700, -800, -900, -900ER is predicated to be less than 100° F (38° C) for standard day conditions of 59° F (15° C).

6.1.27 Jet Engine Exhaust Temperature Contours – Takeoff Thrust: Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets



D6-58325-7

6.1.28 Inlet Hazard Areas: Models 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets



	RADIUS		AFT DISTANCE	
IDLE THRUST	10 FT	3.1 M	4 FT	1.2 M
BREAKAWAY THRUST	14 FT	4.2 M	5 FT	1.5 M
TAKEOFF THRUST	14 FT	4.2 M	5 FT	1.5 M

6.2 AIRPORT AND COMMUNITY NOISE

Airport noise is of major concern to the airport and community planner. The airport is a major element in the community's transportation system and, as such, is vital to its growth. However, the airport must also be a good neighbor, and this can be accomplished only with proper planning. Since aircraft noise extends beyond the boundaries of the airport, it is vital to consider the impact on surrounding communities. Many means have been devised to provide the planner with a tool to estimate the impact of airport operations. Too often they oversimplify noise to the point where the results become erroneous. Noise is not a simple subject; therefore, there are no simple answers.

The cumulative noise contour is an effective tool. However, care must be exercised to ensure that the contours, used correctly, estimate the noise resulting from aircraft operations conducted at an airport.

The size and shape of the single-event contours, which are inputs into the cumulative noise contours, are dependent upon numerous factors. They include the following:

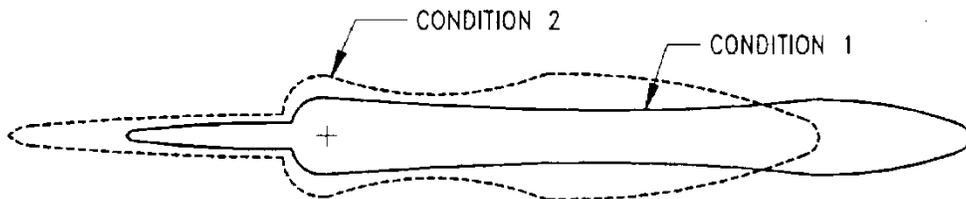
1. Operational Factors
 - a. Aircraft Weight-Aircraft weight is dependent on distance to be traveled, enroute winds, payload, and anticipated aircraft delay upon reaching the destination.
 - b. Engine Power Settings-The rates of ascent and descent and the noise levels emitted at the source are influenced by the power setting used.
 - c. Airport Altitude-Higher airport altitude will affect engine performance and thus can influence noise.
2. Atmospheric Conditions-Sound Propagation
 - a. Wind-With stronger headwinds, the aircraft can take off and climb more rapidly relative to the ground. Also, winds can influence the distribution of noise in surrounding communities.
 - b. Temperature and Relative Humidity-The absorption of noise in the atmosphere along the transmission path between the aircraft and the ground observer varies with both temperature and relative humidity.
3. Surface Condition-Shielding, Extra Ground Attenuation (EGA)
 - a. Terrain-If the ground slopes down after takeoff or before landing, noise will be reduced since the aircraft will be at a higher altitude above ground. Additionally, hills, shrubs, trees, and large buildings can act as sound buffers.

All these factors can alter the shape and size of the contours appreciably. To demonstrate the effect of some of these factors, estimated noise level contours for two different

operating conditions are shown below. These contours reflect a given noise level upon a ground level plane at runway elevation.

Condition 1

Landing	Takeoff
Maximum Structural Landing Weight	Maximum Gross Takeoff Weight
10-knot Headwind	Zero Wind
3° Approach	84 °F
84 °F	Humidity 15%
Humidity 15%	



Condition 2

Landing	Takeoff
85% of Maximum Structural Landing Weight	80% of Maximum Gross Takeoff Weight
10-knot Headwind	10-knot Headwind
3° Approach	59 °F (15 °C)
59 °F (15 °C)	Humidity 70%
Humidity 70%	

As indicated from the data, the contour size varies substantially with operating and atmospheric conditions. Most aircraft operations are, of course, conducted at less than maximum gross weights because average flight distances are much shorter than maximum aircraft range capability and average load factors are less than 100%. Therefore, in developing cumulative contours for planning purposes, it is recommended that the airlines serving a particular city be contacted to provide operational information.

In addition, there are no universally accepted methods for developing aircraft noise contours or for relating the acceptability of specific zones to specific land uses. It is

therefore expected that noise contour data for particular aircraft and the impact assessment methodology will be changing. To ensure that the best currently available information of this type is used in any planning study, it is recommended that it be obtained directly from the Office of Environmental Quality in the Federal Aviation Administration in Washington, D.C.

It should be noted that the contours shown herein are only for illustrating the impact of operating and atmospheric conditions and do not represent the single-event contour of the family of aircraft described in this document. It is expected that the cumulative contours will be developed as required by planners using the data and methodology applicable to their specific study.

7.0 PAVEMENT DATA

7.1 GENERAL INFORMATION

A brief description of the pavement charts that follow will help in their use for airport planning. Each airplane configuration is depicted with a minimum range of five loads imposed on the main landing gear to aid in interpolation between the discrete values shown. All curves for any single chart represent data based on rated loads and tire pressures considered normal and acceptable by current aircraft tire manufacturer's standards. Tire pressures, where specifically designated on tables and charts, are at values obtained under loaded conditions as certificated for commercial use.

Section 7.2 presents basic data on the landing gear footprint configuration, maximum design taxi loads, and tire sizes and pressures.

Maximum pavement loads for certain critical conditions at the tire-to-ground interface are shown in Section 7.3, with the tires having equal loads on the struts.

Pavement requirements for commercial airplanes are customarily derived from the static analysis of loads imposed on the main landing gear struts. The charts in Section 7.4 are provided in order to determine these loads throughout the stability limits of the airplane at rest on the pavement. These main landing gear loads are used as the point of entry to the pavement design charts, interpolating load values where necessary.

The flexible pavement design curves based on the US Army Corp of Engineers Method and the rigid pavement curves based on the Portland Cement Association Design Method are no longer provided in Sections 7.5 and 7.7. Refer to the State's design standards for pavement design requirements. For US airports, refer to FAA Advisory Circular (AC) 150/5320-6, "Pavement Design" and pavement design program FAARFIELD for flexible and rigid pavement design requirements.

The Load Classification Number (LCN) curves are no longer provided in section 7.6 and 7.8 since the LCN system for reporting pavement strength is obsolete, being replaced by the ICAO recommended ACN/PCN system in 1983. For questions regarding the LCN system contact Boeing Airport Operations Engineering:

AirportCompatibility@boeing.com

The ACN/PCN system (Section 7.10) as referenced in ICAO Annex 14, "Aerodromes," 8th Edition, July 2018, provides a standardized international airplane/pavement rating system replacing the various S, T, TT, LCN, AUW, ISWL, etc., rating systems used throughout the world. ACN is the Aircraft Classification Number and PCN is the Pavement Classification Number. An aircraft having an ACN equal to or less than the PCN can operate on the pavement subject to any limitation on the tire pressure. Numerically, the ACN is two times the derived single-wheel load expressed in thousands of kilograms, where the derived single wheel load is defined as the load on a single tire inflated to 181 psi (1.25 MPa) that would have the same pavement requirements as the

aircraft. Computationally, the ACN/PCN system uses the PCA program PDILB for rigid pavements and S-77-1 for flexible pavements to calculate ACN values.

The ACR-PCR system (Section 7.11) follows the proposed amendment to ICAO Annex 14 replacing the current ACN-PCN system. ACR is the Aircraft Classification Rating and PCR is the Pavement Classification Rating. An aircraft having an ACR equal to or less than the PCR can operate on the pavement subject to any limitation on the tire pressure. Numerically, the ACR is two times the derived single-wheel load expressed in hundreds of kilograms, where the derived single wheel load is defined as the load on a single tire inflated to 218 psi (1.5 MPa) that would have the same pavement requirements as the aircraft.

The method of pavement evaluation is left up to the airport with the results of their evaluation presented as follows:

PCN	PAVEMENT TYPE	SUBGRADE CATEGORY	TIRE PRESSURE CATEGORY	EVALUATION METHOD
	R = Rigid	A = High	W = No Limit	T = Technical
	F = Flexible	B = Medium	X = To 254 psi (1.75 MPa)	U = Using Aircraft
		C = Low	Y = To 181 psi (1.25 MPa)	
		D = Ultra Low	Z = To 73 psi (0.5 MPa)	

ACN values for flexible pavements are calculated for the following four subgrade categories:

- Code A - High Strength - CBR 15
- Code B - Medium Strength - CBR 10
- Code C - Low Strength - CBR 6
- Code D - Ultra Low Strength - CBR 3

ACN values for rigid pavements are calculated for the following four subgrade categories:

- Code A - High Strength, $k = 552.6 \text{ pci (150 MN/m}^3\text{)}$
- Code B - Medium Strength, $k = 294.7 \text{ pci (80 MN/m}^3\text{)}$
- Code C - Low Strength, $k = 147.4 \text{ pci (40 MN/m}^3\text{)}$
- Code D - Ultra Low Strength, $k = 73.7 \text{ pci (20 MN/m}^3\text{)}$

ACR values at any mass on rigid and flexible pavements are calculated for the following four subgrade categories:

Code A - High Strength - Subgrade Modulus, $E = 200 \text{ MPa}$ (29,008 psi)

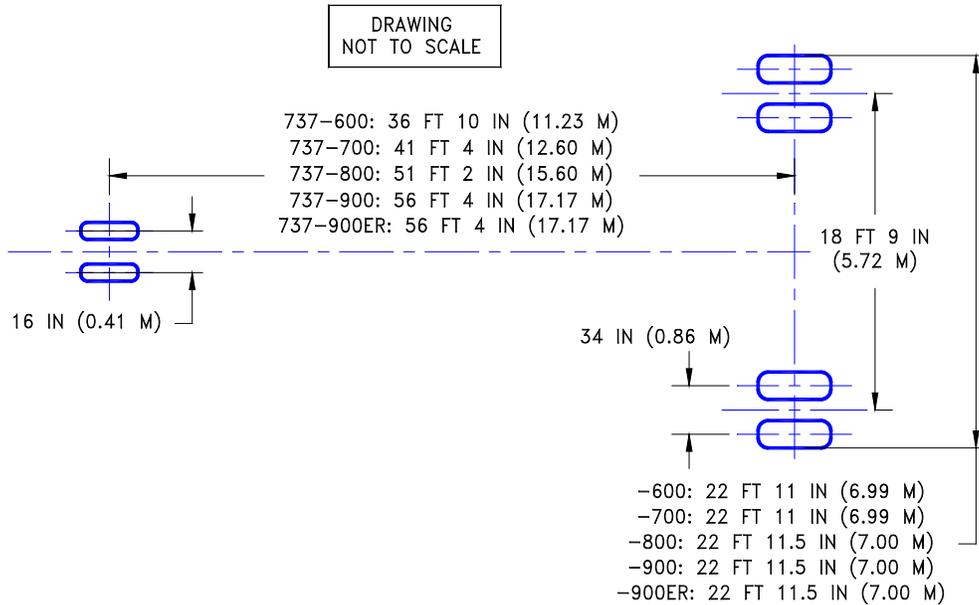
Code B - Medium Strength - Subgrade Modulus, $E = 120 \text{ MPa}$ (17,405 psi)

Code C - Low Strength - Subgrade Modulus, $E = 80 \text{ MPa}$ (11,603 psi)

Code D - Ultra Low Strength - Subgrade Modulus, $E = 50 \text{ MPa}$ (7,252 psi)

7.2 LANDING GEAR FOOTPRINT

7.2.1 Landing Gear Footprint: Model Advanced 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets



	UNITS	737-600	737-700	737-800	737-900	737-900ER
MAXIMUM DESIGN TAXI WEIGHT	LB	124,500 THRU 145,000	133,500 THRU 155,000	156,000 THRU 174,700	164,500 THRU 174,700	164,500 THRU 188,200
	KG	56,472 THRU 65,771	60,554 THRU 70,307	70,760 THRU 79,242	74,616 THRU 79,242	74,616 THRU 85,366
NOSE GEAR TIRE SIZE	IN	27 x 7.7 - 15 12 PR			27 x 7.75 - 15 12 PR	27 x 7.75 - 15 12 PR
NOSE GEAR TIRE PRESSURE	PSI	206	205	185	185	185
	MPa	1.42	1.41	1.28	1.28	1.28
MAIN GEAR TIRE SIZE	IN	H43.5 x 16.0 - 21 24PR OR 26 PR	H43.5 x 16.0 - 21 26 PR	H44.5 x 16.5 - 21 28 PR	H44.5 x 16.5 - 21 28 PR	H44.5 x 16.5 - 21 30 PR
MAIN GEAR TIRE PRESSURE	PSI	182 THRU 205	197 THRU 205	204 THRU 205	204 THRU 205	205 THRU 220
	MPa	1.25 THRU 1.41	1.36 THRU 1.41	1.407 THRU 14.413	1.407 THRU 14.413	1.41 THRU 1.52

OPTIONAL TIRES

MAN GEAR TIRE SIZE	IN	H44.5 x 16.5 - 21 28PR (1)	H44.5 x 16.5 - 21 28PR	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
MAIN GEAR TIRE PRESSURE	PSI	168 THRU 205	179 THRU 205	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
	MPa	1.16 THRU 1.41	1.23 THRU 1.41	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE

NOTE: 1. H44.5 x 16.5 - 21 28PR TIRE CERTIFICATED ON 737-600 UP TO 144,000 LB (65,317 KG)

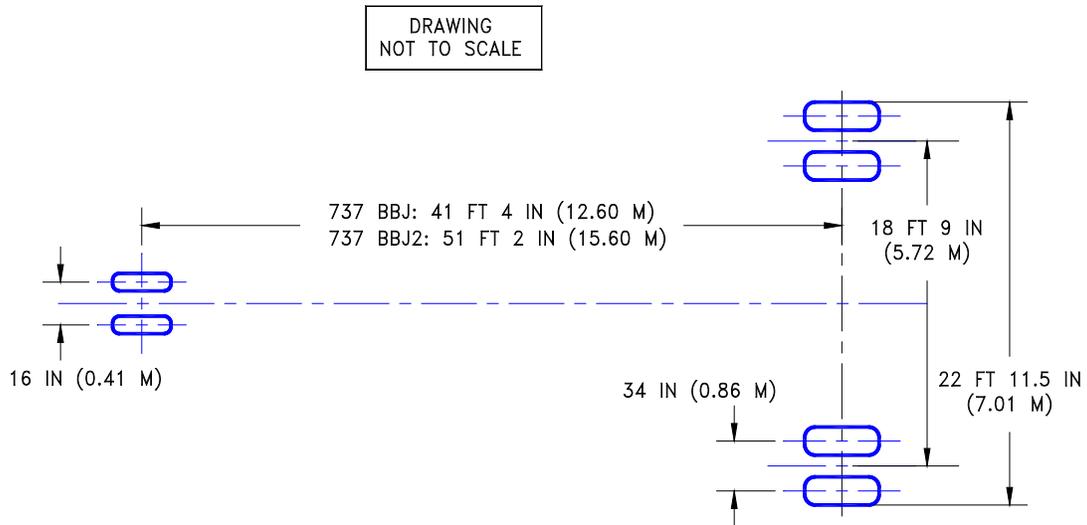
D6-58325-7

REV A

March 2023

7-4

7.2.2 Landing Gear Footprint: Model 737 BBJ1, BBJ2



	UNITS	737-BBJ	737-BBJ2
MAXIMUM DESIGN TAXI WEIGHT	LB	171,500	174,700
	KG	77,790	79,250
PERCENT OF WEIGHT ON MAIN GEAR		SEE SECTION 7.4	
NOSE GEAR TIRE SIZE	IN	27 x 7.7 - 15 12 PR	
NOSE GEAR TIRE PRESSURE	PSI	185	185
	MPa	1.28	1.28
MAIN GEAR TIRE SIZE	IN	H44.5 x 16.5 - 21 28 PR	H44.5 x 16.5 - 21 28 PR
MAIN GEAR TIRE PRESSURE	PSI	204	204
	KG/CM ²	1.41	1.41

7.3 MAXIMUM PAVEMENT LOADS

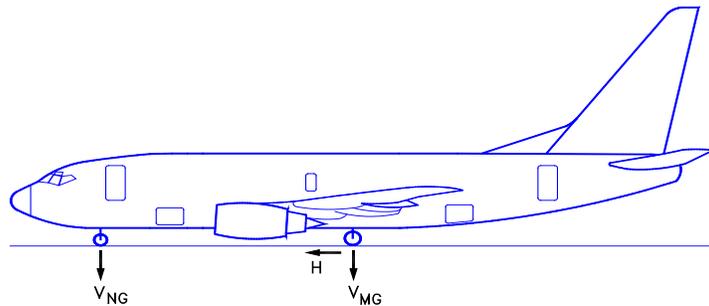
7.3.1 Maximum Pavement Loads: Model 737-600, -700, -800, -800BCF, -900, -900ER With and Without Winglets

V_{NG} = MAXIMUM VERTICAL NOSE GEAR GROUND LOAD AT MOST FORWARD CENTER OF GRAVITY

V_{MG} = MAXIMUM VERTICAL MAIN GEAR GROUND LOAD AT MOST AFT CENTER OF GRAVITY

H = MAXIMUM HORIZONTAL GROUND LOAD FROM BRAKING

NOTE: ALL LOADS CALCULATED USING AIRPLANE MAXIMUM DESIGN TAXI WEIGHT



AIRPLANE MODEL	UNITS	MAX DESIGN TAXI WEIGHT	V_{NG}		V_{MG} PER STRUT AT MAX LOAD AT STATIC AFT C.G.	H PER STRUT	
			STATIC AT MOST FWD C.G.	STATIC + BRAKING 10 FT/SEC ² DECEL		STEADY BRAKING 10 FT/SEC ² DECEL	AT INSTANTANEOUS BRAKING ($\mu = 0.8$)
737-600	LB	124,500	16,839	26,489	58,333	19,298	46,666
	KG	56,472	7,638	12,015	26,459	8,708	21,167
737-600	LB	144,000	19,020	30,180	66,708	22,320	53,366
	KG	65,317	8,627	13,689	30,258	10,124	24,206
737-600	LB	145,000	19,000	30,236	66,454	22,475	53,163
	KG	65,771	8,618	13,715	30,143	10,194	24,114
737-700	LB	133,500	17,558	26,711	63,000	20,692	50,400
	KG	60,554	7,963	12,116	28,576	9,386	22,861
737-700	LB	153,500	18,740	29,265	71,482	23,792	57,185
	KG	69,626	8,500	13,274	32,424	10,792	25,939
737-700	LB	155,000	16,925	27,552	71,060	24,025	56,847
	KG	70,307	7,677	12,497	32,232	10,898	25,785
737-800	LB	156,000	16,770	25,510	75,062	24,180	60,050
	KG	70,750	7,607	11,571	34,047	10,968	27,442
737-800	LB	173,000	17,059	26,752	82,143	26,815	65,715
	KG	78,471	7,738	12,134	37,259	12,163	29,808
737-800, -800BCF	LB	174,400	15,100	24,886	81,730	27,078	65,384
	KG	79,242	6,849	11,279	37,060	12,282	29,658
737-900	LB	164,500	14,998	23,369	78,962	25,498	63,169
	KG	74,616	6,803	10,600	35,817	11,566	28,653
737-900	LB	174,700	14,155	23,045	81,743	27,078	65,394
	KG	79,242	6,421	10,453	37,078	12,282	29,662

D6-58325-7

AIRPLANE MODEL	UNITS	MAX DESIGN TAXI WEIGHT	V _{NG}		V _{MG} PER STRUT AT MAX LOAD AT STATIC AFT C.G.	H PER STRUT	
			STATIC AT MOST FWD C.G.	STATIC + BRAKING 10 FT/SEC ² DECEL		STEADY BRAKING 10 FT/SEC ² DECEL	AT INSTANTANEOUS BRAKING ($\mu = 0.8$)
737-900ER	LB	188,200	15,206	24,810	88,993	29,227	71,194
	KG	85,366	6,897	11,254	40,367	13,257	32,293

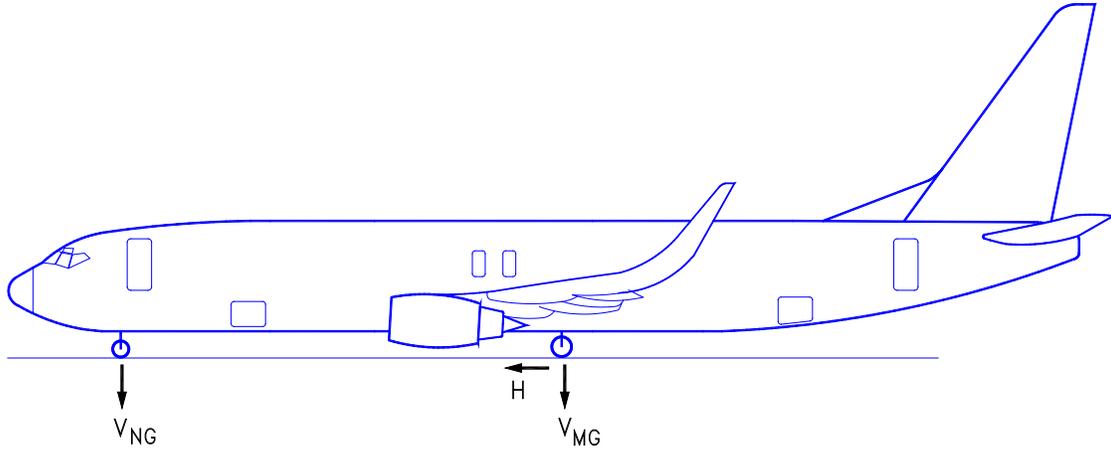
7.3.2 Maximum Pavement Loads: Model 737 BBJ1, BBJ2

V_{NG} = MAXIMUM VERTICAL NOSE GEAR GROUND LOAD AT MOST FORWARD CENTER OF GRAVITY

V_{MG} = MAXIMUM VERTICAL MAIN GEAR GROUND LOAD AT MOST AFT CENTER OF GRAVITY

H = MAXIMUM HORIZONTAL GROUND LOAD FROM BRAKING

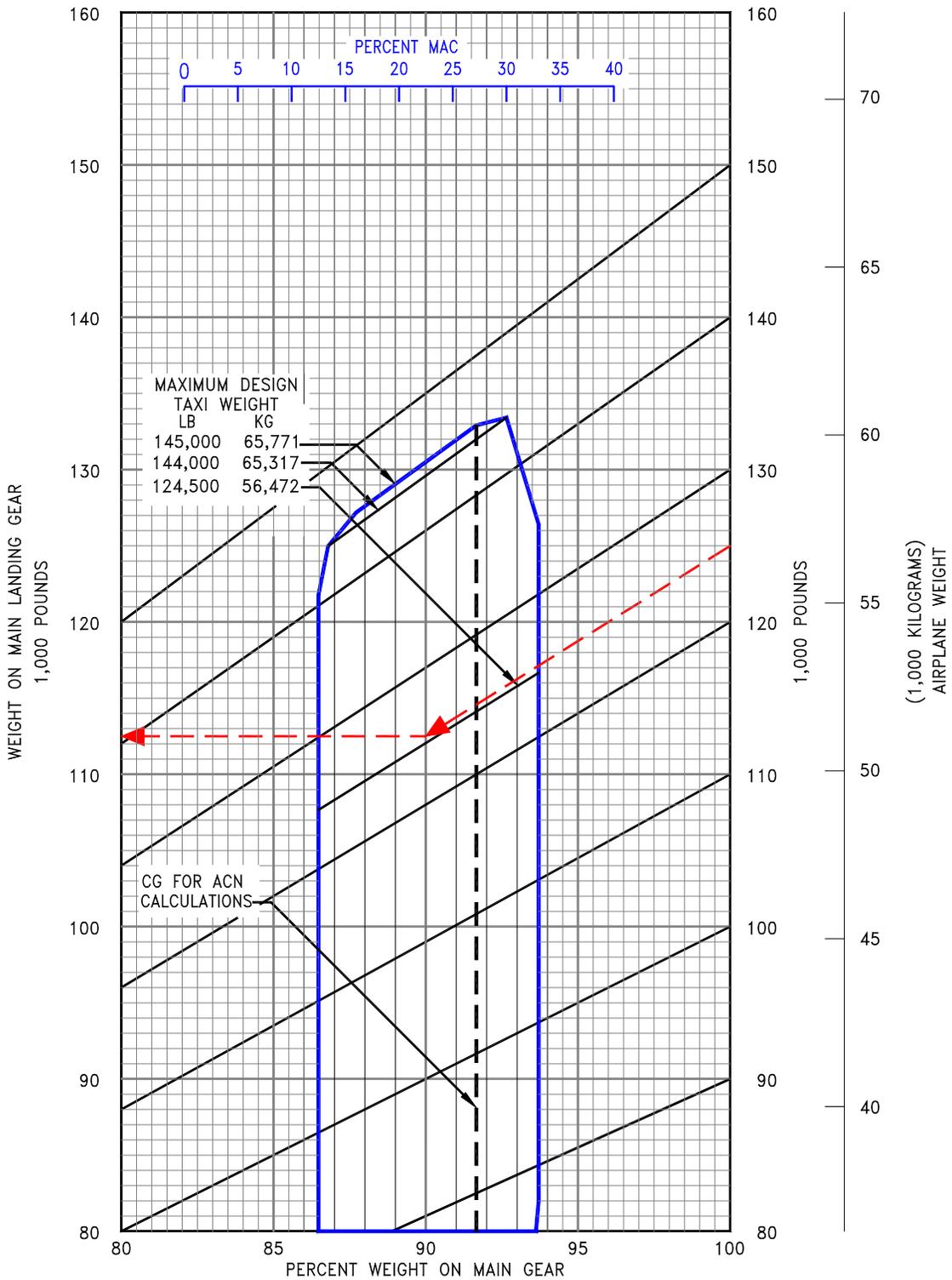
NOTE: ALL LOADS CALCULATED USING AIRPLANE MAXIMUM DESIGN TAXI WEIGHT



AIRPLANE MODEL	UNITS	MAX DESIGN TAXI WEIGHT	V_{NG}		V_{MG} PER STRUT AT MAX LOAD AT STATIC AFT C.G.	H PER STRUT	
			STATIC AT MOST FWD C.G.	STATIC + BRAKING 10 FT/SEC ² DECEL		STEADY BRAKING 10 FT/SEC ² DECEL	AT INSTANTANEOUS BRAKING ($\mu = 0.8$)
737 BBJ	LB	171,500	17,400	29,400	78,700	26,600	62,900
	KG	77,800	7,900	13,340	35,700	12,100	28,550
737 BBJ2	LB	174,700	15,100	24,900	81,700	27,100	65,400
	KG	79,250	6,850	11,300	37,050	12,300	29,650

7.4 LANDING GEAR LOADING ON PAVEMENT

7.4.1 Landing Gear Loading on Pavement: 737-600



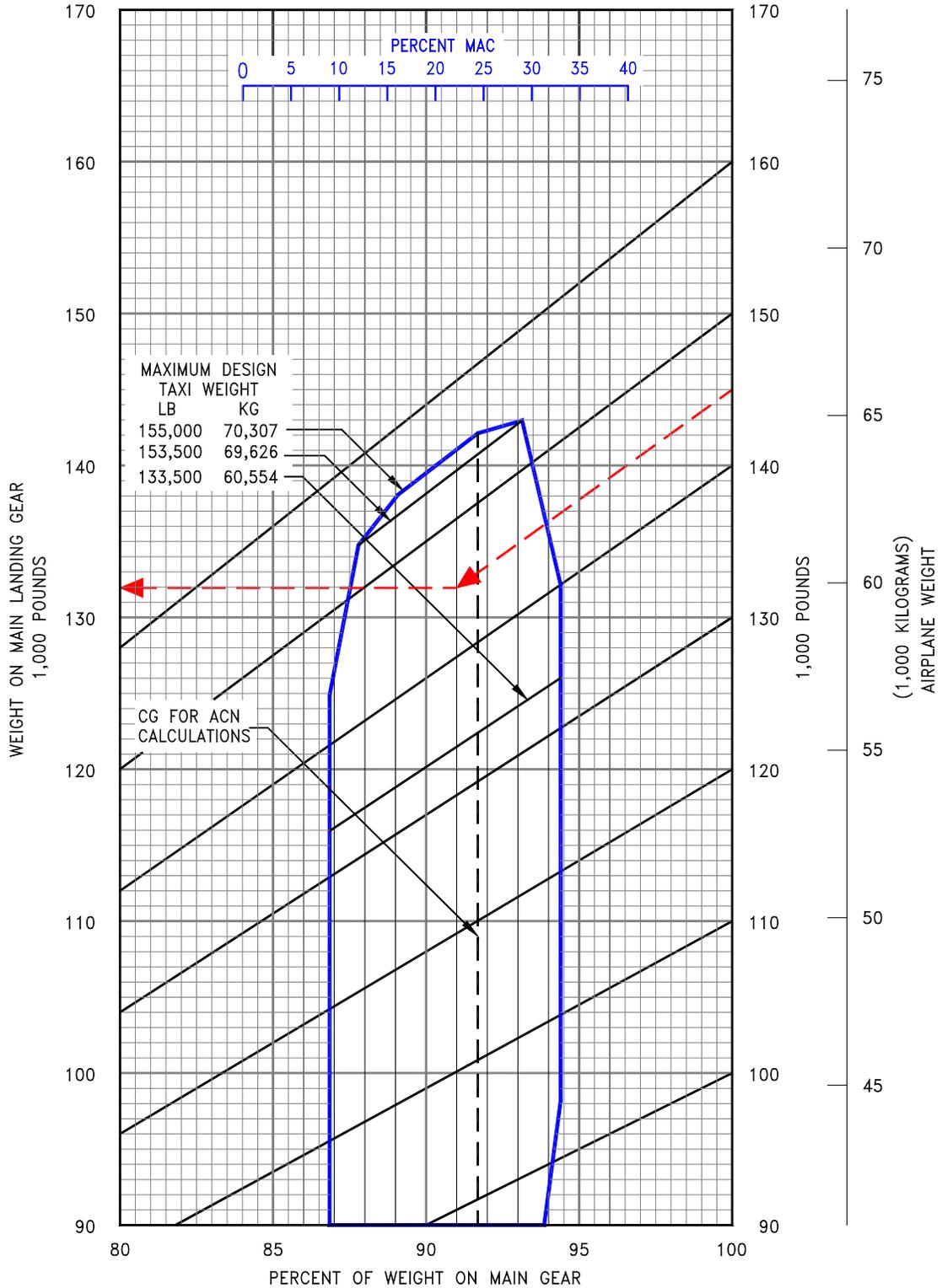
D6-58325-7

REV A

March 2023

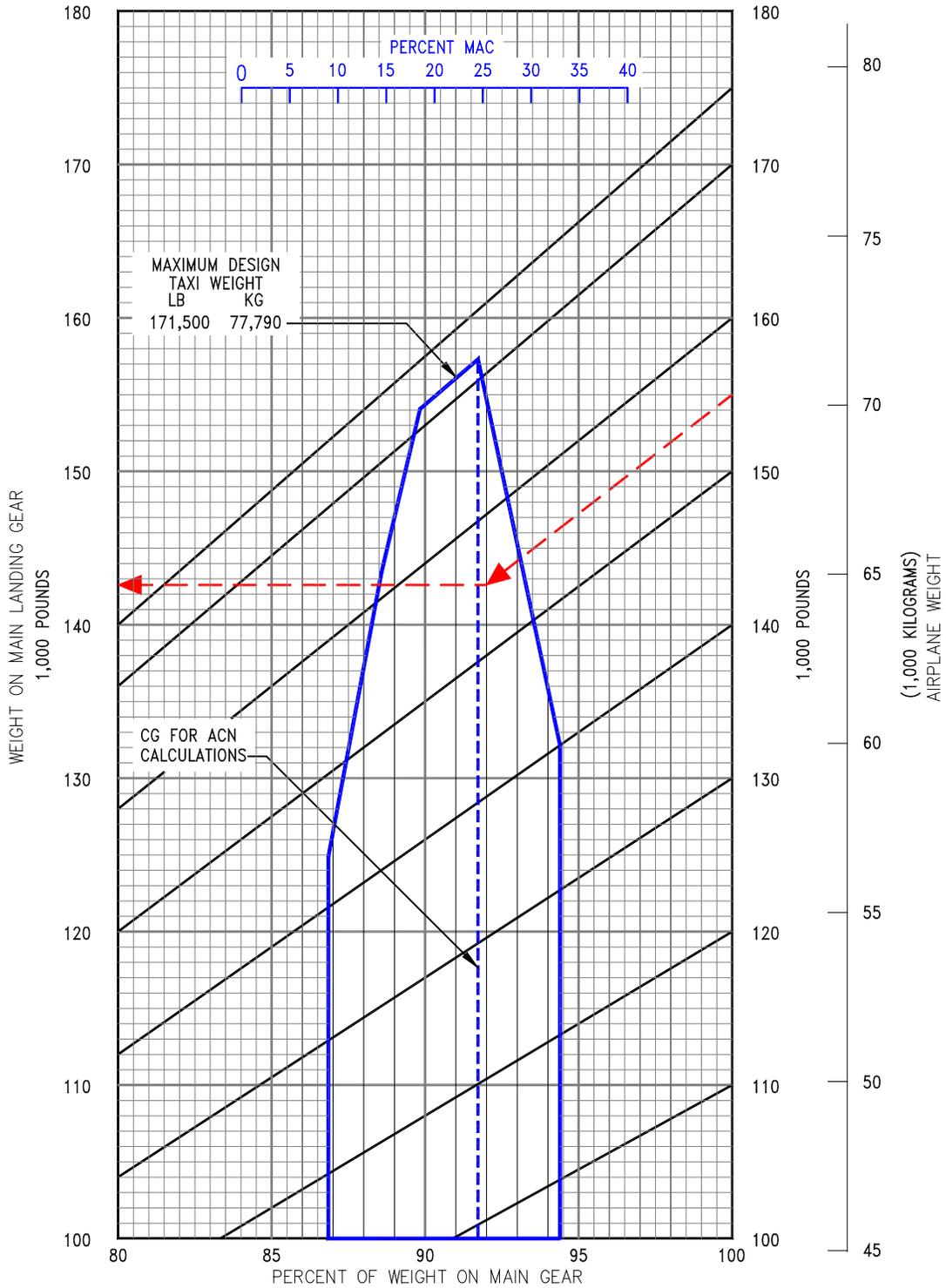
7-9

7.4.2 Landing Gear Loading on Pavement: Model 737-700, -700W



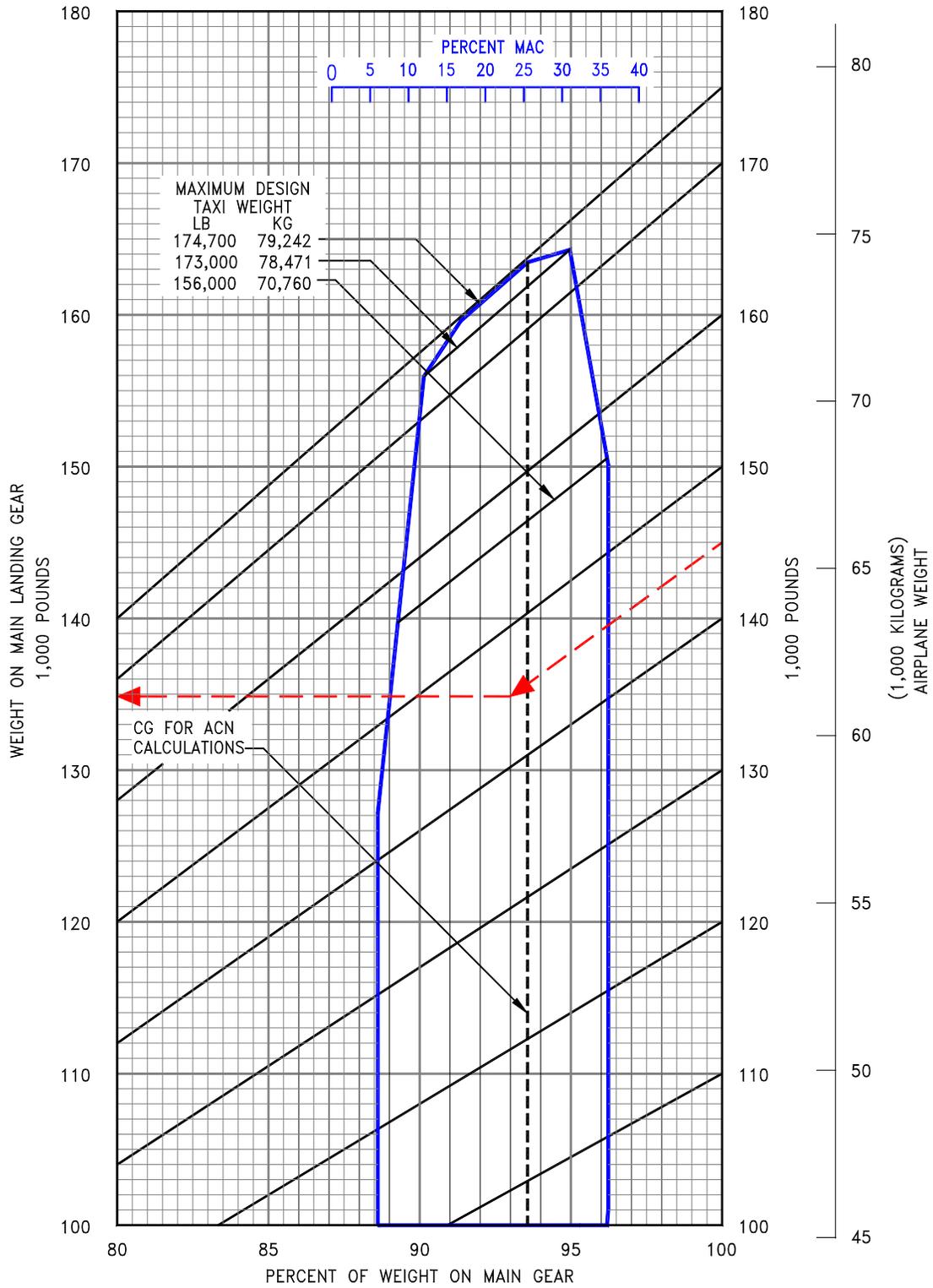
D6-58325-7

7.4.3 Landing Gear Loading on Pavement: Model 737 BBJ1



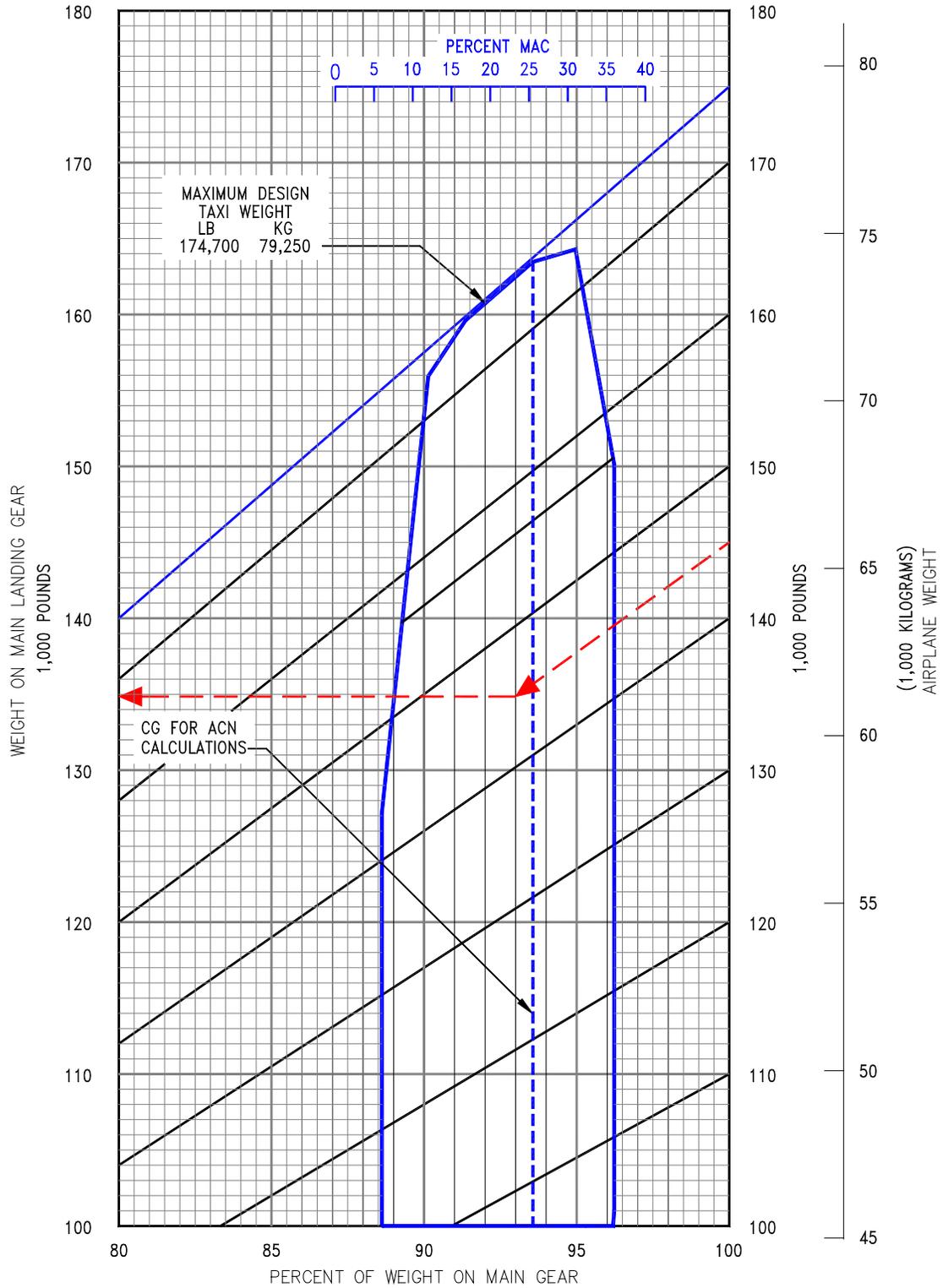
D6-58325-7

7.4.4 Landing Gear Loading on Pavement: Model 737-800, -800W, -800BCF



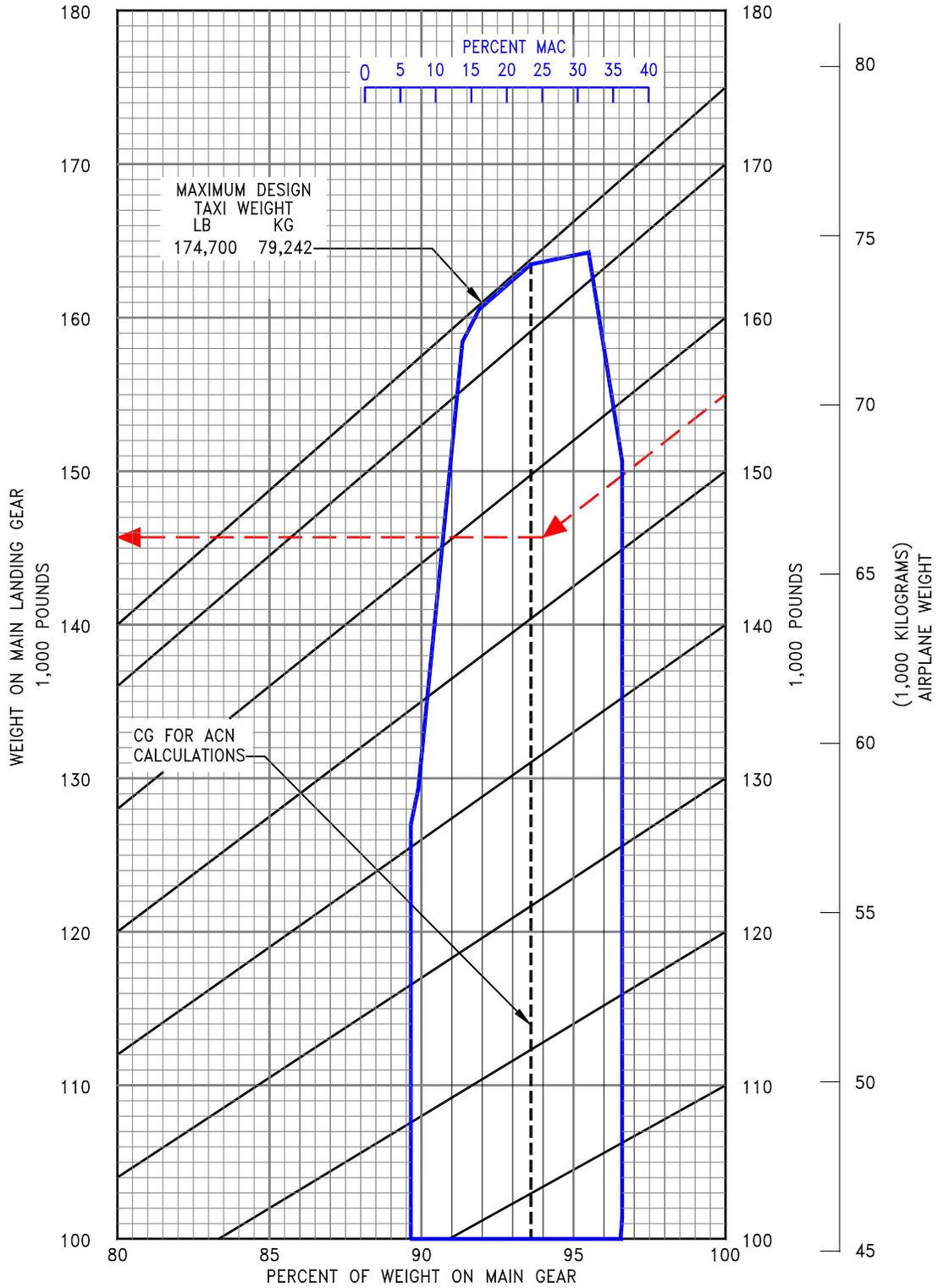
D6-58325-7

7.4.5 Landing Gear Loading on Pavement: Model 737 BBJ2



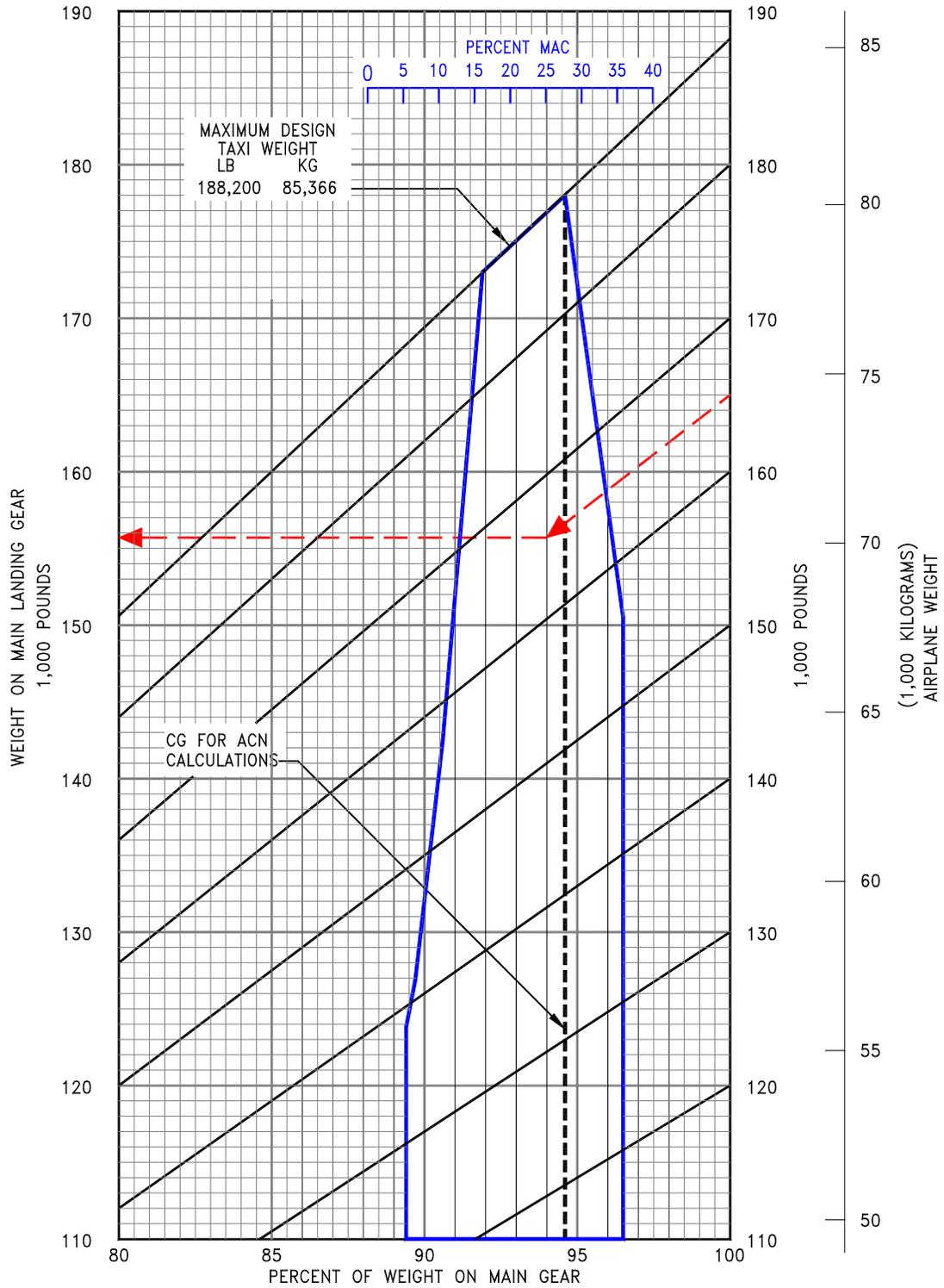
D6-58325-7

7.4.6 Landing Gear Loading on Pavement: Model 737-900, -900W



D6-58325-7

7.4.7 Landing Gear Loading on Pavement: Model 737-900ER, -900ERW



D6-58325-7

7.5 FLEXIBLE PAVEMENT REQUIREMENTS - U.S. ARMY CORPS OF ENGINEERS METHOD S-77-1 AND FAA DESIGN METHOD

The following flexible-pavement design chart presents the data of five incremental main-gear loads at the minimum tire pressure required at the maximum design taxi weight.

In the example shown in the next page, for a CBR of 25 and an annual departure level of 10,000, the required flexible pavement thickness for an airplane with a main gear loading of 85,000 pounds is 8.2 inches. Similar examples are shown in succeeding charts.

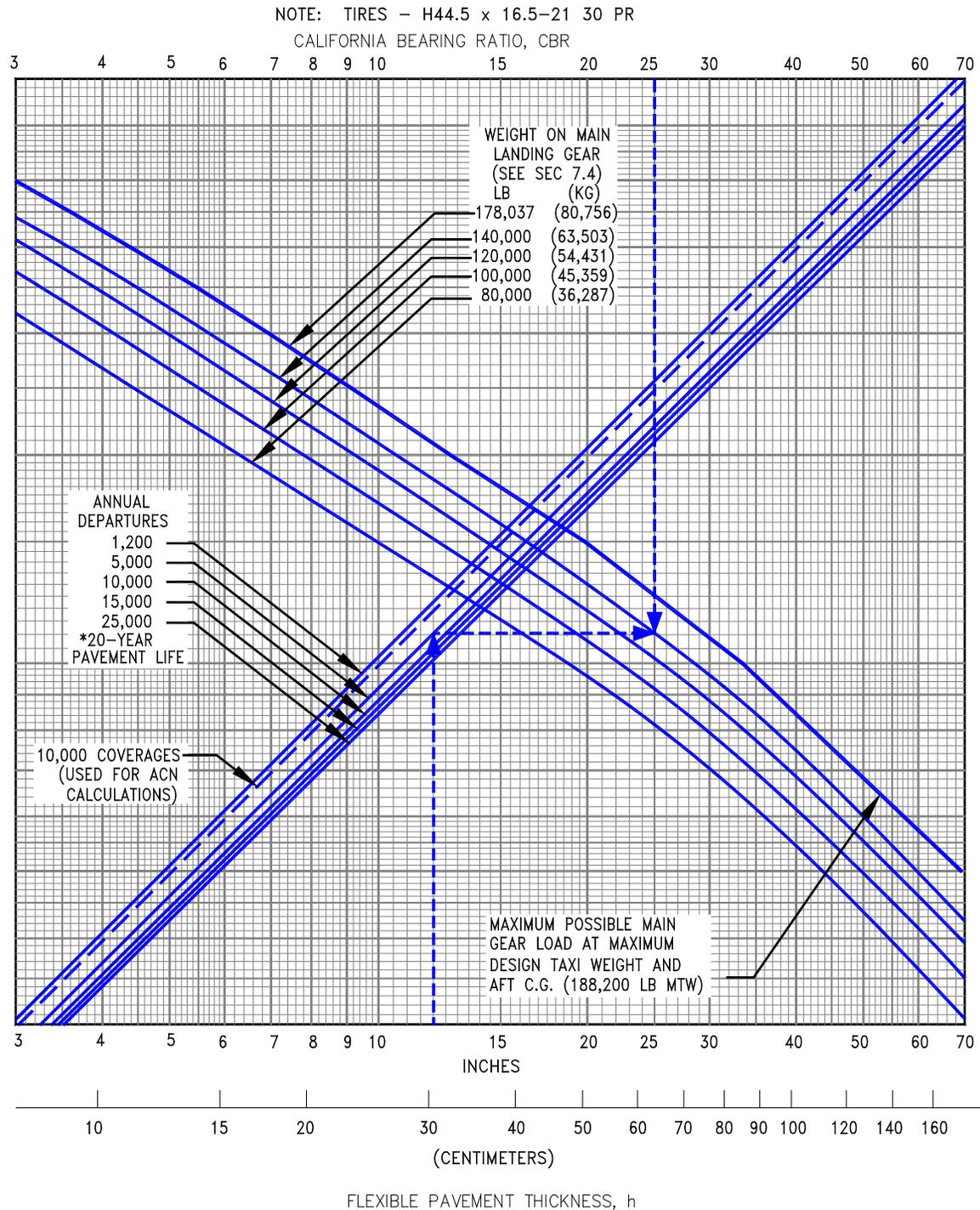
The line showing 10,000 coverages is used for ACN calculations (see Section 7.10).

The FAA design method uses a similar procedure using total airplane weight instead of weight on the main landing gears. The equivalent main gear loads for a given airplane weight could be calculated from Section 7.4. For the flexible pavement design refer to the FAA AC 150/5320-6 "Airport Pavement Design and Evaluation" and pavement design program FAARFIELD. Both are available on the FAA website:

FAA AC 150/5320-6F: https://www.faa.gov/airports/resources/advisory_circulars/

FAARFIELD: https://www.faa.gov/airports/engineering/design_software/

7.5.1 Flexible Pavement Requirements - U.S. Army Corps of Engineers Design Method (S-77-1) and FAA Design Method: Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets, BBJ1, BBJ2



D6-58325-7

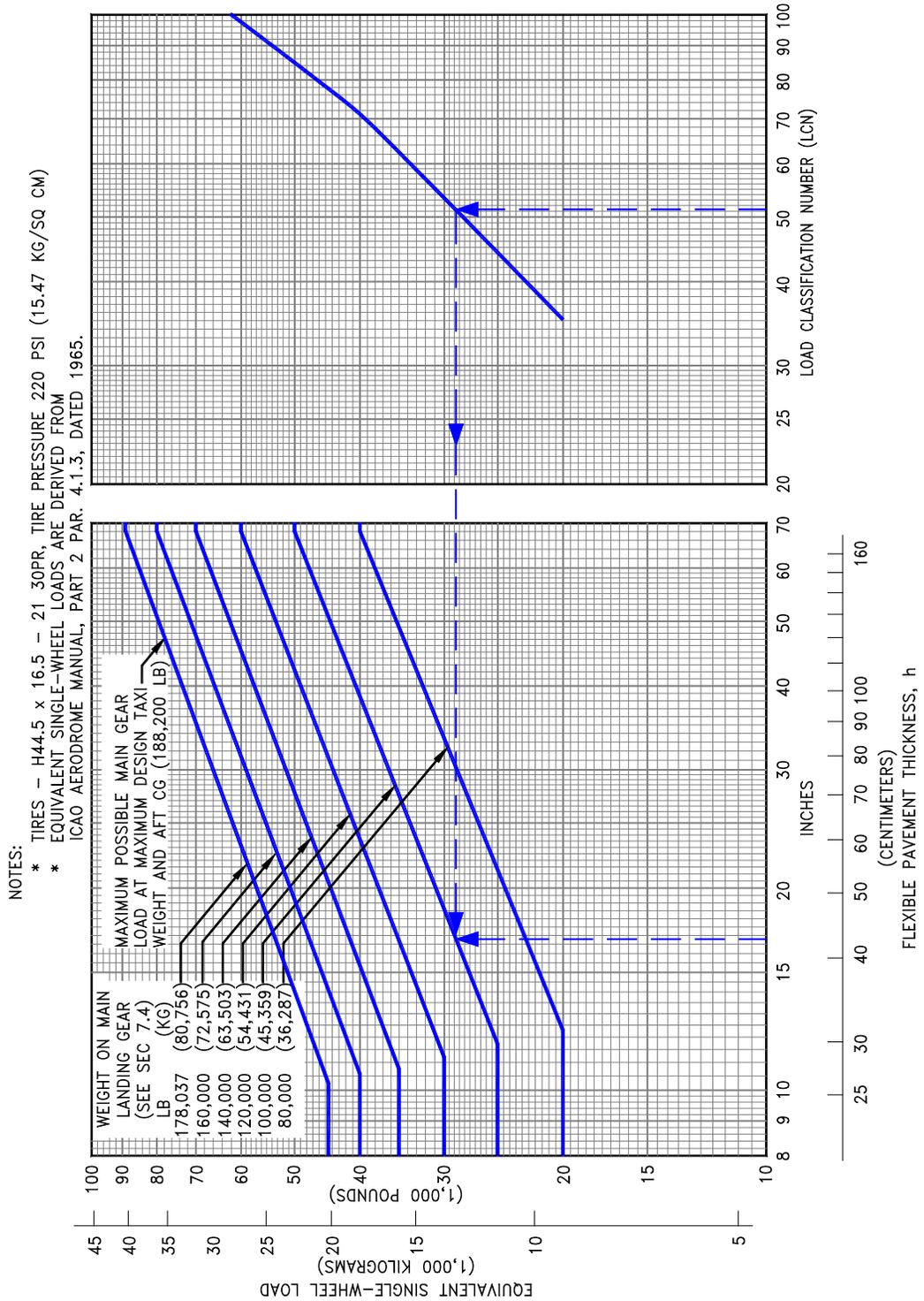
7.6 FLEXIBLE PAVEMENT REQUIREMENTS - LCN CONVERSION

To determine the airplane weight that can be accommodated on a particular flexible pavement, both the Load Classification Number (LCN) of the pavement and the thickness must be known.

In the example shown on the next page, flexible pavement thickness is shown at 23.75 in. with an LCN of 42. For these conditions, the apparent maximum allowable weight permissible on the main landing gear is 85,000 lb for an airplane with 138 to 146-psi main gear tires. Similar examples are shown in succeeding charts.

Note: If the resultant aircraft LCN is not more than 10% above the published pavement LCN, the bearing strength of the pavement can be considered sufficient for unlimited use by the airplane. The figure 10% has been chosen as representing the lowest degree of variation in LCN that is significant (reference: ICAO Aerodrome Manual, Part 2, "Aerodrome Physical Characteristics," Chapter 4, Paragraph 4.1.5.7v, 2nd Edition dated 1965).

7.6.1 Flexible Pavement Requirements - LCN Method: Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets, BBJ1, BBJ2



D6-58325-7

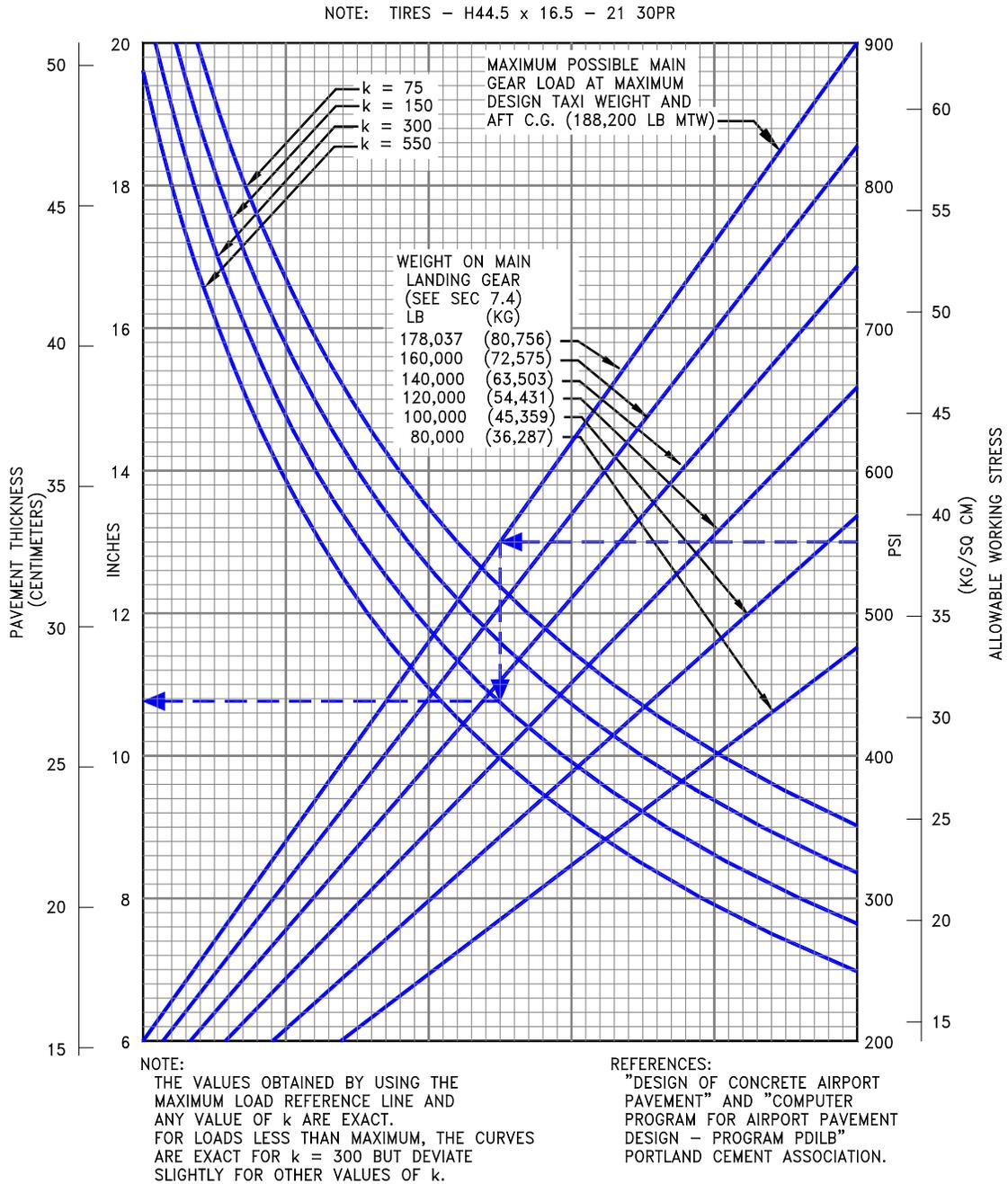
7.7 RIGID PAVEMENT REQUIREMENTS - PORTLAND CEMENT ASSOCIATION DESIGN METHOD

The Portland Cement Association method of calculating rigid pavement requirements is based on the computerized version of "Design of Concrete Airport Pavement" (Portland Cement Association, 1965) as described in XP6705-2, "Computer Program for Airport Pavement Design" by Robert G. Packard, Portland Cement Association, 1968.

The following rigid pavement design chart presents the data for five incremental main gear loads at the minimum tire pressure required at the maximum design taxi weight.

In the example shown on the next page, for an allowable working stress of 400 psi, a main gear load of 70,000 lb, and a subgrade strength (k) of 300, the required rigid pavement thickness is 7.7 in. Similar examples are shown in succeeding charts.

7.7.1 Rigid Pavement Requirements - Portland Cement Association Design Method: Model 737-600, -700, -800, -800BCF, -900, -900ER, With and Without Winglets, BBJ1, BBJ2



D6-58325-7

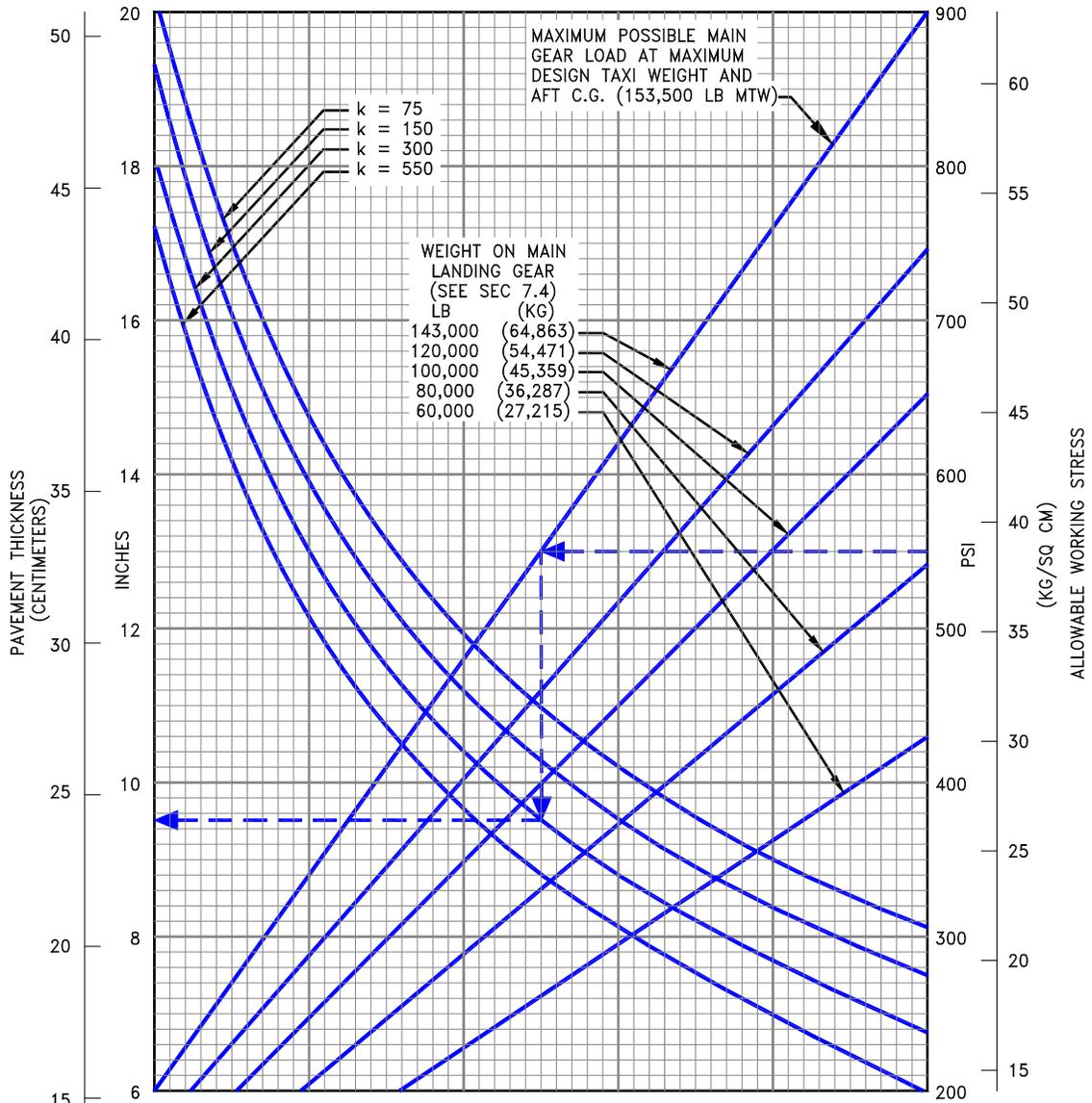
REV A

March 2023

7-21

7.7.2 Rigid Pavement Requirements - Portland Cement Association Design Method: Model 737-600, -700 (Optional Tires)

NOTE: TIRES - H44.5 x 16.5 - 21 28PR



NOTE:
THE VALUES OBTAINED BY USING THE MAXIMUM LOAD REFERENCE LINE AND ANY VALUE OF k ARE EXACT. FOR LOADS LESS THAN MAXIMUM, THE CURVES ARE EXACT FOR $k = 300$ BUT DEVIATE SLIGHTLY FOR OTHER VALUES OF k .

REFERENCES:
"DESIGN OF CONCRETE AIRPORT PAVEMENT" AND "COMPUTER PROGRAM FOR AIRPORT PAVEMENT DESIGN - PROGRAM PDILB" PORTLAND CEMENT ASSOCIATION.

D6-58325-7

REV A

March 2023

7-22

7.8 RIGID PAVEMENT REQUIREMENTS - LCN CONVERSION

To determine the airplane weight that can be accommodated on a particular rigid pavement, both the LCN of the pavement and the radius of relative stiffness (k) of the pavement must be known.

In the examples shown in Section 7.8.2 for a rigid pavement with a radius of relative stiffness of 47 with an LCN of 91, and 7.8.3 for a rigid pavement with a radius of relative stiffness of 47 with an LCN of 87, the apparent maximum allowable weight permissible on the main landing gear is 600,000 lb (272,155 kg) for an airplane with 221-psi (15.54 kg/cm²) main tires.

Note: If the resultant aircraft LCN is not more than 10% above the published pavement LCN, the bearing strength of the pavement can be considered sufficient for unlimited use by the airplane. The figure 10% has been chosen as representing the lowest degree of variation in LCN that is significant (reference: ICAO Aerodrome Design Manual, Part 2, "Aerodrome Physical Characteristics," Chapter 4, Paragraph 4.1.5.7v, 2nd Edition dated 1965).

7.8.1 Radius of Relative Stiffness (Reference: Portland Cement Association)

RADIUS OF RELATIVE STIFFNESS (l)
VALUES IN INCHES

$$l = \sqrt[4]{\frac{Ed^3}{12(1-\mu^2)k}} = 24.1652 \sqrt[4]{\frac{d^3}{k}}$$

WHERE: E = YOUNG'S MODULUS OF ELASTICITY = 4×10^6 psi

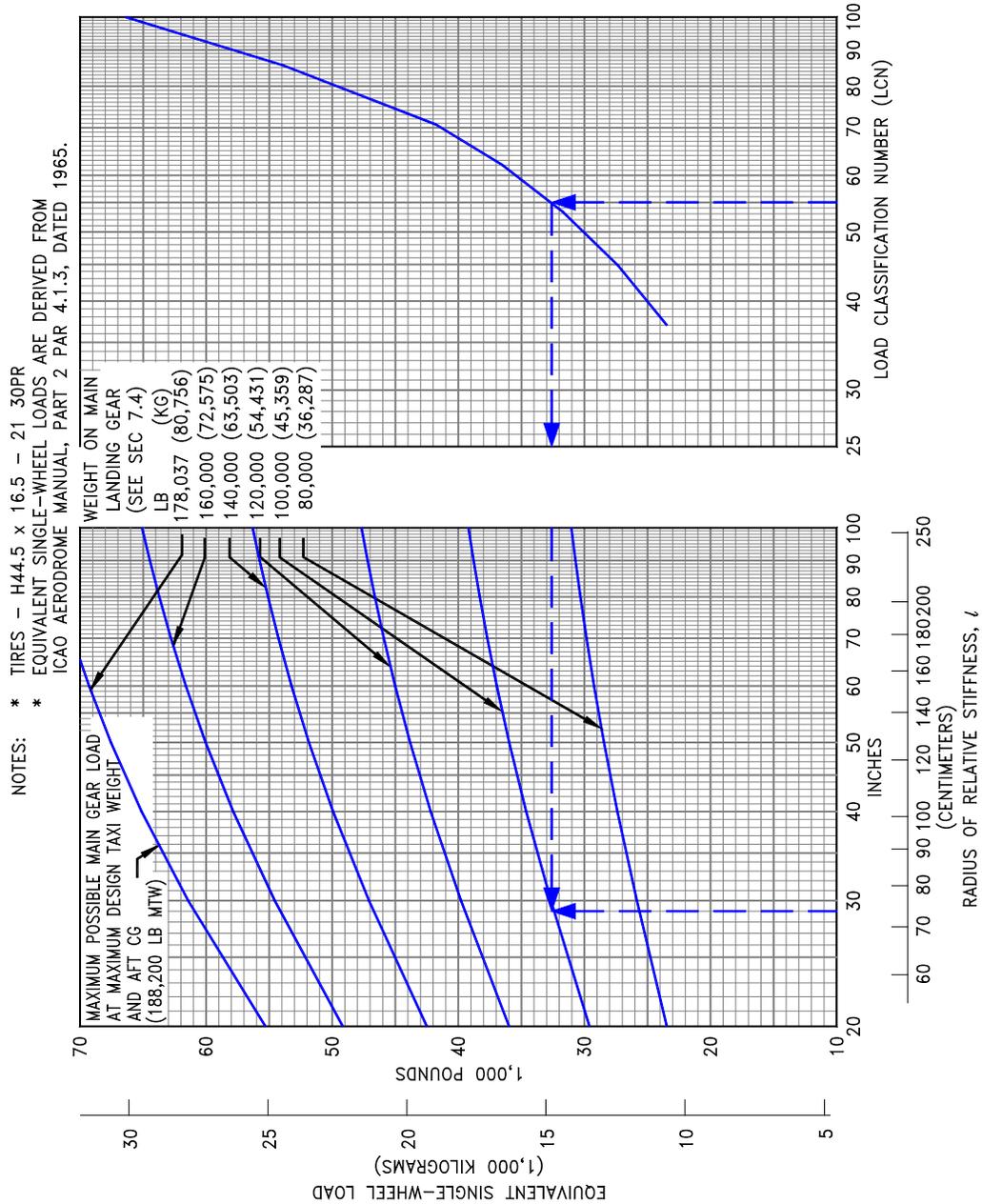
k = SUBGRADE MODULUS, LB PER CU IN

d = RIGID PAVEMENT THICKNESS, IN

μ = POISSON'S RATIO = 0.15

d	k = 75	k = 100	k = 150	k = 200	k = 250	k = 300	k = 350	k = 400	k = 500	k = 550
6.0	31.48	29.29	26.47	24.63	23.30	22.26	21.42	20.71	19.59	19.13
6.5	33.42	31.10	28.11	26.16	24.74	23.63	22.74	21.99	20.80	20.31
7.0	35.33	32.88	29.71	27.65	26.15	24.99	24.04	23.25	21.99	21.47
7.5	37.21	34.63	31.29	29.12	27.54	26.31	25.32	24.49	23.16	22.61
8.0	39.06	36.35	32.84	30.56	28.91	27.62	26.57	25.70	24.31	23.73
8.5	40.87	38.04	34.37	31.99	30.25	28.90	27.81	26.90	25.44	24.84
9.0	42.66	39.70	35.88	33.39	31.57	30.17	29.03	28.07	26.55	25.93
9.5	44.43	41.35	37.36	34.77	32.88	31.42	30.23	29.24	27.65	27.00
10.0	46.17	42.97	38.83	36.13	34.17	32.65	31.41	30.38	28.73	28.06
10.5	47.89	44.57	40.27	37.48	35.44	33.87	32.58	31.52	29.81	29.10
11.0	49.59	46.15	41.70	38.81	36.70	35.07	33.74	32.63	30.86	30.14
11.5	51.27	47.72	43.12	40.12	37.95	36.26	34.89	33.74	31.91	31.16
12.0	52.94	49.26	44.51	41.43	39.18	37.43	36.02	34.83	32.94	32.17
12.5	54.58	50.80	45.90	42.71	40.40	38.60	37.14	35.92	33.97	33.17
13.0	56.21	52.31	47.27	43.99	41.60	39.75	38.25	36.99	34.98	34.16
13.5	57.83	53.81	48.63	45.25	42.80	40.89	39.34	38.05	35.99	35.14
14.0	59.43	55.30	49.97	46.50	43.98	42.02	40.43	39.10	36.98	36.11
14.5	61.01	56.78	51.30	47.74	45.15	43.14	41.51	40.15	37.97	37.07
15.0	62.58	58.24	52.62	48.97	46.32	44.25	42.58	41.18	38.95	38.03
15.5	64.14	59.69	53.93	50.19	47.47	45.35	43.64	42.21	39.92	38.98
16.0	65.69	61.13	55.23	51.40	48.61	46.45	44.69	43.22	40.88	39.92
16.5	67.22	62.55	56.52	52.60	49.75	47.53	45.73	44.23	41.83	40.85
17.0	68.74	63.97	57.80	53.79	50.87	48.61	46.77	45.23	42.78	41.77
17.5	70.25	65.38	59.07	54.97	51.99	49.68	47.80	46.23	43.72	42.69
18.0	71.75	66.77	60.34	56.15	53.10	50.74	48.82	47.22	44.65	43.60
19.0	74.72	69.54	62.83	58.47	55.30	52.84	50.84	49.17	46.50	45.41
20.0	77.65	72.26	65.30	60.77	57.47	54.91	52.83	51.10	48.33	47.19
21.0	80.55	74.96	67.73	63.03	59.61	56.95	54.80	53.00	50.13	48.95
22.0	83.41	77.62	70.14	65.27	61.73	58.98	56.75	54.88	51.91	50.68
23.0	86.23	80.25	72.51	67.48	63.82	60.98	58.67	56.74	53.67	52.40
24.0	89.03	82.85	74.86	69.67	65.89	62.95	60.57	58.58	55.41	54.10
25.0	91.80	85.43	77.19	71.84	67.94	64.91	62.46	60.41	57.13	55.78

7.8.2 Rigid Pavement Requirements - LCN Conversion: Model 737-600, -700, -800, -800BCF, -900, -900ER With and Without Winglets, BBJ1, BBJ2



D6-58325-7

7.9 RIGID PAVEMENT REQUIREMENTS - FAA DESIGN METHOD

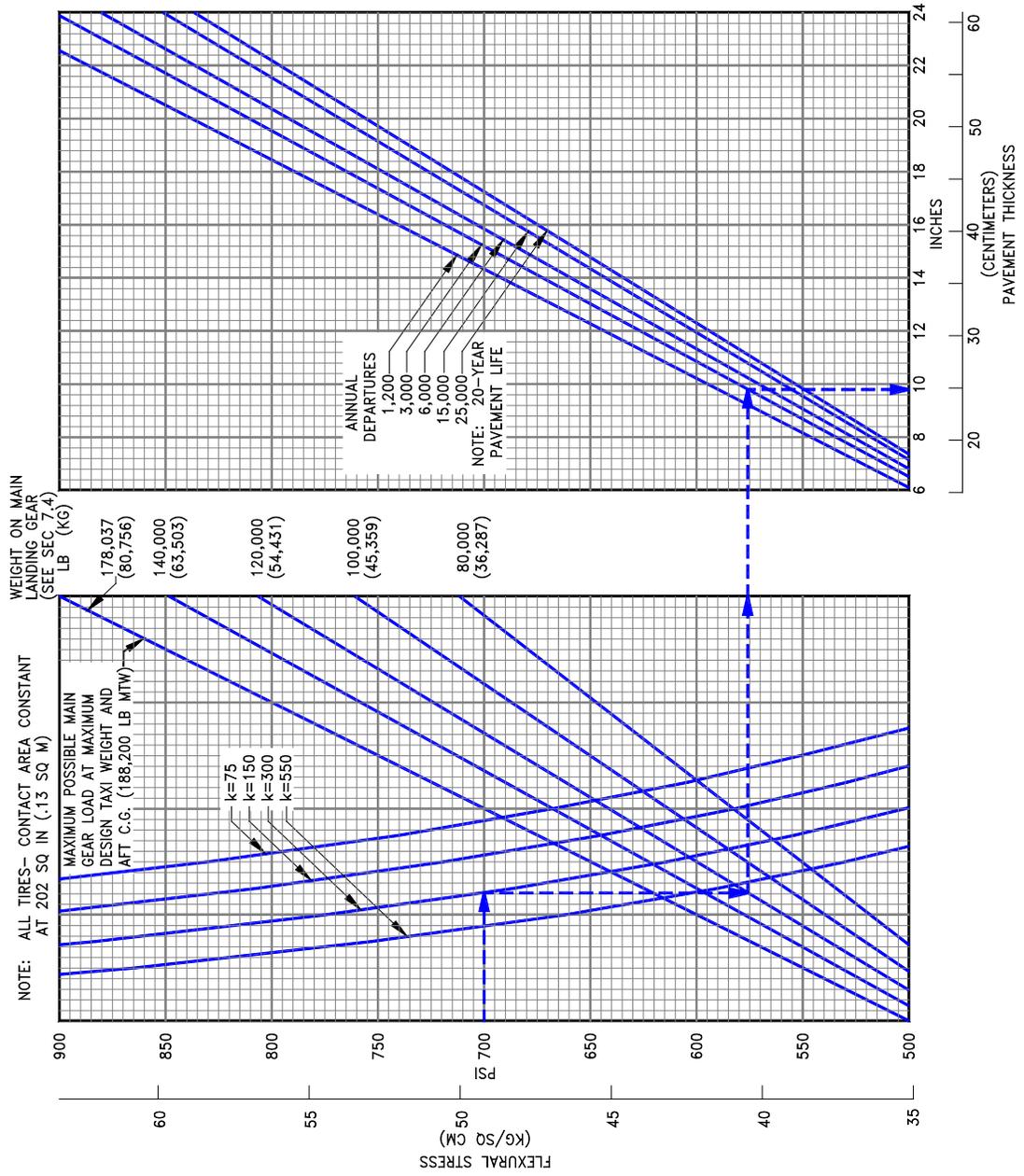
The following rigid pavement design charts present data on five incremental main gear loads at the minimum tire pressure required at the maximum design taxi weight.

In the example shown in the next page, the pavement flexural stress is shown at 700 psi, the subgrade strength is shown at $k = 550$, and the annual departure level is 6,000. For these conditions, the required rigid pavement thickness for an airplane with main gear load of 100,000 pounds is 10.4 inches. Similar examples are shown in succeeding charts.

For the rigid pavement design refer to the FAA AC 150/5320-6F “Airport Pavement Design and Evaluation” and pavement design program FAARFIELD. Both are available on the FAA website:

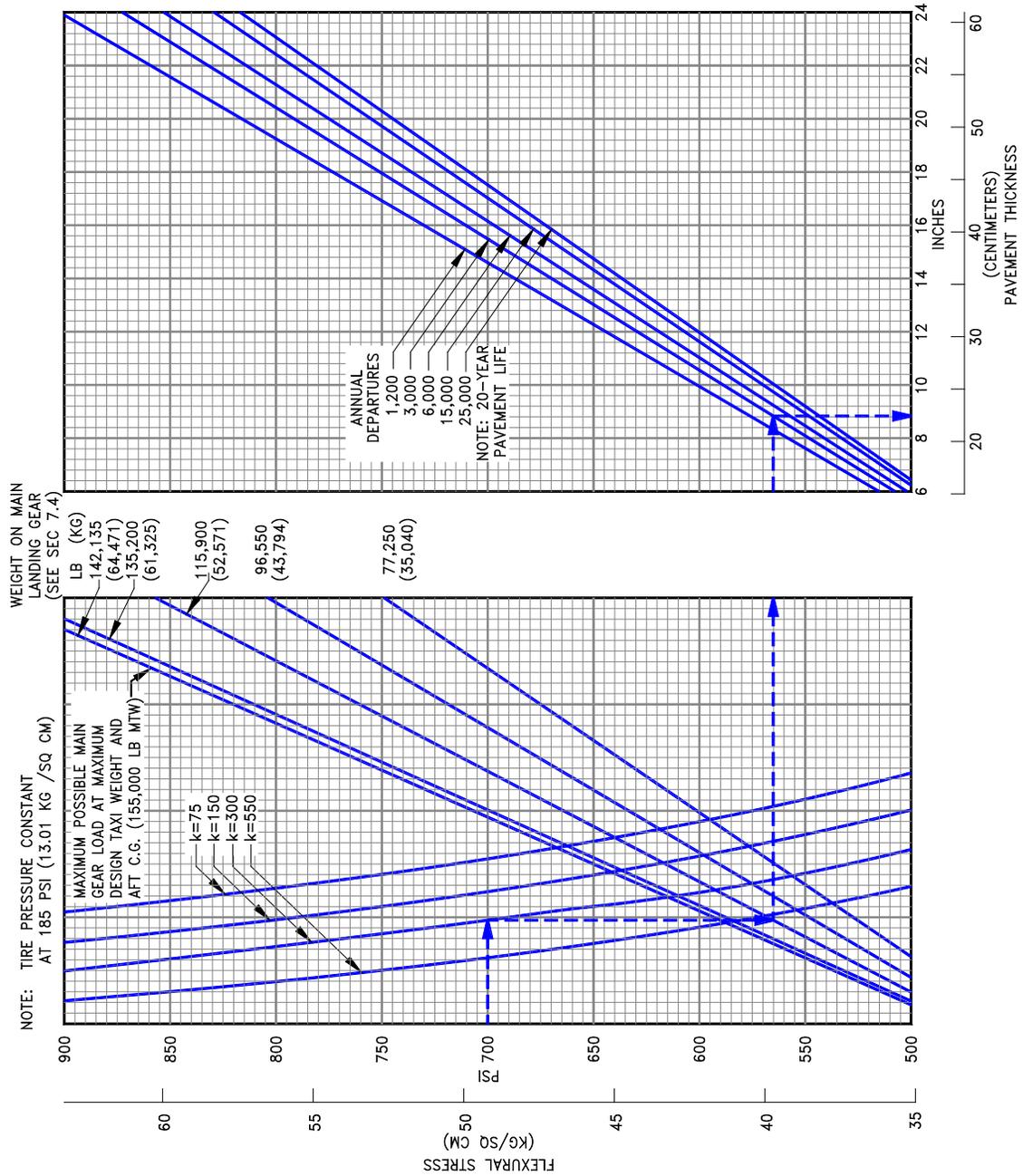
FAA AC 150/5320-6F: https://www.faa.gov/airports/resources/advisory_circulars/
FAARFIELD: https://www.faa.gov/airports/engineering/design_software/

7.9.1 Rigid Pavement Requirements – FAA Design Method: Model 737-600, -700, -800, -800BCF, -900, -900ER With and Without Winglets, BBJ1, BBJ2



D6-58325-7

7.9.2 Rigid Pavement Requirements – FAA Design Method: Model 737-600, -700 (Optional Tires)



D6-58325-7

7.10 ACN/PCN REPORTING SYSTEM - FLEXIBLE AND RIGID PAVEMENTS

To determine the ACN of an aircraft on flexible or rigid pavement, both the aircraft gross weight and the subgrade strength category must be known. In the chart in Section 7.10.1, for an aircraft with gross weight of 80,000 lb and low subgrade strength, the flexible pavement ACN is 19.5. In Section 7.10.20, for the same gross weight and subgrade strength, the rigid pavement ACN is 20.6.

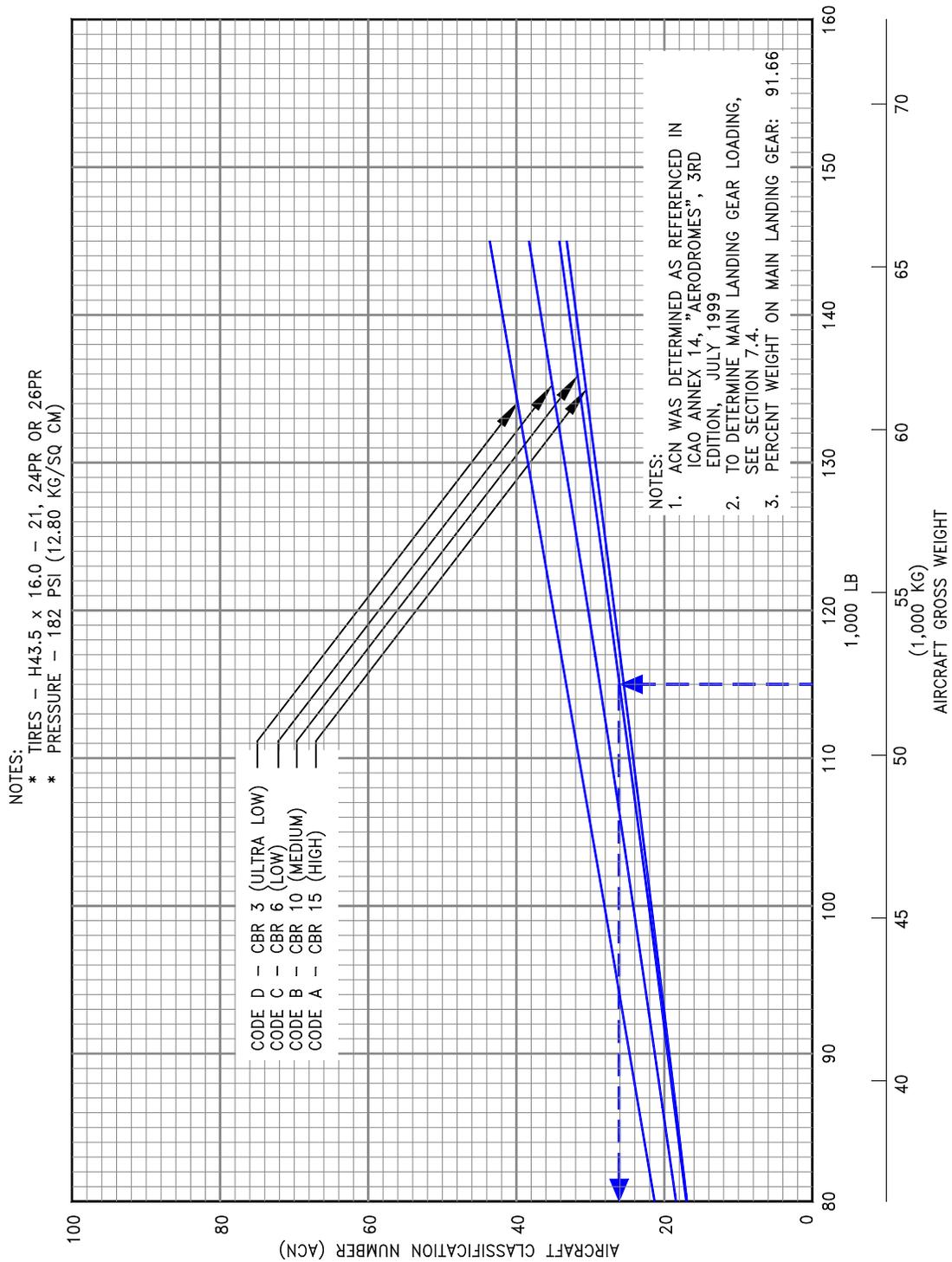
Note: An aircraft with an ACN equal to or less than the reported PCN can operate on that pavement subject to any limitations on the tire pressure.

The following table provides ACN data in tabular format similar to the one used by ICAO in the “Aerodrome Design Manual Part 3, Pavements”. If the ACN for an intermediate weight between maximum taxi weight and the empty weight of the aircraft is required, Sections 7.10.1 through 7.10.38 should be consulted.

AIRCRAFT TYPE	MAXIMUM TAXI WEIGHT MINIMUM WEIGHT (1) LB (KG)	LOAD ON ONE MAIN GEAR LEG (%)	TIRE PRESSURE PSI (MPa)	ACN FOR RIGID PAVEMENT SUBGRADES – MN/m ³				ACN FOR FLEXIBLE PAVEMENT SUBGRADES – CBR			
				HIGH 150	MEDIUM 80	LOW 40	ULTRA LOW 20	HIGH 15	MEDIUM 10	LOW 6	ULTRA LOW 3
				737-600	145,000 (65,771) 80,200 (36,378)	45.83	182 (1.25)	37 19	39 19	41 21	43 22
737-600	144,000 (65,317) 80,200 (36,378)	45.83	168 (1.15)	36 18	38 19	40 20	42 22	33 17	34 17	38 18	43 21
737-700	155,000 (70,307) 83,000 (37,648)	45.85	197 (1.36)	41 19	43 20	46 22	47 23	36 18	38 18	42 19	47 22
737-700	155,000 (70,307) 83,000 (37,648)	45.85	179 (1.23)	40 20	42 21	45 22	47 23	36 18	37 18	42 19	47 22
737 BBJ1	171,500 (77,790) 100,000 (45,360)	45.86	204 (1.41)	47 25	49 26	52 28	54 29	41 22	43 23	48 24	53 28
737-800	174,700 (79,242) 91,300 (41,413)	46.79	204 (1.41)	49 23	52 24	54 25	56 27	43 20	45 21	50 22	55 26
737 BBJ2	174,700(79,260) 100,000(45,360)	46.79	204 (1.41)	49 24	52 26	54 28	56 30	42 22	45 23	50 25	55 29
737-900	174,700 (79,242) 94,580 (42,901)	46.79	204 (1.41)	49 24	52 25	54 27	56 28	43 21	45 22	50 23	55 27
737-900ER	188,200(85,366) 98,495(44,676)	47.29	220 (1.52)	56 26	58 27	61 29	63 30	48 22	51 23	56 25	61 29

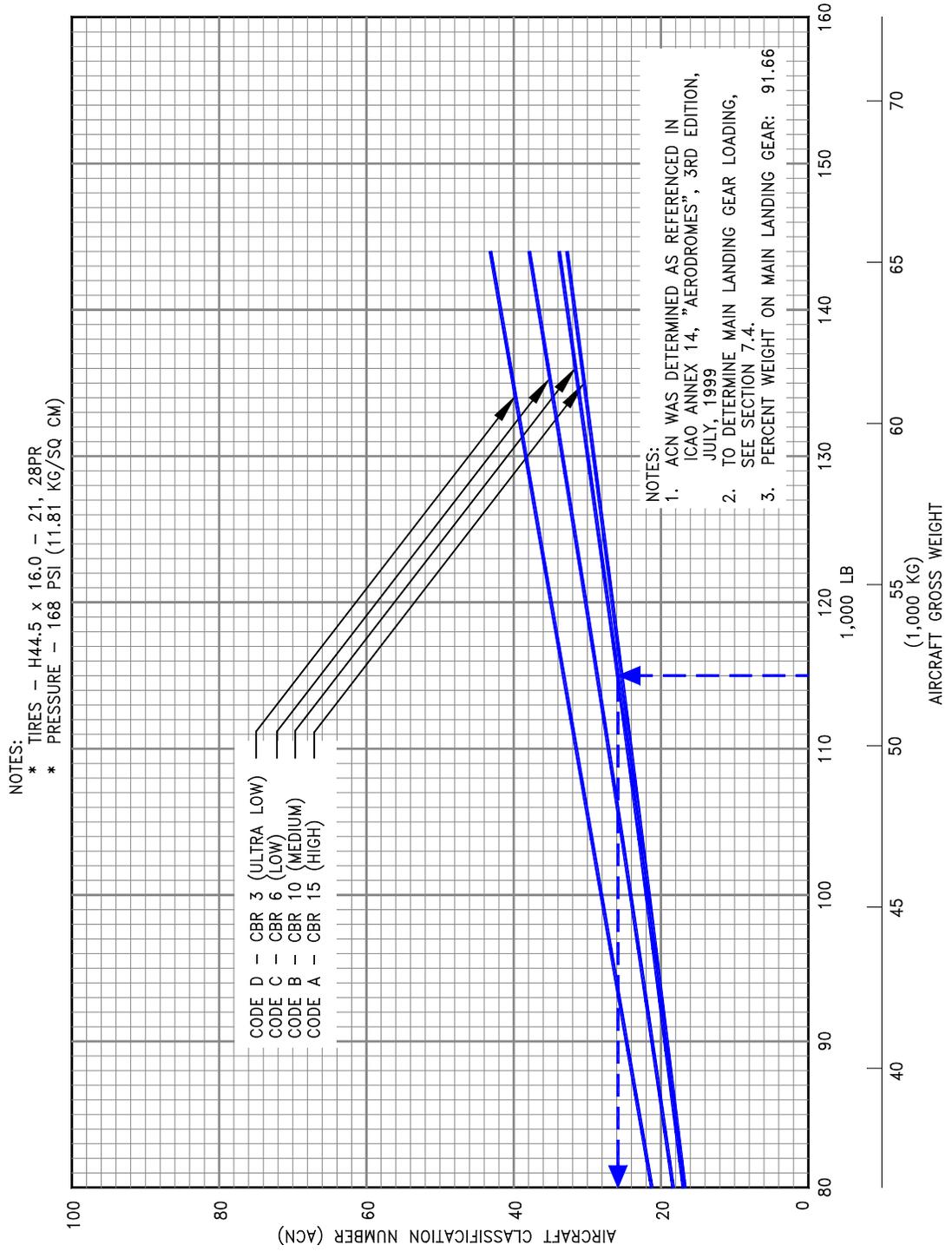
NOTE: VALUES FOR 737-700, -800, -900, -900ER ARE VALID FOR MODELS WITH AND WITHOUT WINGLETS.

7.10.1 Aircraft Classification Number - Flexible Pavement: Model 737-600



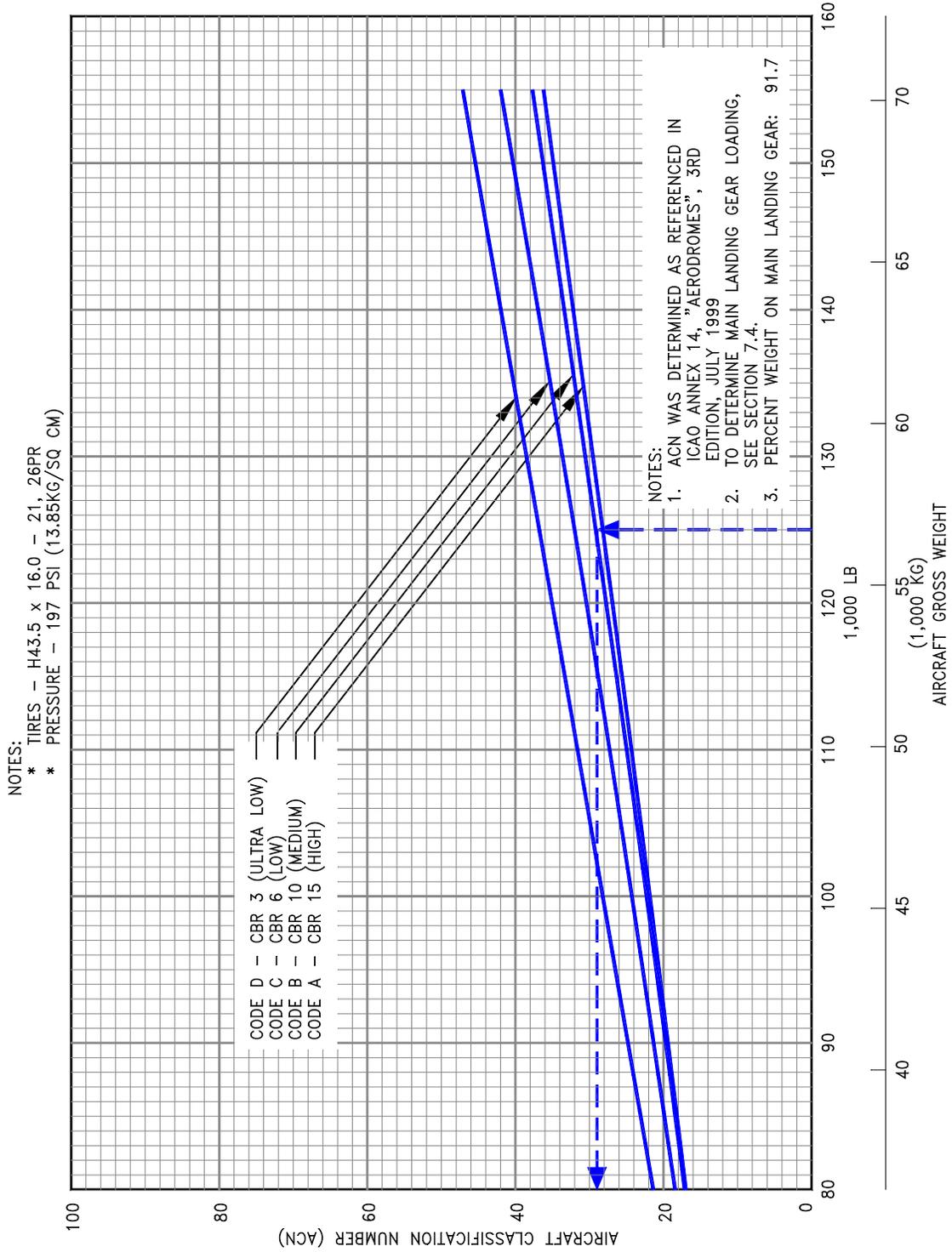
D6-58325-7

7.10.2 Aircraft Classification Number - Flexible Pavement: Model 737-600 (Optional Tires)

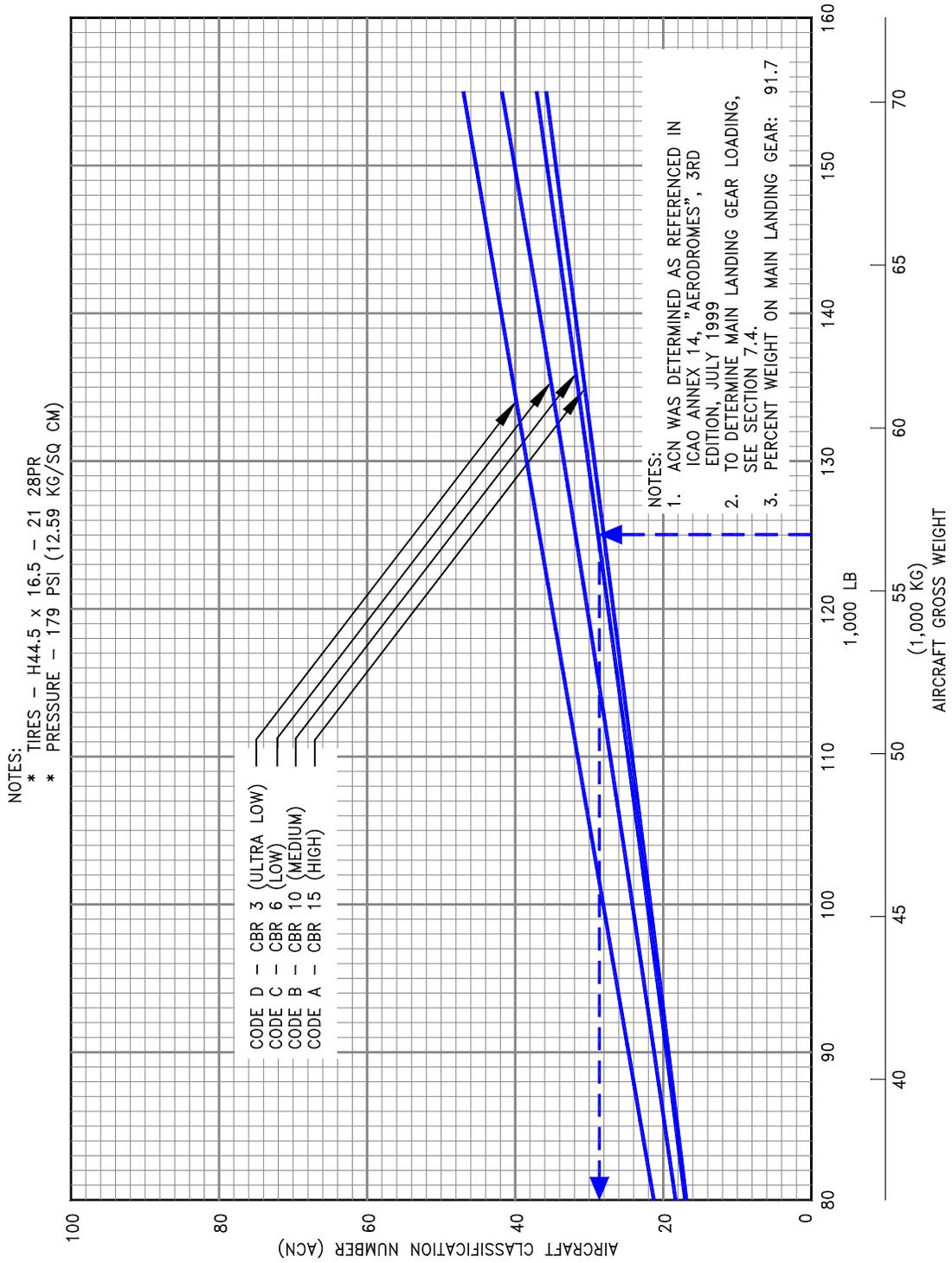


D6-58325-7

7.10.3 Aircraft Classification Number - Flexible Pavement: Model 737-700, -700W

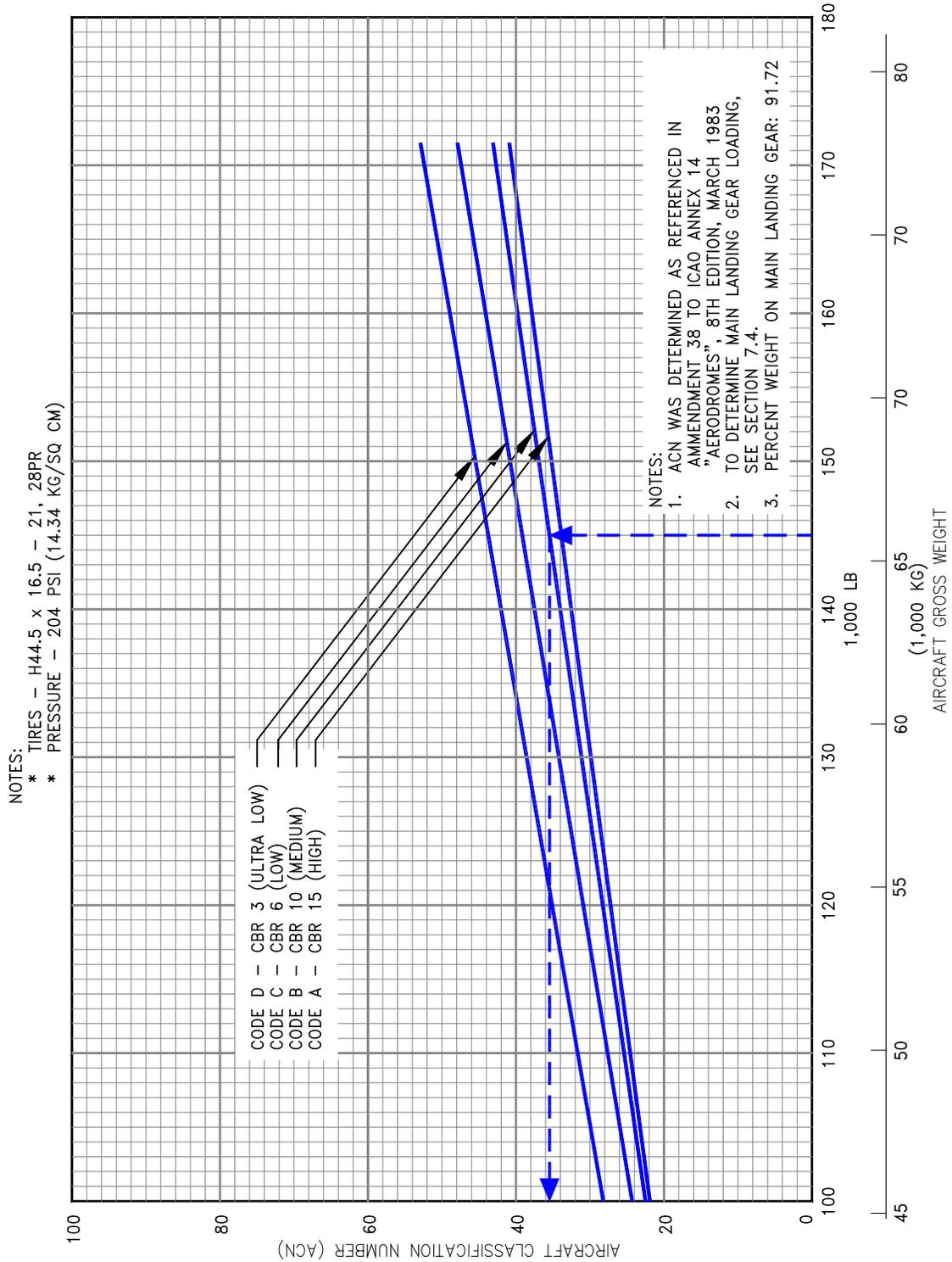


7.10.4 Aircraft Classification Number - Flexible Pavement: Model 737-700, -700W (Optional Tires)



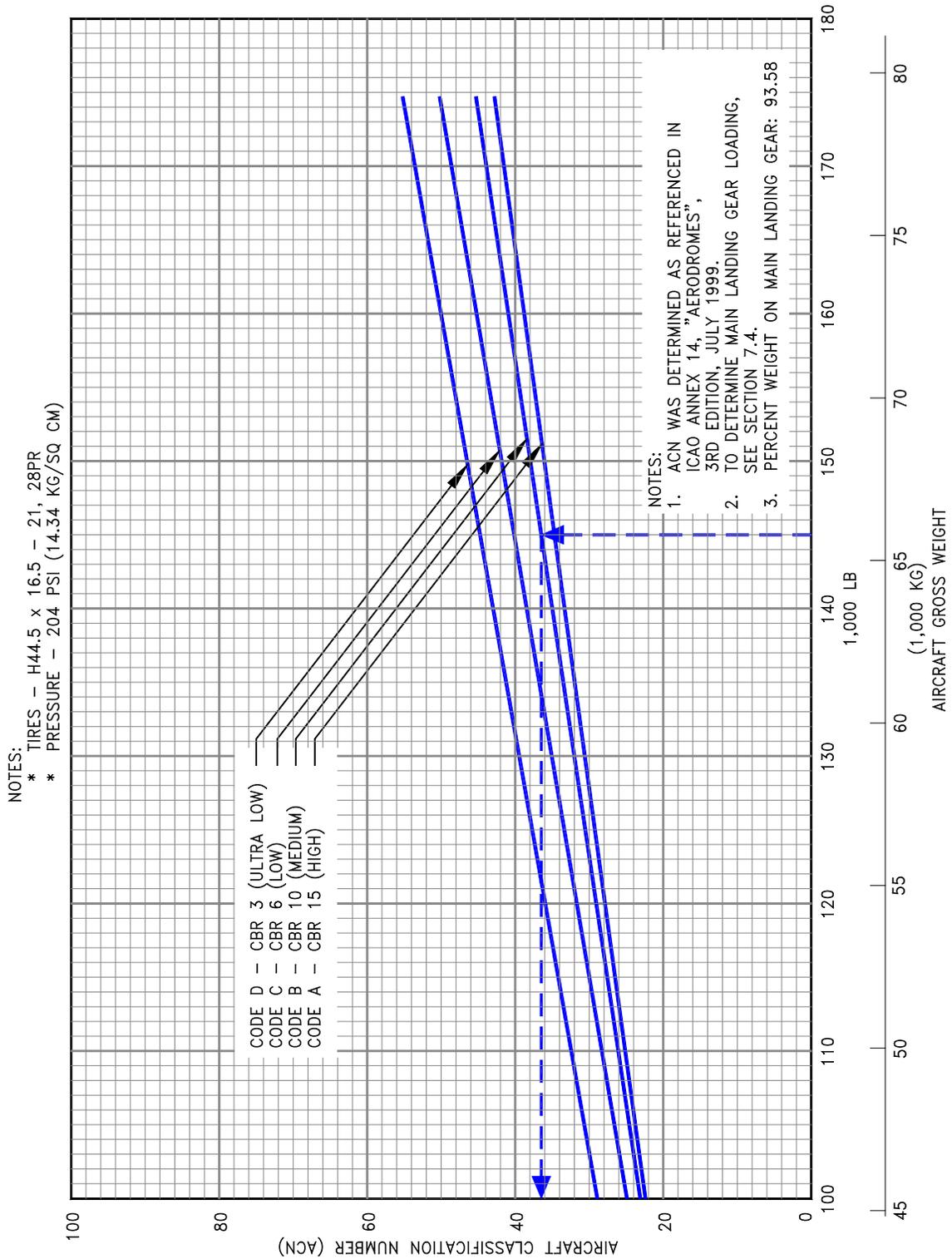
D6-58325-7

7.10.5 Aircraft Classification Number - Flexible Pavement: Model 737 BBJ1



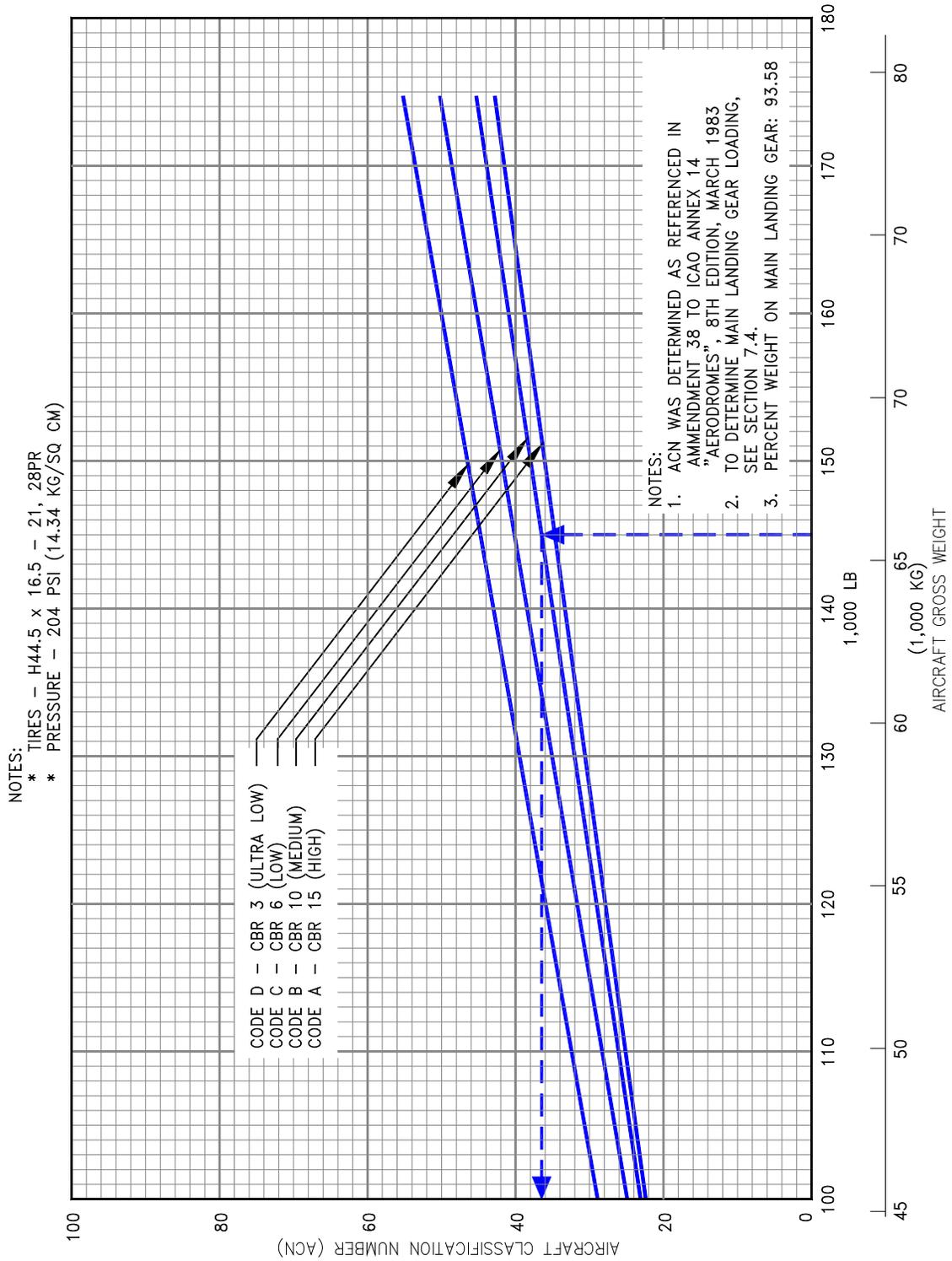
D6-58325-7

7.10.6 Aircraft Classification Number - Flexible Pavement: Model 737-800, -800W, -800BCF



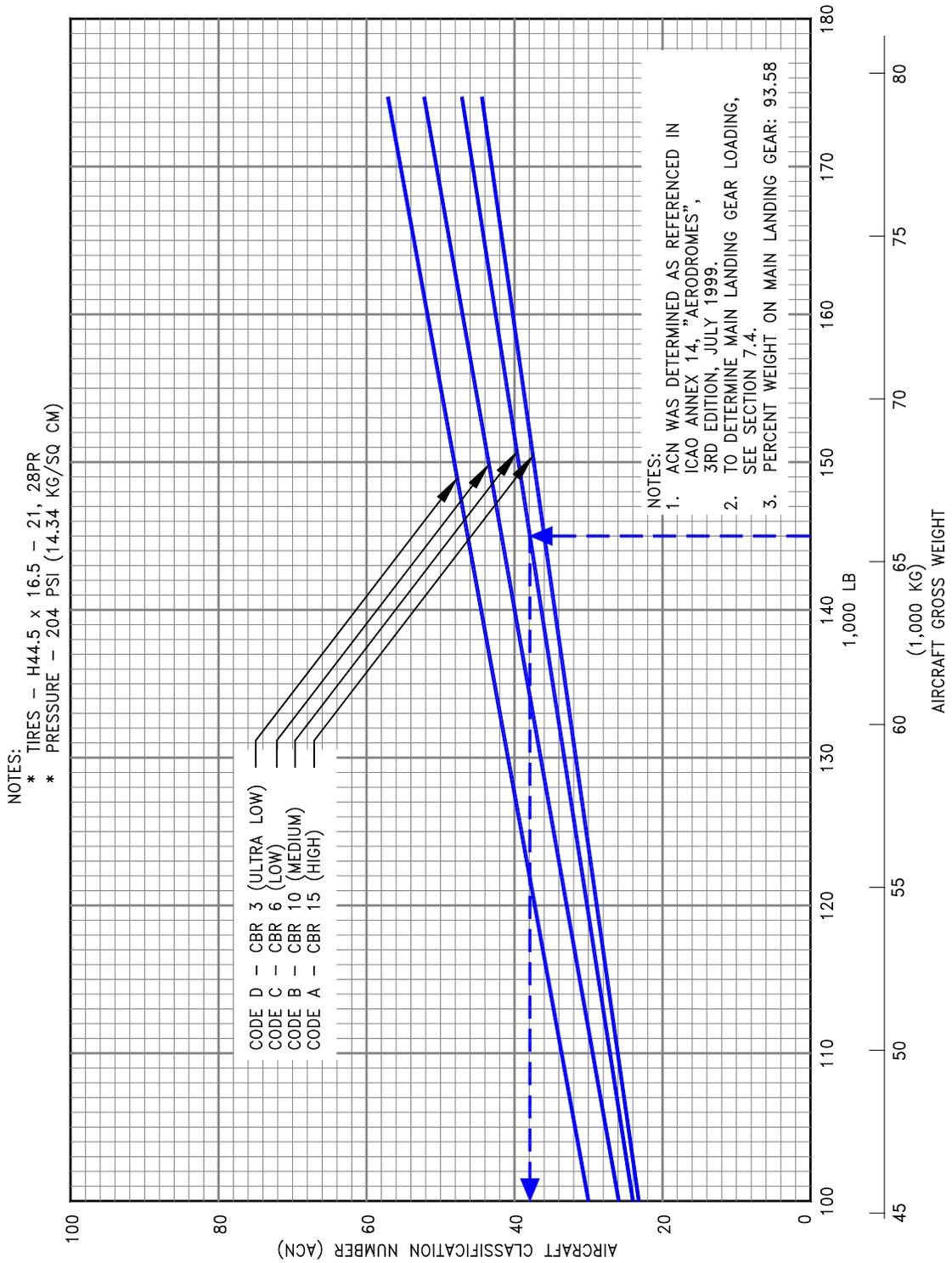
D6-58325-7

7.10.7 Aircraft Classification Number - Flexible Pavement: Model 737 BBJ2



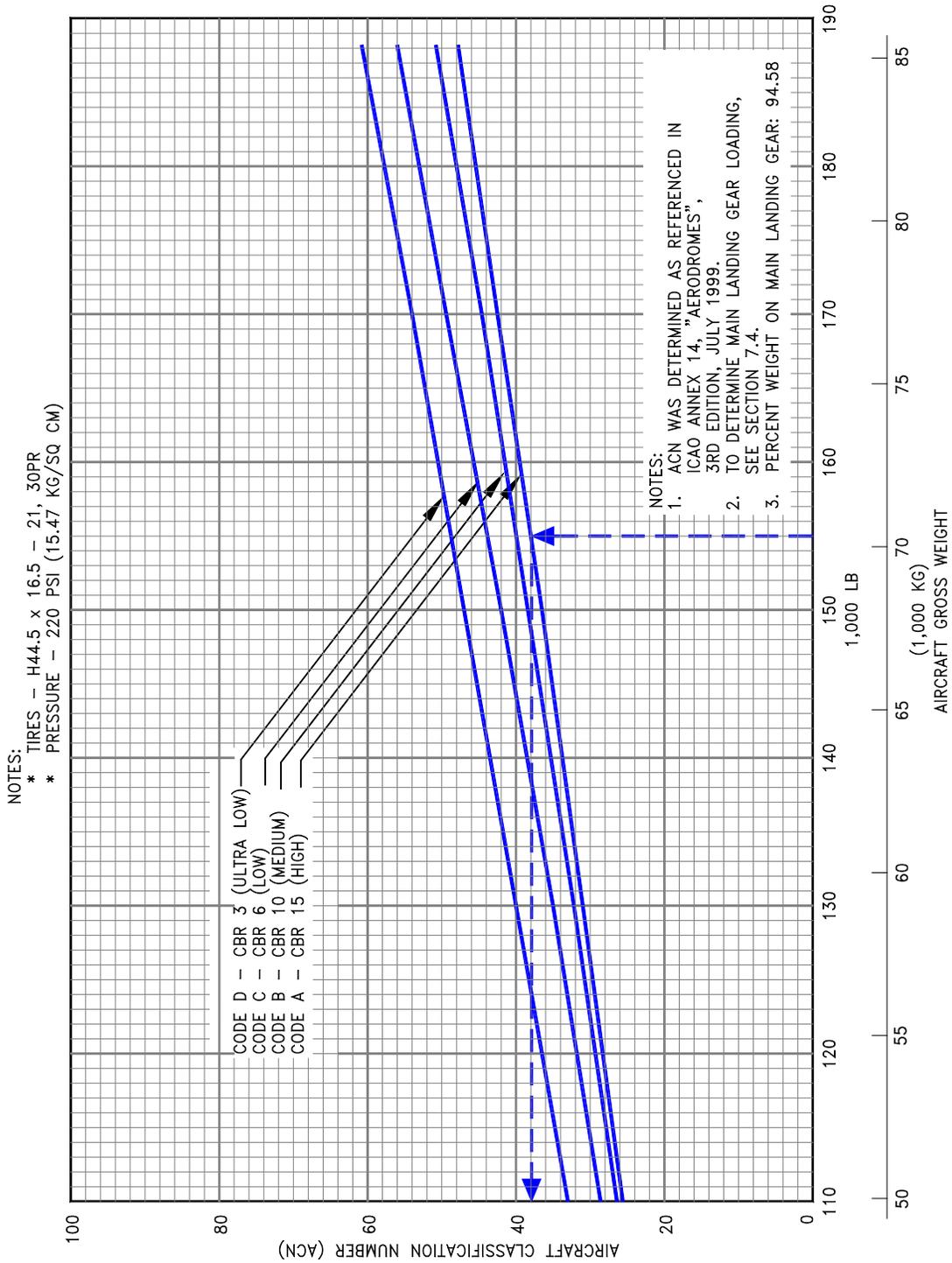
D6-58325-7

7.10.8 Aircraft Classification Number - Flexible Pavement: Model 737-900, -900W

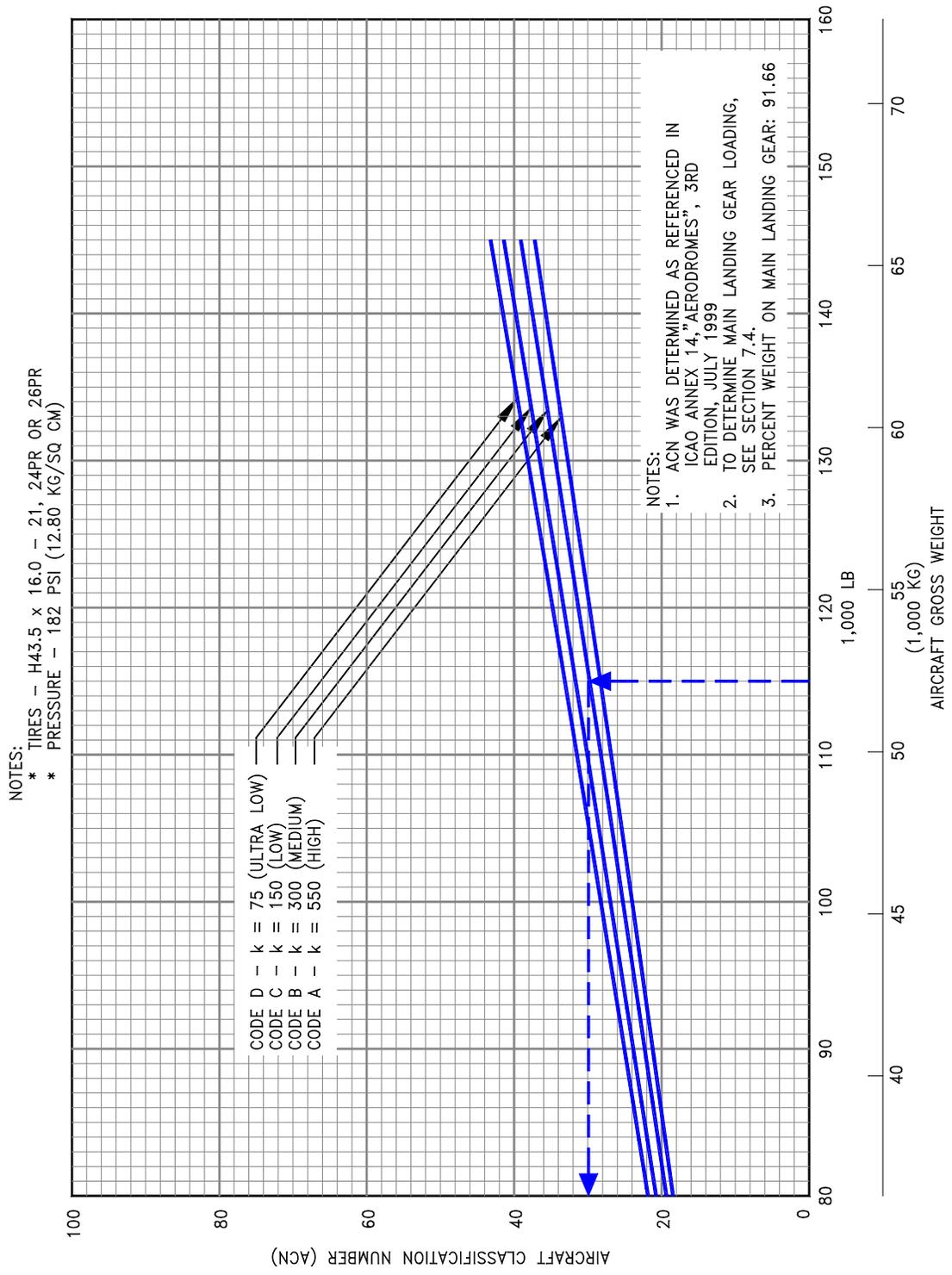


D6-58325-7

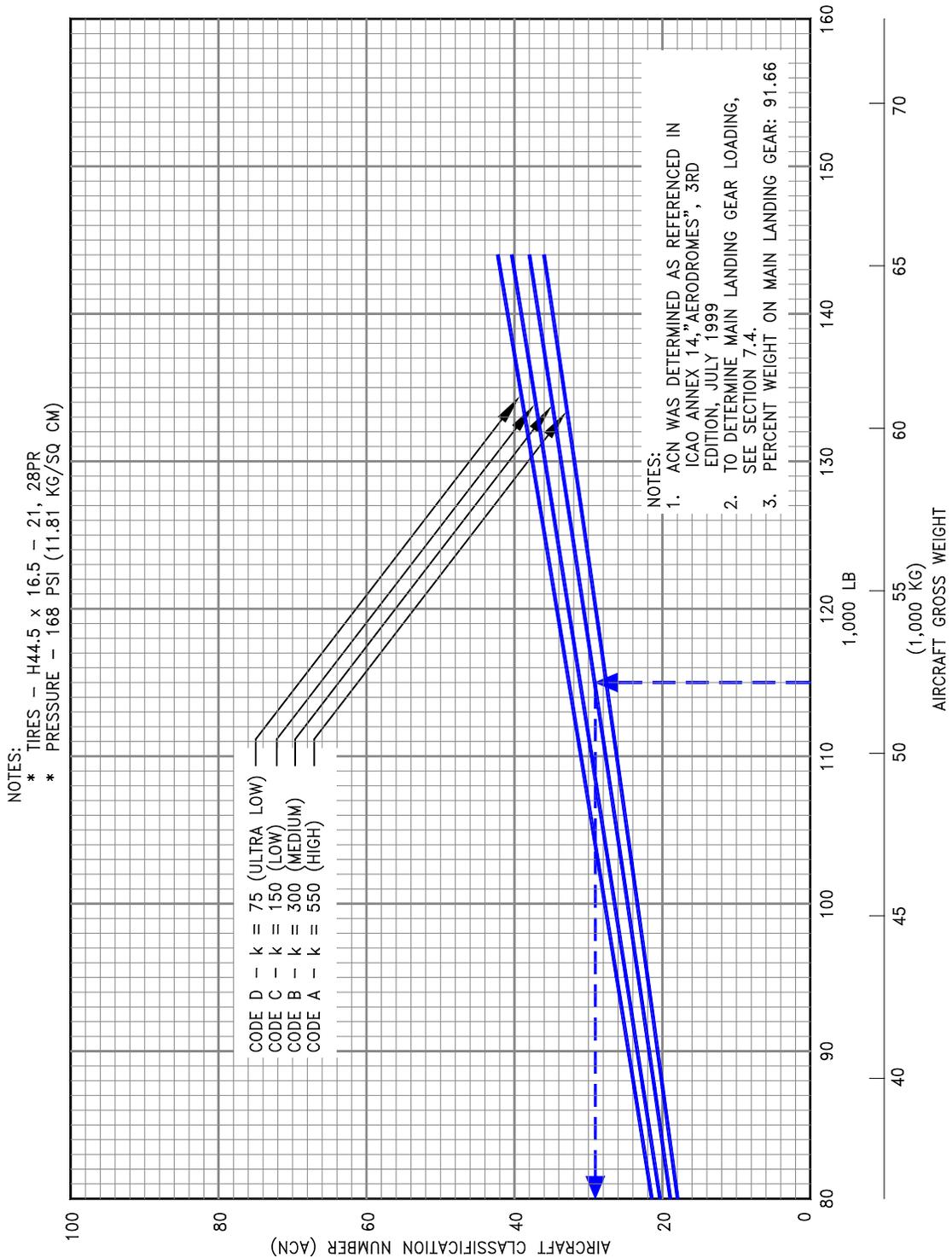
7.10.9 Aircraft Classification Number - Flexible Pavement: Model 737-900ER, -900ERW



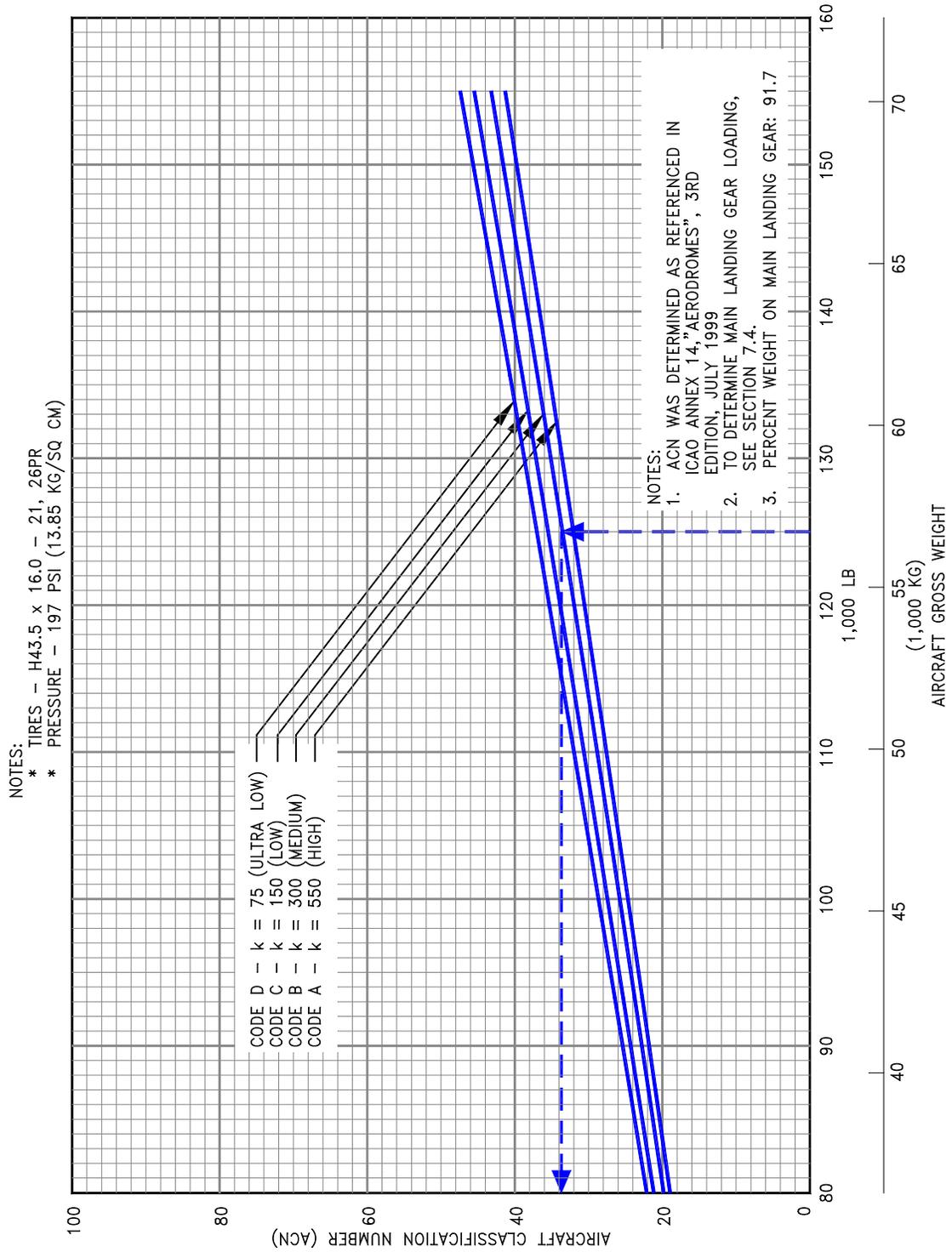
7.10.10 Aircraft Classification Number - Rigid Pavement: Model 737-600



7.10.11 Aircraft Classification Number - Rigid Pavement: Model 737-600 (Optional Tires)

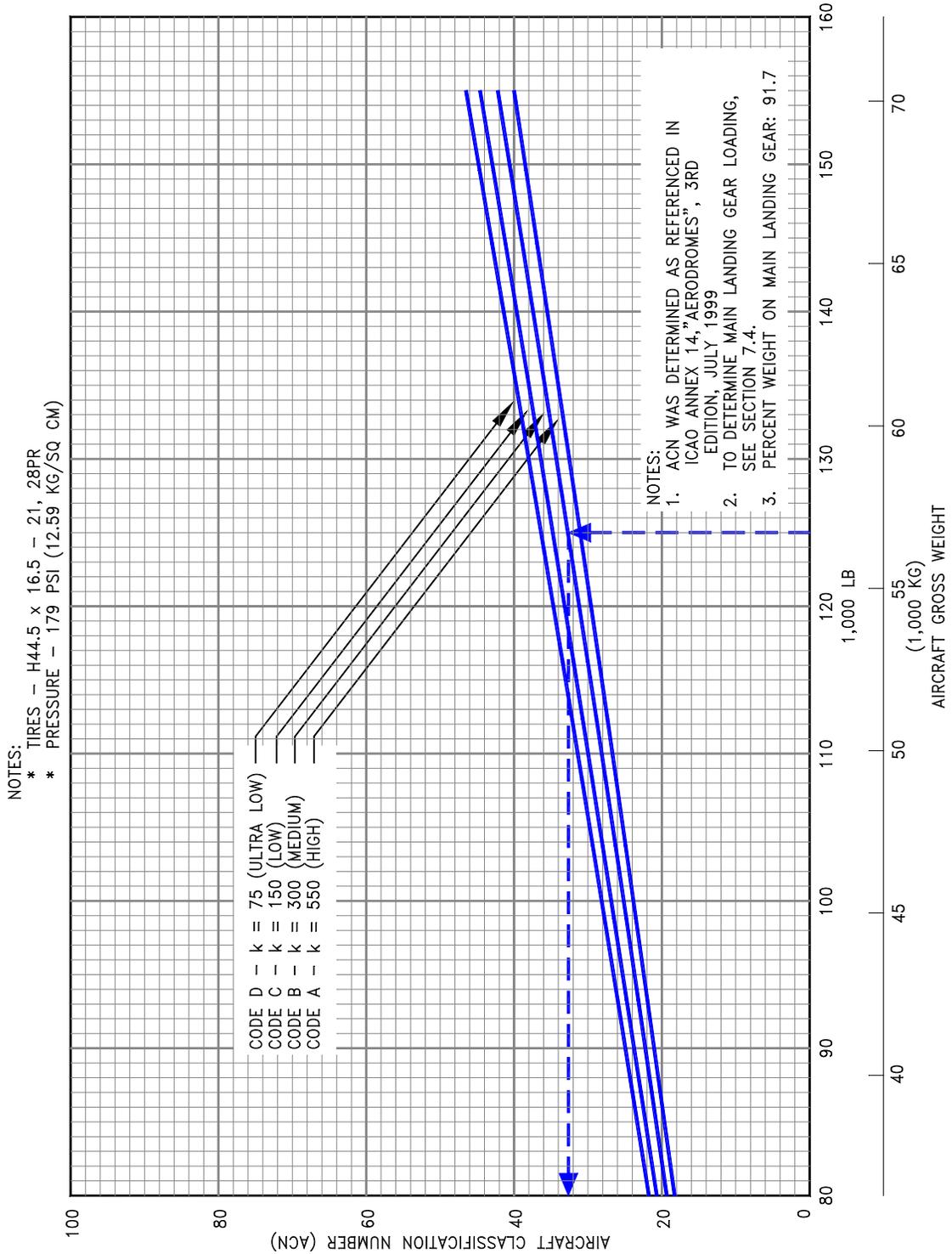


7.10.12 Aircraft Classification Number - Rigid Pavement: Model 737-700, -700W



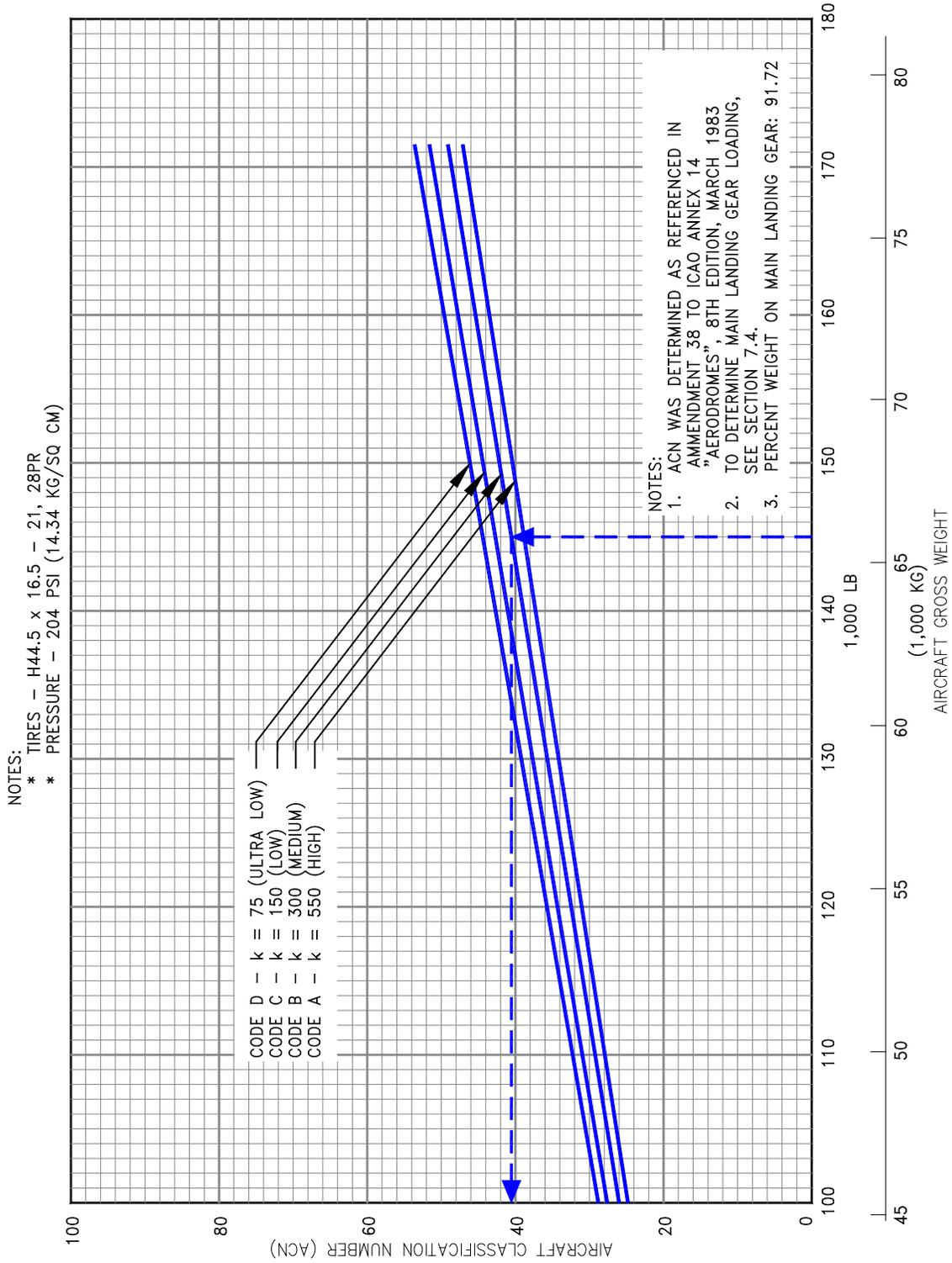
D6-58325-7

7.10.13 Aircraft Classification Number - Rigid Pavement: Model 737-700, -700W (Optional Tires)



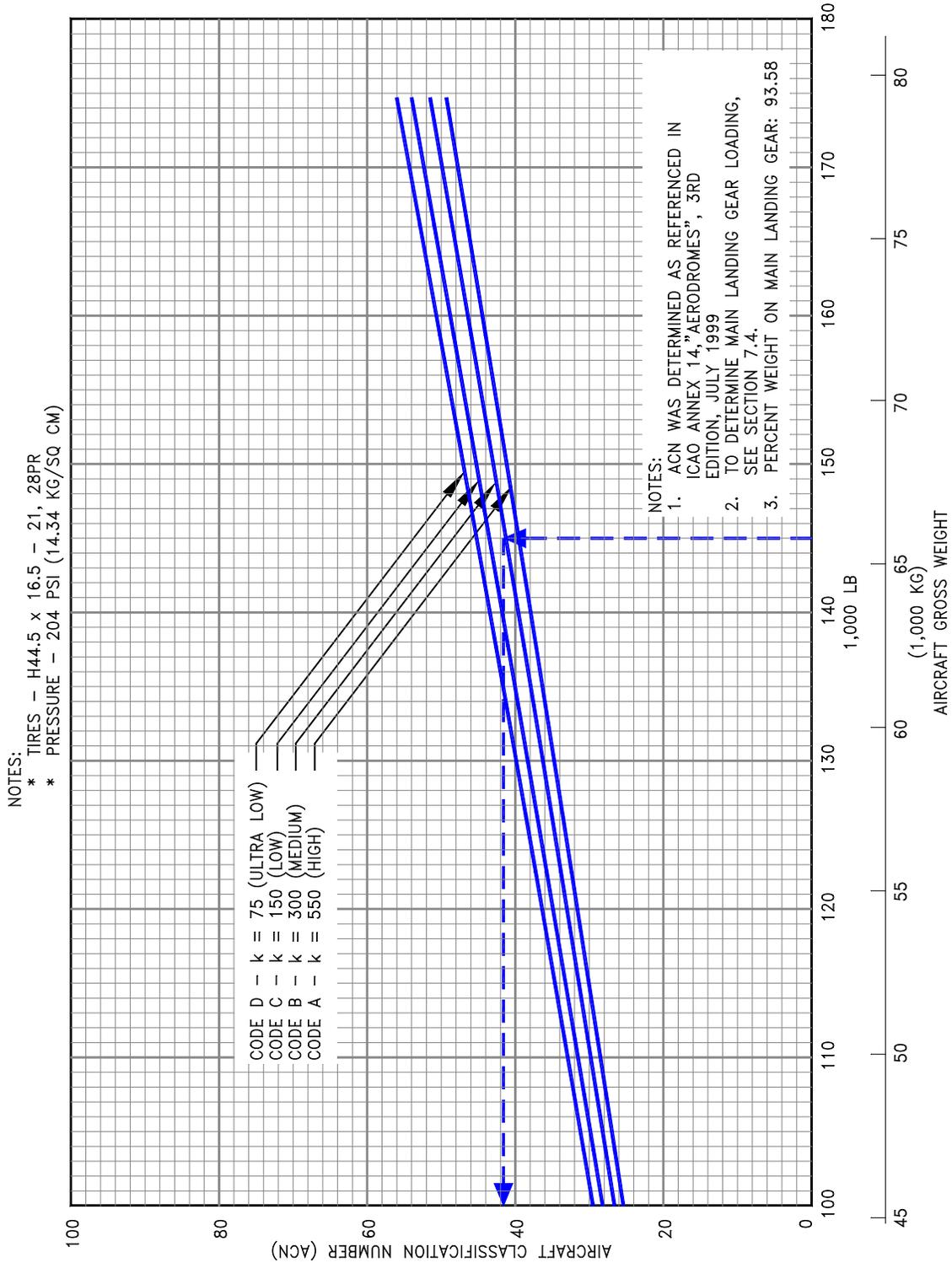
D6-58325-7

7.10.14 Aircraft Classification Number - Rigid Pavement: Model 737 BBJ1

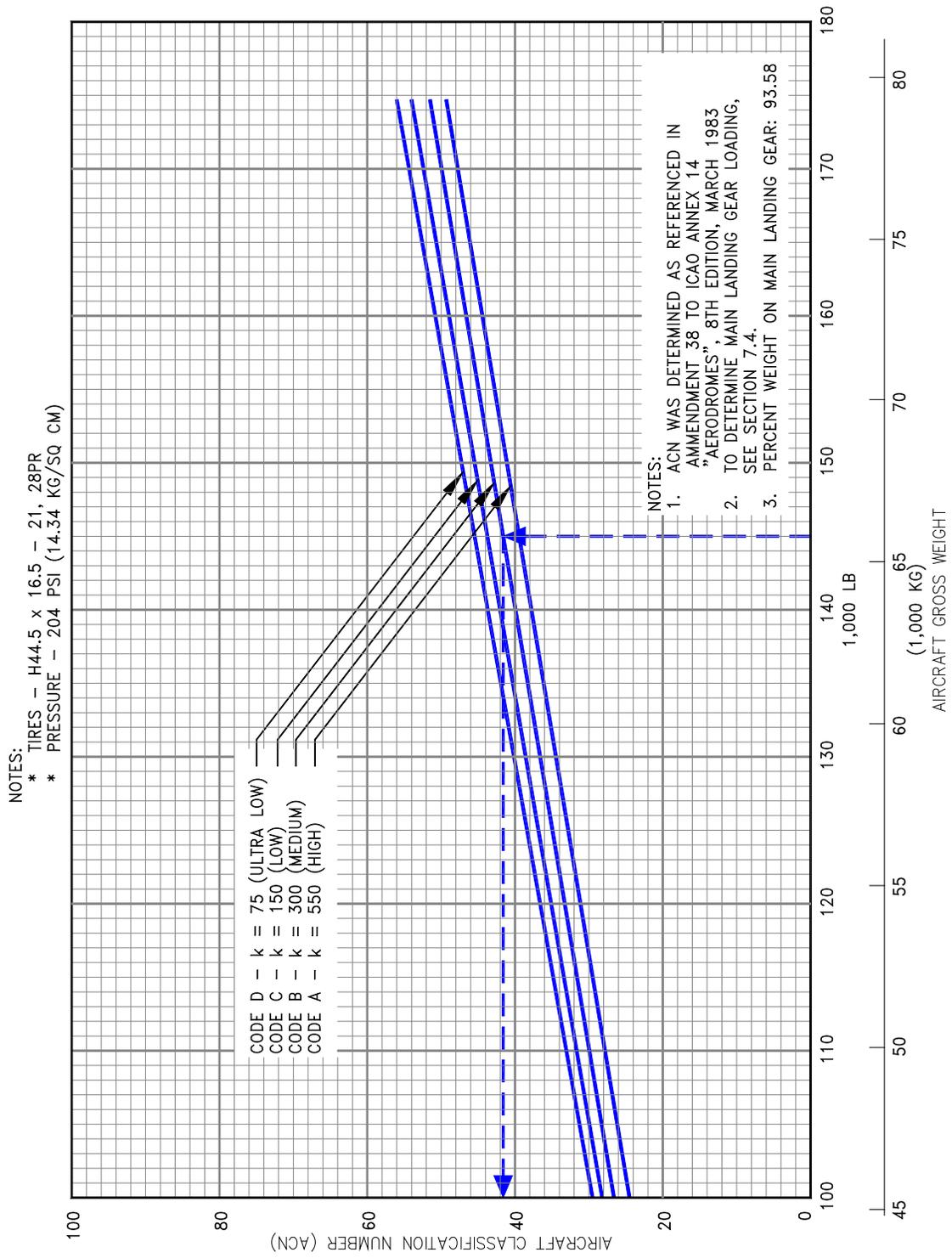


D6-58325-7

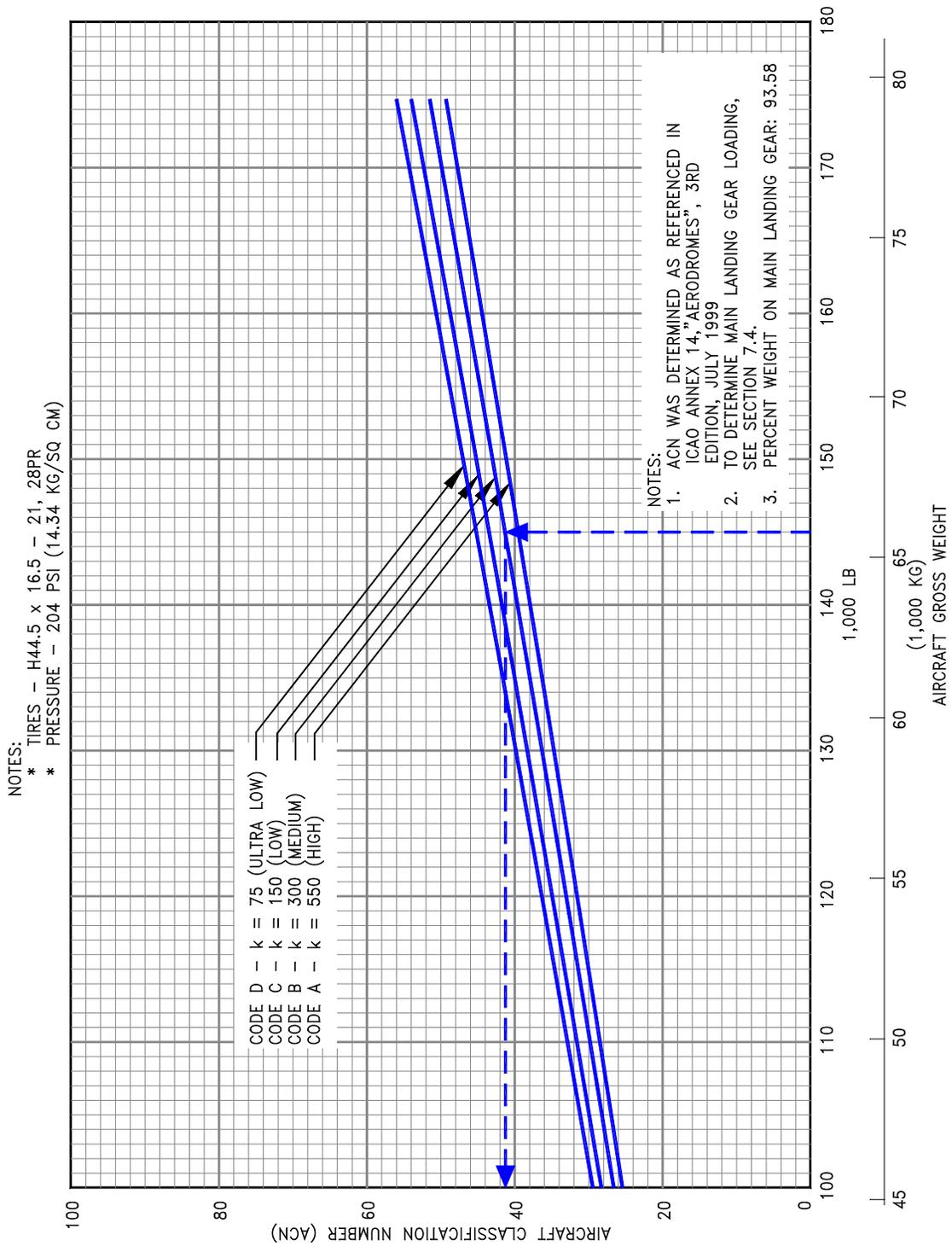
7.10.15 Aircraft Classification Number - Rigid Pavement: Model 737-800, -800W, -800BCF



7.10.16 Aircraft Classification Number - Rigid Pavement: Model 737 BBJ2

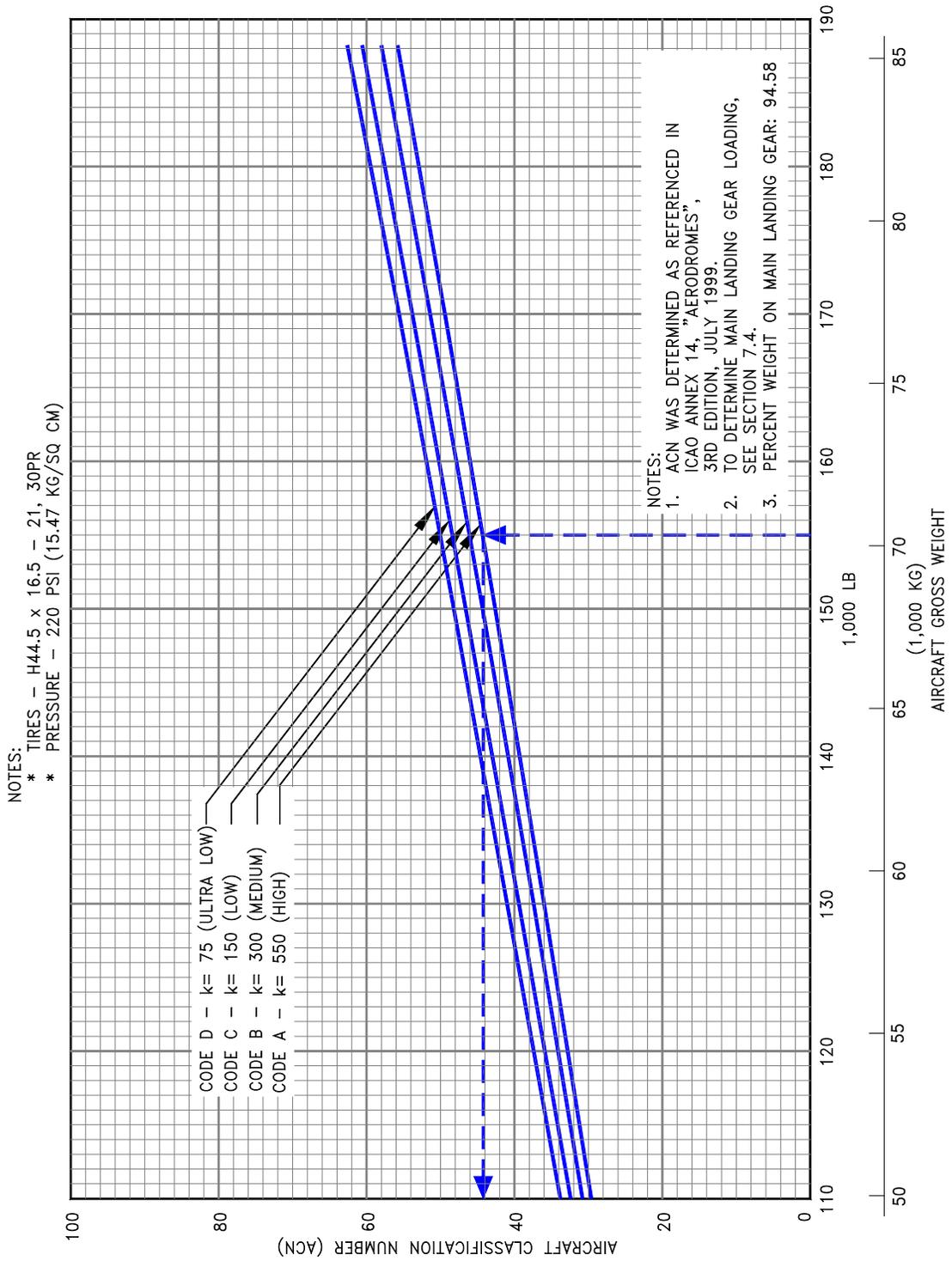


7.10.17 Aircraft Classification Number - Rigid Pavement: Model 737-900, -900W



D6-58325-7

7.10.18 Aircraft Classification Number - Rigid Pavement: Model 737-900ER, -900ERW



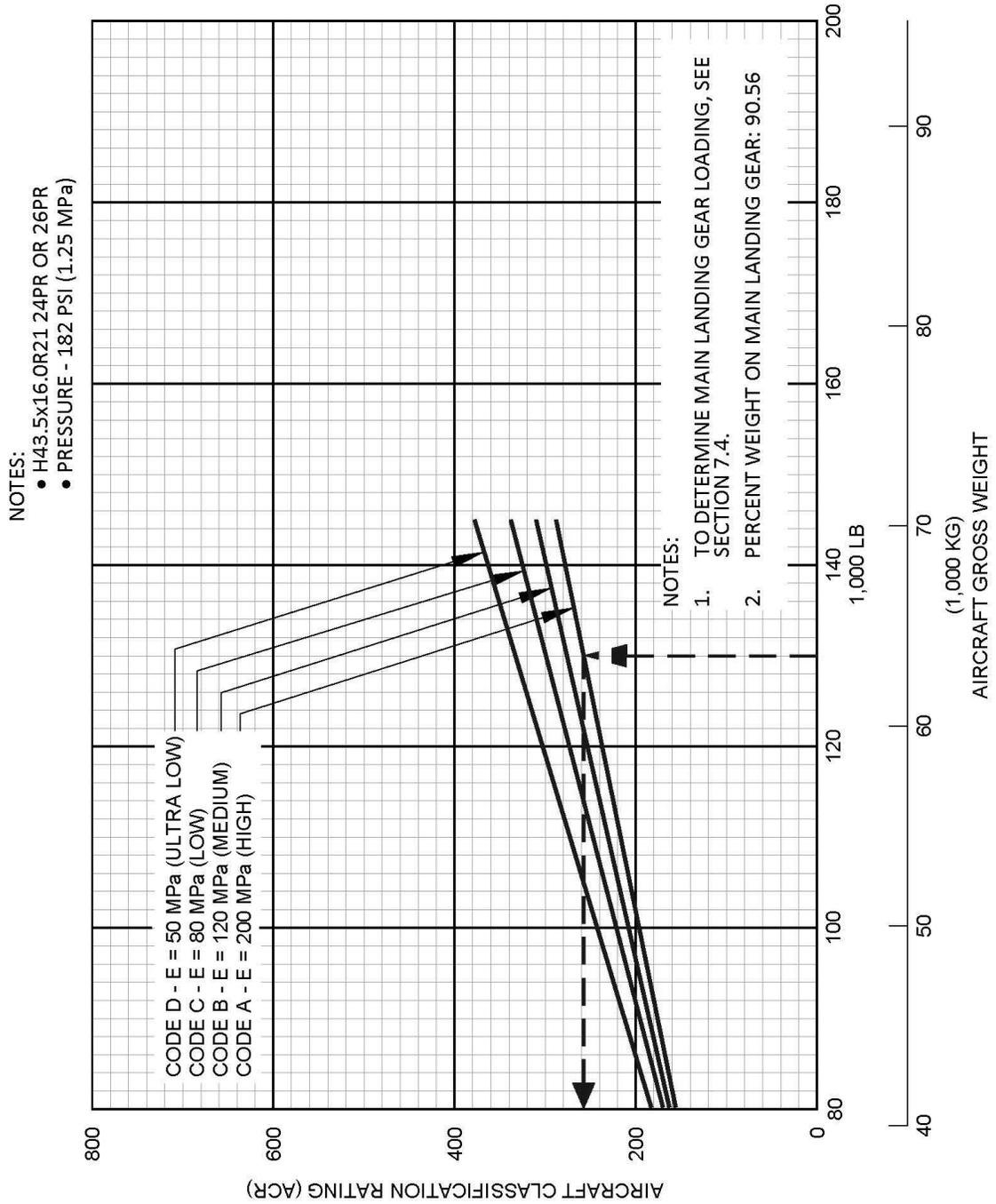
7.11 ACR/PCR REPORTING SYSTEM – FLEXIBLE AND RIGID PAVEMENTS

To determine the ACR of an aircraft on flexible or rigid pavement, both the aircraft gross weight and the subgrade strength category must be known. In the chart in Section 7.11.1, for an aircraft with gross weight of 130,000 lb on a Code A, the flexible pavement ACR is 260. In Section 7.11.8, the same aircraft on a high strength subgrade rigid pavement has an ACR of 330.

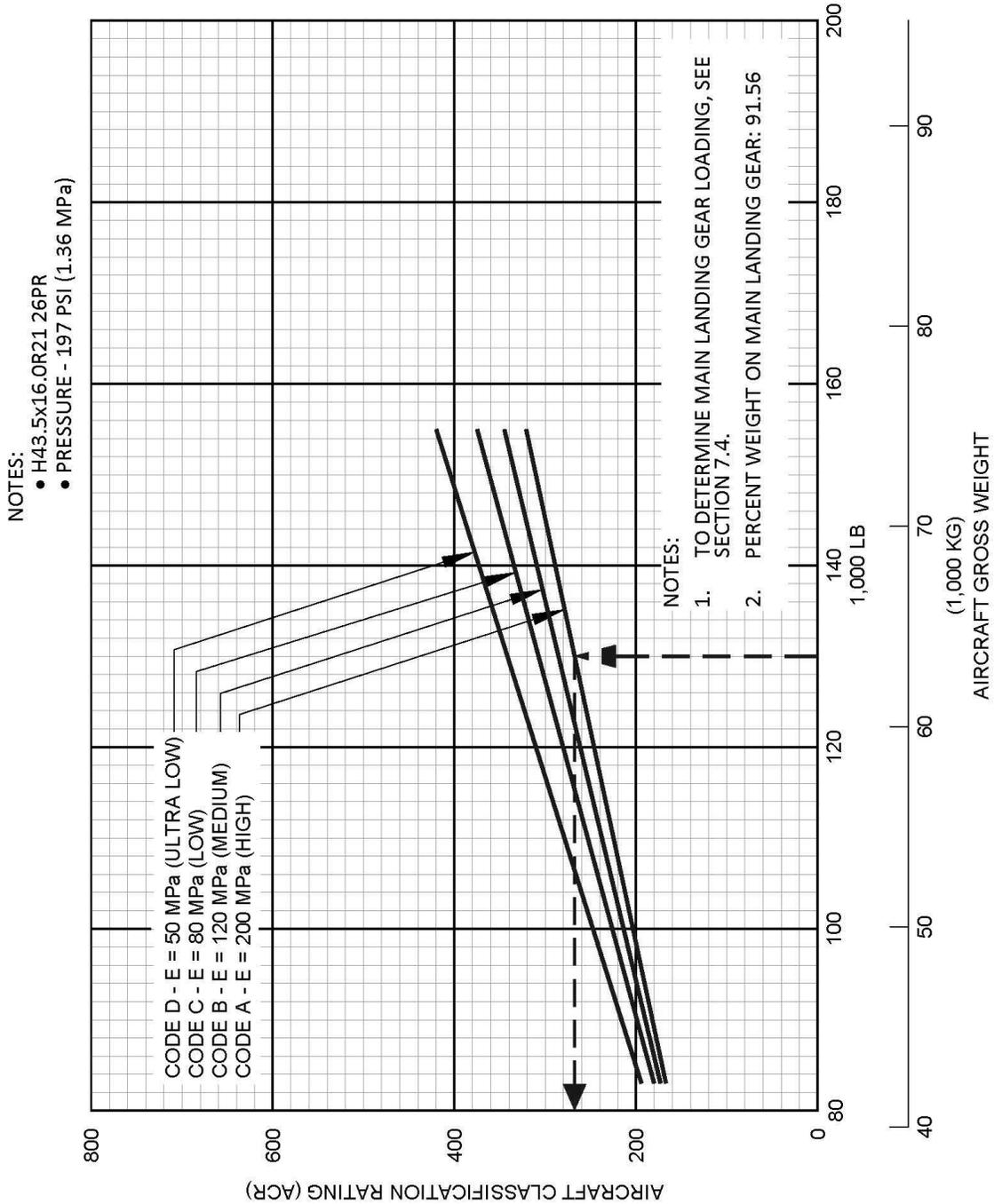
The following table provides ACR data in tabular format. If the ACR for an intermediate weight between maximum taxi weight and the empty weight of the aircraft is required, Sections 7.11.1 through 7.11.14 should be consulted.

AIRCRAFT TYPE	MAXIMUM TAXI WEIGHT ----- MINIMUM WEIGHT * [1] lb (kg)	LOAD ON ONE MAIN GEAR LEG (%)	TIRE PRESSURE psi (MPa)	ACR FOR RIGID PAVEMENT SUBGRADES				ACR FOR FLEXIBLE PAVEMENT SUBGRADES			
				HIGH	MEDIUM	LOW	ULTRA LOW	HIGH	MEDIUM	LOW	ULTRA LOW
				E = 200 MPa	E = 120 MPa	E = 80 MPa	E = 50 MPa	E = 200 MPa	E = 120 MPa	E = 80 MPa	E = 50 MPa
737-600	145,000 (65,771)	45.28	182 (1.25)	375	395	410	425	289	311	339	379
	80,200 (36,378)			185	196	204	214	156	163	170	183
737-700	155,000 (70,307)	45.78	197 (1.36)	420	440	455	470	321	345	376	421
	83,000 (37,648)			200	210	219	228	168	174	181	194
737 BBJ1	171,500 (77,790)	45.8	196 (1.35)	474	497	512	528	358	389	425	481
	100,000 (45,360)			249	262	272	283	203	212	222	243
737-800	174,700 (79,242)	46.73	204 (1.41)	502	524	539	556	377	410	448	507
	91,300 (41,413)			231	243	252	262	191	197	206	224
737 BBJ2	174,700 (79,242)	46.73	204 (1.41)	501	523	539	555	377	410	447	506
	100,000 (45,360)			257	270	280	291	209	217	228	250
737-900	174,700 (79,242)	46.74	204 (1.41)	501	523	539	555	377	410	447	506
	94,580 (42,901)			241	253	263	273	197	205	214	233
737-900ER	188,200(85,366)	47.24	220 (1.52)	565	587	602	618	422	459	502	570
	98,495(44,676)			261	273	282	292	212	219	229	250

7.11.1 Aircraft Classification Rating - Flexible Pavement: Model 737-600

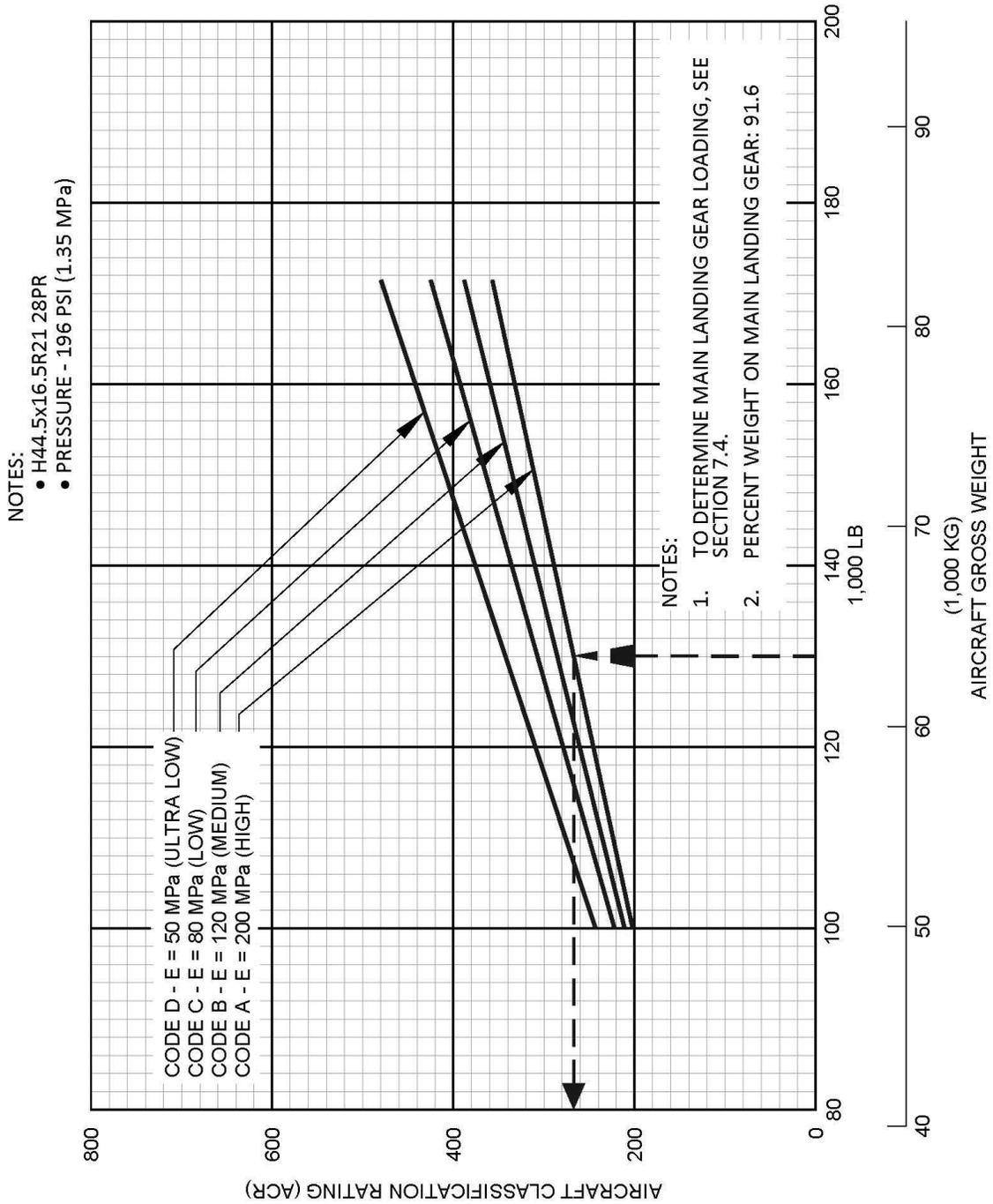


7.11.2 Aircraft Classification Rating - Flexible Pavement: Model 737-700, -700W



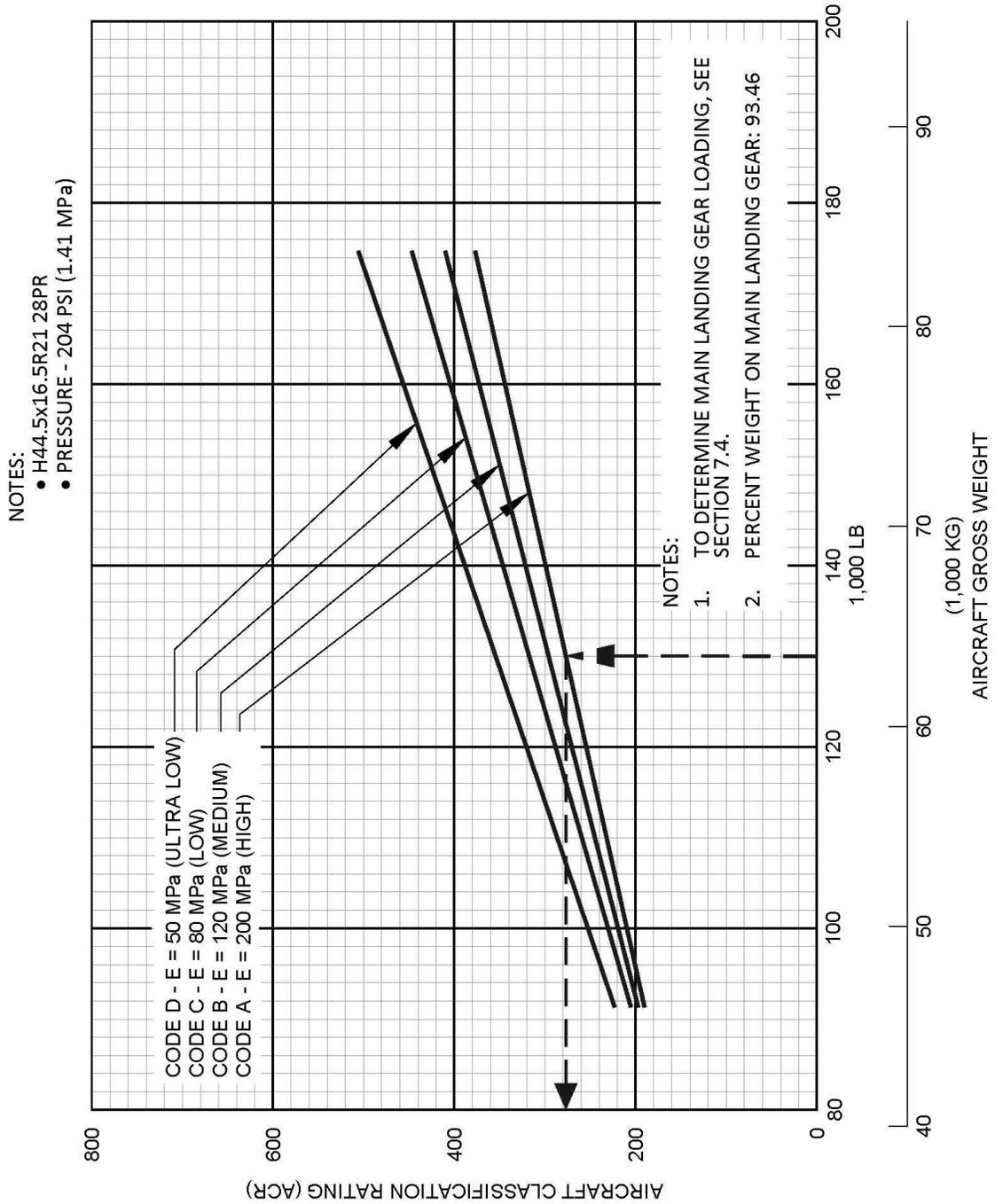
D6-58325-7

7.11.3 Aircraft Classification Rating - Flexible Pavement: Model 737 BBJ1



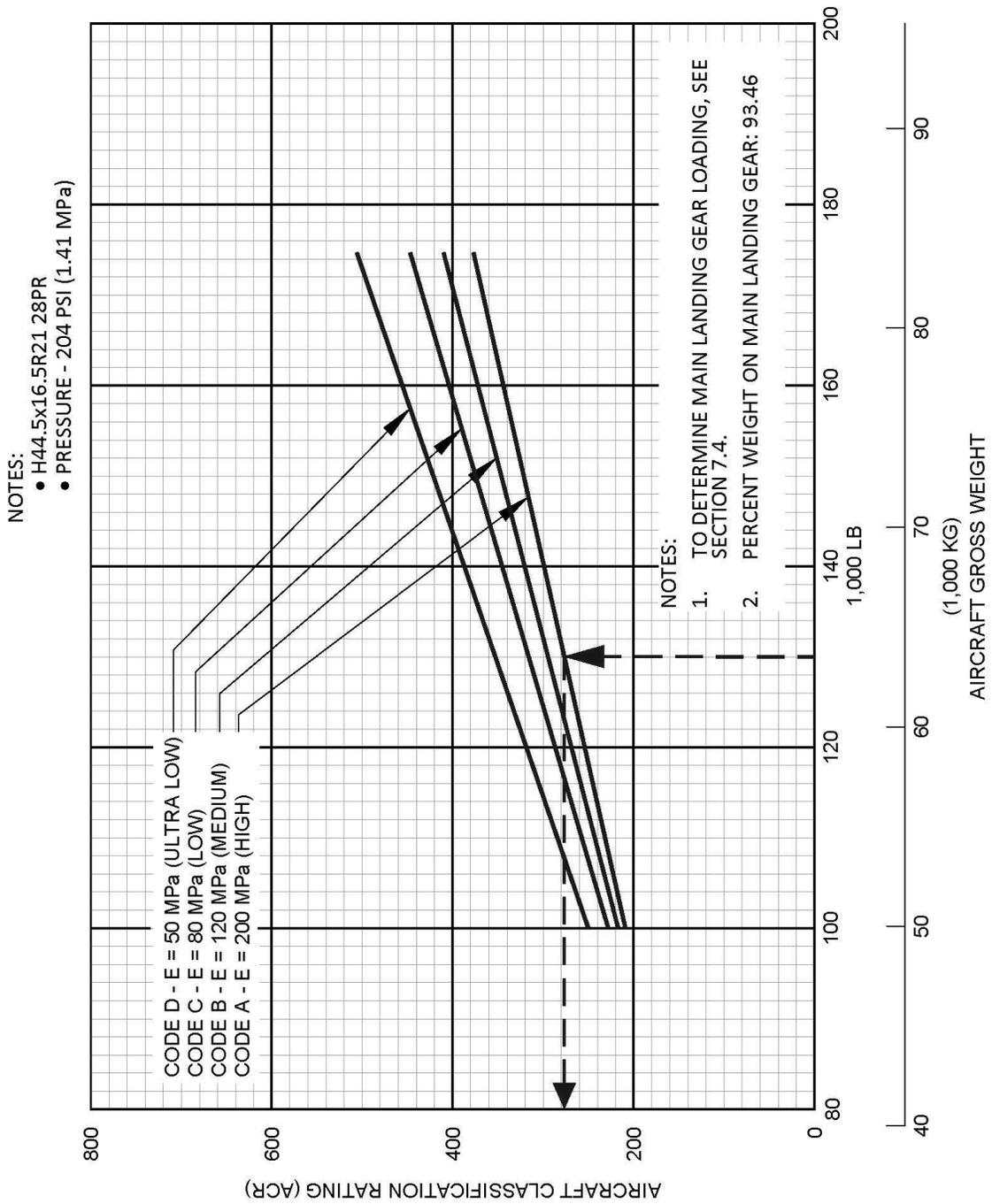
D6-58325-7

7.11.4 Aircraft Classification Rating - Flexible Pavement: Model 737-800, -800W, -800BCF

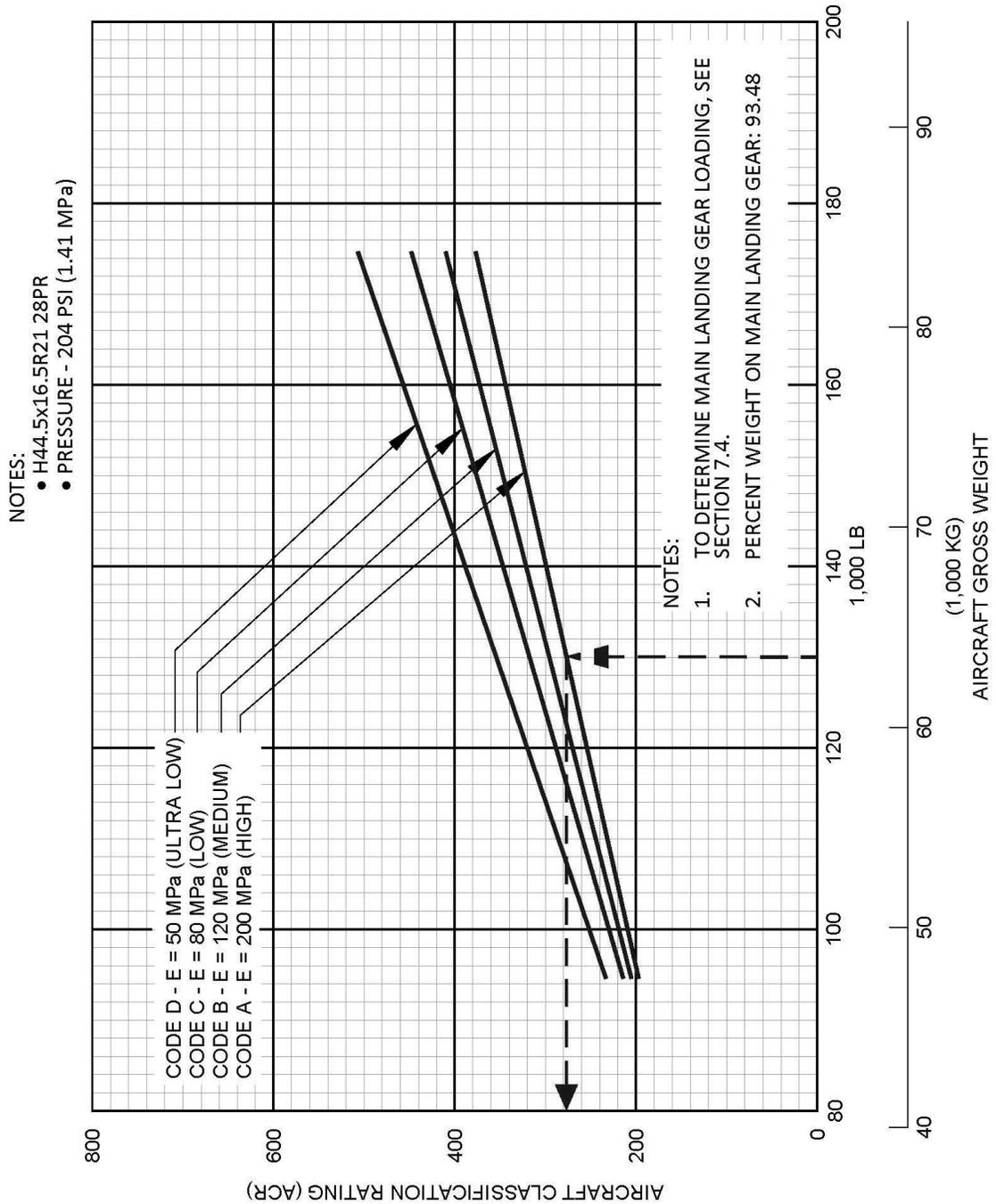


D6-58325-7

7.11.5 Aircraft Classification Rating - Flexible Pavement: Model 737 BBJ2

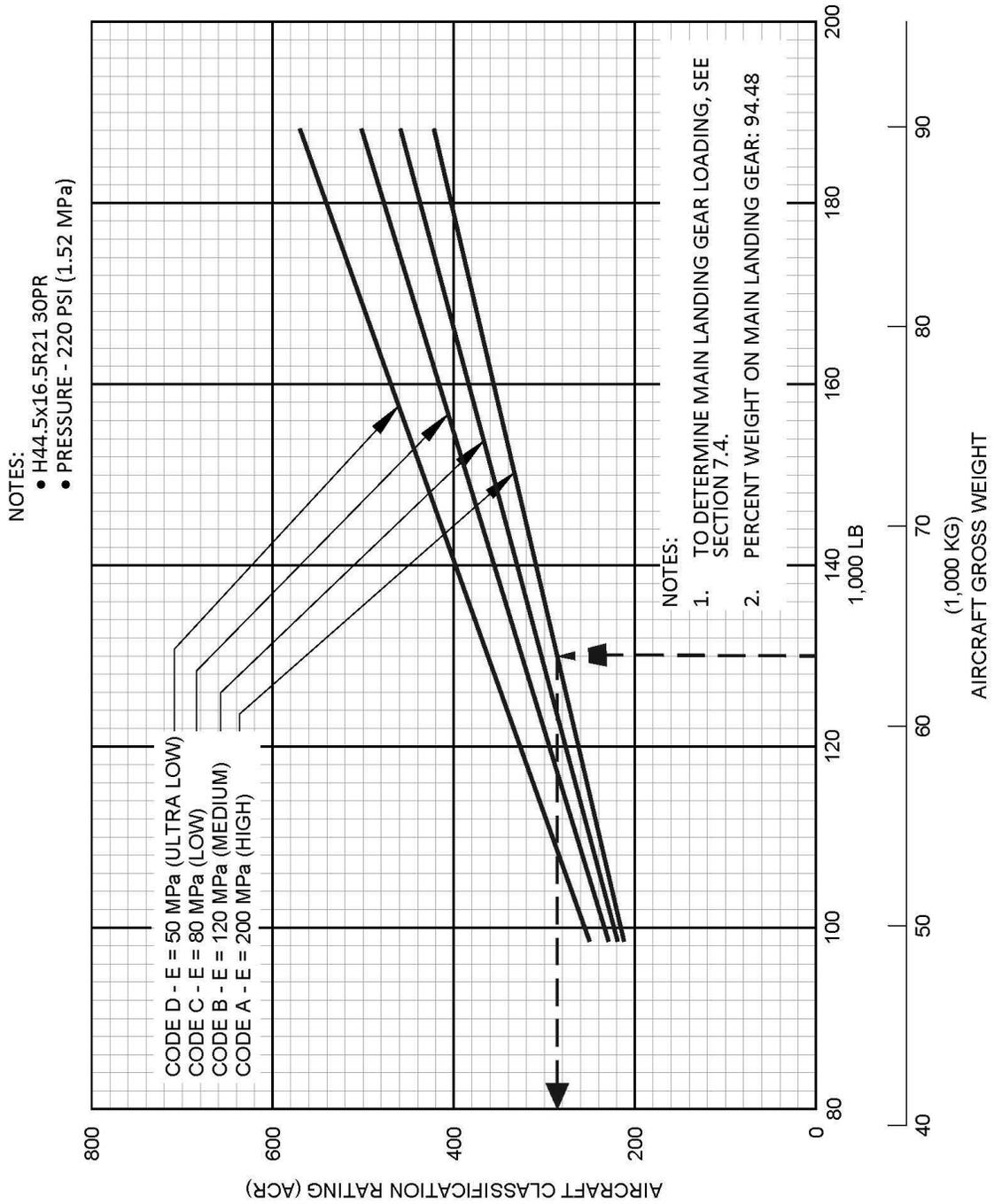


7.11.6 Aircraft Classification Rating - Flexible Pavement: Model 737-900, -900W



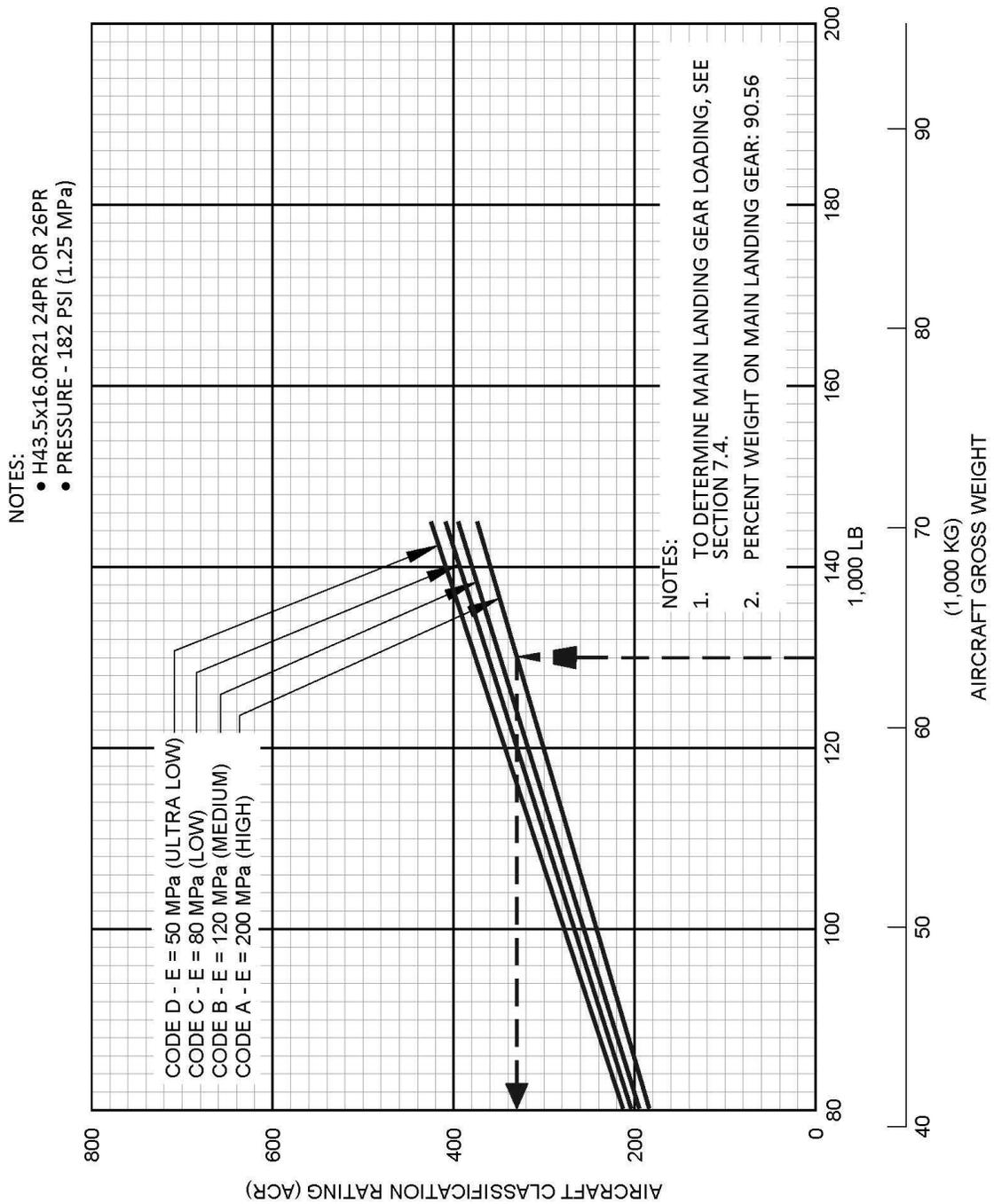
D6-58325-7

7.11.7 Aircraft Classification Rating - Flexible Pavement: Model 737-900ER, -900ERW



D6-58325-7

7.11.8 Aircraft Classification Rating - Rigid Pavement: Model 737-600



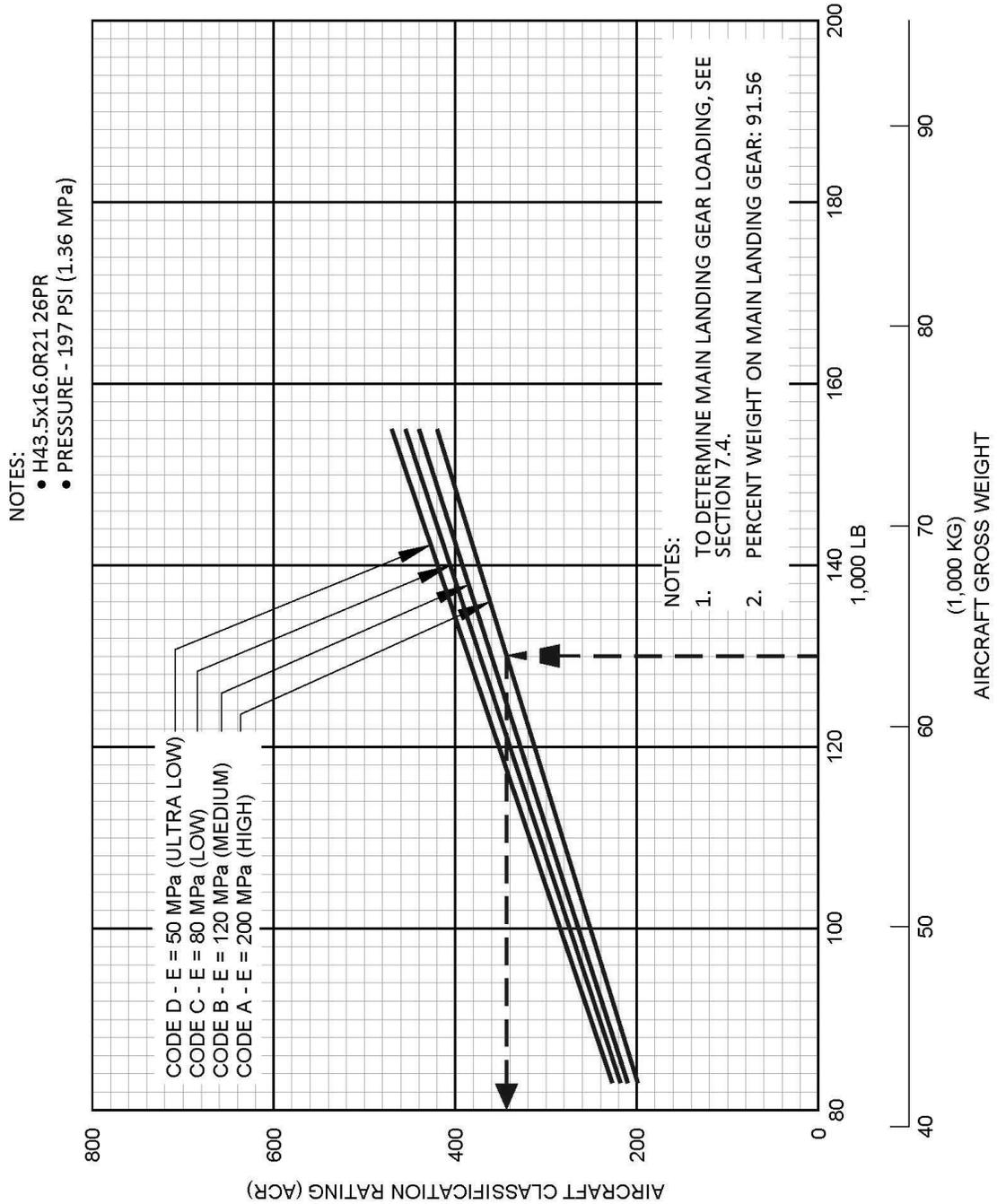
D6-58325-7

REV A

March 2023

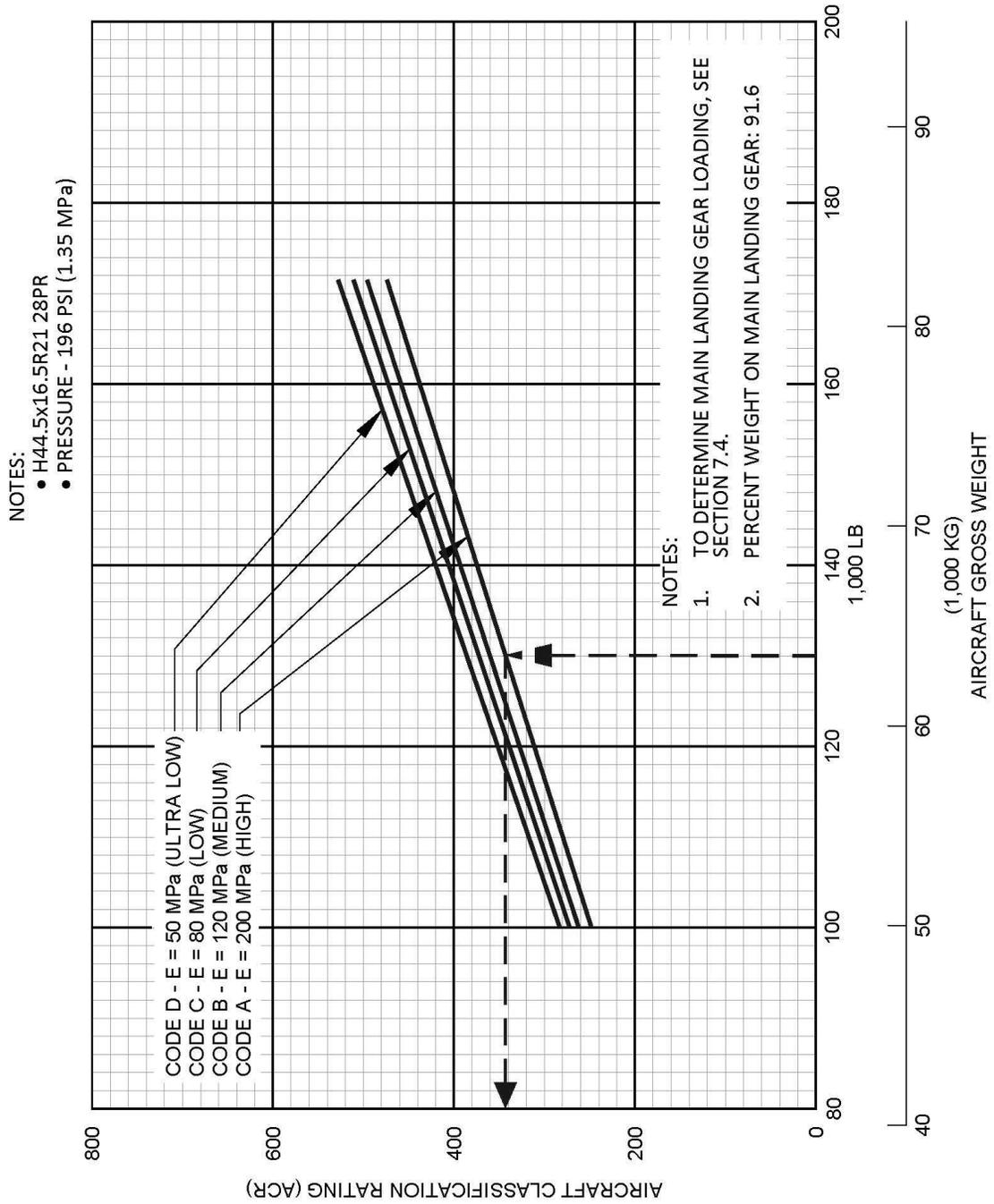
7-56

7.11.9 Aircraft Classification Rating - Rigid Pavement: Model 737-700, -700W

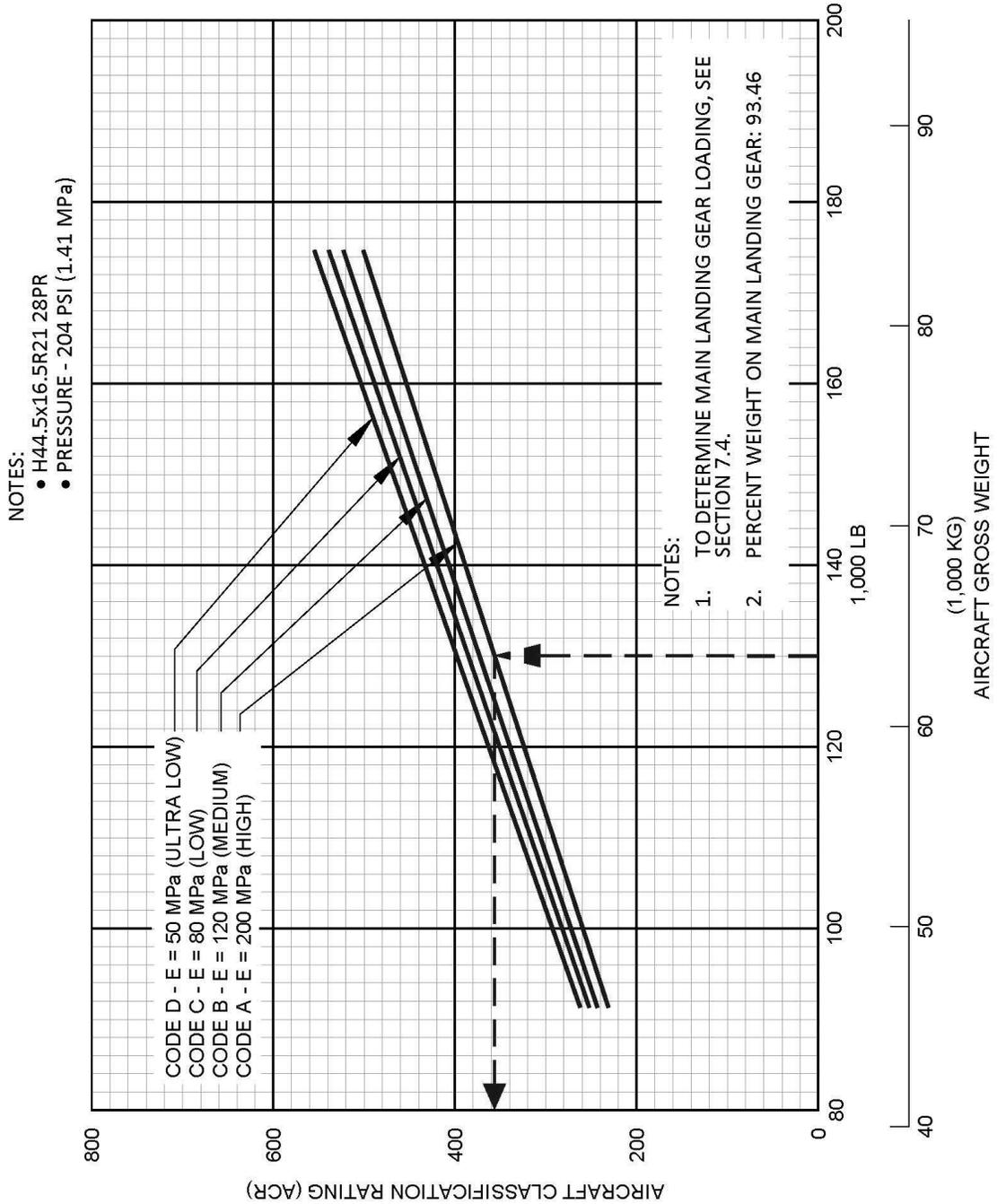


D6-58325-7

7.11.10 Aircraft Classification Rating - Rigid Pavement: Model 737 BBJ1

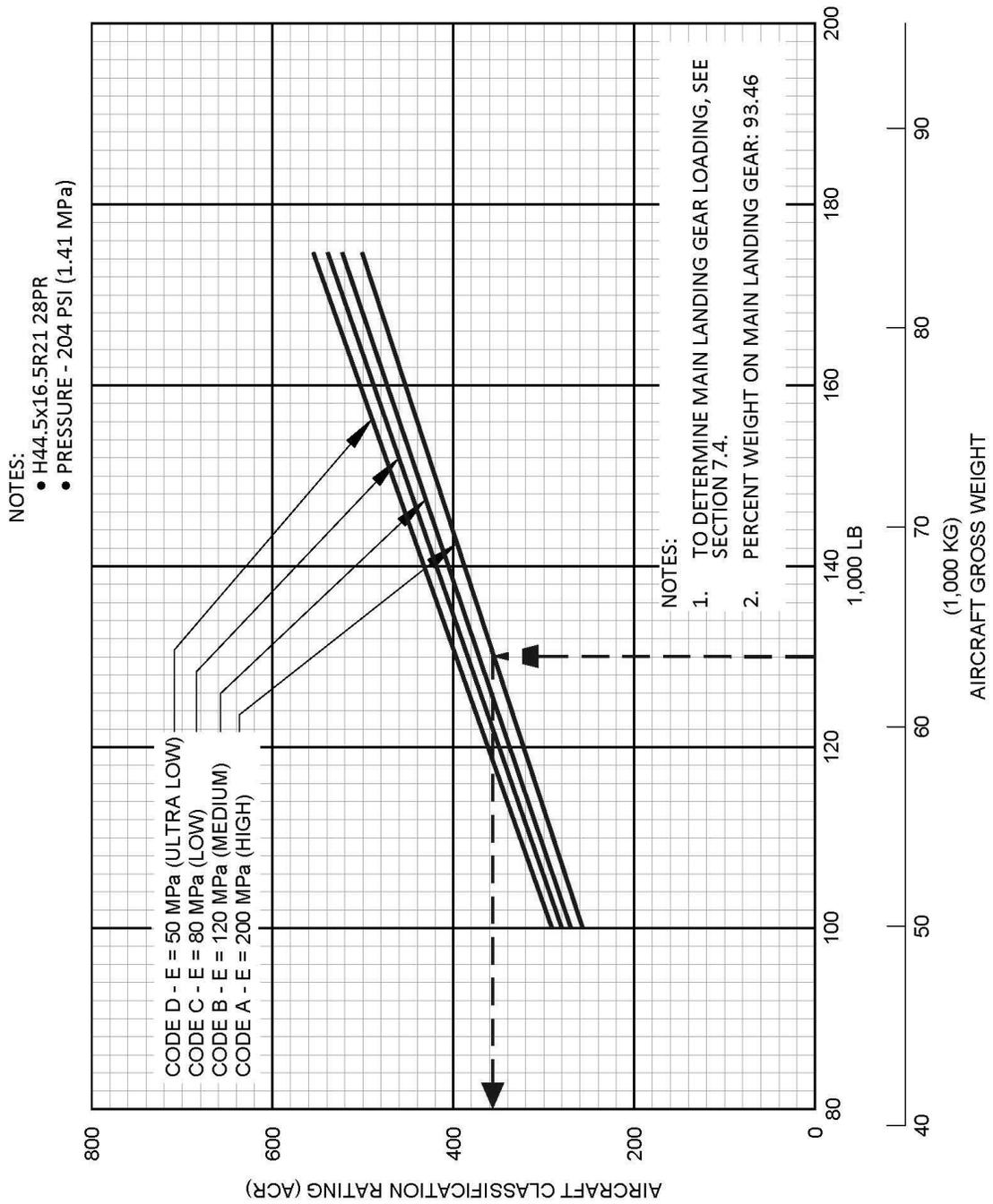


7.11.11 Aircraft Classification Rating - Rigid Pavement: Model 737-800, -800W, -800BCF



D6-58325-7

7.11.12 Aircraft Classification Rating - Rigid Pavement: Model 737 BBJ2



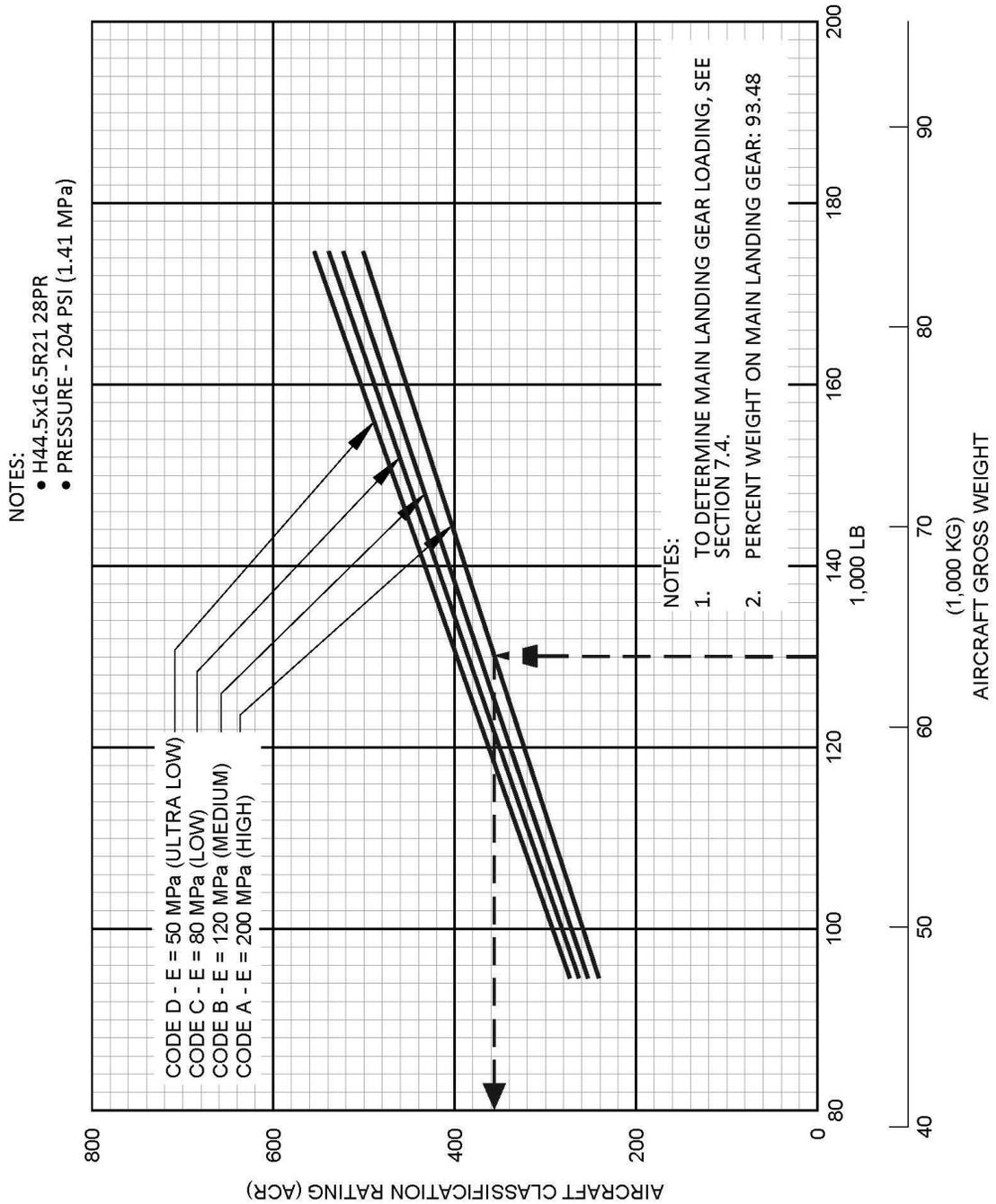
D6-58325-7

REV A

March 2023

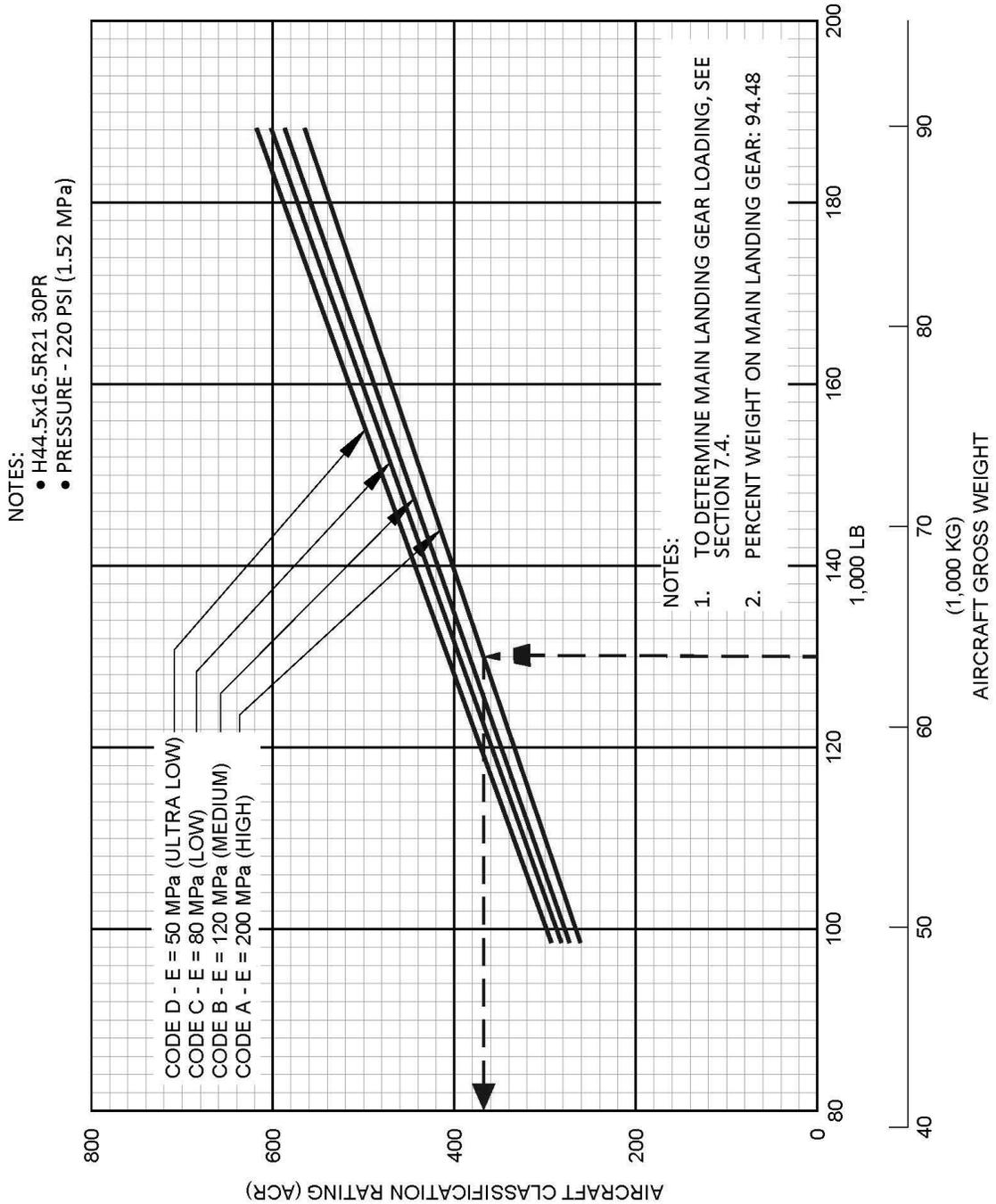
7-60

7.11.13 Aircraft Classification Rating - Rigid Pavement: Model 737-900, -900W



D6-58325-7

7.11.14 Aircraft Classification Rating - Rigid Pavement: Model 737-900ER, - 900ERW



D6-58325-7

REV A

March 2023

7-62

8.0 FUTURE 737 DERIVATIVE AIRPLANES

Development of these derivatives will depend on airline requirements. The impact of airline requirements on airport facilities will be a consideration in the configuration and design of these derivatives.

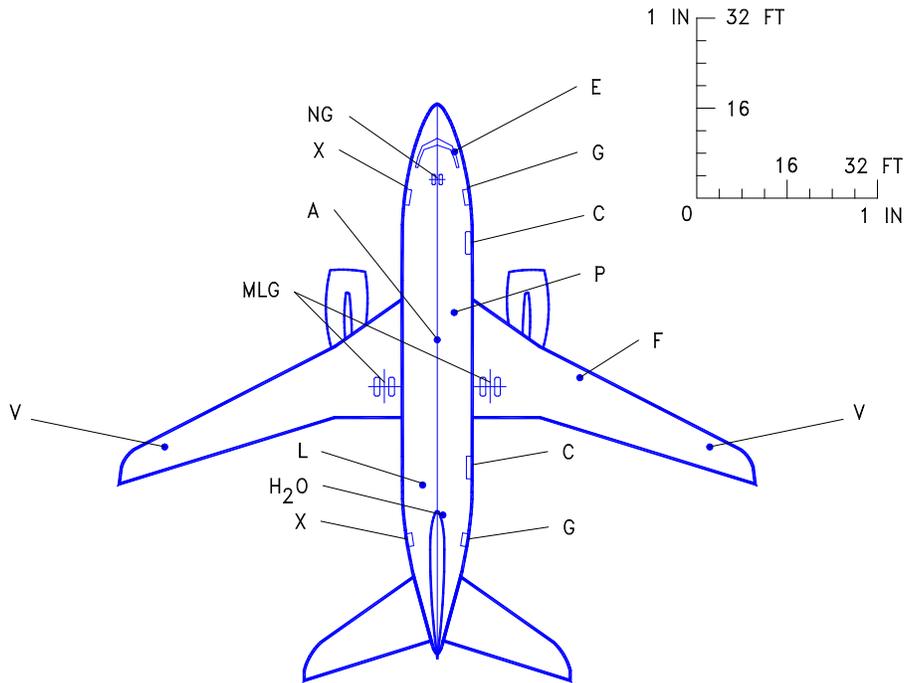
9.0 SCALED 737 DRAWINGS

The drawings in the following pages show airplane plan view drawings, drawn to approximate scale as noted. The drawings may not come out to exact scale when printed or copied from this document. Printing scale should be adjusted when attempting to reproduce these drawings. Three-view drawing files of the 737 airplane models, along with other Boeing airplane models, can be downloaded from the following website:

<http://www.boeing.com/airports>

9.1 MODEL 737-600

9.1.1 Scaled Drawings – 1 IN. = 32 FT: Model 737-600



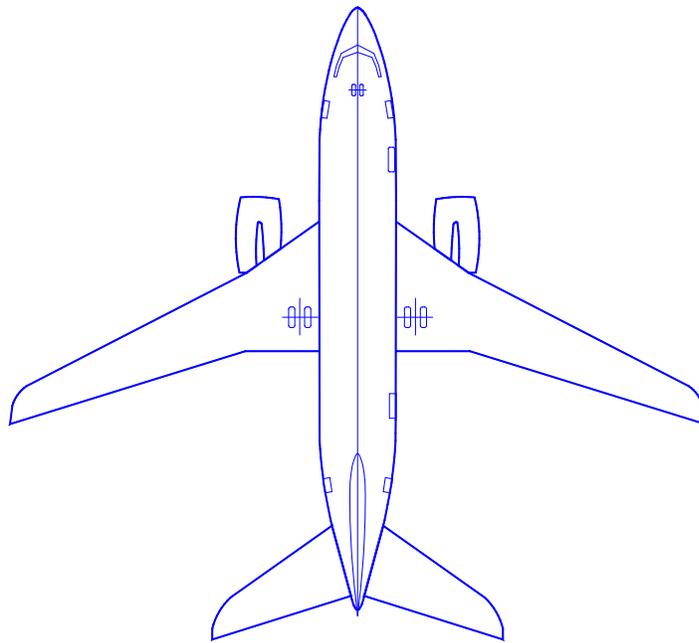
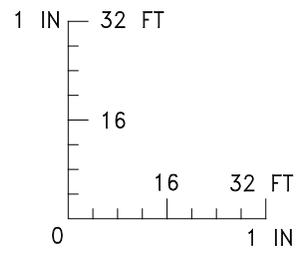
LEGEND

- A AIR CONDITIONING
- C CARGO DOOR
- E ELECTRICAL
- F FUEL
- G SERVICE DOOR
- H₂O POTABLE WATER
- MLG MAIN LANDING GEAR
- NG NOSE LANDING GEAR
- P PNEUMATIC (AIR START)
- L VACUUM LAVATORY SERVICE
- V FUEL VENT
- X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

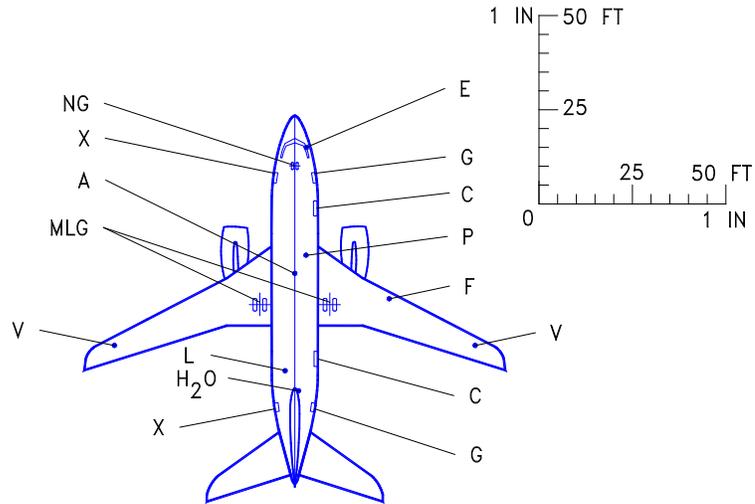
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.1.2 Scaled Drawings – 1 IN. = 32 FT: Model 737-600



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.1.3 Scaled Drawings – 1 IN. = 50 FT: Model 737-600



LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

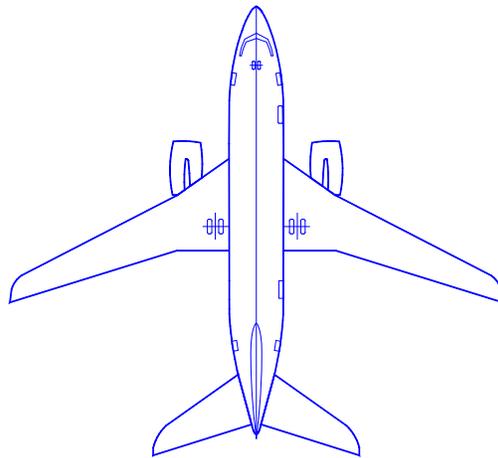
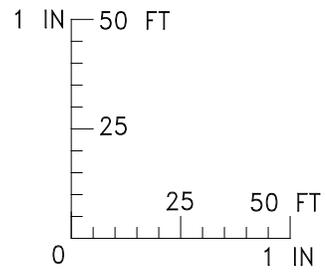
D6-58325-7

REV A

March 2023

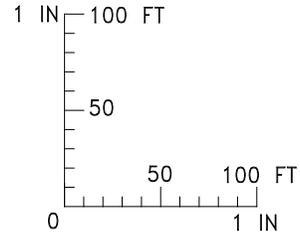
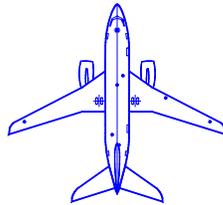
9-4

9.1.4 Scaled Drawings – 1 IN. = 50 FT: Model 737-600



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.1.5 Scaled Drawings – 1 IN. = 100 FT: Model 737-600



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

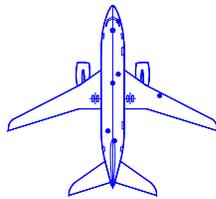
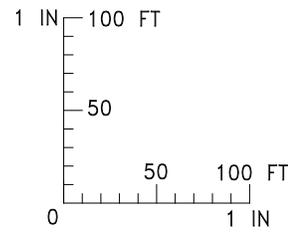
D6-58325-7

REV A

March 2023

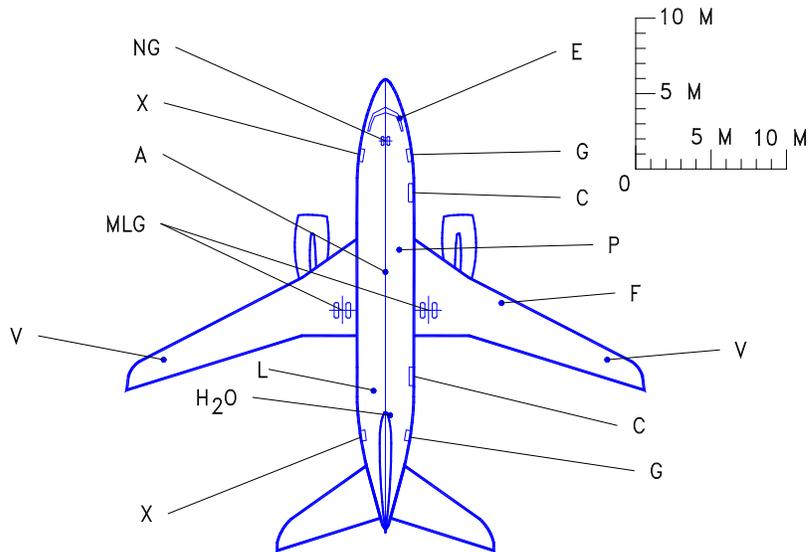
9-6

9.1.6 Scaled Drawings – 1 IN. = 100 FT: Model 737-600



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.1.7 Scaled Drawings – 1:500: Model 737-600



LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

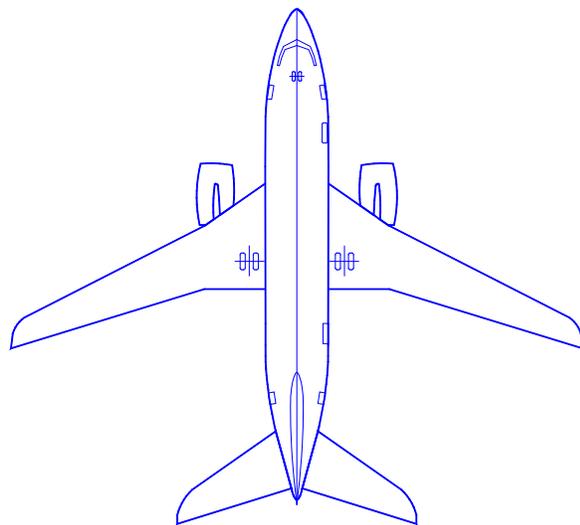
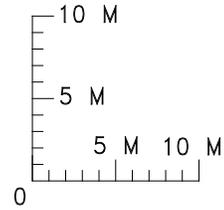
D6-58325-7

REV A

March 2023

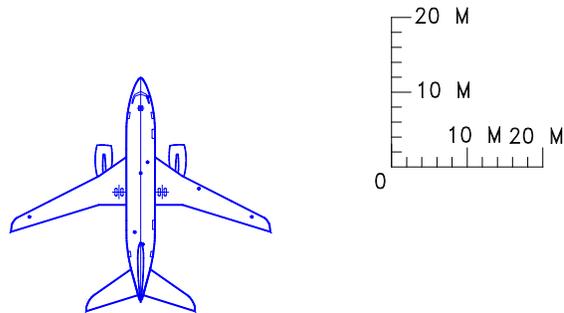
9-8

9.1.8 Scaled Drawings – 1:500: Model 737-600



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.1.9 Scaled Drawings – 1:1000: Model 737-600



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

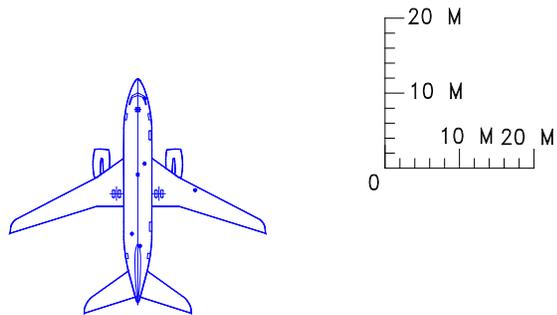
D6-58325-7

REV A

March 2023

9-10

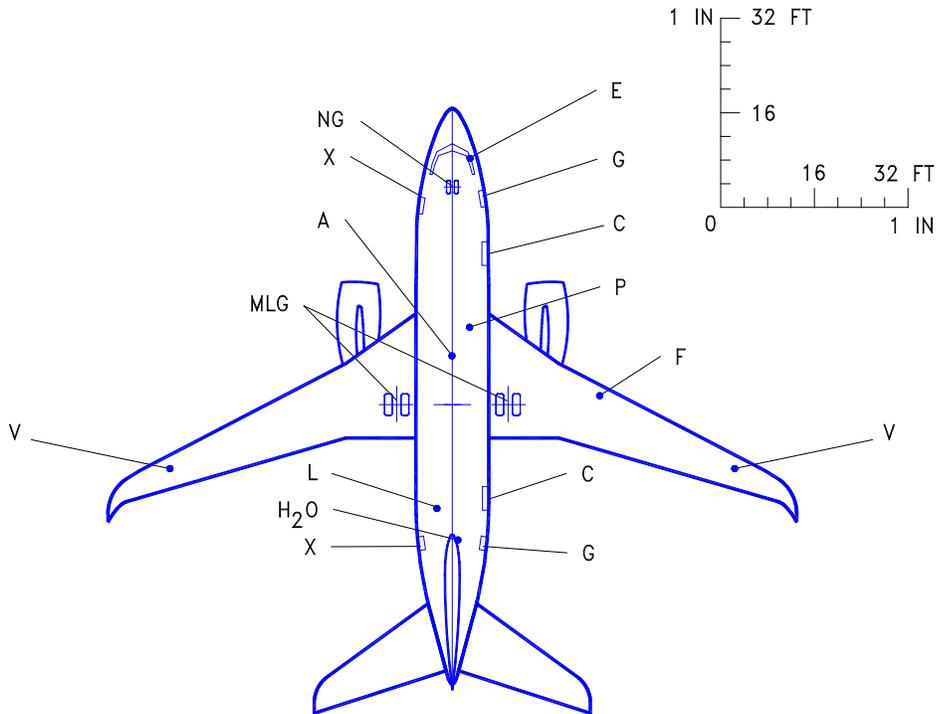
9.1.10 Scaled Drawings – 1:1000: Model 737-600



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.2 MODEL 737-600W

9.2.1 Scaled Drawings – 1 IN. = 32 FT: Model 737-600W



LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

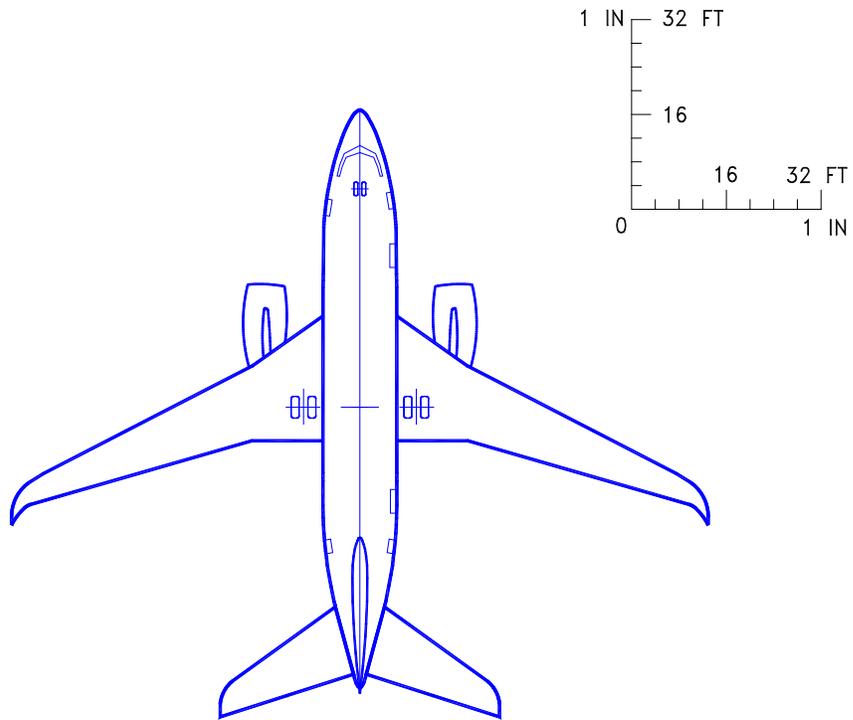
D6-58325-7

REV A

March 2023

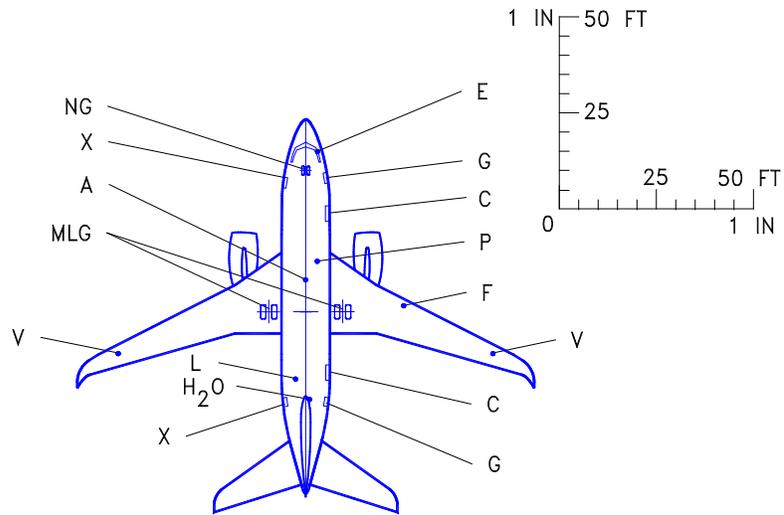
9-12

9.2.2 Scaled Drawings – 1 IN. = 32 FT: Model 737-600W



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.2.3 Scaled Drawings – 1 IN. = 50 FT: Model 737-600W



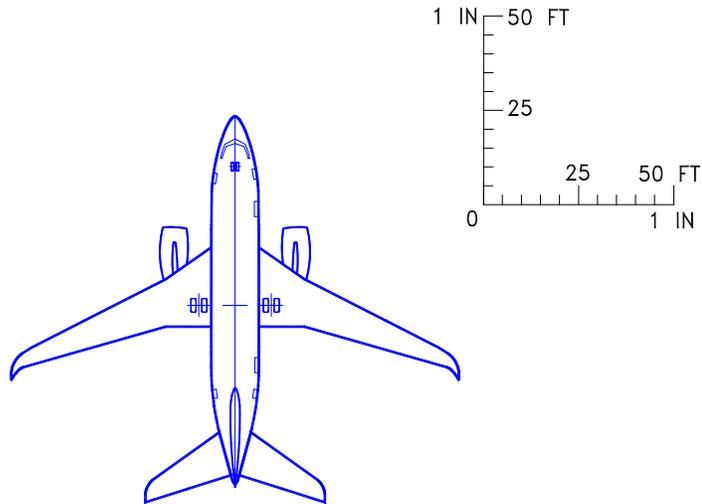
LEGEND

- A AIR CONDITIONING
- C CARGO DOOR
- E ELECTRICAL
- F FUEL
- G SERVICE DOOR
- H₂O POTABLE WATER
- MLG MAIN LANDING GEAR
- NG NOSE LANDING GEAR
- P PNEUMATIC (AIR START)
- L VACUUM LAVATORY SERVICE
- V FUEL VENT
- X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

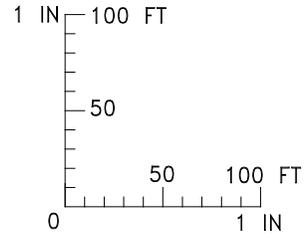
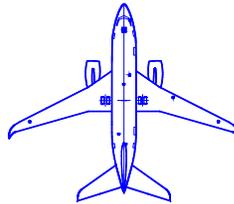
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.2.4 Scaled Drawings – 1 IN. = 50 FT: Model 737-600W



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.2.5 Scaled Drawings – 1 IN. = 100 FT: Model 737-600W



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

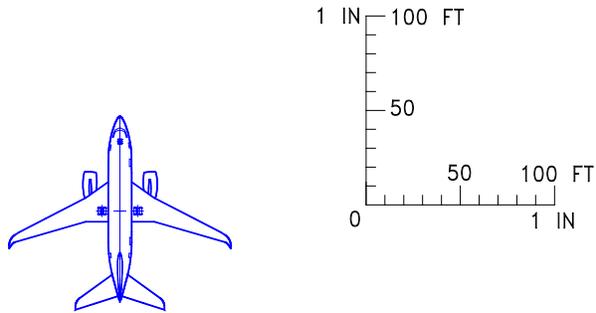
LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

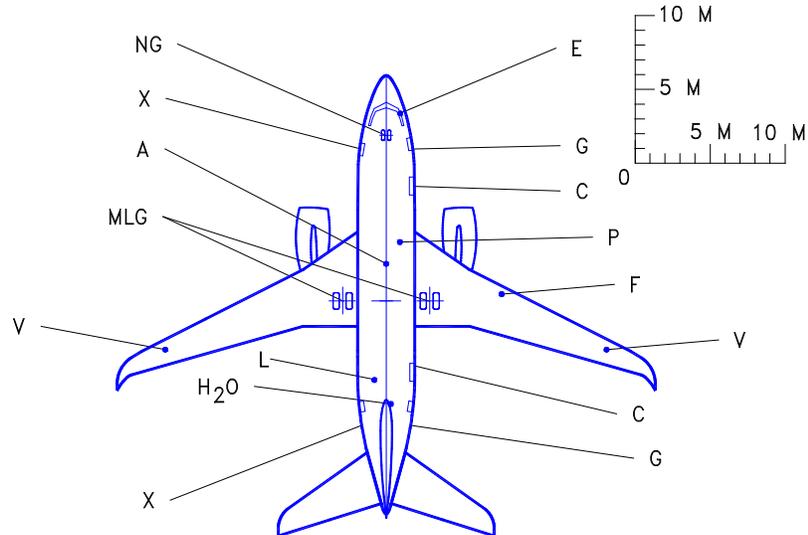
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.2.6 Scaled Drawings – 1 IN. = 100 FT: Model 737-600W



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.2.7 Scaled Drawings – 1:500: Model 737-600W



LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

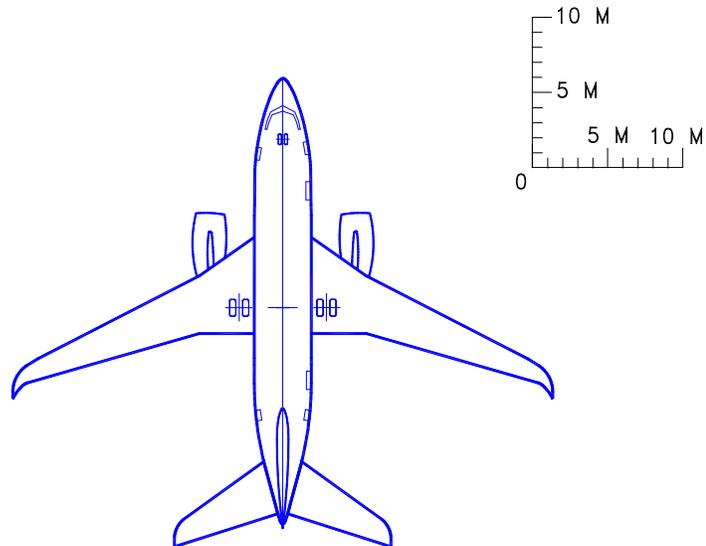
D6-58325-7

REV A

March 2023

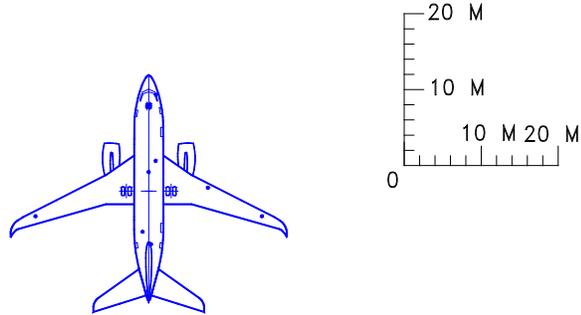
9-18

9.2.8 Scaled Drawings – 1:500: Model 737-600W



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.2.9 Scaled Drawings – 1:1000: Model 737-600W



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

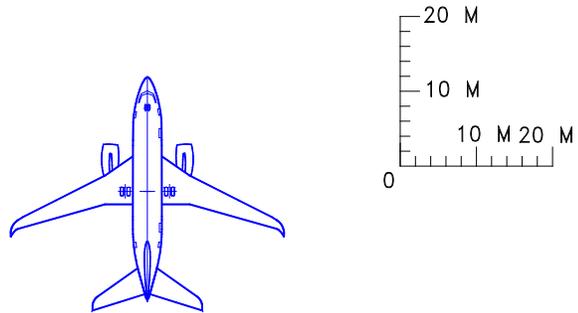
D6-58325-7

REV A

March 2023

9-20

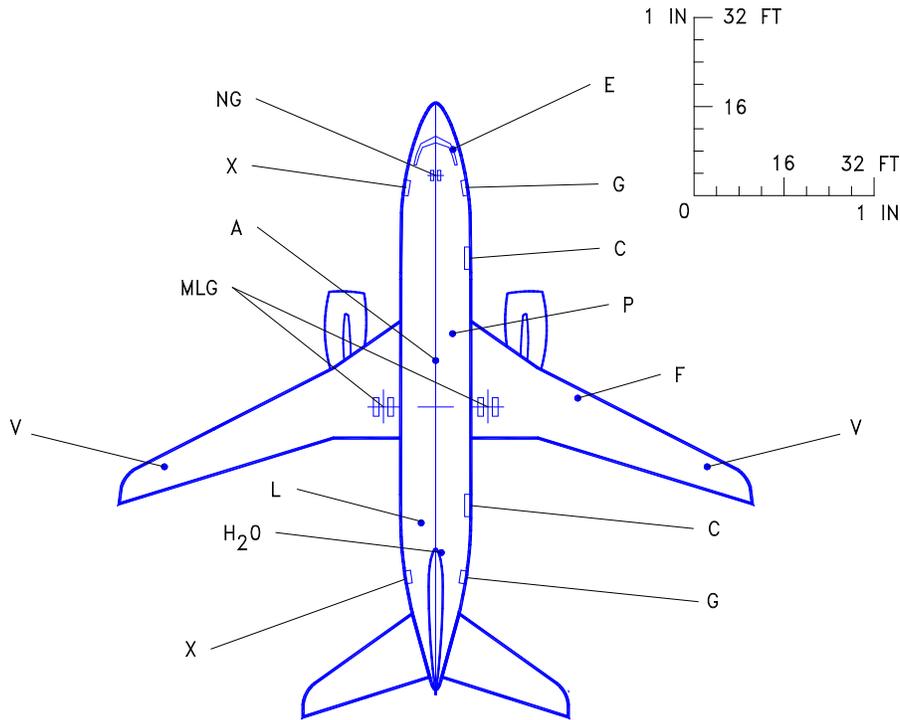
9.2.10 Scaled Drawings – 1:1000: Model 737-600W



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.3 MODEL 737-700

9.3.1 Scaled Drawings – 1 IN. = 32 FT: Model 737-700



LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

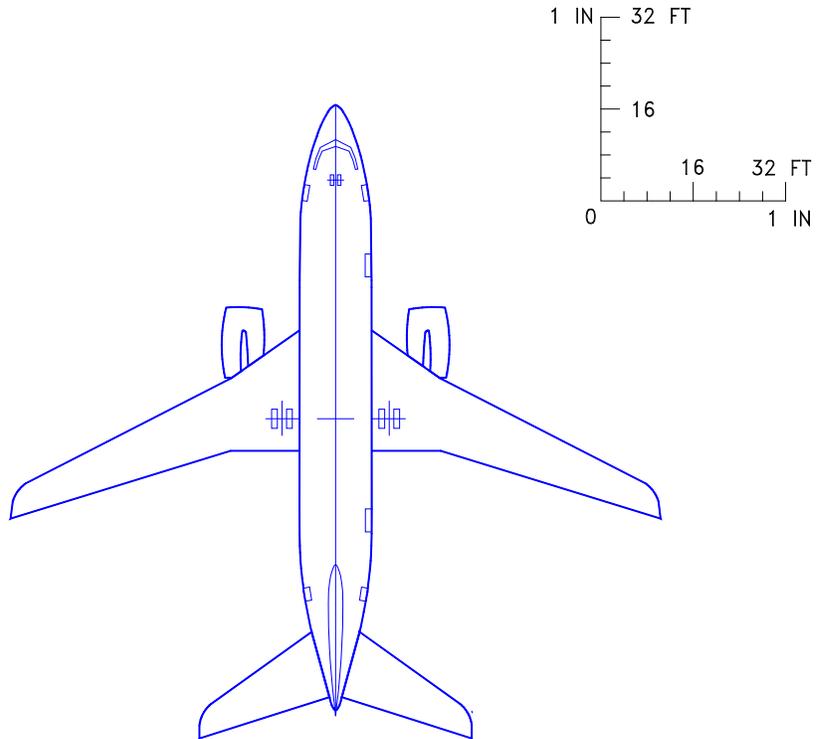
D6-58325-7

REV A

March 2023

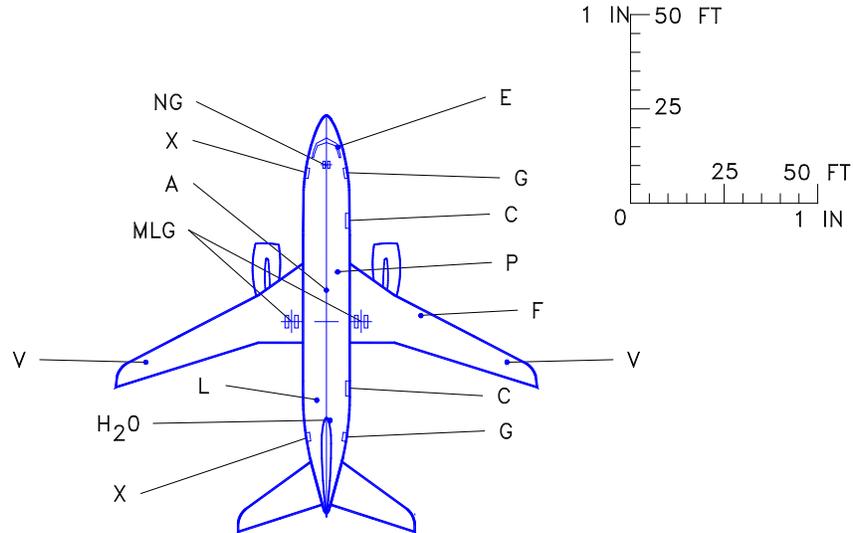
9-22

9.3.2 Scaled Drawings – 1 IN. = 32 FT: Model 737-700



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.3.3 Scaled Drawings – 1 IN. = 50 FT: Model 737-700



LEGEND

- A AIR CONDITIONING
- C CARGO DOOR
- E ELECTRICAL
- F FUEL
- G SERVICE DOOR
- H₂O POTABLE WATER
- MLG MAIN LANDING GEAR
- NG NOSE LANDING GEAR
- P PNEUMATIC (AIR START)
- L VACUUM LAVATORY SERVICE
- V FUEL VENT
- X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

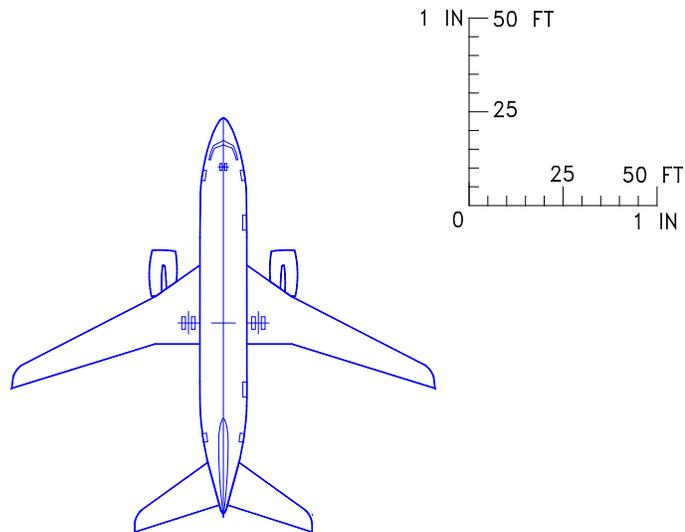
D6-58325-7

REV A

March 2023

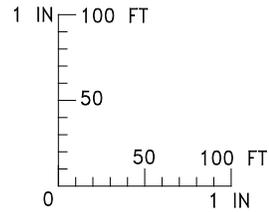
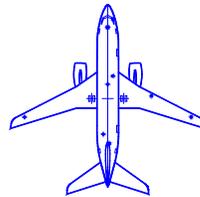
9-24

9.3.4 Scaled Drawings – 1 IN. = 50 FT: Model 737-700



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.3.5 Scaled Drawings – 1 IN. = 100 FT: Model 737-700



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

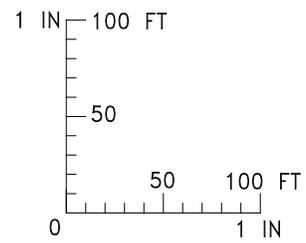
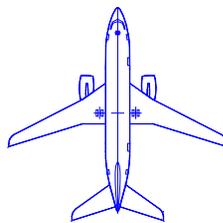
LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

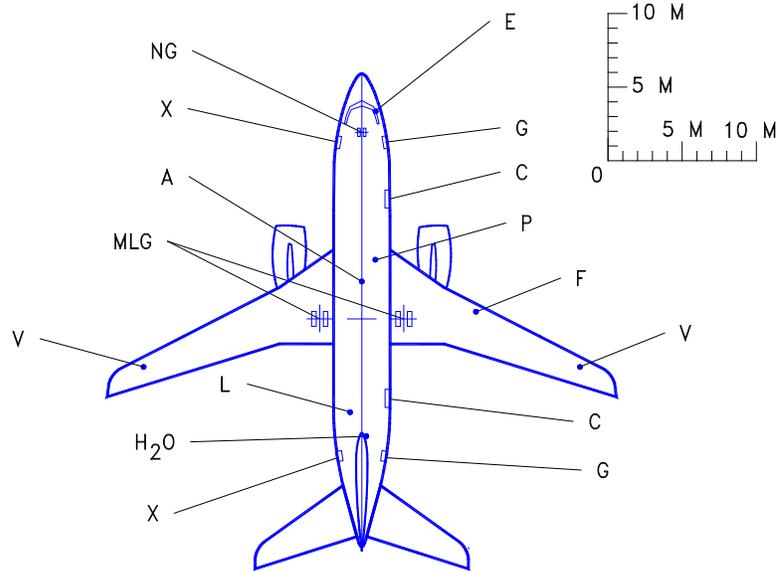
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.3.6 Scaled Drawings – 1 IN. = 100 FT: Model 737-700



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.3.7 Scaled Drawings – 1:500: Model 737-700



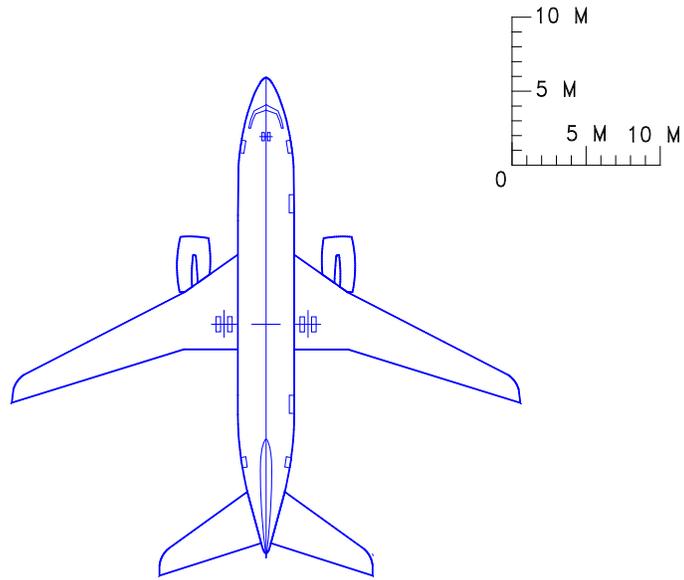
LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

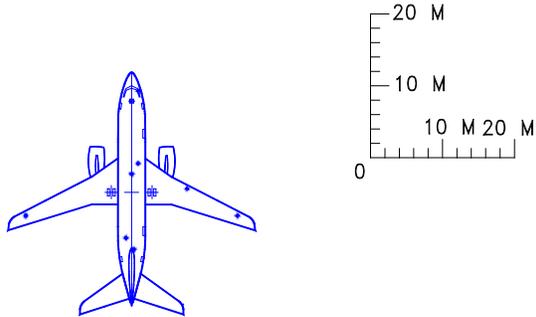
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.3.8 Scaled Drawings – 1:500: Model 737-700



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.3.9 Scaled Drawings – 1:1000: Model 737-700



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

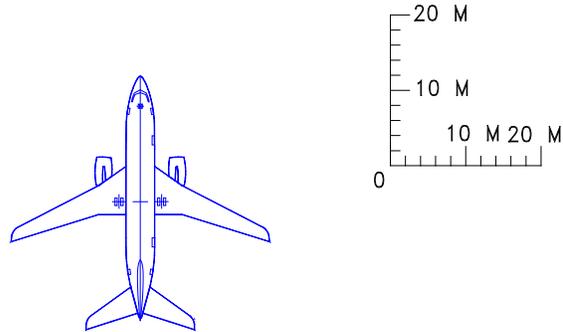
LEGEND

A AIR CONDITIONING
C CARGO DOOR
E ELECTRICAL
F FUEL
G SERVICE DOOR
H₂O POTABLE WATER
MLG MAIN LANDING GEAR
NG NOSE LANDING GEAR
P PNEUMATIC (AIR START)
L VACUUM LAVATORY SERVICE
V FUEL VENT
X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

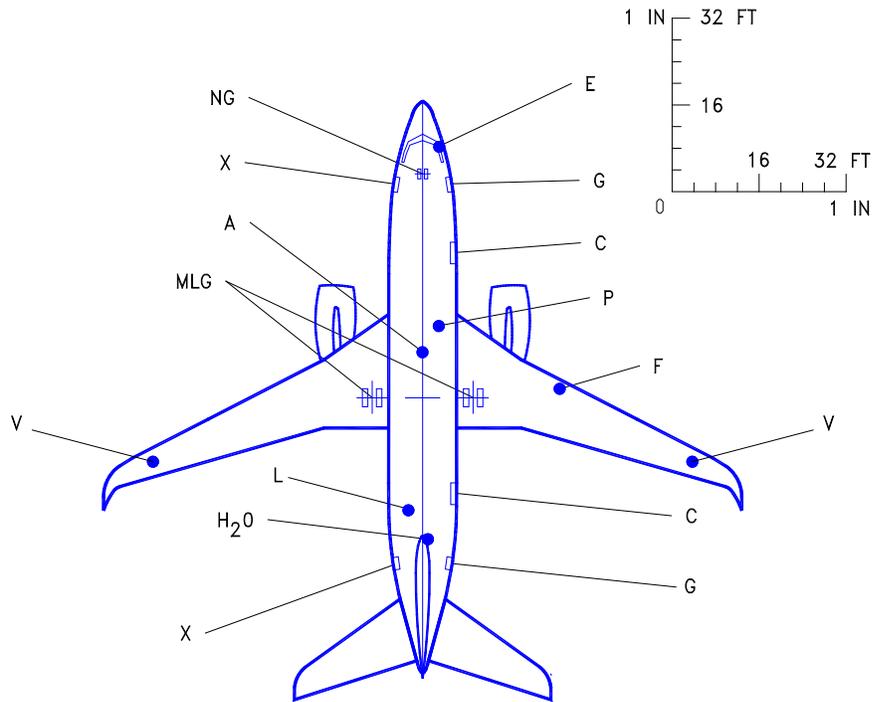
9.3.10 Scaled Drawings – 1:1000: Model 737-700



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.4 MODEL 737-700W, BBJ1

9.4.1 Scaled Drawings – 1 IN. = 32 FT: Model 737-700W



LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

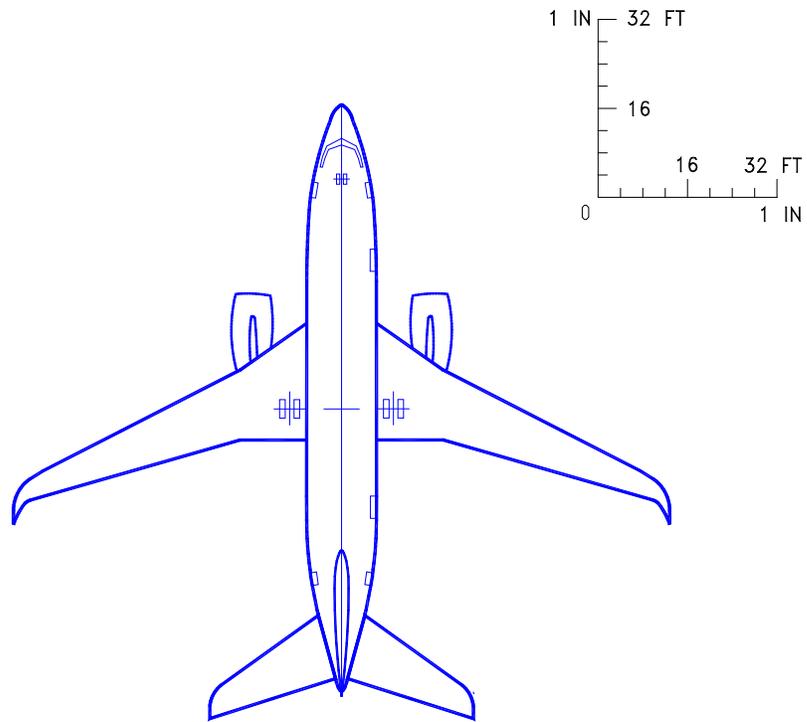
D6-58325-7

REV A

March 2023

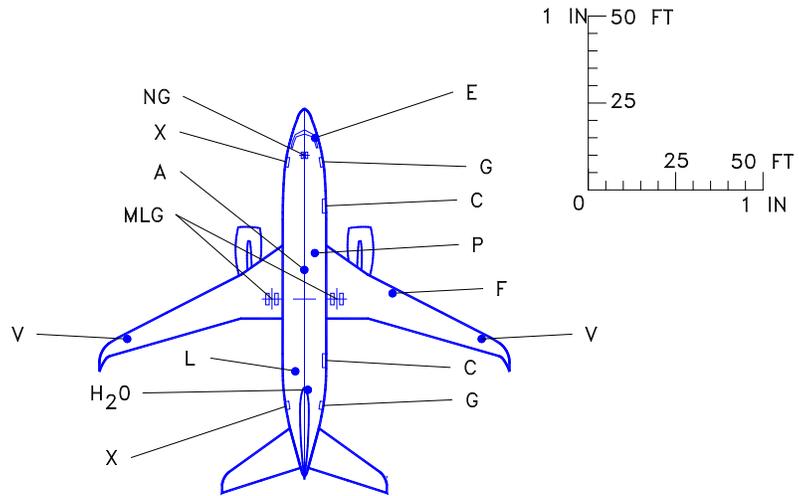
9-32

9.4.2 Scaled Drawings – 1 IN. = 32 FT: Model 737 BBJ1



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.4.3 Scaled Drawings – 1 IN. = 50 FT: Model 737-700W, BBJ1



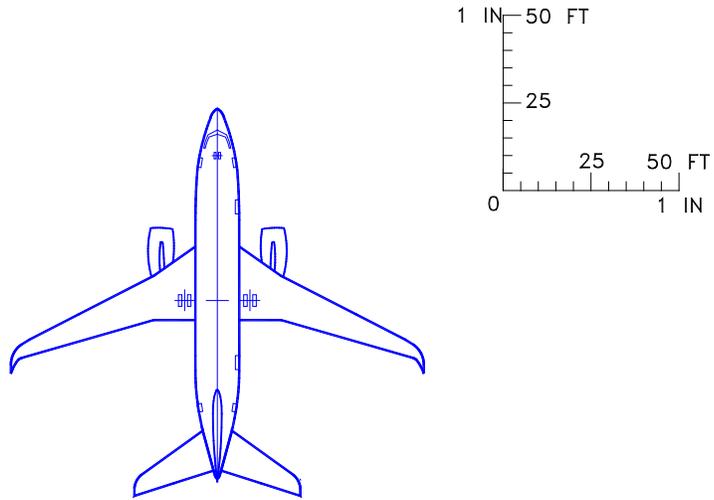
LEGEND

- A AIR CONDITIONING
- C CARGO DOOR
- E ELECTRICAL
- F FUEL
- G SERVICE DOOR
- H₂O POTABLE WATER
- MLG MAIN LANDING GEAR
- NG NOSE LANDING GEAR
- P PNEUMATIC (AIR START)
- L VACUUM LAVATORY SERVICE
- V FUEL VENT
- X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

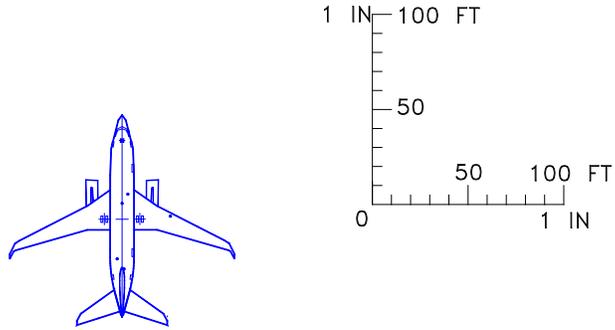
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.4.4 Scaled Drawings – 1 IN. = 50 FT: Model 737-700W, BBJ1



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.4.5 Scaled Drawings – 1 IN. = 100 FT: Model 737-700W, BBJ1



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

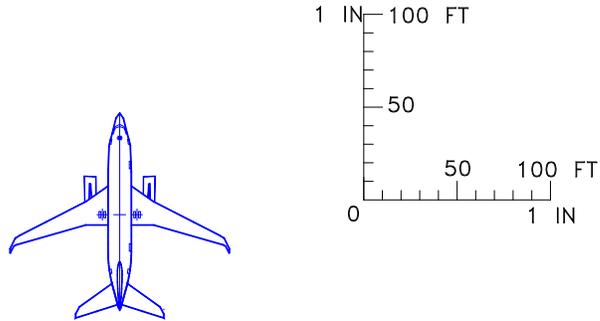
D6-58325-7

REV A

March 2023

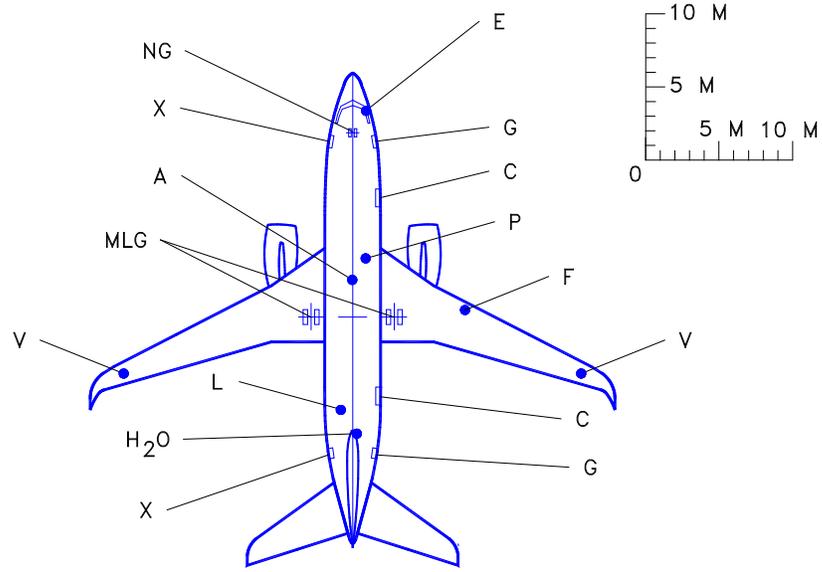
9-36

9.4.6 Scaled Drawings – 1 IN. = 100 FT: Model 737-700W, BBJ1



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.4.7 Scaled Drawings – 1:500: Model 737-700W, BBJ1

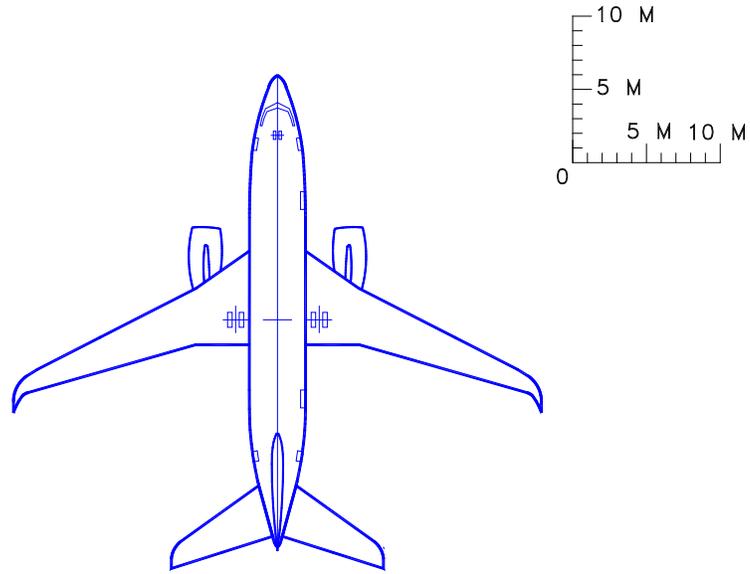


LEGEND

- A AIR CONDITIONING
 - C CARGO DOOR
 - E ELECTRICAL
 - F FUEL
 - G SERVICE DOOR
 - H₂O POTABLE WATER
 - MLG MAIN LANDING GEAR
 - NG NOSE LANDING GEAR
 - P PNEUMATIC (AIR START)
 - L VACUUM LAVATORY SERVICE
 - V FUEL VENT
 - X PASSENGER DOOR
- NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

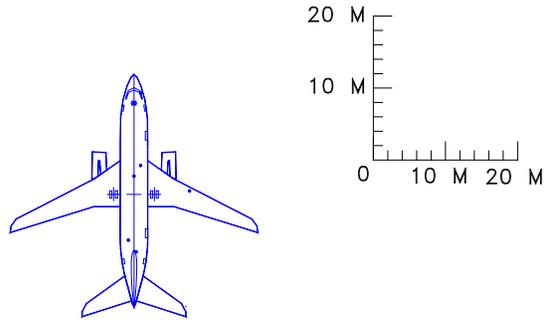
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.4.8 Scaled Drawings – 1:500: Model 737-700W, BBJ1



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.4.9 Scaled Drawings – 1:1000: Model 737-700W, BBJ1



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

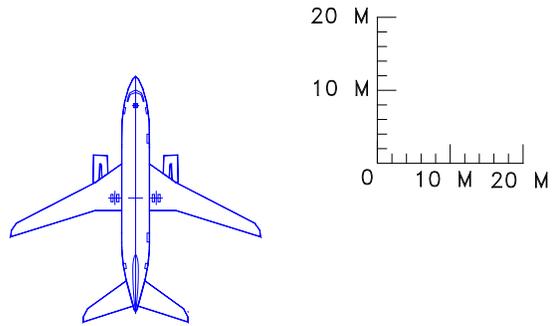
D6-58325-7

REV A

March 2023

9-40

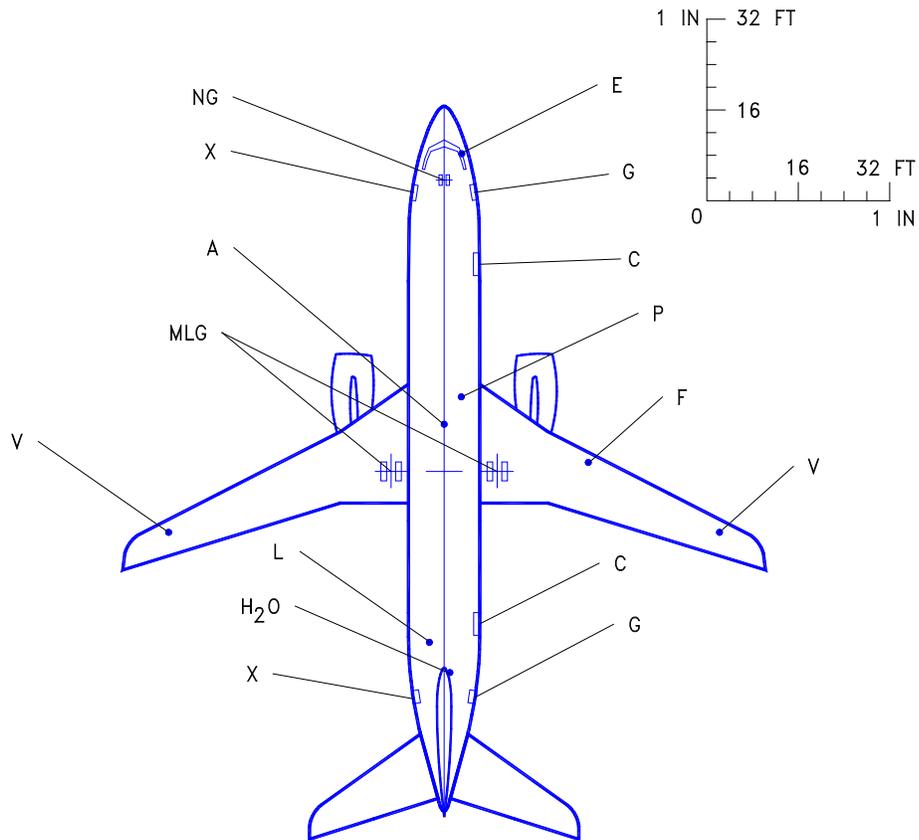
9.4.10 Scaled Drawings – 1:1000: Model 737-700W, BBJ1



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.5 MODEL 737-800

9.5.1 Scaled Drawings – 1 IN. = 32 FT: Model 737-800



LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

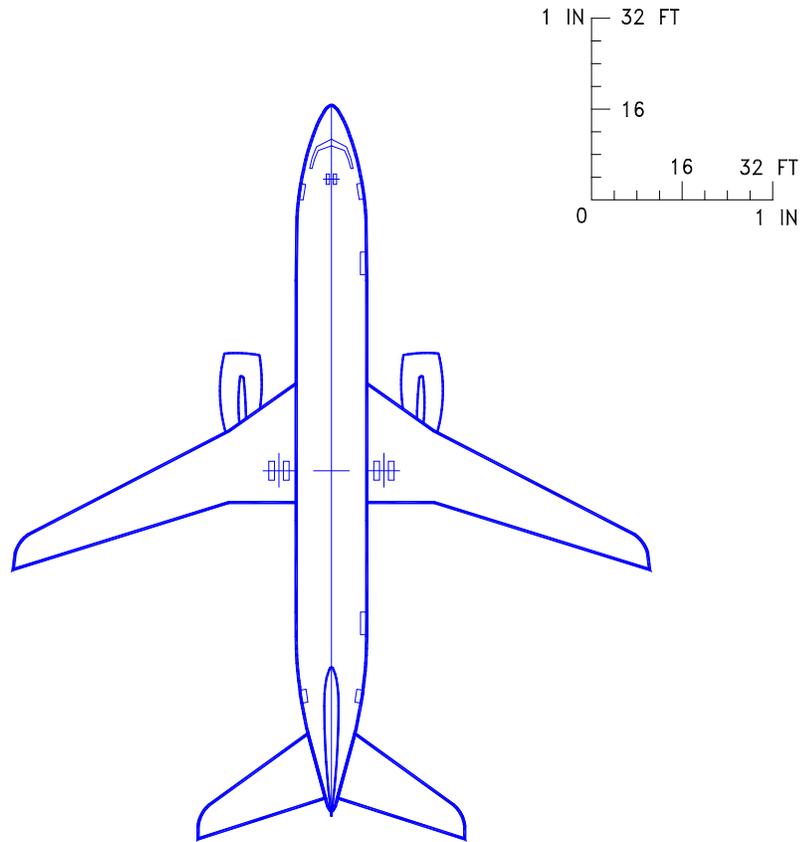
D6-58325-7

REV A

March 2023

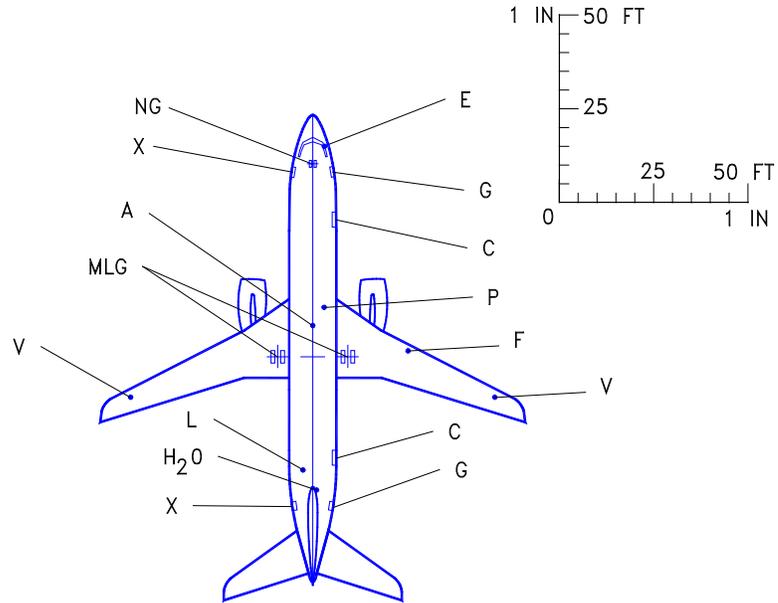
9-42

9.5.2 Scaled Drawings – 1 IN. = 32 FT: Model 737-800



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.5.3 Scaled Drawings – 1 IN. = 50 FT: Model 737-800



LEGEND

- A AIR CONDITIONING
- C CARGO DOOR
- E ELECTRICAL
- F FUEL
- G SERVICE DOOR
- H₂O POTABLE WATER
- MLG MAIN LANDING GEAR
- NG NOSE LANDING GEAR
- P PNEUMATIC (AIR START)
- L VACUUM LAVATORY SERVICE
- V FUEL VENT
- X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

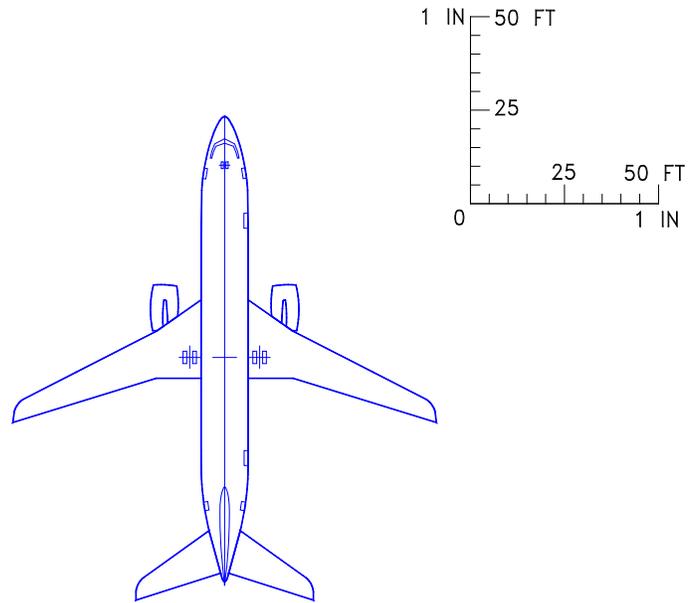
D6-58325-7

REV A

March 2023

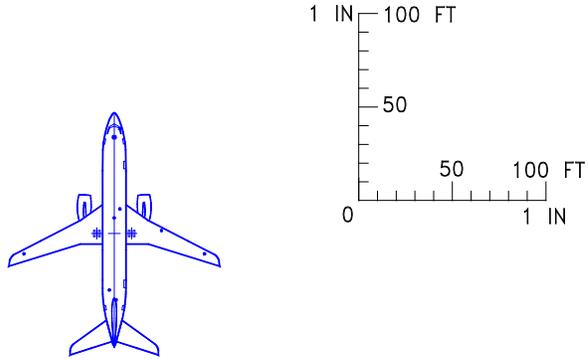
9-44

9.5.4 Scaled Drawings – 1 IN. = 50 FT: Model 737-800



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.5.5 Scaled Drawings – 1 IN. = 100 FT: Model 737-800



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A AIR CONDITIONING
C CARGO DOOR
E ELECTRICAL
F FUEL
G SERVICE DOOR
H₂O POTABLE WATER
MLG MAIN LANDING GEAR
NG NOSE LANDING GEAR
P PNEUMATIC (AIR START)
L VACUUM LAVATORY SERVICE
V FUEL VENT
X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

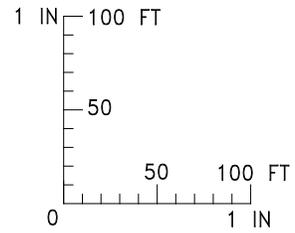
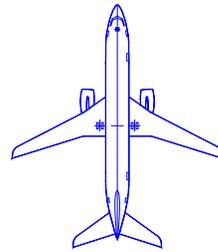
D6-58325-7

REV A

March 2023

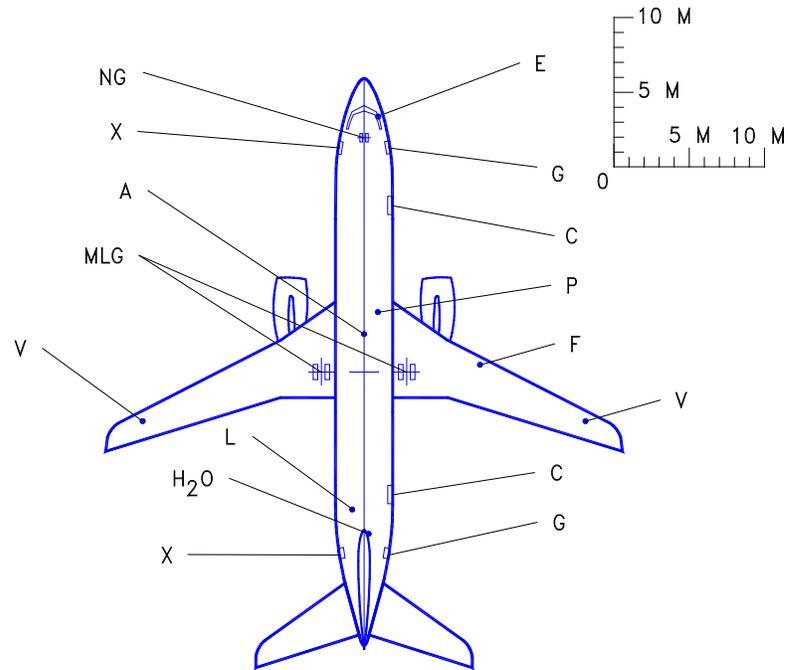
9-46

9.5.6 Scaled Drawings – 1 IN. = 100 FT: Model 737-800



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.5.7 Scaled Drawings – 1:500: Model 737-800



LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

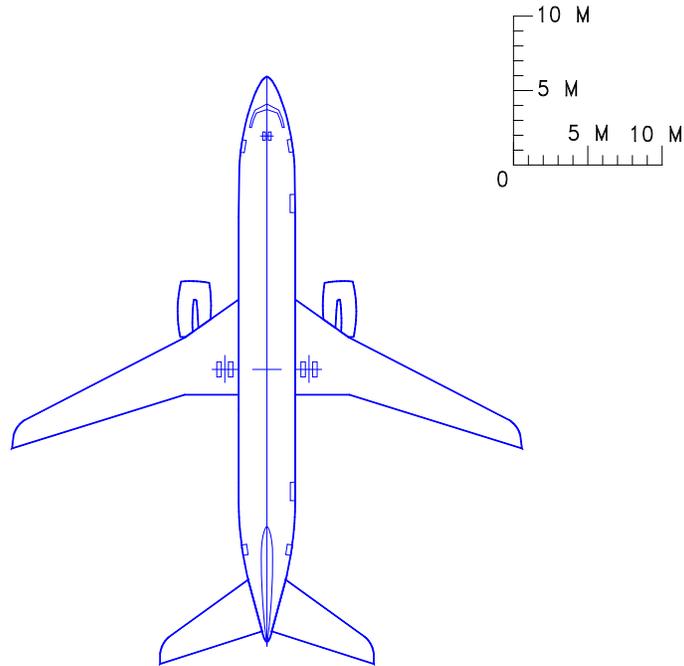
D6-58325-7

REV A

March 2023

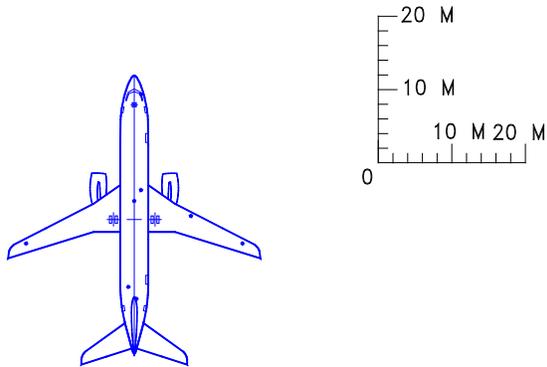
9-48

9.5.8 Scaled Drawings – 1:500: Model 737-800



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.5.9 Scaled Drawings – 1:1000: Model 737-800



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

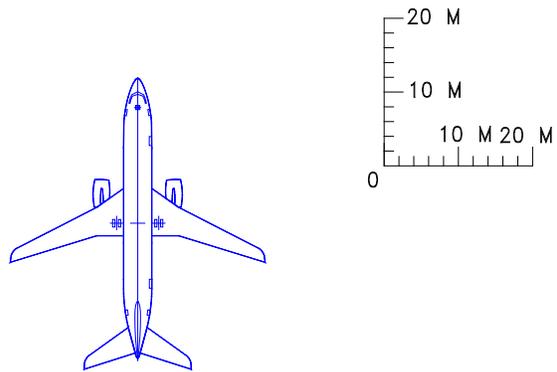
D6-58325-7

REV A

March 2023

9-50

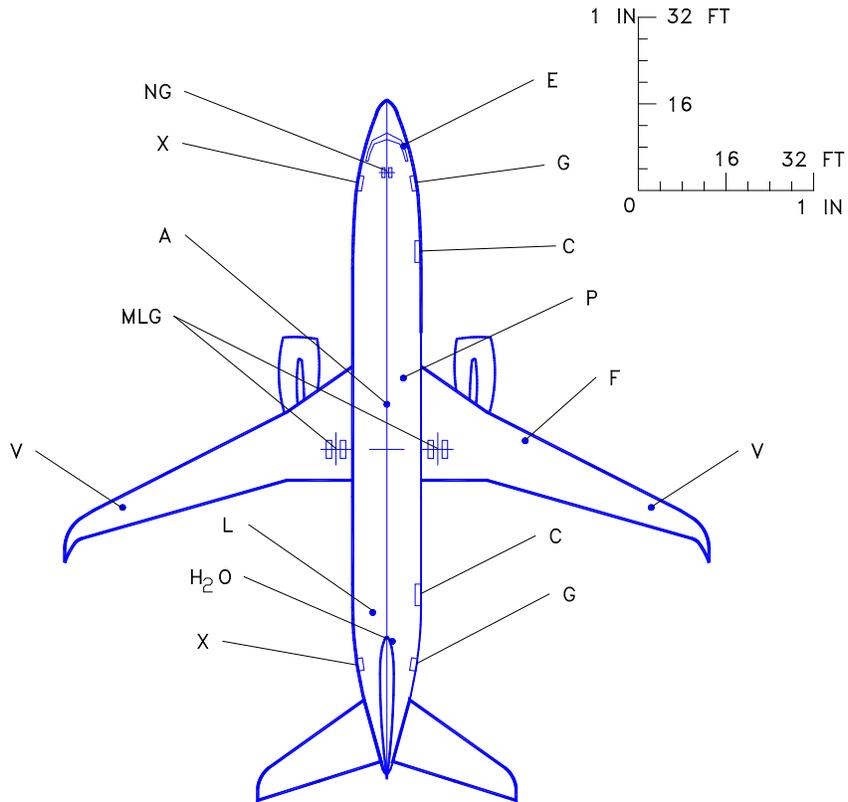
9.5.10 Scaled Drawings – 1:1000: Model 737-800



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.6 MODEL 737-800W, BBJ2

9.6.1 Scaled Drawings – 1 IN. = 32 FT: Model 737-800W, BBJ2

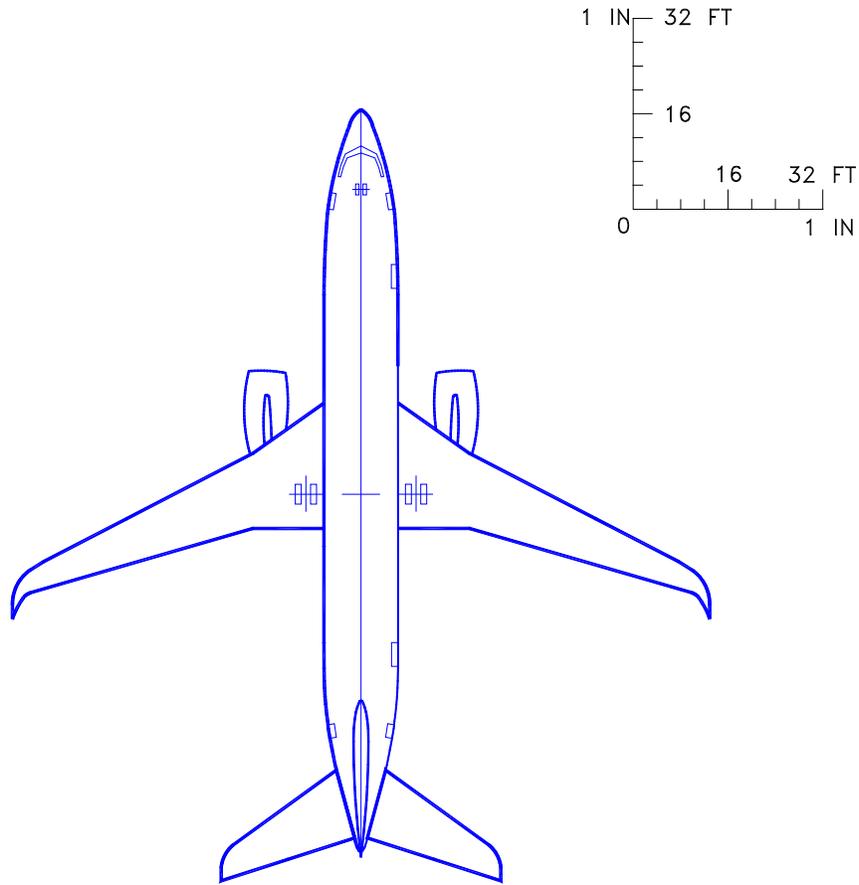


LEGEND

- A AIR CONDITIONING
 - C CARGO DOOR
 - E ELECTRICAL
 - F FUEL
 - G SERVICE DOOR
 - H₂O POTABLE WATER
 - MLG MAIN LANDING GEAR
 - NG NOSE LANDING GEAR
 - P PNEUMATIC (AIR START)
 - L VACUUM LAVATORY SERVICE
 - V FUEL VENT
 - X PASSENGER DOOR
- NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

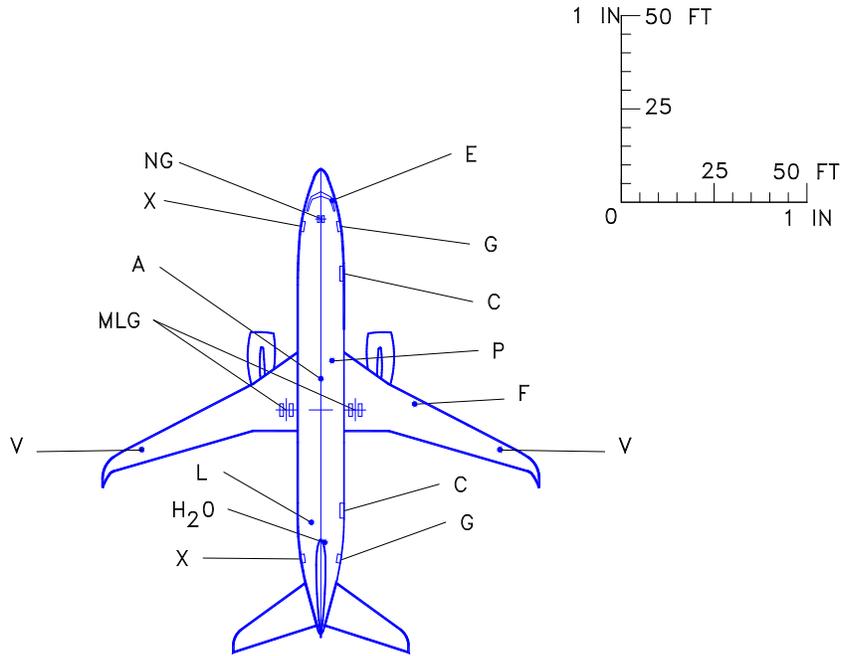
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.6.2 Scaled Drawings – 1 IN. = 32 FT: Model 737-800W, BBJ2



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.6.3 Scaled Drawings – 1 IN. = 50 FT: Model 737-800W, BBJ2



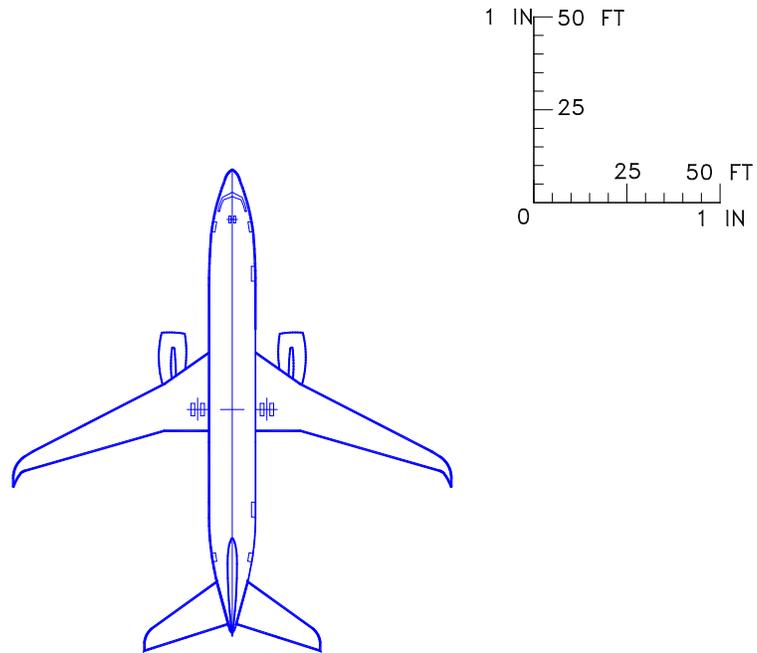
LEGEND

- A AIR CONDITIONING
- C CARGO DOOR
- E ELECTRICAL
- F FUEL
- G SERVICE DOOR
- H₂O POTABLE WATER
- MLG MAIN LANDING GEAR
- NG NOSE LANDING GEAR
- P PNEUMATIC (AIR START)
- L VACUUM LAVATORY SERVICE
- V FUEL VENT
- X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

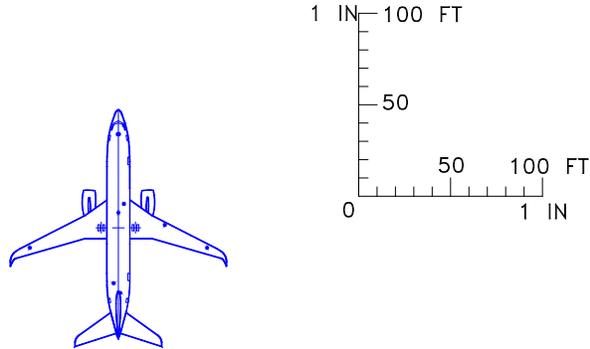
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.6.4 Scaled Drawings – 1 IN. = 50 FT: Model 737-800W, BBJ2



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.6.5 Scaled Drawings – 1 IN. = 100 FT: Model 737-800W, BBJ2



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A AIR CONDITIONING
C CARGO DOOR
E ELECTRICAL
F FUEL
G SERVICE DOOR
H₂O POTABLE WATER
MLG MAIN LANDING GEAR
NG NOSE LANDING GEAR
P PNEUMATIC (AIR START)
L VACUUM LAVATORY SERVICE
V FUEL VENT
X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

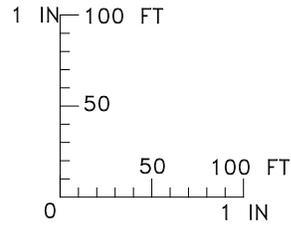
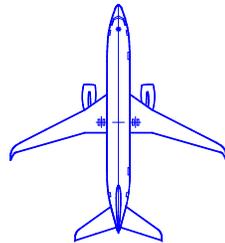
D6-58325-7

REV A

March 2023

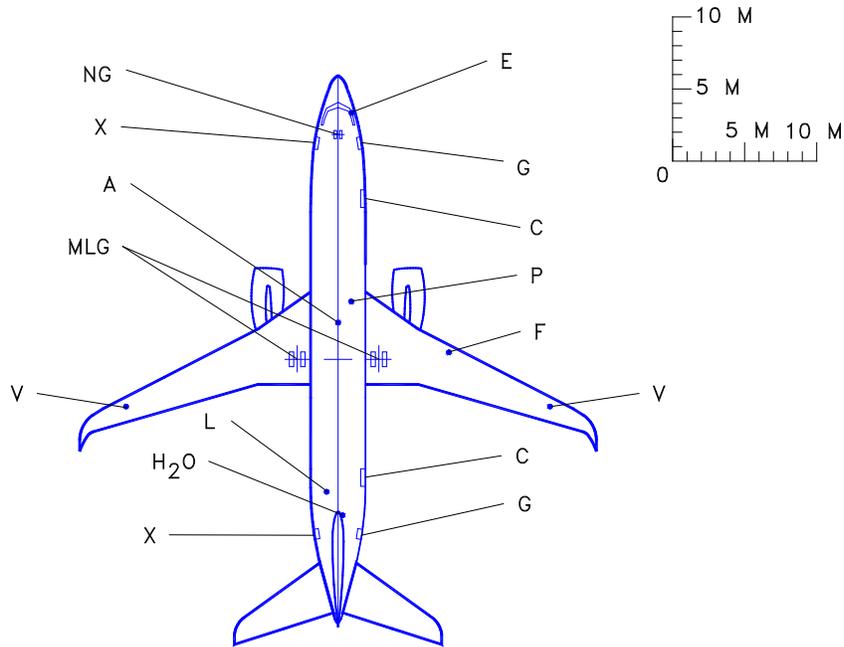
9-56

9.6.6 Scaled Drawings – 1 IN. = 100 FT: Model 737-800W, BBJ2



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.6.7 Scaled Drawings – 1:500: Model 737-800W, BBJ2



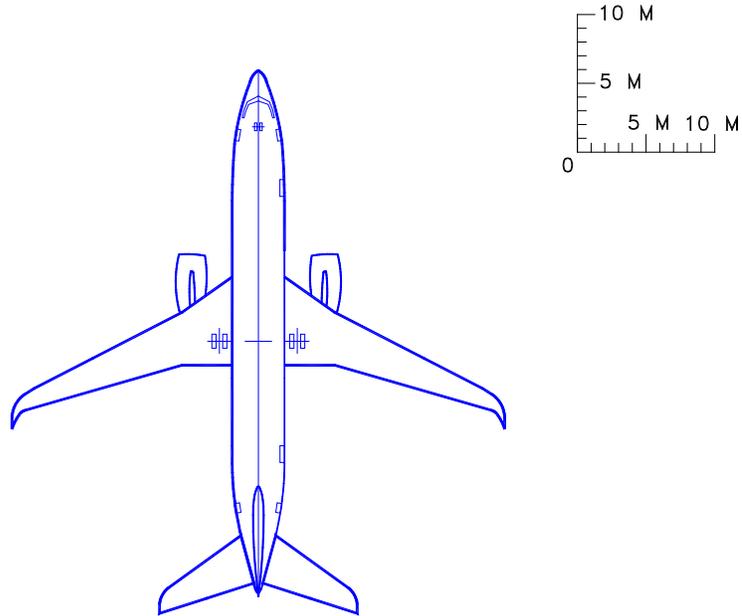
LEGEND

- A AIR CONDITIONING
- C CARGO DOOR
- E ELECTRICAL
- F FUEL
- G SERVICE DOOR
- H₂O POTABLE WATER
- MLG MAIN LANDING GEAR
- NG NOSE LANDING GEAR
- P PNEUMATIC (AIR START)
- L VACUUM LAVATORY SERVICE
- V FUEL VENT
- X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

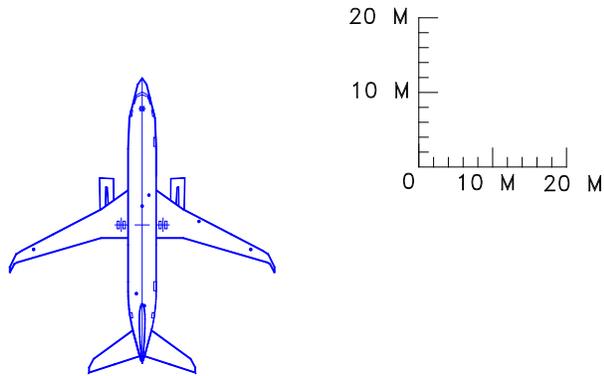
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.6.8 Scaled Drawings – 1:500: Model 737-800W, BBJ2



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.6.9 Scaled Drawings – 1:1000: Model 737-800W, BBJ2



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

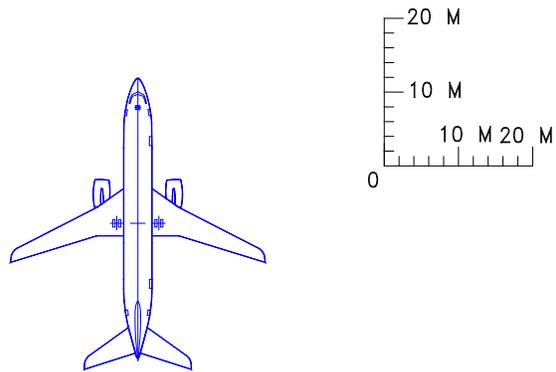
D6-58325-7

REV A

March 2023

9-60

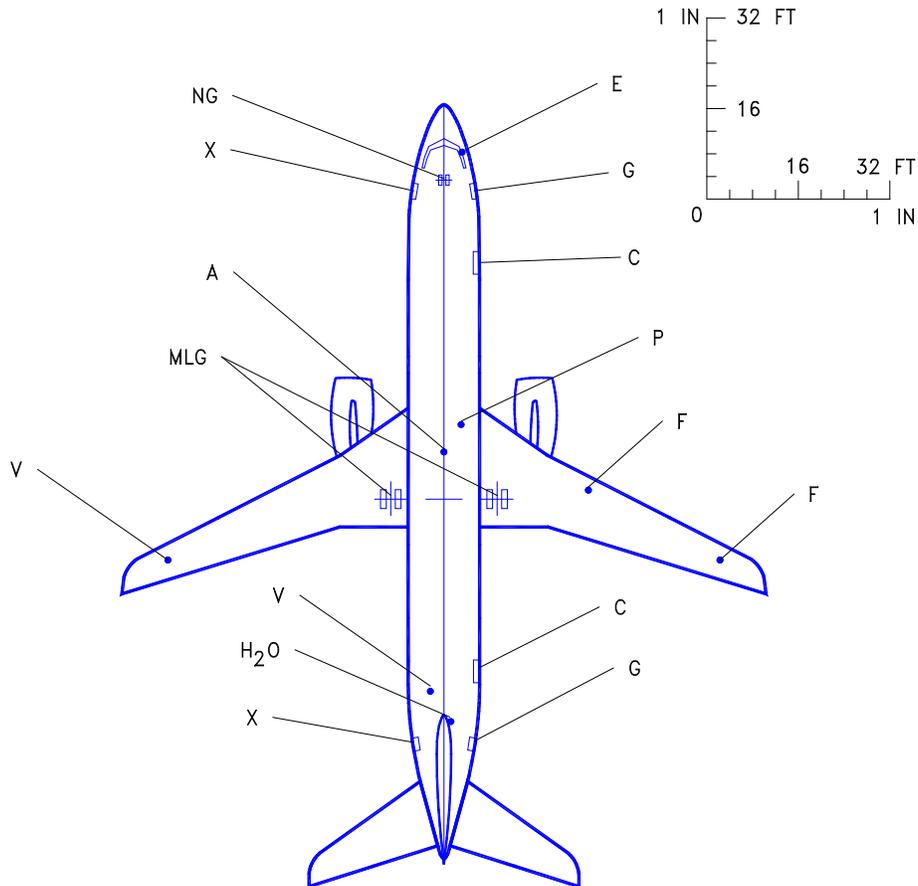
9.6.10 Scaled Drawings – 1:1000: Model 737-800W, BBJ2



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.7 MODEL 737-900, -900ER

9.7.1 Scaled Drawings – 1 IN. = 32 FT: Model 737-900, -900ER



LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

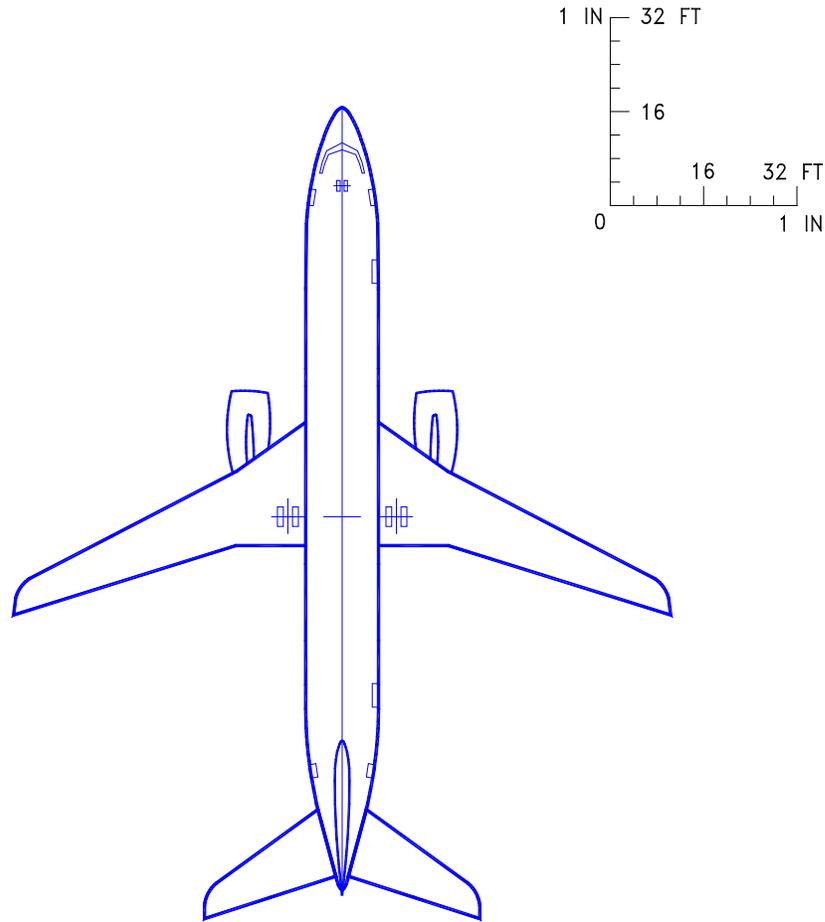
D6-58325-7

REV A

March 2023

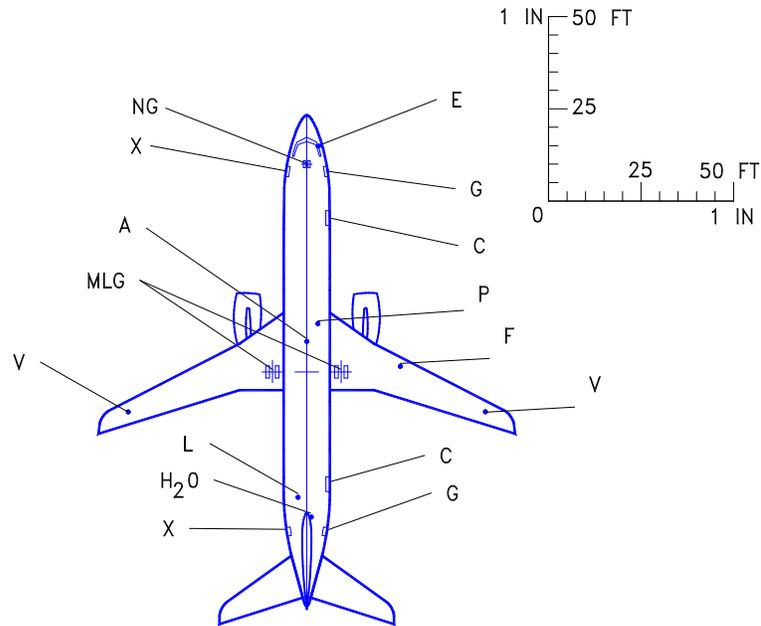
9-62

9.7.2 Scaled Drawings – 1 IN. = 32 FT: Model 737-900, -900ER



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.7.3 Scaled Drawings – 1 IN. = 50 FT: Model 737-900, -900ER



LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

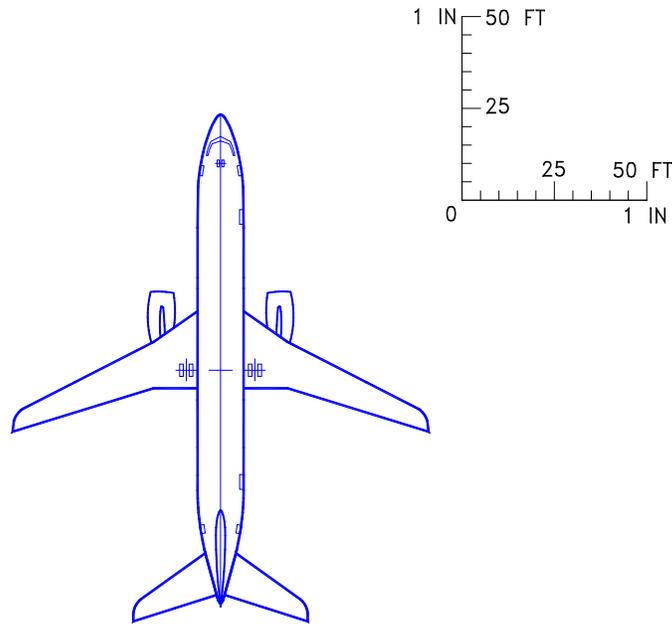
D6-58325-7

REV A

March 2023

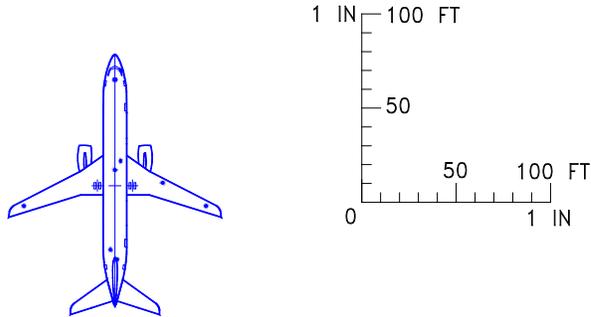
9-64

9.7.4 Scaled Drawings – 1 IN. = 50 FT: Model 737-900, -900ER



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.7.5 Scaled Drawings – 1 IN. = 100 FT: Model 737-900, -900ER



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A AIR CONDITIONING
C CARGO DOOR
E ELECTRICAL
F FUEL
G SERVICE DOOR
H₂O POTABLE WATER
MLG MAIN LANDING GEAR
NG NOSE LANDING GEAR
P PNEUMATIC (AIR START)
L VACUUM LAVATORY SERVICE
V FUEL VENT
X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

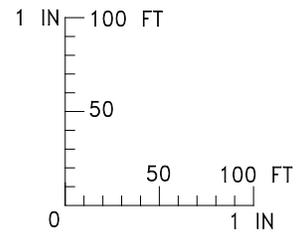
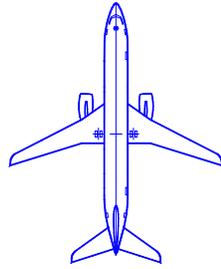
D6-58325-7

REV A

March 2023

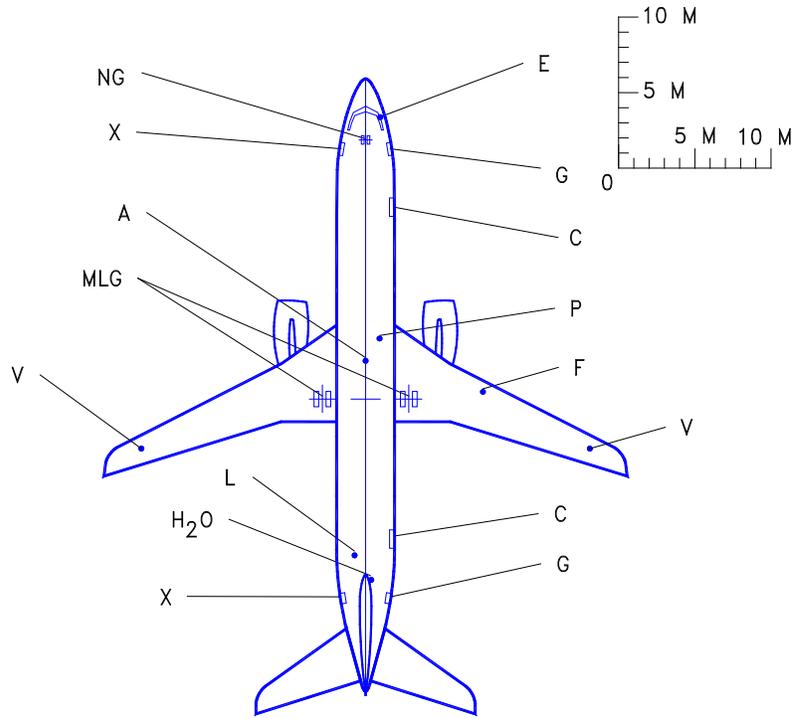
9-66

9.7.6 Scaled Drawings – 1 IN. = 100 FT: Model 737-900, -900ER



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.7.7 Scaled Drawings – 1:500: Model 737-900, -900ER



LEGEND

- A AIR CONDITIONING
- C CARGO DOOR
- E ELECTRICAL
- F FUEL
- G SERVICE DOOR
- H₂O POTABLE WATER
- MLG MAIN LANDING GEAR
- NG NOSE LANDING GEAR
- P PNEUMATIC (AIR START)
- L VACUUM LAVATORY SERVICE
- V FUEL VENT
- X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

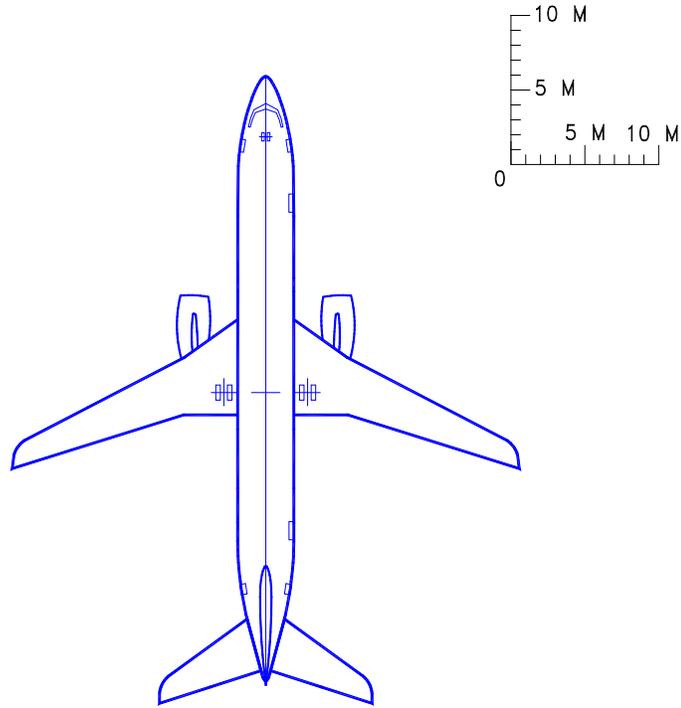
D6-58325-7

REV A

March 2023

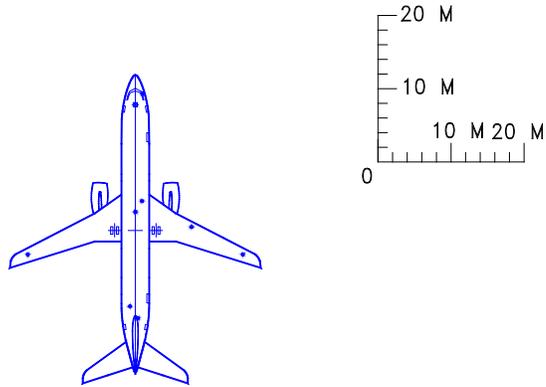
9-68

9.7.8 Scaled Drawings – 1:500: Model 737-900, -900ER



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.7.9 Scaled Drawings – 1:1000: Model 737-900, -900ER



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

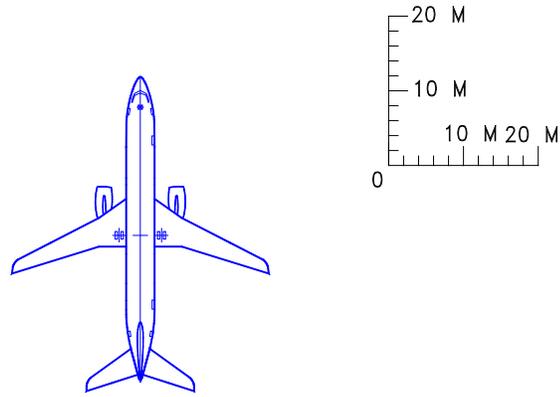
D6-58325-7

REV A

March 2023

9-70

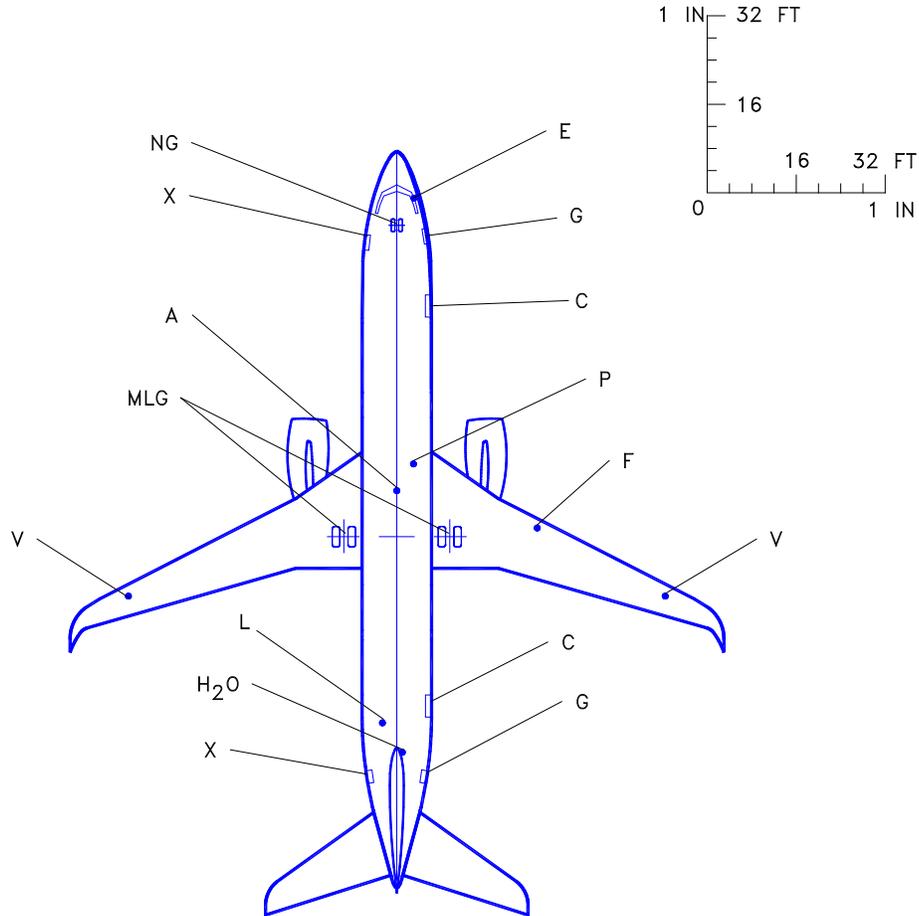
9.7.10 Scaled Drawings – 1:1000: Model 737-900, -900ER



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.8 MODEL 737-900W, -900ERW

9.8.1 Scaled Drawings – 1 IN. = 32 FT: Model 737-900W, -900ERW



LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

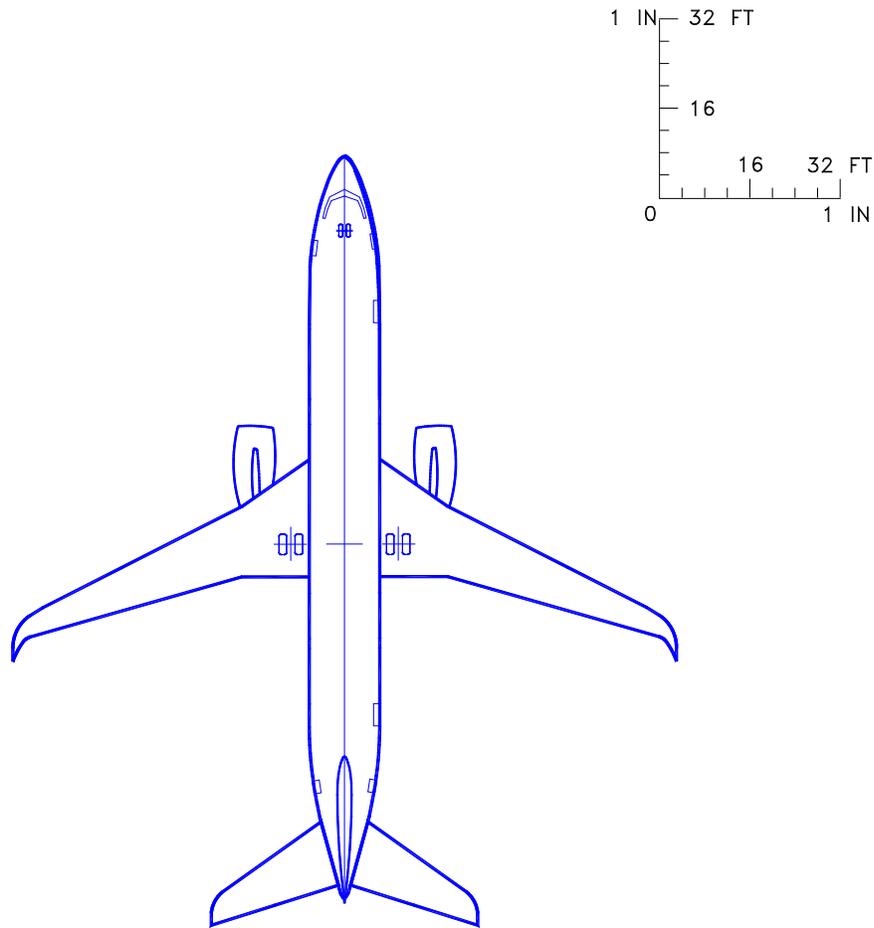
D6-58325-7

REV A

March 2023

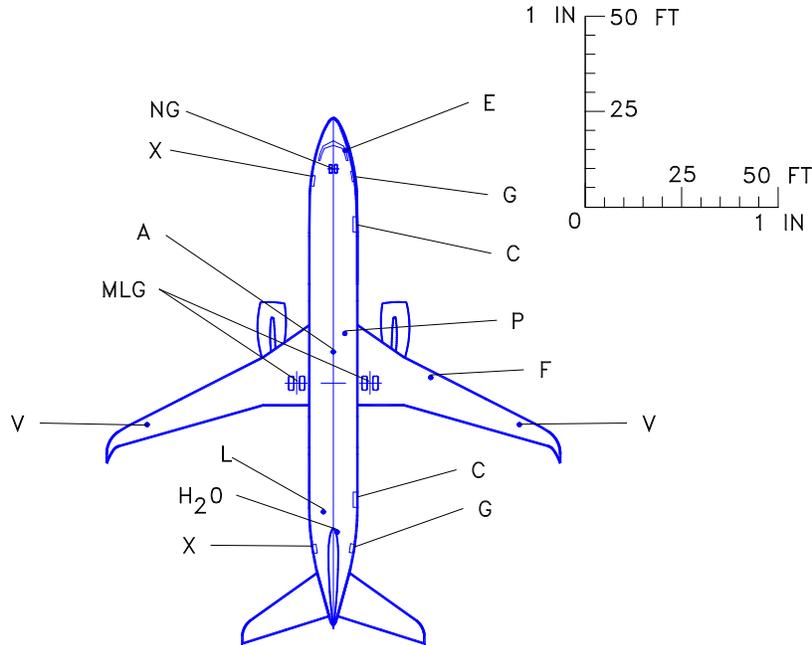
9-72

9.8.2 Scaled Drawings – 1 IN. = 32 FT: Model 737-900W, -900ERW



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.8.3 Scaled Drawings – 1 IN. = 50 FT: Model 737-900W, -900ERW



LEGEND

- A AIR CONDITIONING
- C CARGO DOOR
- E ELECTRICAL
- F FUEL
- G SERVICE DOOR
- H₂O POTABLE WATER
- MLG MAIN LANDING GEAR
- NG NOSE LANDING GEAR
- P PNEUMATIC (AIR START)
- L VACUUM LAVATORY SERVICE
- V FUEL VENT
- X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

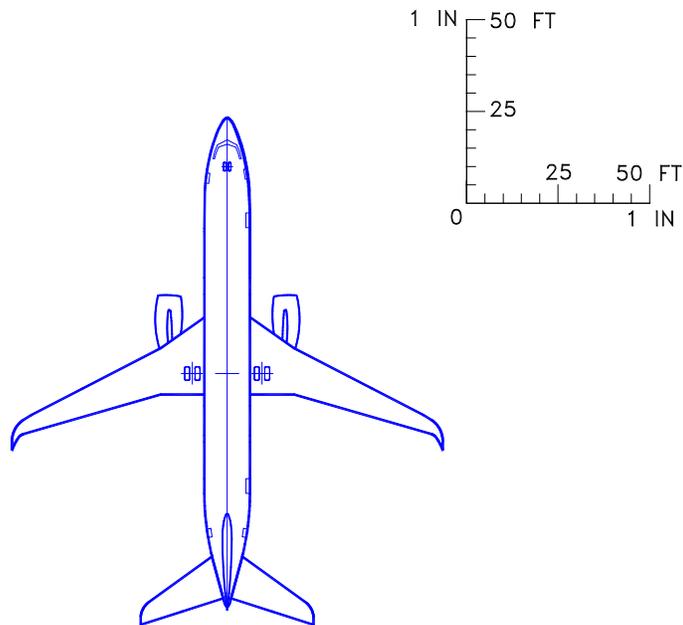
D6-58325-7

REV A

March 2023

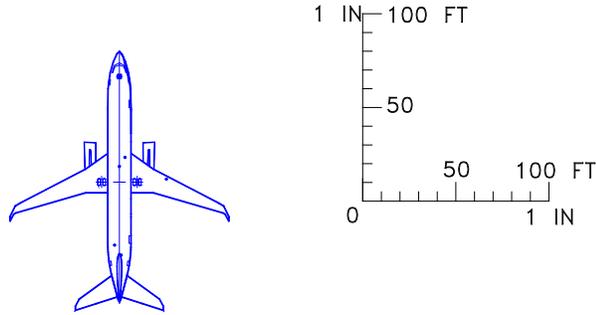
9-74

9.8.4 Scaled Drawings – 1 IN. = 50 FT: Model 737-900W, -900ERW



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.8.5 Scaled Drawings – 1 IN. = 100 FT: Model 737-900W, -900ERW



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A AIR CONDITIONING
C CARGO DOOR
E ELECTRICAL
F FUEL
G SERVICE DOOR
H₂O POTABLE WATER
MLG MAIN LANDING GEAR
NG NOSE LANDING GEAR
P PNEUMATIC (AIR START)
L VACUUM LAVATORY SERVICE
V FUEL VENT
X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

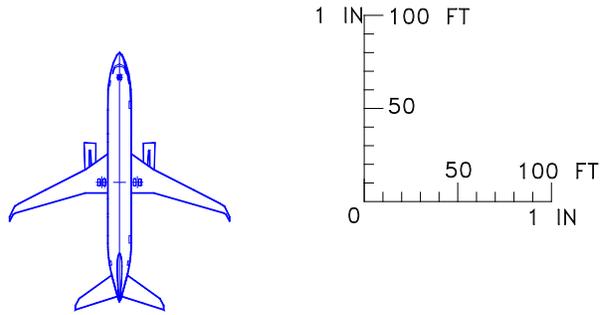
D6-58325-7

REV A

March 2023

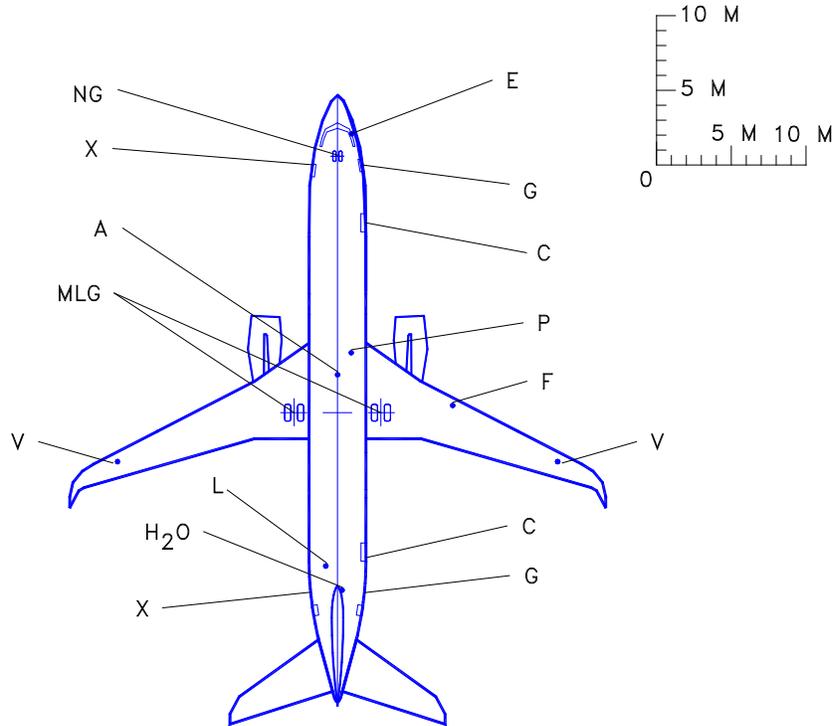
9-76

9.8.6 Scaled Drawings – 1 IN. = 100 FT: Model 737-900W, -900ERW



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.8.7 Scaled Drawings – 1:500: Model 737-900W, -900ERW



LEGEND

- A AIR CONDITIONING
- C CARGO DOOR
- E ELECTRICAL
- F FUEL
- G SERVICE DOOR
- H₂O POTABLE WATER
- MLG MAIN LANDING GEAR
- NG NOSE LANDING GEAR
- P PNEUMATIC (AIR START)
- L VACUUM LAVATORY SERVICE
- V FUEL VENT
- X PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

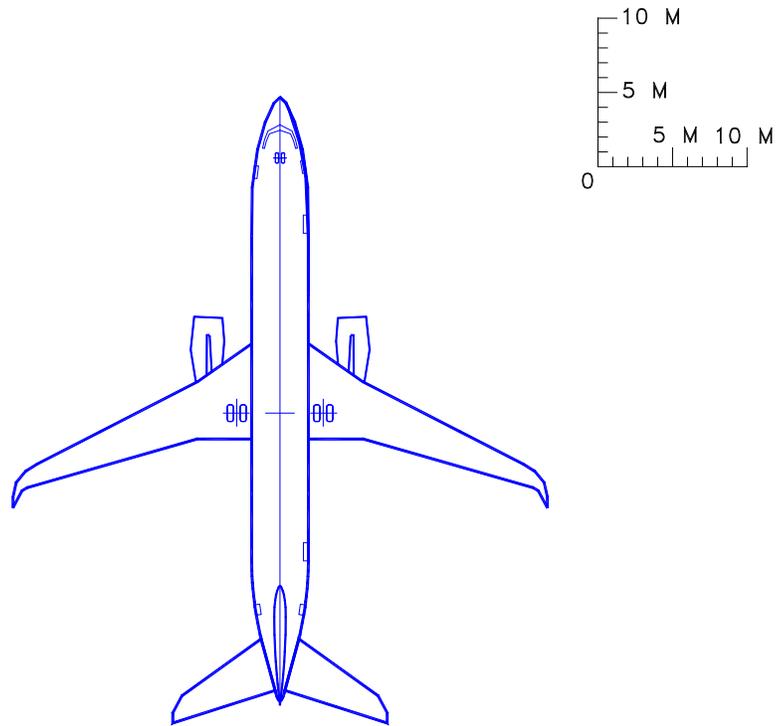
D6-58325-7

REV A

March 2023

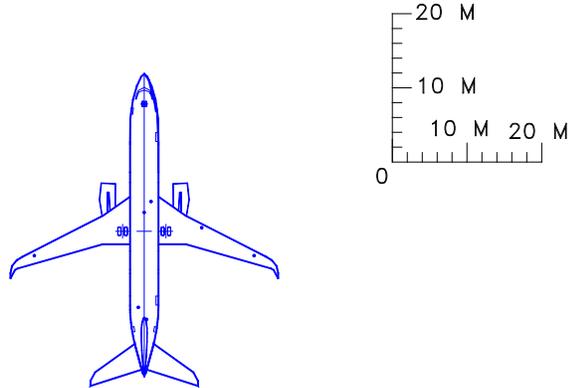
9-78

9.8.8 Scaled Drawings – 1:500: Model 737-900W, -900ERW



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

9.8.9 Scaled Drawings – 1:1000: Model 737-900W, -900ERW



NOTE:

SEE CORRESPONDING PAGE FOR 1 IN = 32 FT
FOR IDENTIFICATIONS OF SERVICE POINTS

LEGEND

A	AIR CONDITIONING
C	CARGO DOOR
E	ELECTRICAL
F	FUEL
G	SERVICE DOOR
H ₂ O	POTABLE WATER
MLG	MAIN LANDING GEAR
NG	NOSE LANDING GEAR
P	PNEUMATIC (AIR START)
L	VACUUM LAVATORY SERVICE
V	FUEL VENT
X	PASSENGER DOOR

NOTE: FOR TURNING RADIUS DATA
SEE SECTIONS 4.2 AND 4.3

NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

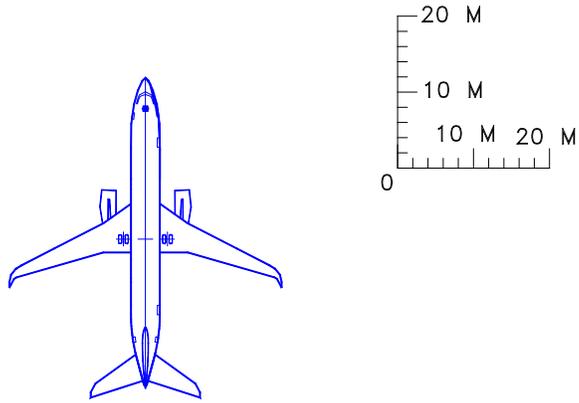
D6-58325-7

REV A

March 2023

9-80

9.8.10 Scaled Drawings – 1:1000: Model 737-900W, -900ERW



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING