3.0 AIRPLANE PERFORMANCE

Page

3.1 Payload/Range for Long-Range Cruise 30

3.2 C.A.R. Takeoff Runway Length Requirements . 37

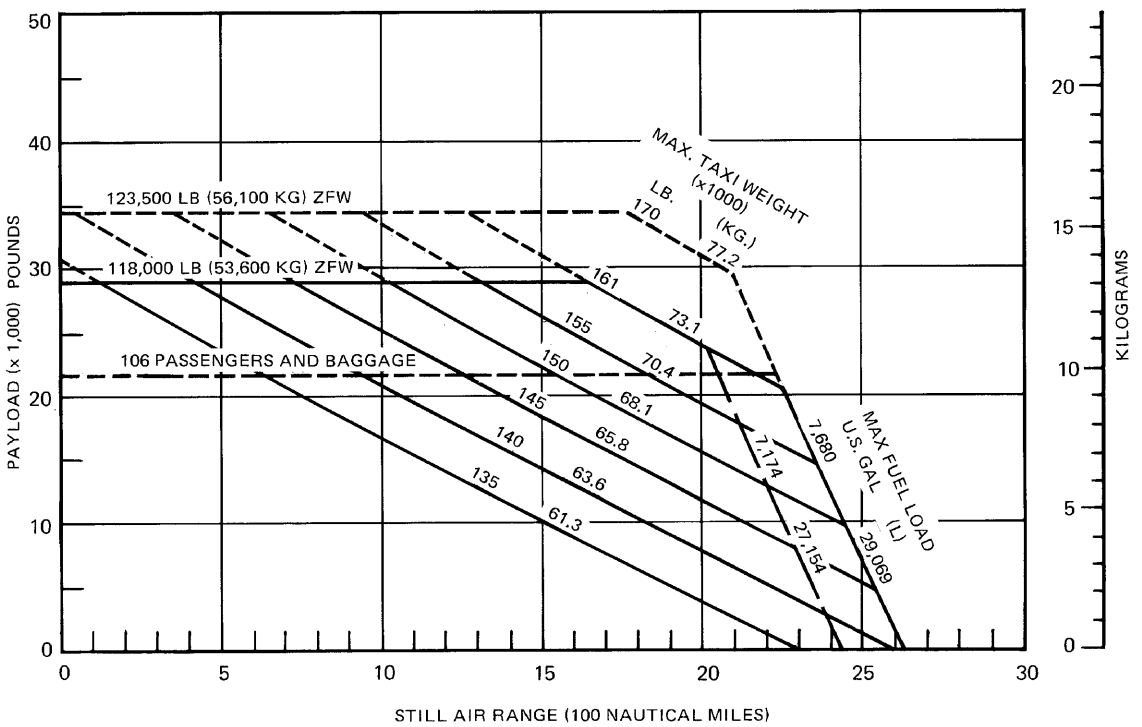
Standard day temperatures for the pressure altitudes shown on the C.A.R. Takeoff Runway charts are given below:

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	0.83

3.3 C.A.R. Landing Runway Length Requirement . 51

NOTES:

- TYPICAL AIRLINE OEW 89,000 LB (40,410 KG)
- LRC AT 30,000 AND 35,000 FT (9,140 AND 10,670 M)
- ATA DOMESTIC RESERVES
- JT8D-7 OR -9 ENGINES
- STANDARD DAY
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN

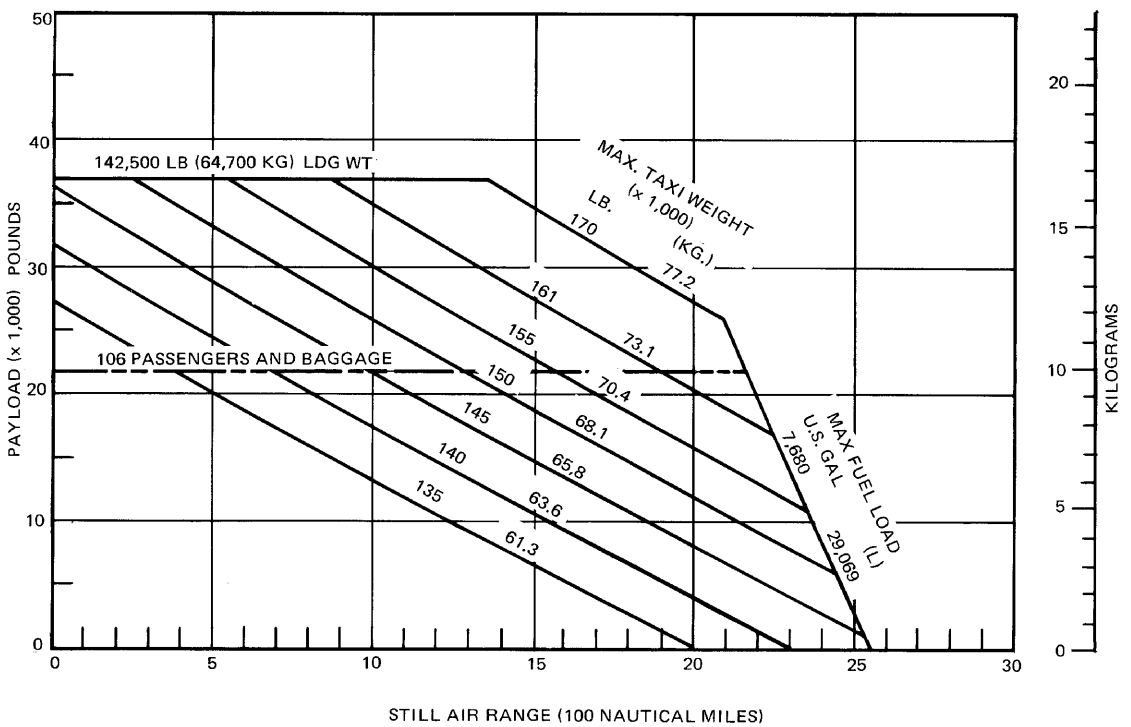


3.1 PAYLOAD/RANGE FOR LONG-RANGE CRUISE—(JT8D-7 OR -9 ENGINES)

MODEL 727-100

NOTES:

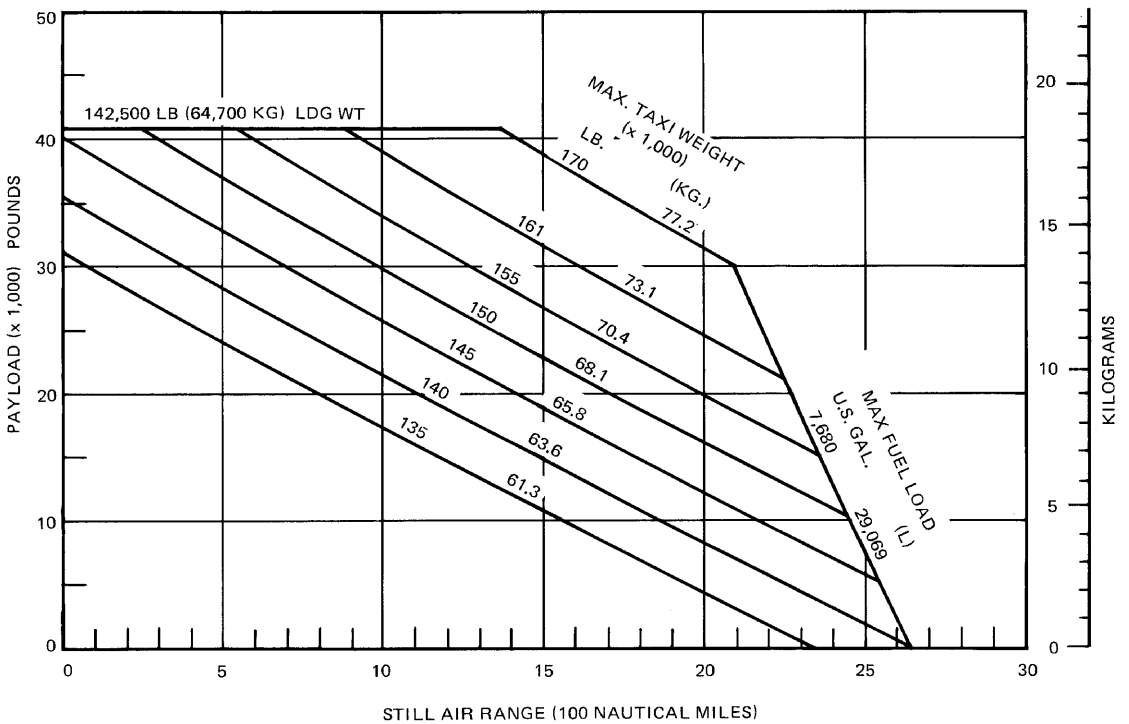
- PASSENGER CONFIGURATION
- TYPICAL AIRLINE OEW 92,500 LB (42,000 KG)
- LRC AT 30,000 AND 35,000 FT (9,140 AND 10,670 M)
- ATA DOMESTIC RESERVES
- JT8D-7 OR -9 ENGINES
- STANDARD DAY
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN



PAYLOAD/RANGE FOR LONG-RANGE CRUISE–(JT8D-7 OR -9 ENGINES)
MODEL 727-100C PASSENGER CONFIGURATION

NOTES

- CARGO CONFIGURATION
- TYPICAL AIRLINE OEW 88,500 LB (40,180 KG)
- LRC AT 30,000 AND 35,000 FT (9,140 AND 10,670 M)
- ATA DOMESTIC RESERVES
- JT8D-7 OR -9 ENGINES
- STANDARD DAY
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN

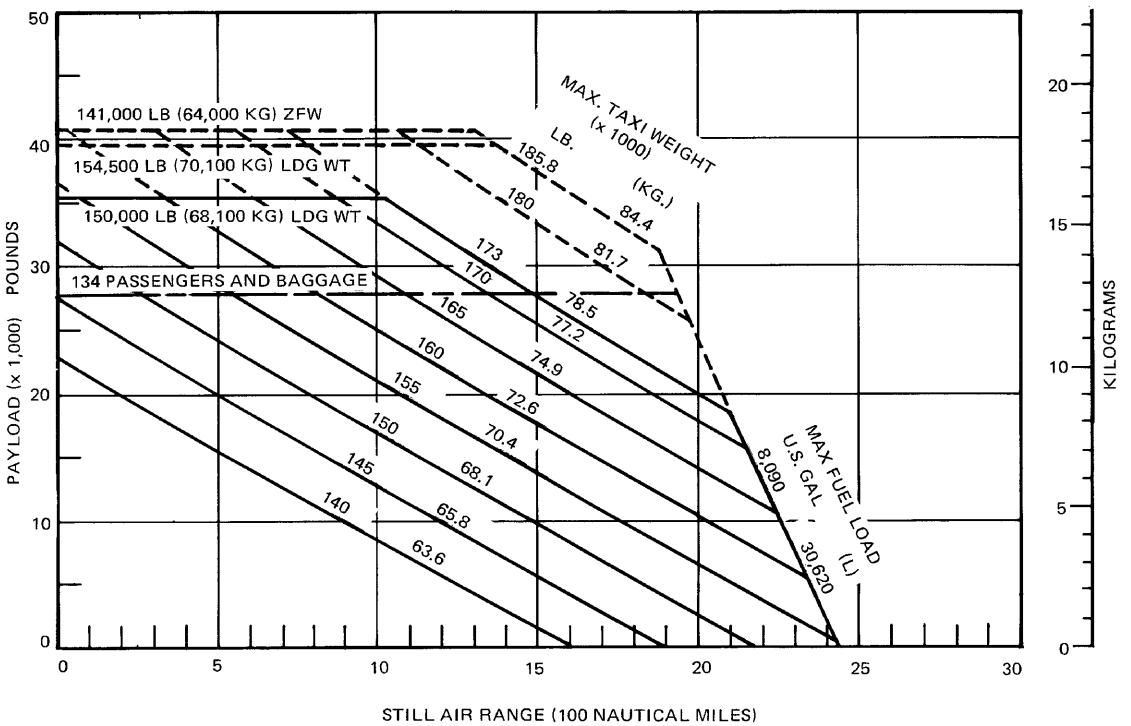


PAYLOAD/RANGE FOR LONG-RANGE CRUISE—(JT8D-7 OR -9 ENGINES)

MODEL 727-100C CARGO CONFIGURATION

NOTES:

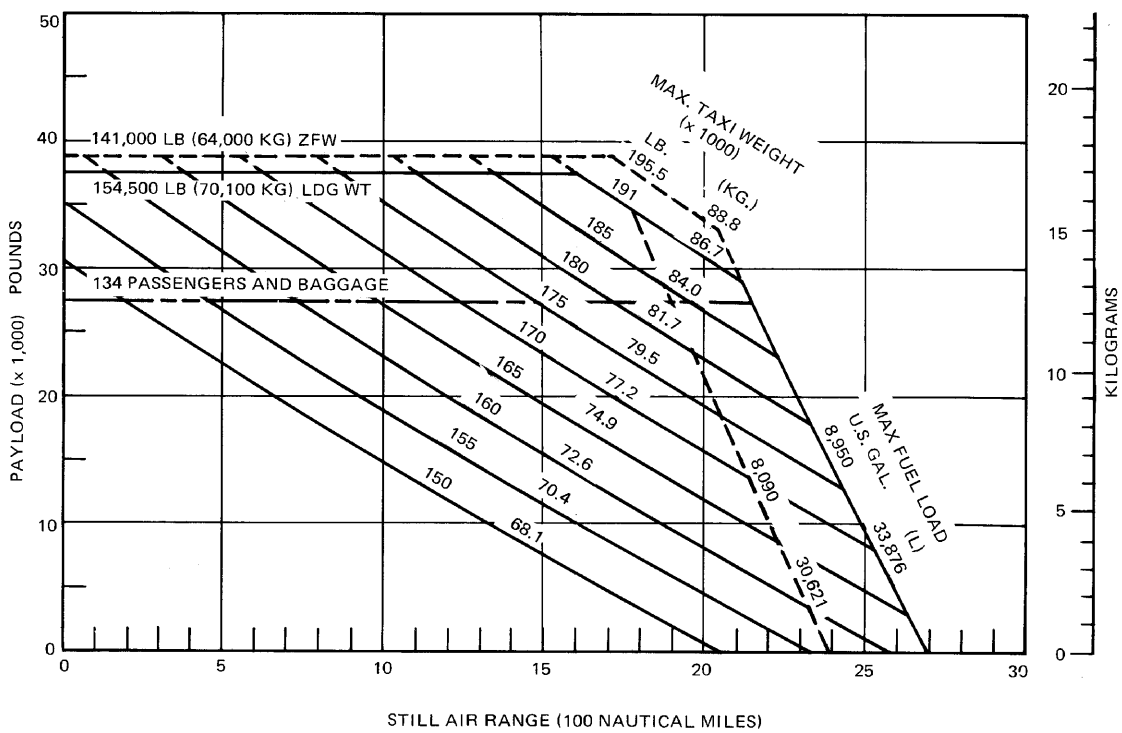
- TYPICAL AIRLINE OEW 100,350 LB (45,560 KG)
- LRC AT 30,000 AND 35,000 FT (9,140 AND 10,670 M)
- ATA DOMESTIC RESERVES
- JT8D-7 OR -9 ENGINES
- STANDARD DAY
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN



PAYLOAD/RANGE FOR LONG-RANGE CRUISE—(JT8D-7 ENGINES, STANDARD MODEL).
MODEL 727-200 **—(JT8D-9 ENGINES, STANDARD OR ADVANCED MODELS).**

NOTES:

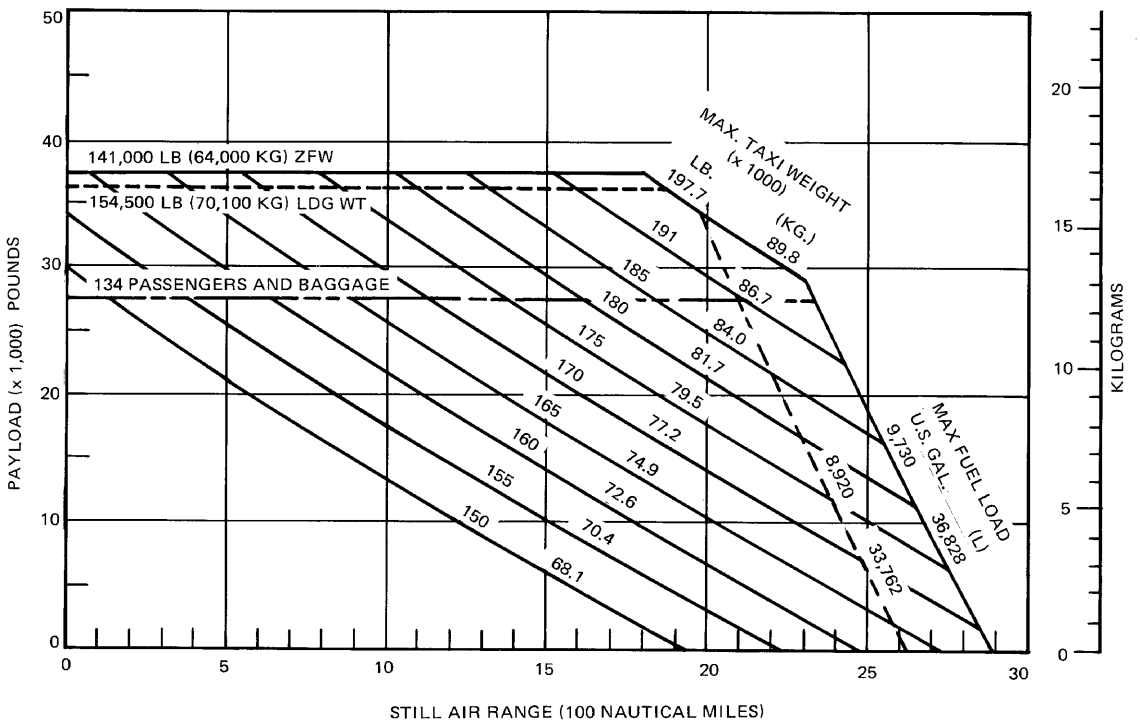
- TYPICAL AIRLINE OEW 102,215 LB (46,410 KG)
- LRC AT 31,000 and 35,000 FT (9,450 AND 10,670 M)
- ATA DOMESTIC RESERVES
- JT8D-15 ENGINES
- STANDARD DAY
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN



PAYLOAD/RANGE FOR LONG-RANGE CRUISE–(JT8D-15 ENGINES)
MODEL ADVANCED 727-200

NOTES:

- TYPICAL AIRLINE OEW 103,480 LB (46,980 KG)
- LRC AT 31,000 AND 35,000 FT (9,450 AND 10,670 M)
- ATA DOMESTIC RESERVES
- JT8D-17 ENGINES
- STANDARD DAY
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN

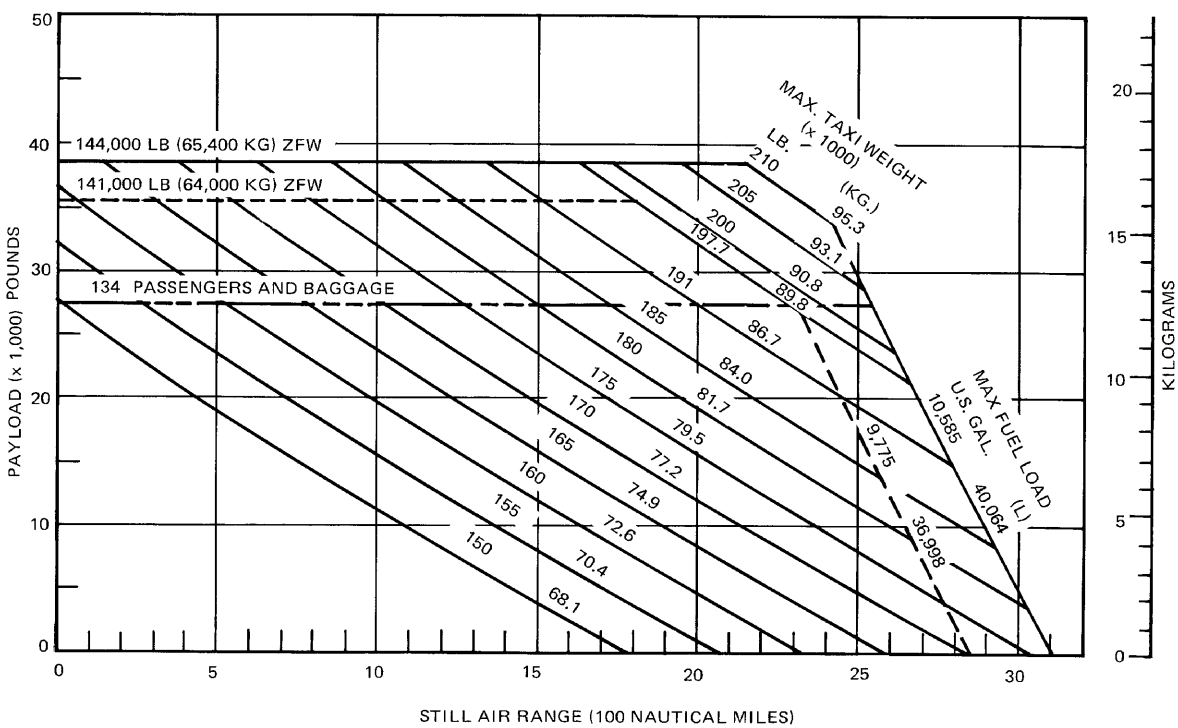


PAYLOAD/RANGE FOR LONG-RANGE CRUISE—(JT8D-17 ENGINES)

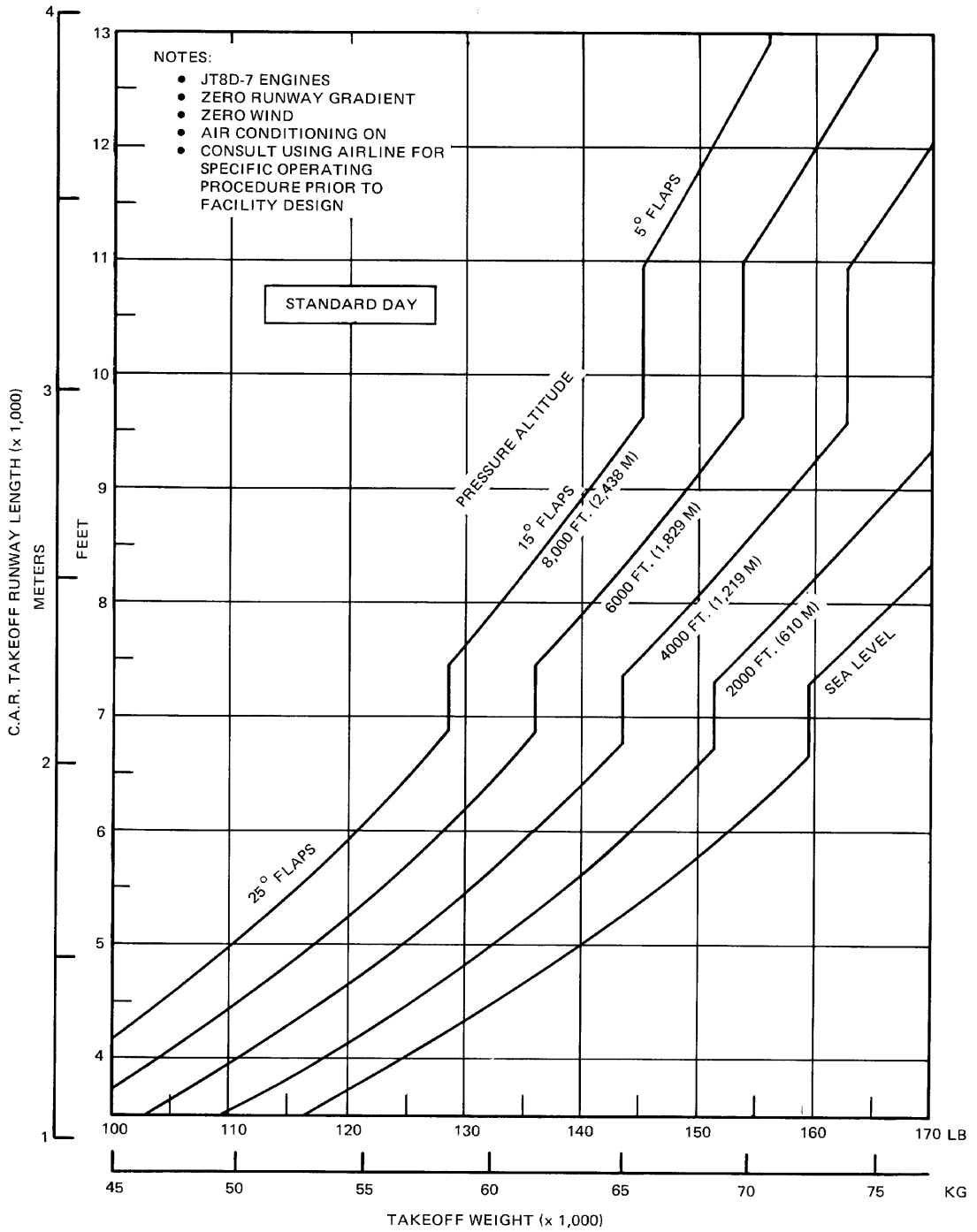
MODEL ADVANCED 727-200

NOTES:

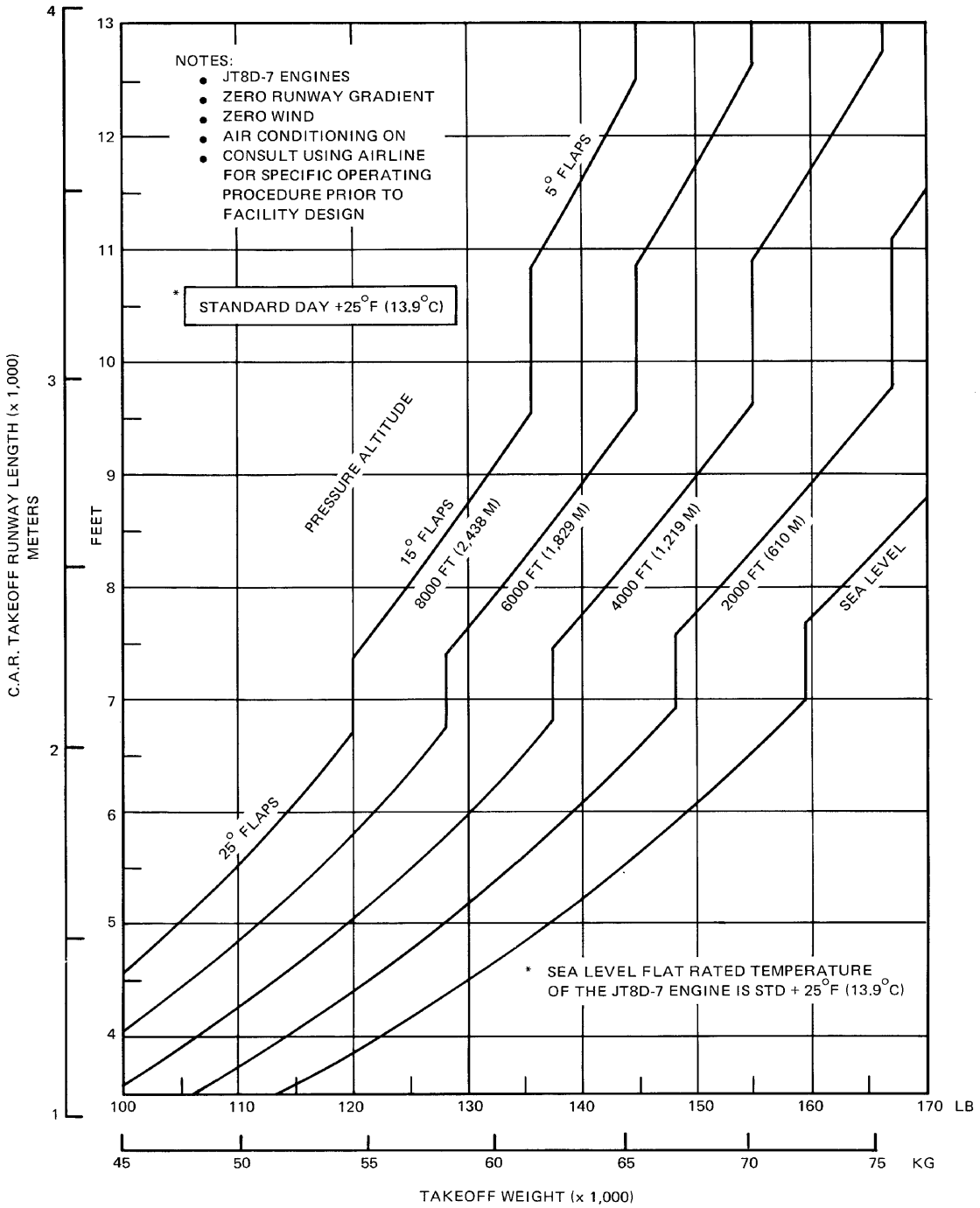
- TYPICAL AIRLINE OEW 105,470 LB (47,880 KG)
- LRC AT 31,000 AND 35,000 FT (9,450 AND 10,670 M)
- ATA DOMESTIC RESERVES
- JT8D-17R ENGINES
- STANDARD DAY
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN



PAYLOAD/RANGE FOR LONG-RANGE CRUISE–(JT8D-17R ENGINES)
MODEL ADVANCED 727-200

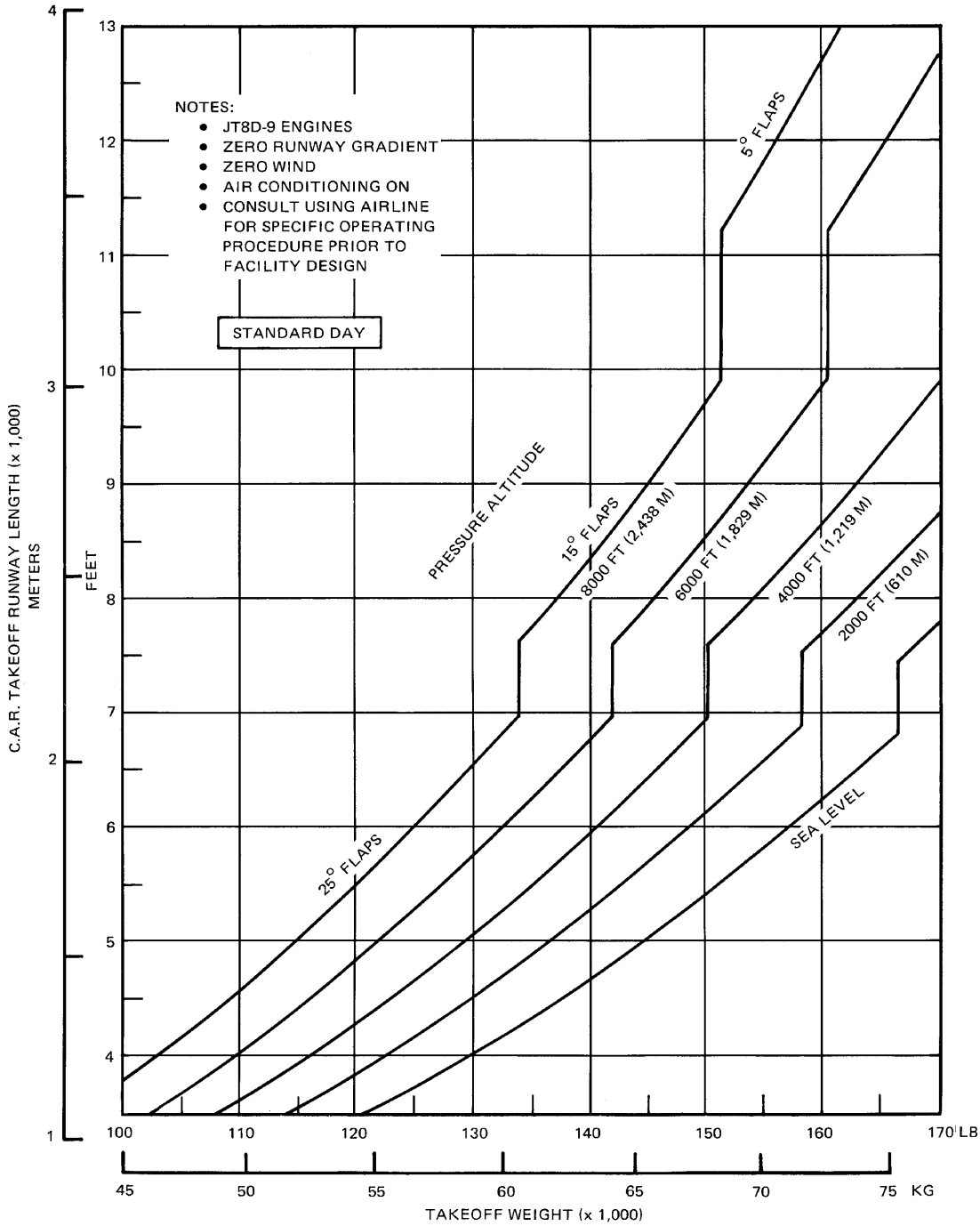


3.2 C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS–(JT8D-7 ENGINES)–STANDARD DAY
MODELS 727-100, -100C

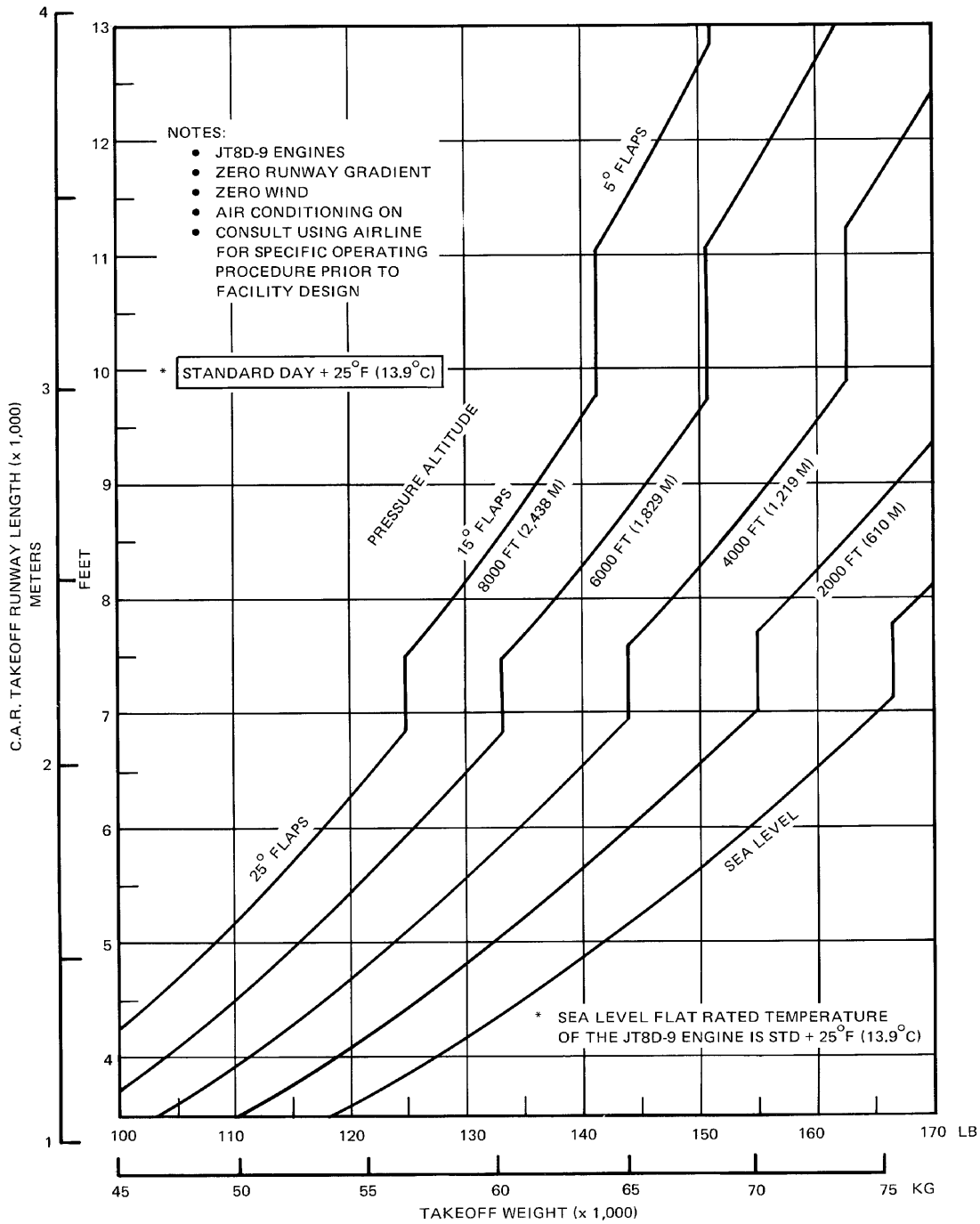


C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS—(JT8D-7 ENGINES)—STANDARD DAY + 25°F (13.9°C)

MODELS 727-100, -100C

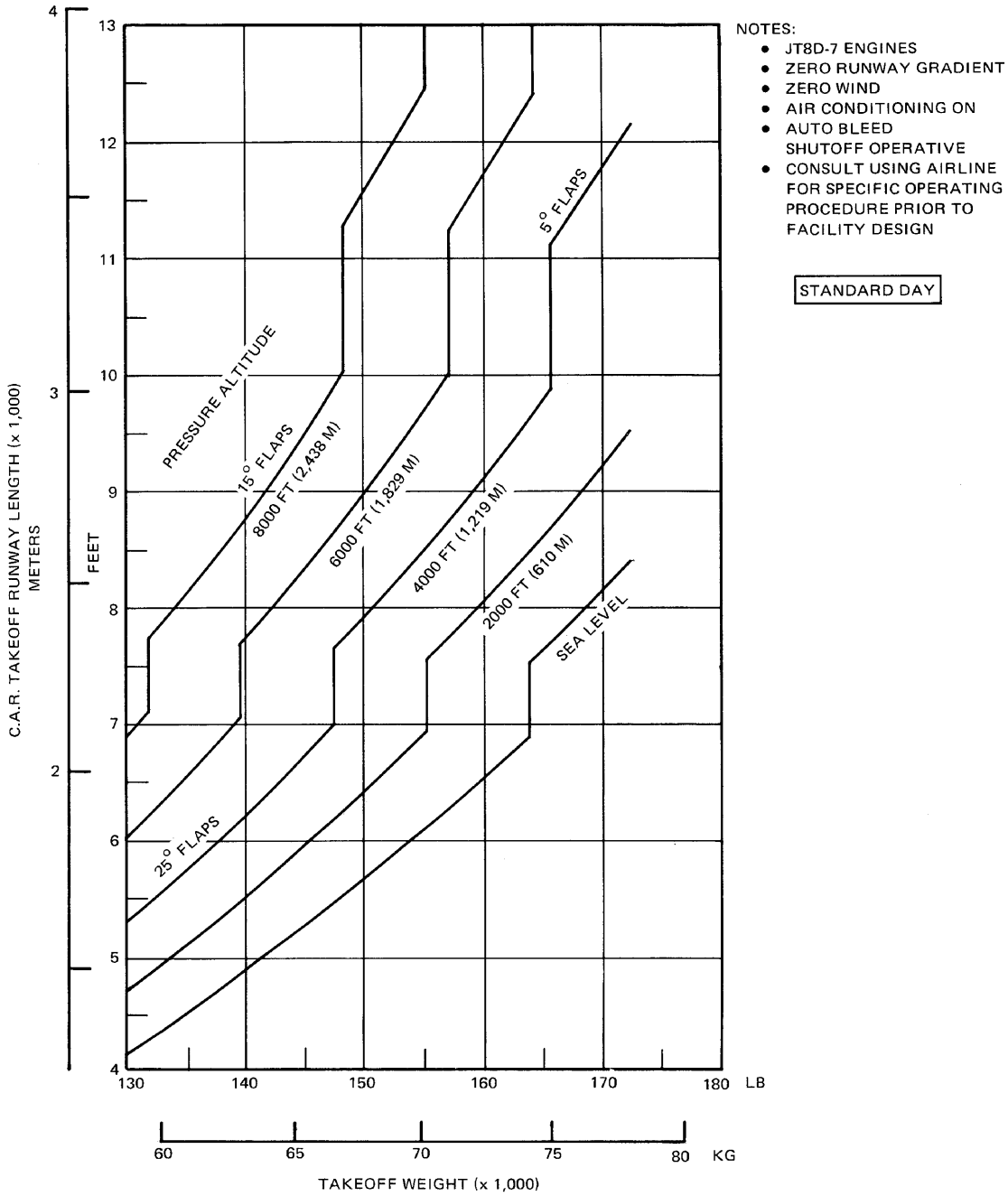


C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS—(JT8D-9 ENGINES)—STANDARD DAY
MODELS 727-100, -100C

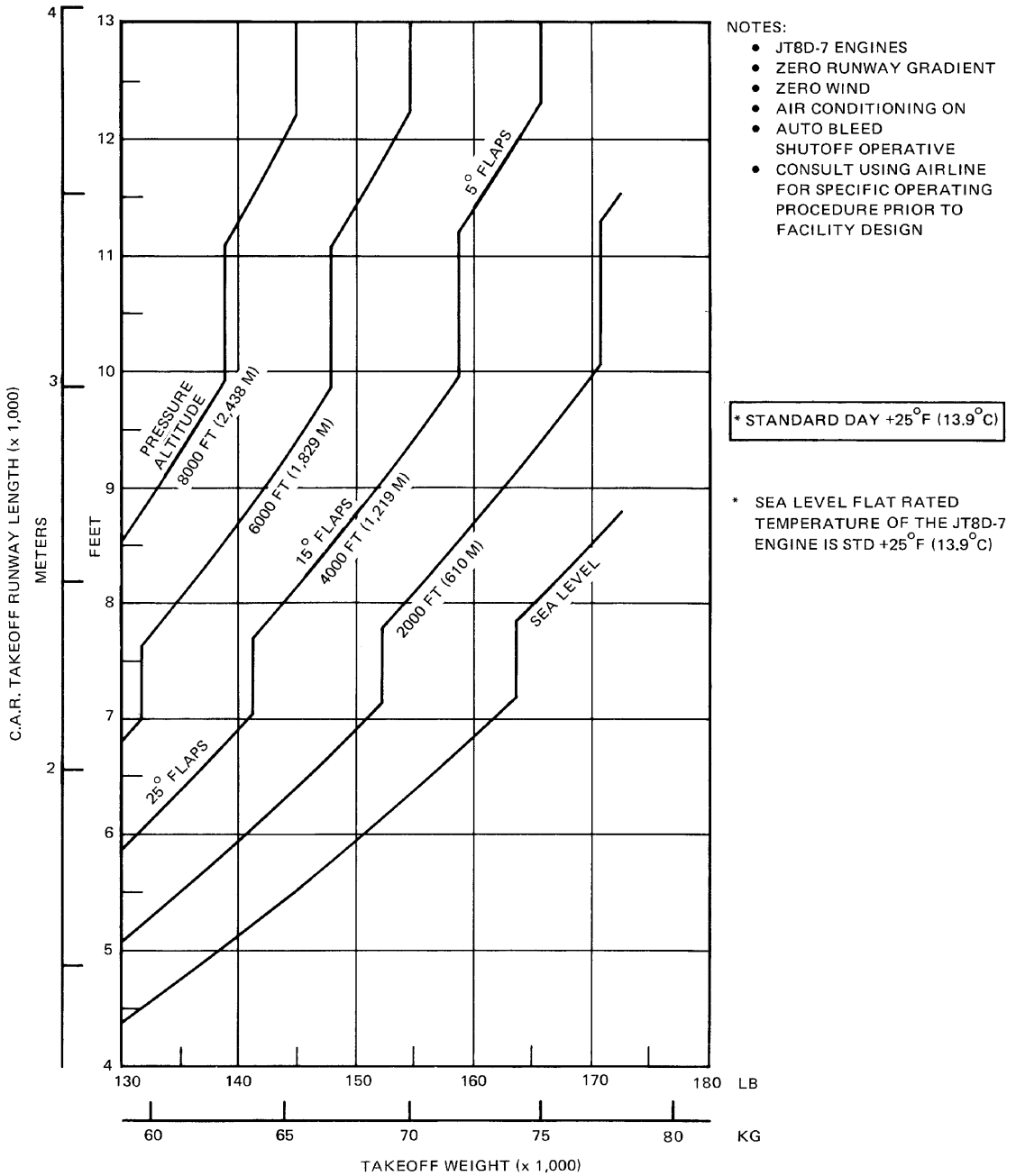


C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS—(JT8D-9 ENGINES)—STANDARD DAY + 25°F (13.9°C)

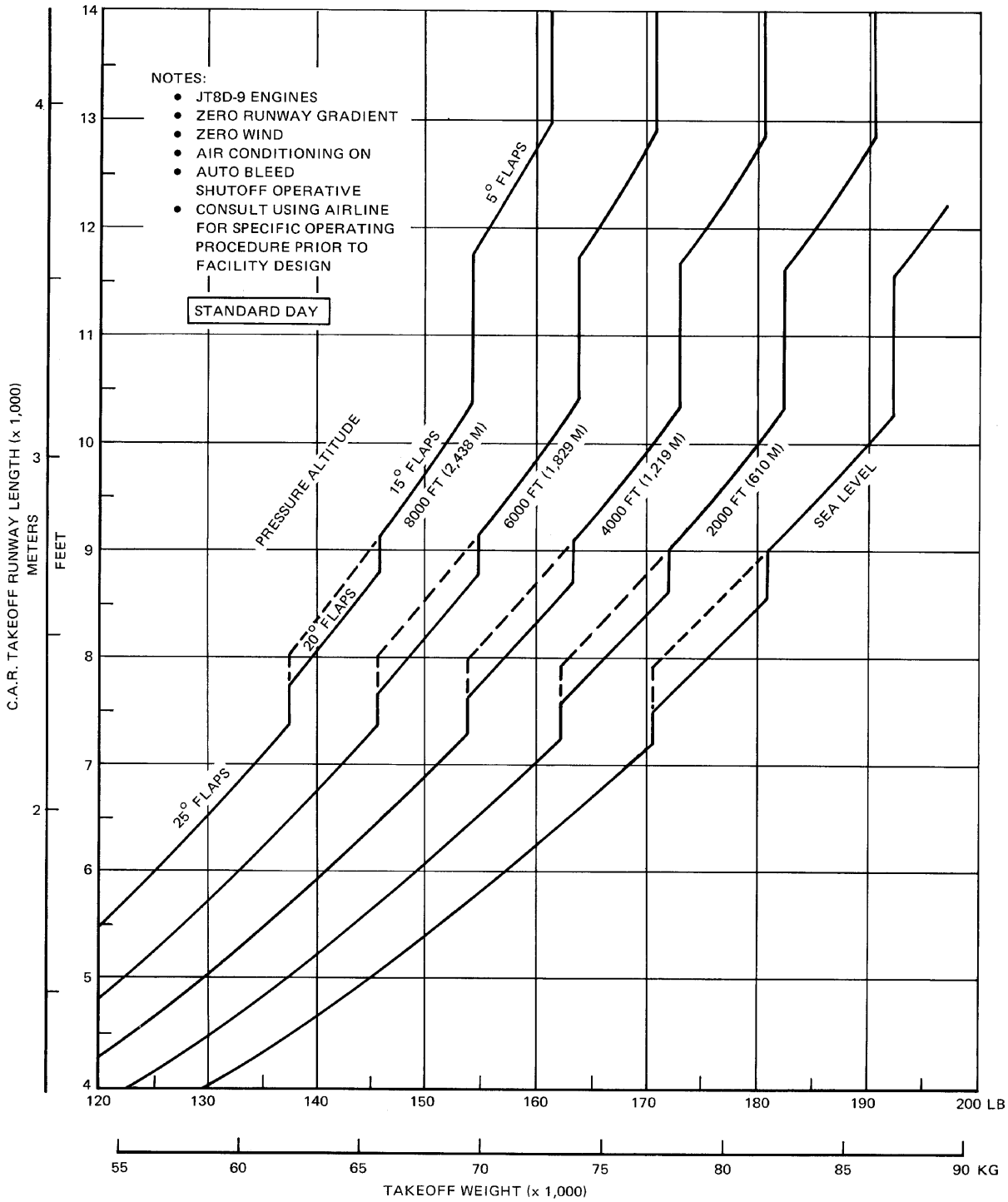
MODELS 727-100, -100C



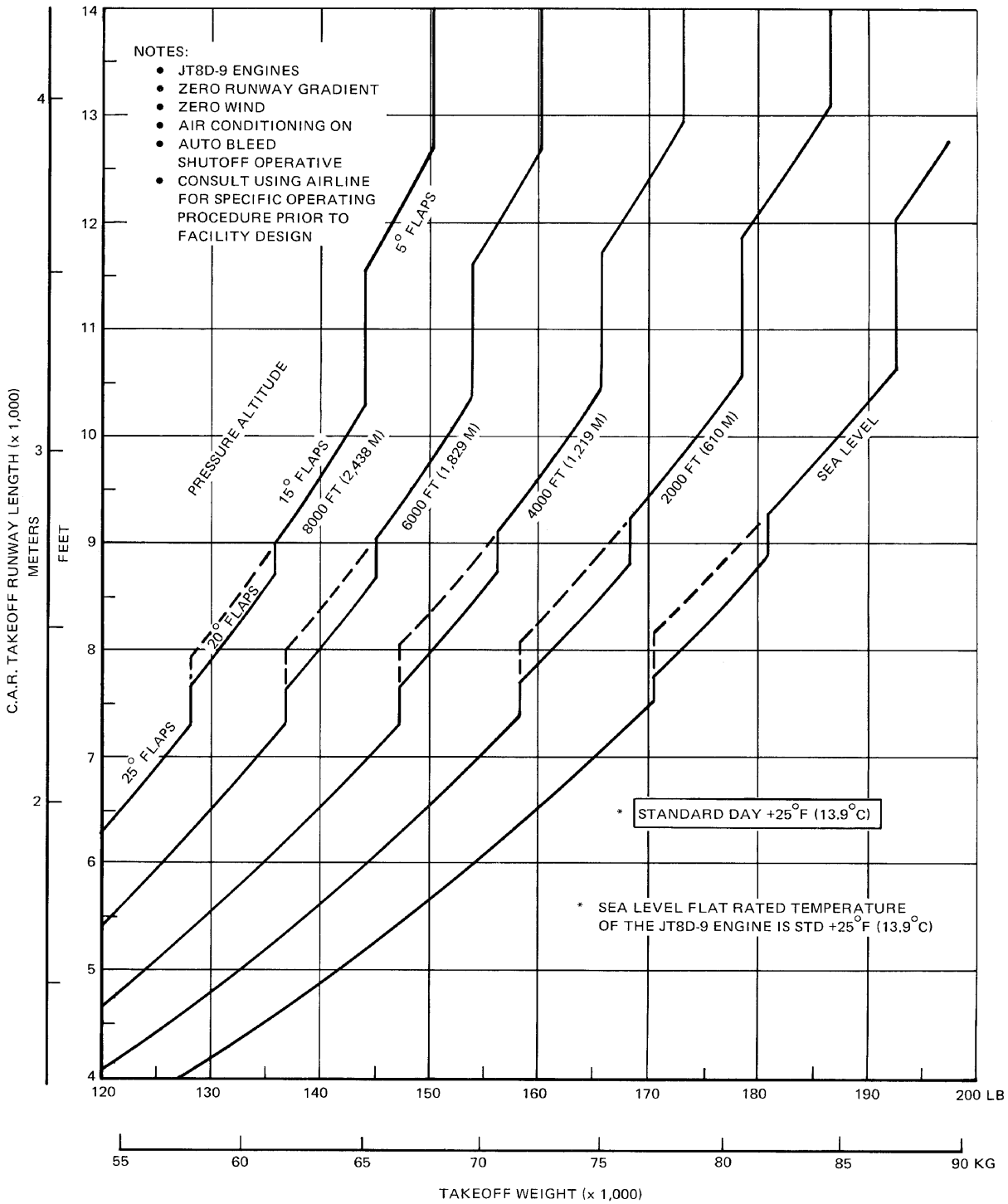
C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS–(JT8D-7 ENGINES)–STANDARD DAY
MODELS 727-200 STANDARD



C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS—(JT8D-7 ENGINES)—STANDARD DAY + 25°F (13.9°C)
MODELS 727-200 STANDARD

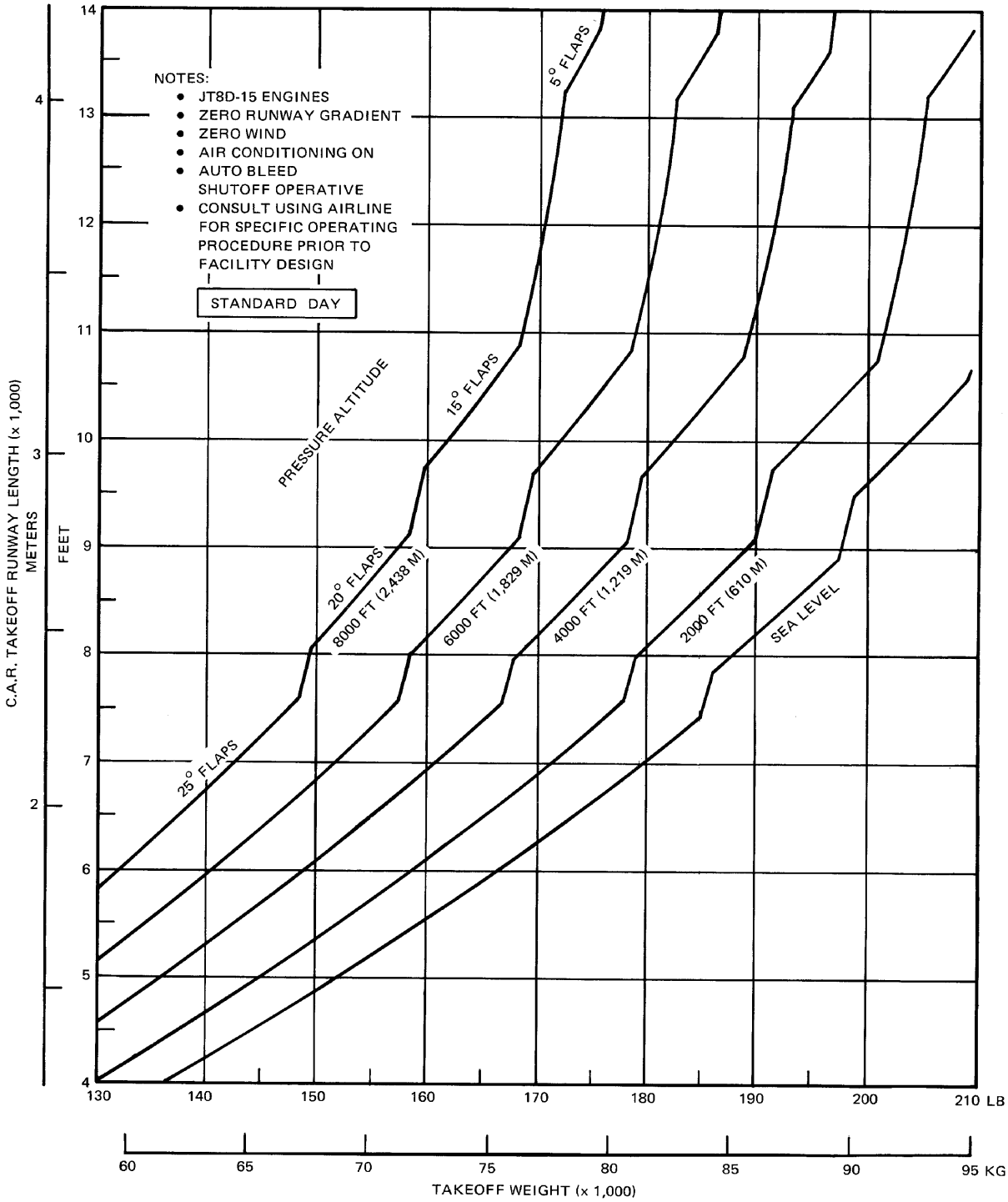


C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS—(JT8D-9 ENGINES)—STANDARD DAY
MODELS 727-200 STANDARD OR ADVANCED

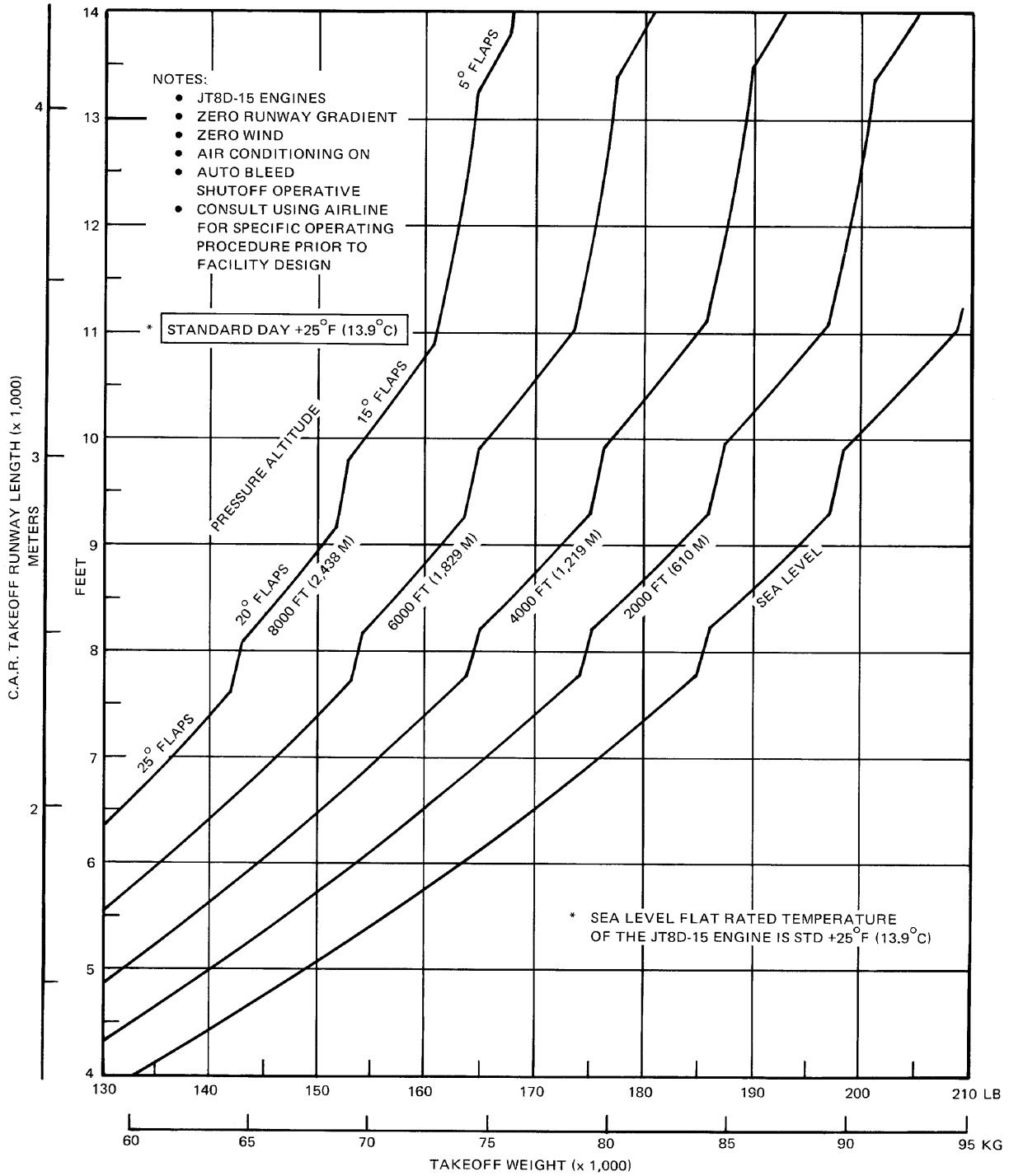


C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS—(JT8D-9 ENGINES)—STANDARD DAY + 25°F (13.9°C)

MODELS 727-200 STANDARD OR ADVANCED

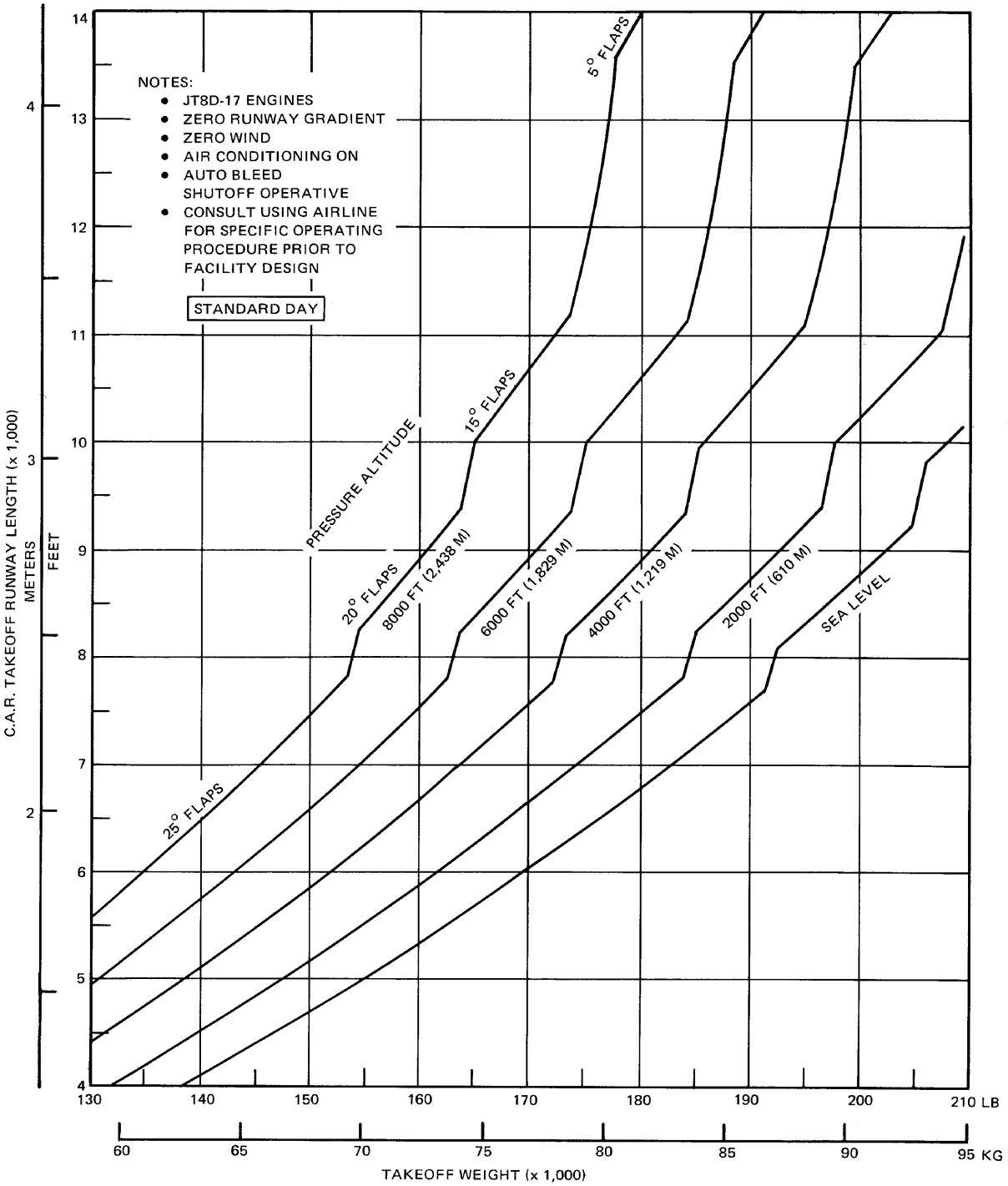


C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS—(JT8D-15 ENGINES)—STANDARD DAY
MODEL ADVANCED 727-200

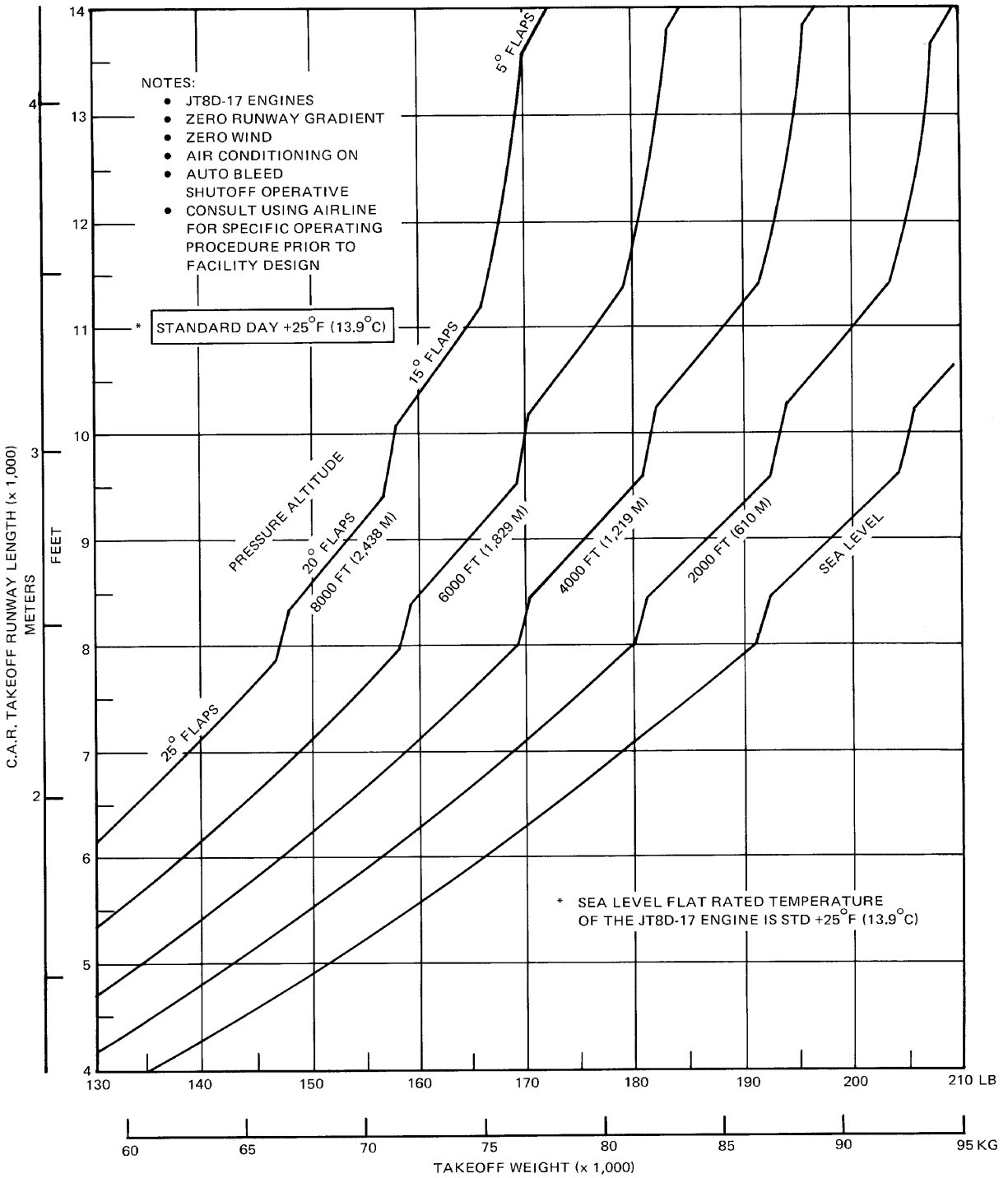


C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS—(JT8D-15 ENGINES)—STANDARD DAY + 25°F (13.9°C)

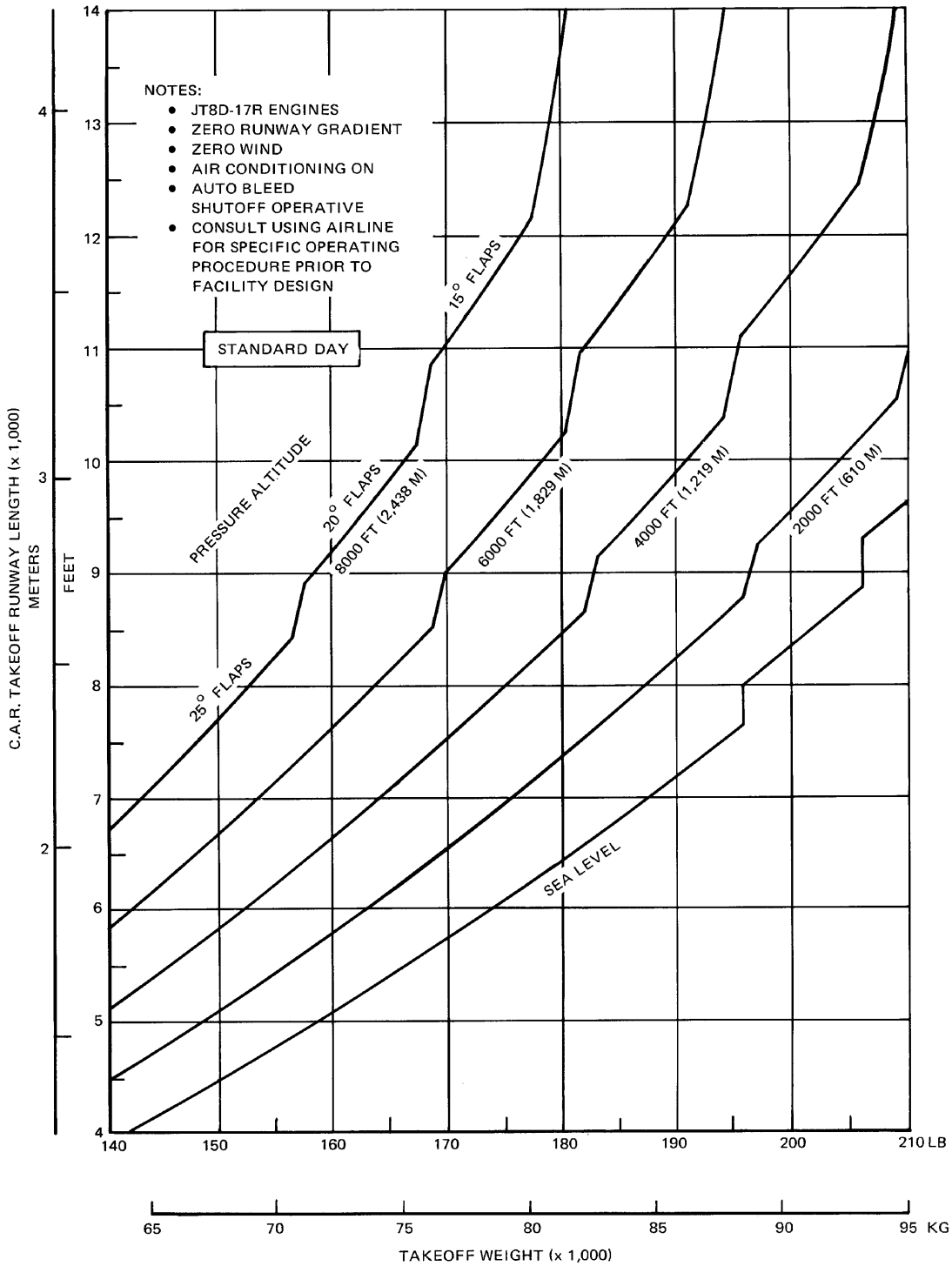
MODEL ADVANCED 727-200



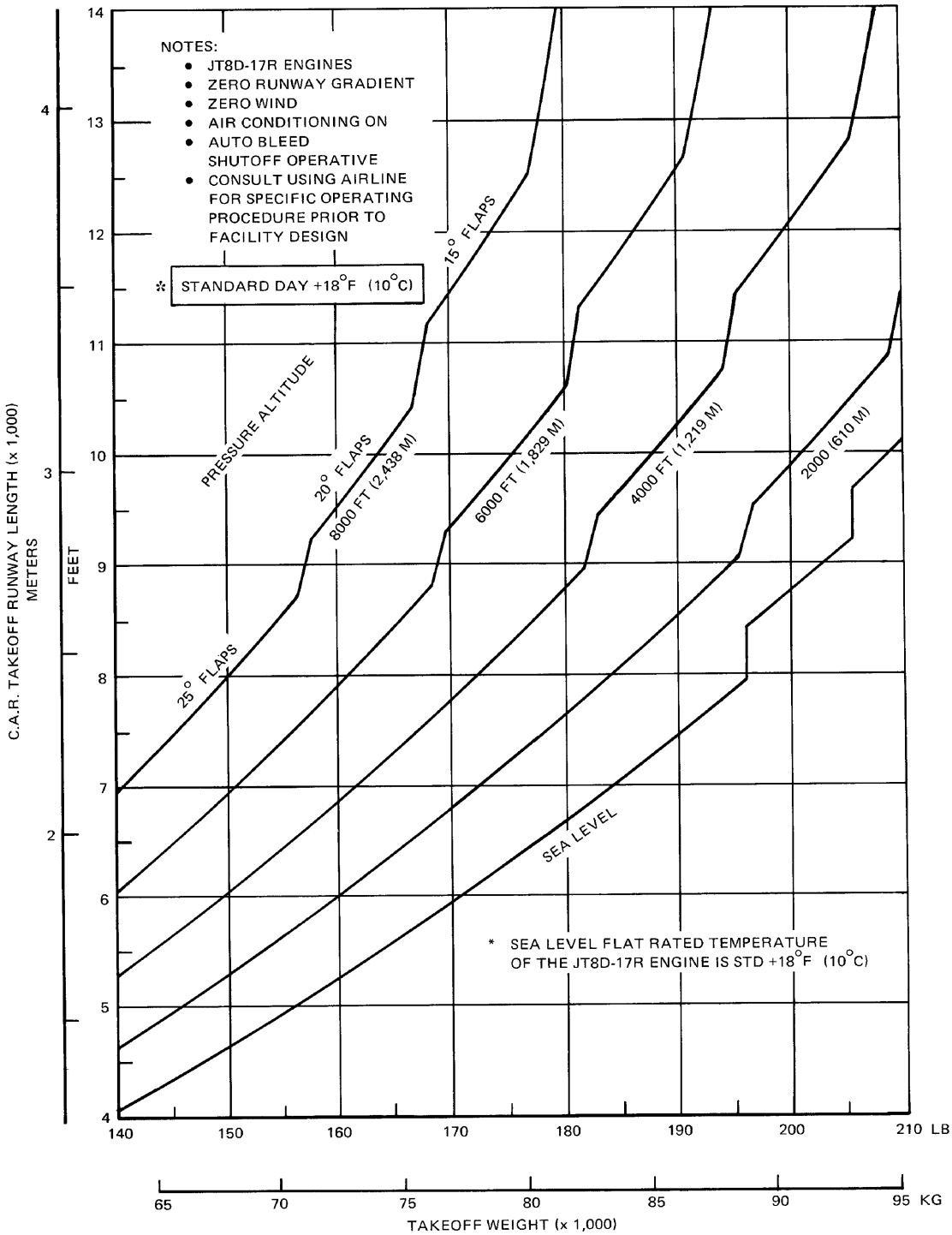
C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS—(JT8D-17 ENGINES)—STANDARD DAY
MODEL ADVANCED 727-200



C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS–(JT8D-17 ENGINES)–STANDARD DAY + 25°F (13.9°C)
MODEL ADVANCED 727-200



C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS—(JT8D-17R ENGINES)—STANDARD DAY
MODEL ADVANCED 727-200



C.A.R. TAKEOFF RUNWAY LENGTH REQUIREMENTS—(JT8D-17R ENGINES)—STANDARD DAY + 18°F (10°C)

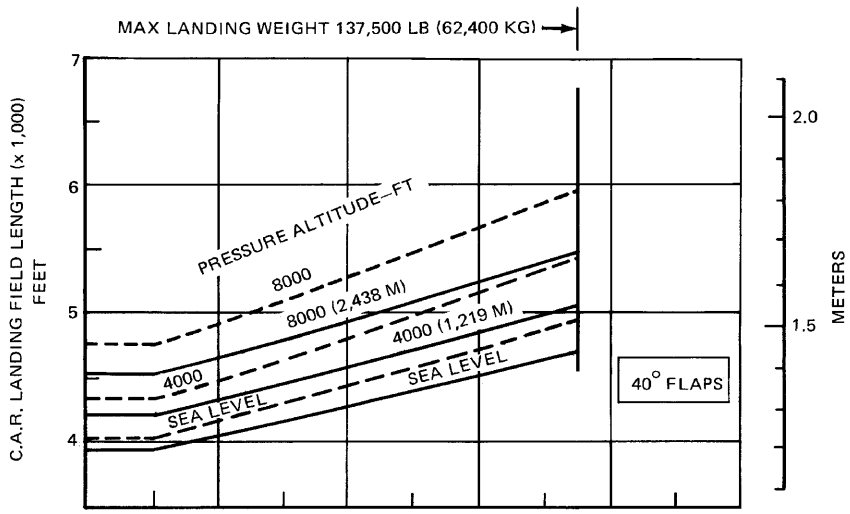
MODEL ADVANCED 727-200

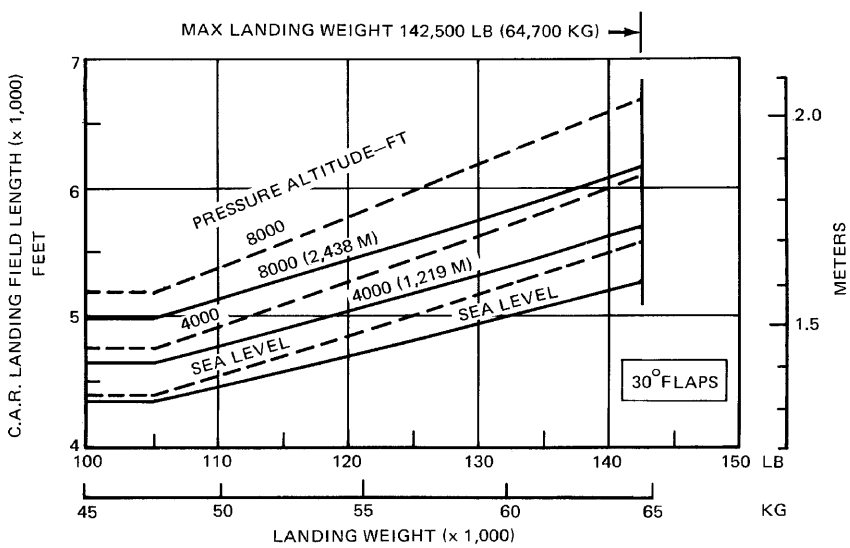
NOTES:

- NOSE BRAKES ON
- MK II ANTI-SKID
- MANUAL SPOILERS
- ZERO WIND
- ZERO SLOPE
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN

——— DRY RUNWAY

— — — WET RUNWAY





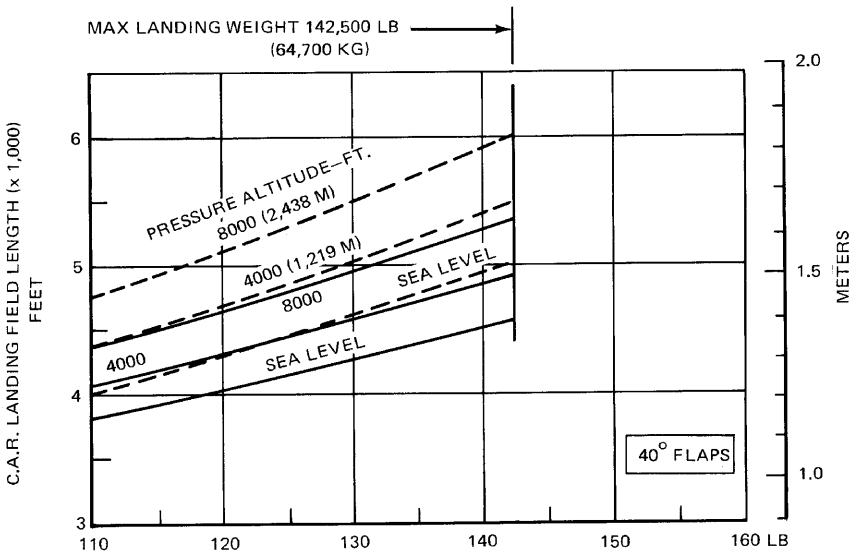
3.3 C.A.R. LANDING RUNWAY REQUIREMENTS–30° AND 40° FLAPS

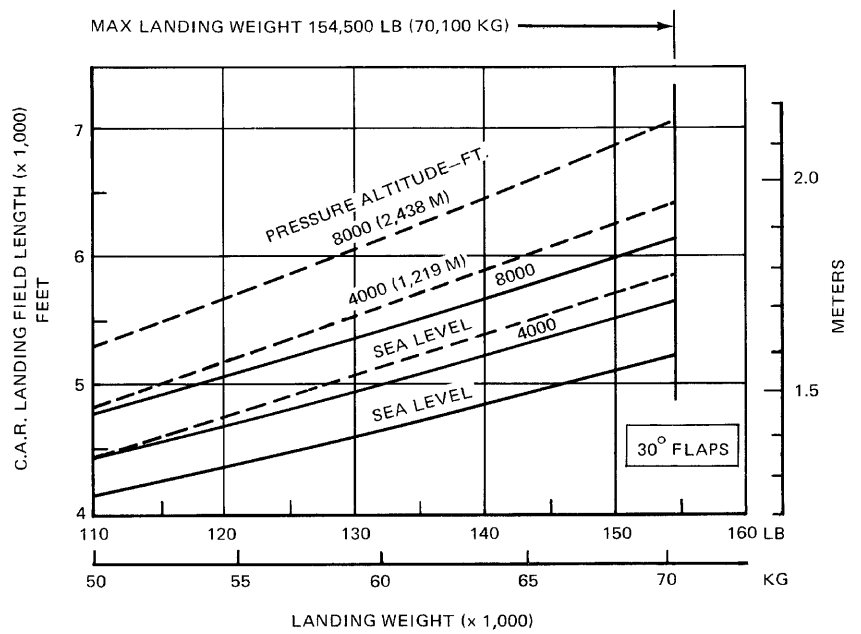
MODEL 727-100, -100C

NOTES:

- MK II ANTI-SKID
- MANUAL SPOILERS
- NOSE BRAKES ON
- ZERO WIND
- ZERO SLOPE
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN

——— DRY RUNWAY
— — — WET RUNWAY





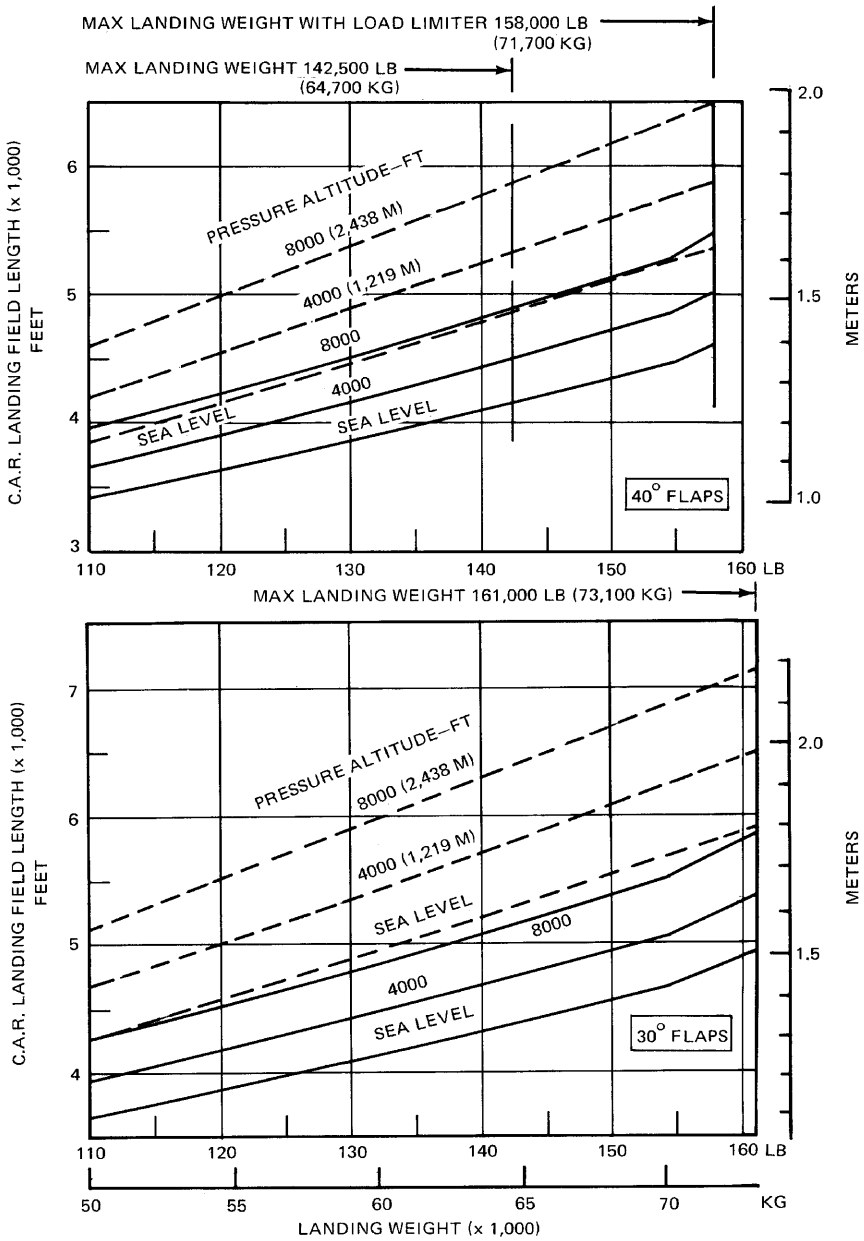
C.A.R. LANDING RUNWAY REQUIREMENTS–30° AND 40° FLAPS
MODEL 727-200 STANDARD

NOTES:

- NOSE BRAKES ON
- MK III ANTI-SKID
- MANUAL SPOILERS
- ZERO WIND
- ZERO SLOPE
- CONSULT USING AIRLINE FOR SPECIFIC OPERATING PROCEDURE PRIOR TO FACILITY DESIGN

——— DRY RUNWAY

— — — WET RUNWAY



C.A.R. LANDING RUNWAY REQUIREMENTS–30° AND 40° FLAPS
MODEL ADVANCED 727-200

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