

TAKEOFF DISTANCE MAXIMUM WEIGHT 2300 LBS

SHORT FIELD

CONDITIONS:

Flaps Up
Full Throttle Prior to Brake Release
Paved, Level, Dry Runway
Zero Wind

NOTES:

1. Short field technique as specified in Section 4.
2. Prior to takeoff from fields above 3000 feet elevation, the mixture should be leaned to give maximum RPM in a full throttle, static runup.
3. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds up to 10 knots, increase distances by 10% for each 2 knots.
4. For operation on a dry, grass runway, increase distances by 15% of the "ground roll" figure.

| WEIGHT LBS | TAKEOFF SPEED KIAS | | PRESS ALT FT | 0°C | | 10°C | | 20°C | | 30°C | | 40°C | |
|---------------|--------------------------|-------------|--------------------|--------------|--------------------------------|--------------|--------------------------------|--------------|--------------------------------|--------------|--------------------------------|--------------|--------------------------------|
| | LIFT OFF | AT 50 FT | | GRND ROLL | TOTAL TO CLEAR 50 FT OBS | GRND ROLL | TOTAL TO CLEAR 50 FT OBS | GRND ROLL | TOTAL TO CLEAR 50 FT OBS | GRND ROLL | TOTAL TO CLEAR 50 FT OBS | GRND ROLL | TOTAL TO CLEAR 50 FT OBS |
| | | | | | | | | | | | | | |
| 2300 | 52 | 59 | S.L. | 720 | 1300 | 775 | 1390 | 835 | 1490 | 895 | 1590 | 960 | 1700 |
| | | | 1000 | 790 | 1420 | 850 | 1525 | 915 | 1630 | 980 | 1745 | 1050 | 1865 |
| | | | 2000 | 865 | 1555 | 930 | 1670 | 1000 | 1790 | 1075 | 1915 | 1155 | 2055 |
| | | | 3000 | 950 | 1710 | 1025 | 1835 | 1100 | 1970 | 1185 | 2115 | 1270 | 2265 |
| | | | 4000 | 1045 | 1880 | 1125 | 2025 | 1210 | 2175 | 1300 | 2335 | 1400 | 2510 |
| | | | 5000 | 1150 | 2075 | 1240 | 2240 | 1335 | 2410 | 1435 | 2595 | 1540 | 2795 |
| | | | 6000 | 1265 | 2305 | 1365 | 2485 | 1475 | 2680 | 1585 | 2895 | 1705 | 3125 |
| | | | 7000 | 1400 | 2565 | 1510 | 2770 | 1630 | 3000 | 1755 | 3245 | 1890 | 3515 |
| | | | 8000 | 1550 | 2870 | 1675 | 3110 | 1805 | 3375 | 1945 | 3670 | 2095 | 3990 |

Figure 5-4. Takeoff Distance (Sheet 1 of 2)

TAKEOFF DISTANCE 2100 LBS AND 1900 LBS

SHORT FIELD

REFER TO SHEET 1 FOR APPROPRIATE CONDITIONS AND NOTES.

| WEIGHT LBS | TAKEOFF SPEED KIAS | | PRESS ALT FT | 0°C | | 10°C | | 20°C | | 30°C | | 40°C | |
|---------------|--------------------------|-------------|--------------------|--------------|--------------------------------|--------------|--------------------------------|--------------|--------------------------------|--------------|--------------------------------|--------------|--------------------------------|
| | LIFT OFF | AT 50 FT | | GRND ROLL | TOTAL TO CLEAR 50 FT OBS | GRND ROLL | TOTAL TO CLEAR 50 FT OBS | GRND ROLL | TOTAL TO CLEAR 50 FT OBS | GRND ROLL | TOTAL TO CLEAR 50 FT OBS | GRND ROLL | TOTAL TO CLEAR 50 FT OBS |
| | | | | | | | | | | | | | |
| 2100 | 50 | 56 | S.L. | 585 | 1070 | 630 | 1140 | 680 | 1220 | 725 | 1300 | 780 | 1390 |
| | | | 1000 | 640 | 1165 | 690 | 1245 | 740 | 1330 | 795 | 1420 | 850 | 1520 |
| | | | 2000 | 700 | 1270 | 755 | 1360 | 810 | 1455 | 870 | 1555 | 935 | 1665 |
| | | | 3000 | 770 | 1390 | 830 | 1490 | 890 | 1595 | 955 | 1710 | 1025 | 1830 |
| | | | 4000 | 845 | 1525 | 910 | 1640 | 980 | 1755 | 1050 | 1880 | 1130 | 2015 |
| | | | 5000 | 930 | 1680 | 1000 | 1805 | 1075 | 1935 | 1155 | 2075 | 1240 | 2230 |
| | | | 6000 | 1025 | 1850 | 1100 | 1990 | 1185 | 2140 | 1275 | 2300 | 1370 | 2475 |
| | | | 7000 | 1130 | 2050 | 1215 | 2210 | 1310 | 2380 | 1410 | 2560 | 1515 | 2755 |
| | | | 8000 | 1245 | 2275 | 1345 | 2460 | 1450 | 2655 | 1560 | 2865 | 1680 | 3090 |
| 1900 | 47 | 54 | S.L. | 470 | 865 | 505 | 920 | 540 | 985 | 580 | 1045 | 620 | 1115 |
| | | | 1000 | 515 | 940 | 550 | 1005 | 590 | 1070 | 635 | 1140 | 680 | 1215 |
| | | | 2000 | 560 | 1025 | 605 | 1095 | 645 | 1170 | 695 | 1245 | 745 | 1330 |
| | | | 3000 | 615 | 1115 | 660 | 1195 | 710 | 1275 | 760 | 1365 | 815 | 1455 |
| | | | 4000 | 670 | 1220 | 725 | 1305 | 780 | 1400 | 835 | 1495 | 895 | 1595 |
| | | | 5000 | 740 | 1340 | 795 | 1435 | 855 | 1535 | 920 | 1640 | 985 | 1755 |
| | | | 6000 | 810 | 1470 | 875 | 1575 | 940 | 1690 | 1010 | 1810 | 1085 | 1940 |
| | | | 7000 | 895 | 1620 | 965 | 1740 | 1035 | 1865 | 1115 | 2000 | 1195 | 2145 |
| | | | 8000 | 985 | 1790 | 1065 | 1925 | 1145 | 2065 | 1230 | 2220 | 1320 | 2385 |

Figure 5-4. Takeoff Distance (Sheet 2 of 2)