Aircraft Manufacturer British Aircraft/Vickers

Aircraft Engine Manufacturer Rolls-Royce (Dart 510)

No. of Engines 4 Engine Rating 1,600 BHP

Min. T/O Wt. 40.6 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 64.5 k-lb Max. T/O Wt. War-Time 64.5 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,000 ft (To 50 ft)

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 51.4 k-lb Max. Ldg. Wt. 57.5 k-lb

Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 3,060 ft (From 50 ft)

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |

Note: Adequate aircraft data is not available to express the relative structural effect of the aircraft.

Figure A-282. B.A.C./Vickers Viscount 745

Aircraft Manufacturer British Aircraft/Vickers

Aircraft Engine Manufacturer Rolls-Royce (Dart RDa.7/1 Mk 525)

No. of Engines 4 Engine Rating 1,990 EHP

Min. T/O Wt. 45.7 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 72.5 k-lb Max. T/O Wt. War-Time 72.5 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 5,930 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 58.9 k-lb Max. Ldg. Wt. 64.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 4,450 ft (From 50 ft)

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |

Note: Adequate aircraft data is not available to express the relative structural effect of the aircraft.

Figure A-283. B.A.C./Vickers Viscount 810

Aircraft Manufacturer Cessna

Aircraft Engine Manufacturer Pratt and Whitney (JT15D-1A)

No. of Engines 2 Engine Rating 2,200 lb

Min. T/O Wt. 8.0 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 11.9 k-lb Max. T/O Wt. War-Time 11.9 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 2,940 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 8.4 k-lb Max. Ldg. Wt. 11.4 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,270 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |
| 11,900 lb/100 psi** | | | | | | | | |

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-284. Cessna Citation I

Aircraft Manufacturer Learjet

Aircraft Engine Manufacturer General Electric (CJ610-8A)

No. of Engines 2 Engine Rating 2,950 lb

Min. T/O Wt. 7.3 k-lb * Min. T/O Dist. @ Min. T/O Wt. 2,300 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 2,300 ft

Max. T/O Wt. Peace-Time 11.4 k-lb Max. T/O Wt. War-Time 13.5 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 3,300 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 3,300 ft

Min. Ldg. Wt. 9.5 k-lb Max. Ldg. Wt. 11.4 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,400 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,790 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |

Note: Adequate aircraft data is not available to express the relative structural effect of the aircraft.

Figure A-285. Gates Learjet 24

Aircraft Manufacturer Learjet

Aircraft Engine Manufacturer General Electric (CJ610-8A)

No. of Engines 2 Engine Rating 2,950 lb

Min. T/O Wt. 7.8 k-lb * Min. T/O Dist. @ Min. T/O Wt. 2,800 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 2,800 ft

Max. T/O Wt. Peace-Time 12.6 k-lb Max. T/O Wt. War-Time 15.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 3,940 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 3,940 ft

Min. Ldg. Wt. 10.0 k-lb Max. Ldg. Wt. 13.3 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,450 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,740 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |

Note: Adequate aircraft data is not available to express the relative structural effect of the aircraft.

Figure A-286. Gates Learjet 25

Aircraft Manufacturer Learjet

Aircraft Engine Manufacturer Garrett/AiResearch (TFE731-2)

No. of Engines 2 Engine Rating 3,500 lb

Min. T/O Wt. 9.8 k-lb * Min. T/O Dist. @ Min. T/O Wt. 3,150 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 3,150 ft

Max. T/O Wt. Peace-Time 14.6 k-lb Max. T/O Wt. War-Time 18.3 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,220 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 4,220 ft

Min. Ldg. Wt. 12.2 k-lb Max. Ldg. Wt. 15.3 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,550 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 3,080 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |

Note: Adequate aircraft data is not available to express the relative structural effect of the aircraft.

Figure A-287. Gates Learjet 35

Aircraft Manufacturer Learjet

Aircraft Engine Manufacturer Garrett/AiResearch (TFE731-2)

No. of Engines 2 Engine Rating 3,500 lb

Min. T/O Wt. 9.8 k-lb * Min. T/O Dist. @ Min. T/O Wt. 3,250 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 3,250 ft

Max. T/O Wt. Peace-Time 14.8 k-lb Max. T/O Wt. War-Time 18.3 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,970 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 4,970 ft

Min. Ldg. Wt. 11.8 k-lb Max. Ldg. Wt. 15.3 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,520 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 3,080 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |

Note: Adequate aircraft data is not available to express the relative structural effect of the aircraft.

Figure A-288. Gates Learjet 36

Aircraft Manufacturer Gulfstream American (Now Grumman)

Aircraft Engine Manufacturer Rolls-Royce (Spey MK 511-8)

No. of Engines 2 Engine Rating 11,400 lb

Min. T/O Wt. 45.2 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 65.5 k-lb Max. T/O Wt. War-Time 65.5 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 5,600 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 45.2 k-lb Max. Ldg. Wt. 58.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 3,500 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |

Note: Adequate aircraft data is not available to express the relative structural effect of the aircraft.

Figure A-289. Grumman Gulfstream II

Aircraft Manufacturer Lockheed

Aircraft Engine Manufacturer Pratt and Whitney (JT12A-8)

No. of Engines 4 Engine Rating 3,300 lb

Min. T/O Wt. 26.9 k-lb * Min. T/O Dist. @ Min. T/O Wt. 3,200 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 42.0 k-lb Max. T/O Wt. War-Time 42.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 6,000 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 26.9 k-lb Max. Ldg. Wt. 35.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,100 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,650 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |
| 27 | 9 | 9 | 9 | 9 | 6 | 7 | 7 | 8 |
| 35 | 12 | 12 | 12 | 12 | 9 | 10 | 10 | 11 |
| 42 | 14 | 14 | 15 | 15 | 12 | 12 | 13 | 14 |

Figure A-290. Lockheed 1329, Jetstar

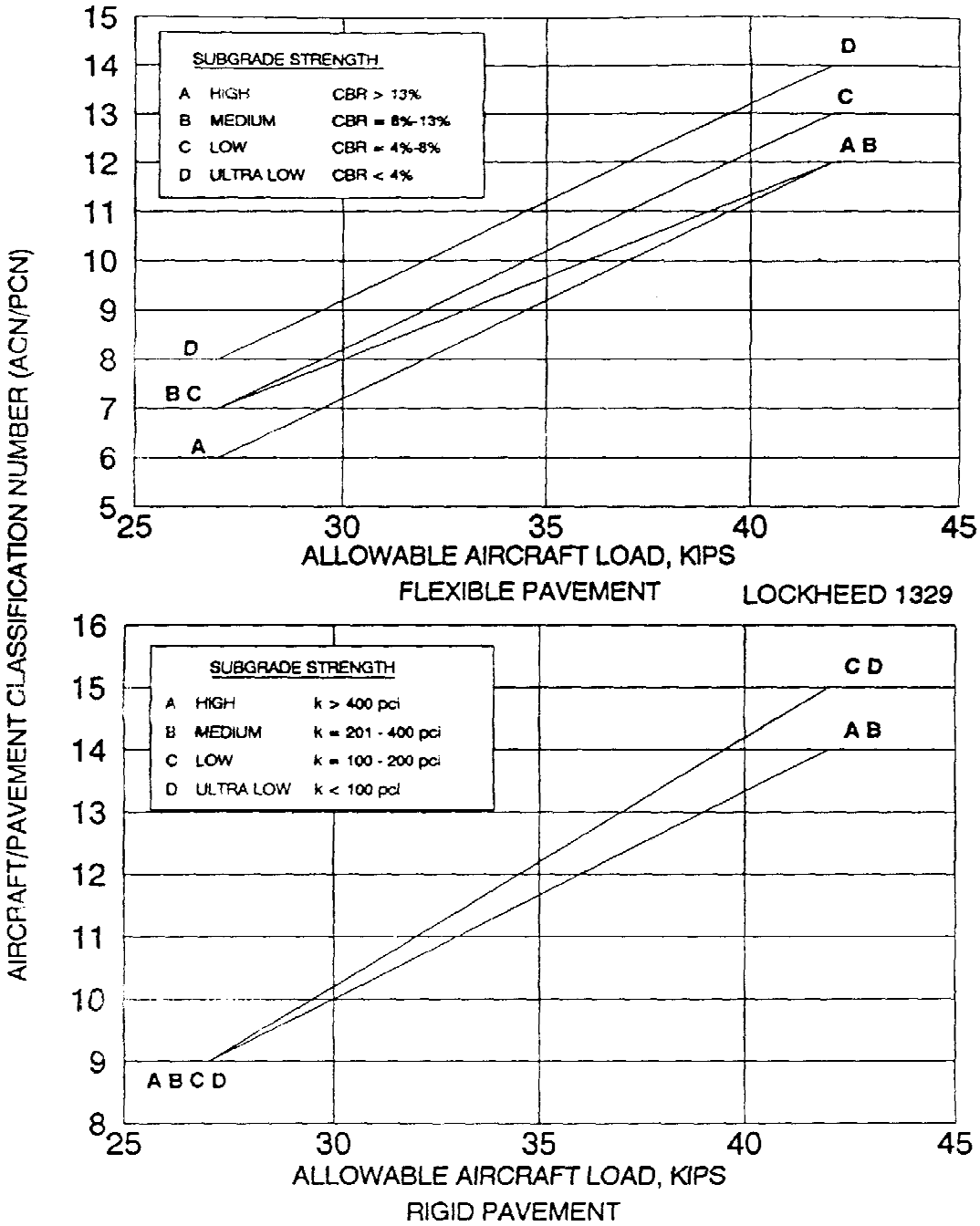


Figure A-291. Lockheed 1329, ACN/PCN Curves

Aircraft Manufacturer Rockwell International

Aircraft Engine Manufacturer Pratt and Whitney (JT12A-8)

No. of Engines 2 Engine Rating 3,300 lb

Min. T/O Wt. 11.2 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 18.6 k-lb Max. T/O Wt. War-Time 18.6 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,800 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 13.4 k-lb Max. Ldg. Wt. 17.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,200 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |
| 13 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 |
| 18 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 |
| 19 | 9 | 9 | 9 | 8 | 8 | 8 | 8 | 8 |

Figure A-292. Rockwell NA-265-40, Sabreliner

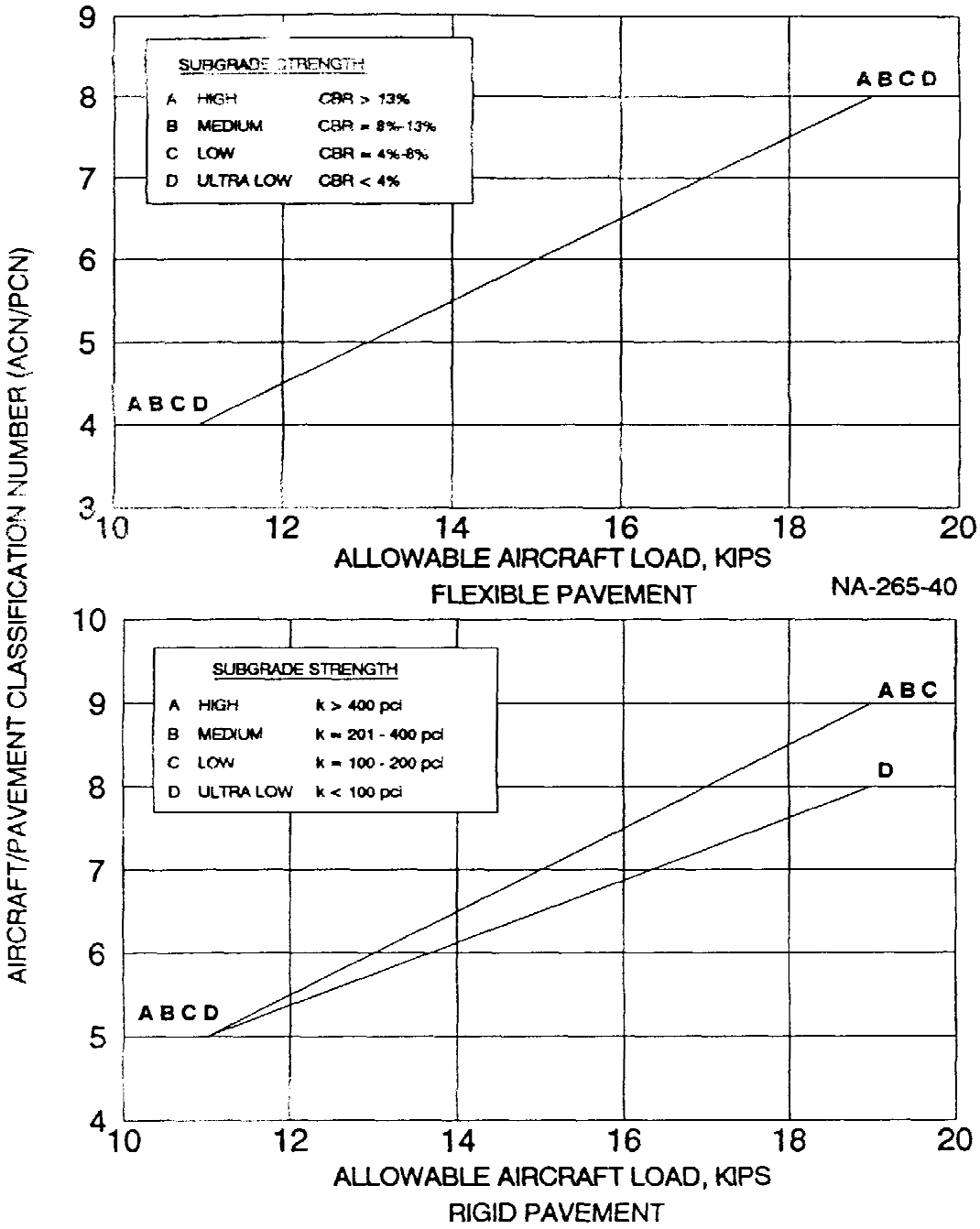


Figure A-293. Rockwell NA-265-40, ACN/PCN Curves

Aircraft Manufacturer Rockwell International

Aircraft Engine Manufacturer Pratt and Whitney (JT12A-8)

No. of Engines 2 Engine Rating 3,300 lb

Min. T/O Wt. 13.3 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 20.0 k-lb Max. T/O Wt. War-Time 20.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 5,050 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 13.9 k-lb Max. Ldg. Wt. 17.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,275 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |
| 14 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 18 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 |
| 20 | 9 | 9 | 9 | 8 | 8 | 8 | 8 | 8 |

Figure A-294. Rockwell NA-265-60, Sabreliner

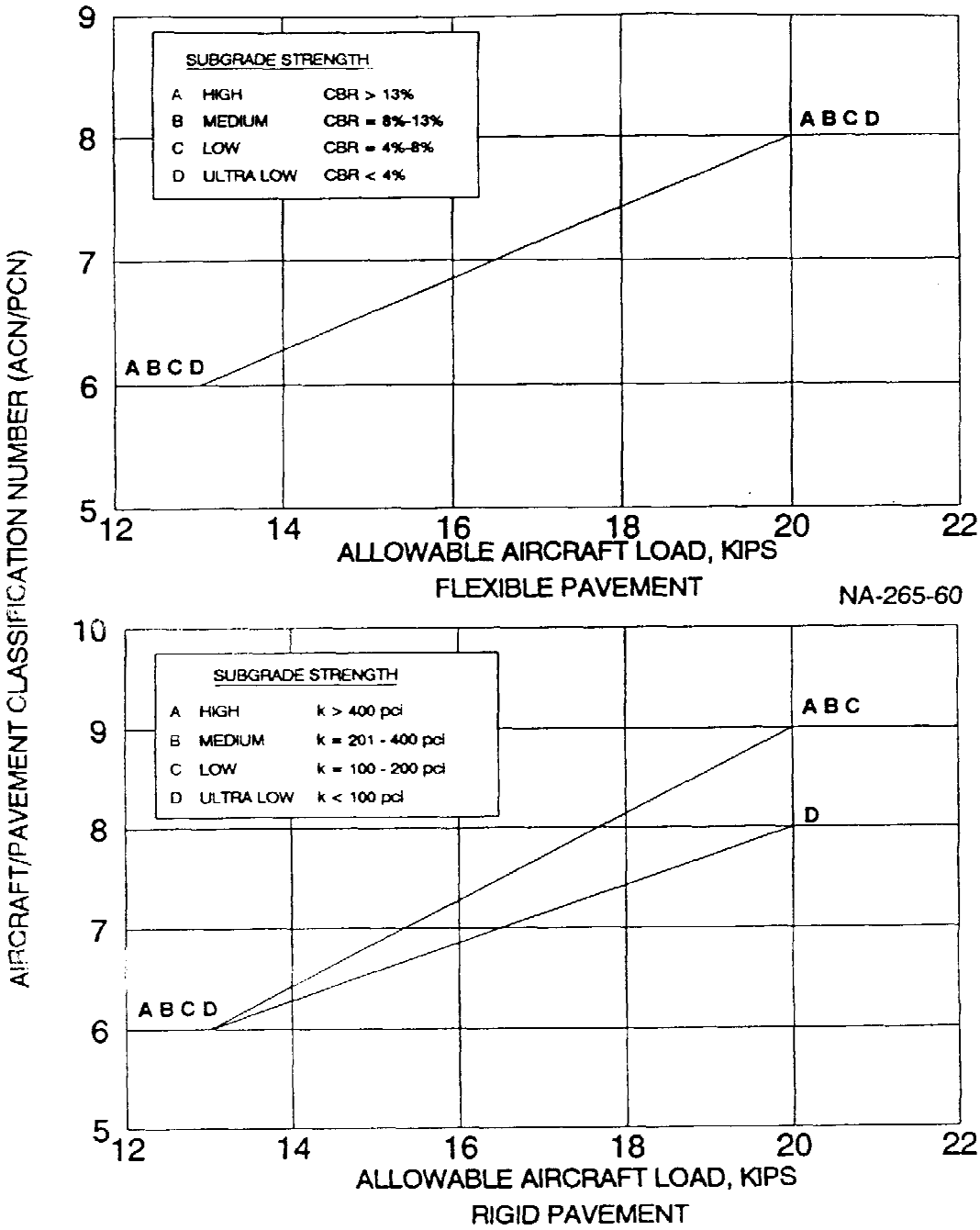


Figure A-295. Rockwell NA-265-60, ACN/PCN Curves

Aircraft Manufacturer Rockwell International

Aircraft Engine Manufacturer General Electric (CF700-2D-2)

No. of Engines 2 Engine Rating 4,500 lb

Min. T/O Wt. 15.5 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 23.0 k-lb Max. T/O Wt. War-Time 23.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,350 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 16.3 k-lb Max. Ldg. Wt. 22.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,470 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. †

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |
| 16 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 7 |
| 22 | 10 | 10 | 10 | 10 | 9 | 9 | 9 | 9 |
| 23 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |

Figure A-296. Rockwell NA-265-75A, Sabreliner

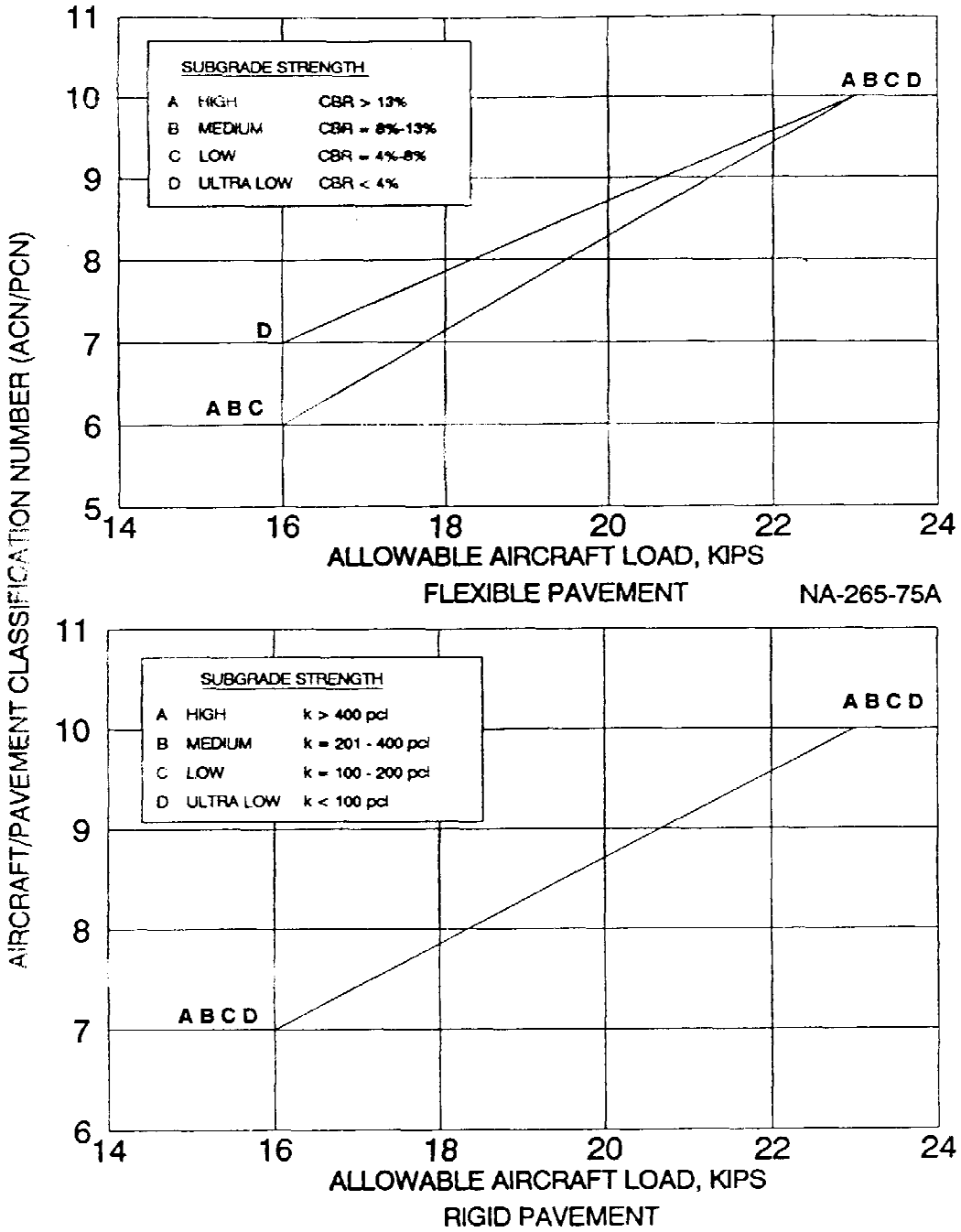


Figure A-297. Rockwell NA-265-75A, ACN/PCN Curves

Aircraft Manufacturer Avions Marcel Dassault

Aircraft Engine Manufacturer General Electric (CF700-2D-2)

No. of Engines 2 Engine Rating 4,500 lb

Min. T/O Wt. 17.6 k-lb * Min. T/O Dist. @ Min. T/O Wt. 1,950 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 2,500 ft

Max. T/O Wt. Peace-Time 28.3 k-lb Max. T/O Wt. War-Time 28.7 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,180 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 4,850

Min. Ldg. Wt. 17.0 k-lb Max. Ldg. Wt. 23.3 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,900 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,500

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |

Note: Adequate aircraft data is not available to express the relative structural effect of the aircraft.

Figure A-298. Avions Marcel Dassault Mystere 20, Fan Jet Falcon

Aircraft Manufacturer Fokker

Aircraft Engine Manufacturer Rolls-Royce (RE.183-2 Spey Junior MK 555-15)

No. of Engines 2 Engine Rating 9,850 lb

Min. T/O Wt. 38.4 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 62.0 k-lb Max. T/O Wt. War-Time 62.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,950 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 49.4 k-lb Max. Ldg. Wt. 54.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 4,200 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |
| 49 | 11 | 12 | 13 | 14 | 9 | 11 | 12 | 14 |
| 54 | 12 | 13 | 15 | 15 | 10 | 12 | 14 | 16 |
| 62 | 14 | 15 | 17 | 17 | 12 | 14 | 16 | 19 |

Figure A-299. Fokker F-28

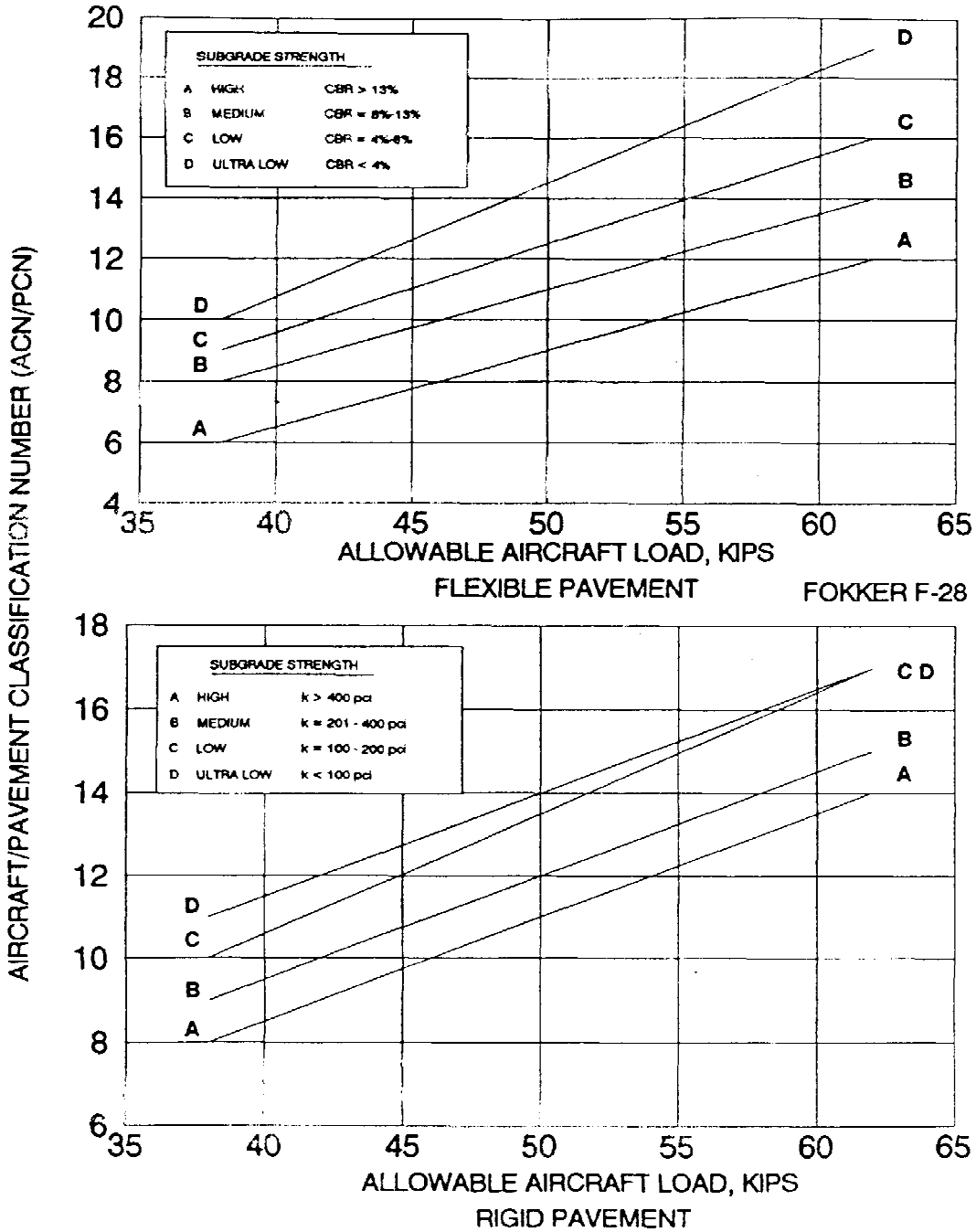


Figure A-300. Fokker F-28, ACN/PCN Curves

Aircraft Manufacturer Hamburger Flugzeugbau (now Messerschmitt-Bolkow-Blohm)

Aircraft Engine Manufacturer General Electric (CJ610-5)

No. of Engines 2 Engine Rating 2,950 lb

Min. T/O Wt. 14.2 k-lb * Min. T/O Dist. @ Min. T/O Wt. 2,500 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 20.3 k-lb Max. T/O Wt. War-Time 20.3 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 5,500 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 16.6 k-lb Max. Ldg. Wt. 19.4 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,150 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,650 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| | Rigid Pavement Subgrades | | | | Flexible Pavement Subgrades | | | |
|---|---|---|---|---|---|---|---|---|
| Weight | High A | Medium B | Low C | Ultra Low D | High A | Medium B | Low C | Very Low D |
| 17 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 19 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 20 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |

Figure A-301. Hamburger-Flugzeugbau HFB-320, Hansa