MAXIMUM GLIDE

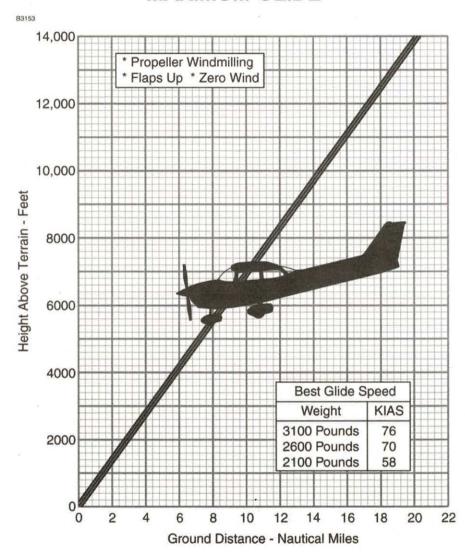


Figure 2*

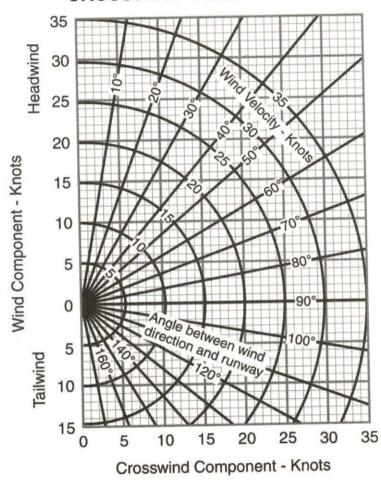
PERFORMANCE

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CROSSWIND COMPONENT

B3094



Note Maximum demonstrated crosswind velocity is 15 knots (not a limitation).

Figure 3

SHORT FIELD TAKEOFF DISTANCE AT 3100 POUNDS

CONDITIONS:

- Flaps 20°
- 2400 RPM, Full Throttle and Mixture Set Prior to Brake Release
- · Paved, Level, Dry Runway

- · Cowl Flaps Open
- · Lift Off:

49 KIAS

- · Speed at 50 Feet: 58 KIAS
- · Zero Wind

| | 0 | °C | 10 | °C | 20 |)°C | 30 | °C | 40°C | |
|---------------------------------|--------------|--|--------------|--|--------------|--|--------------|--|--------------|--|
| Pressure Altitude in Feet | Grnd Roll | Total Ft to Clear 50 Ft Obst |
| S.L. | 715 | 1365 | 765 | 1460 | 825 | 1570 | 885 | 1680 | 945 | 1800 |
| 1000 | 775 | 1490 | 835 | 1600 | 900 | 1720 | 965 | 1845 | 1030 | 1980 |
| 2000 | 850 | 1635 | 915 | 1760 | 980 | 1890 | 1055 | 2035 | 1130 | 2190 |
| 3000 | 925 | 1800 | 995 | 1940 | 1070 | 2090 | 1150 | 2255 | 1235 | 2435 |
| 4000 | 1015 | 1990 | 1090 | 2150 | 1175 | 2325 | 1260 | 2515 | 1355 | 2720 |
| 5000 | 1110 | 2210 | 1195 | 2395 | 1290 | 2595 | 1385 | 2820 | 1485 | 3070 |
| 6000 | 1220 | 2470 | 1315 | 2690 | 1415 | 2930 | 1520 | 3200 | 1635 | 3510 |
| 7000 | 1340 | 2785 | 1445 | 3045 | 1560 | 3345 | 1675 | 3685 | | |
| 8000 | 1480 | 3175 | 1595 | 3500 | 1720 | 3880 | | | | |

- Short field technique as specified in NORMAL PROCEDURES page N-17.
- Prior to takeoff, the mixture should be leaned to the Maximum Power Fuel Flow placard value in a full throttle, static runup.
- Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2 knots.
- For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.

45 KIAS

SHORT FIELD TAKEOFF DISTANCE AT 2700 POUNDS

CONDITIONS:

- Flaps 20°
- · 2400 RPM, Full Throttle and Mixture Set Prior to Brake Release
- · Paved, Level, Dry Runway

- · Cowl Flaps Open
- · Lift Off:
- Speed at 50 Feet:
- 54 KIAS · Zero Wind

| | 0° | C | 10 | 10°C | | °C | 30°C | | 40°C | |
|---------------------------------|--------------|--|--------------|--|--------------|--|--------------|--|--------------|--|
| Pressure Altitude in Feet | Grnd Roll | Total Ft to Clear 50 Ft Obst |
| S.L. | 520 | 995 | 560 | 1065 | 600 | 1135 | 645 | 1215 | 690 | 1295 |
| 1000 | 565 | 1080 | 610 | 1155 | 655 | 1235 | 700 | 1320 | 750 | 1410 |
| 2000 | 615 | 1180 | 665 | 1260 | 710 | 1350 | 765 | 1445 | 820 | 1545 |
| 3000 | 675 | 1285 | 725 | 1380 | 775 | 1480 | 835 | 1585 | 895 | 1695 |
| 4000 | 735 | 1410 | 790 | 1510 | 850 | 1625 | 910 | 1740 | 975 | 1870 |
| 5000 | 805 | 1550 | 865 | 1665 | 930 | 1790 | 1000 | 1920 | 1070 | 2065 |
| 6000 | 880 | 1705 | 950 | 1840 | 1020 | 1980 | 1095 | 2135 | 1175 | 2300 |
| 7000 | 965 | 1890 | 1040 | 2040 | 1120 | 2205 | 1200 | 2380 | 1290 | 2575 |
| 8000 | 1060 | 2100 | 1145 | 2275 | 1230 | 2465 | 1320 | 2675 | 1420 | 2910 |

- Short field technique as specified in NORMAL PROCEDURES page N-17.
- Prior to takeoff, the mixture should be leaned to the Maximum Power Fuel Flow placard value in a full throttle, static runup.
- Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2
- For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.



SHORT FIELD TAKEOFF DISTANCE AT 2300 POUNDS

CONDITIONS:

- Flaps 20°
- · 2400 RPM, Full Throttle and Mixture Set Prior to Brake Release
- · Paved, Level, Dry Runway

- · Cowl Flaps Open
- · Lift Off:
- 42 KIAS · Speed at 50 Feet: 50 KIAS
- · Zero Wind

| | 0 | °C | 10 | °C | 20 | °C | 30 | °C | 40°C | |
|---------------------------------|--------------|--|--------------|--|--------------|--|--------------|--|--------------|--|
| Pressure Altitude in Feet | Grnd Roll | Total Ft to Clear 50 Ft Obst |
| S.L. | 365 | 705 | 390 | 750 | 420 | 800 | 450 | 850 | 480 | 905 |
| 1000 | 395 | 765 | 425 | 815 | 455 | 870 | 490 | 925 | 520 | 985 |
| 2000 | 430 | 830 | 460 | 885 | 495 | 940 | 530 | 1005 | 565 | 1070 |
| 3000 | 470 | 900 | 505 | 960 | 540 | 1025 | 580 | 1090 | 620 | 1165 |
| 4000 | 510 | 980 | 550 | 1045 | 590 | 1115 | 630 | 1190 | 675 | 1270 |
| 5000 | 555 | 1065 | 600 | 1140 | 640 | 1220 | 690 | 1305 | 735 | 1390 |
| 6000 | 610 | 1165 | 655 | 1250 | 700 | 1335 | 755 | 1430 | 805 | 1530 |
| 7000 | 665 | 1275 | 715 | 1370 | 770 | 1470 | 825 | 1570 | 885 | 1685 |
| 8000 | 730 | 1405 | 785 | 1510 | 845 | 1620 | 905 | 1735 | 970 | 1865 |

- Short field technique as specified in NORMAL PROCEDURES page N-17.
- Prior to takeoff, the mixture should be leaned to the Maximum Power Fuel Flow placard value in a full throttle, static runup.
- Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2 knots.
- For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.

CRUISE PERFORMANCE PRESSURE ALTITUDE SEA LEVEL

CONDITIONS: 3100 Pounds Recommended Lean Mixture Cowl Flaps Closed

| | | | °C BELC | Charles I | 200000000000000000000000000000000000000 | TANDAF IPERAT | A CONTRACTOR OF THE PARTY OF TH | 100 700 100 700 700 | °C ABO | CONTRACTOR OF THE PARTY OF THE |
|------|----|----------|---------|-----------|---|------------------|--|---------------------|--------|---|
| RPM | MP | % BPH | KTAS | GPH | % BPH | KTAS | GPH | % BPH | KTAS | GPH |
| 2400 | 27 | | - | | 7200 | | 222 | | | |
| | 26 | | | | | | | 82 | 140 | 14.3 |
| | 25 | 84 | 134 | 14.5 | 81 | 136 | 14.0 | 78 | 138 | 13.5 |
| | 24 | 79 | 132 | 13.6 | 76 | 133 | 13.2 | 74 | 135 | 12.8 |
| | 23 | 74 | 129 | 12.8 | 71 | 130 | 12.4 | 69 | 131 | 12.1 |
| | 22 | 69 | 126 | 12.1 | 67 | 127 | 11.7 | 65 | 127 | 11.4 |
| | 21 | 65 | 122 | 11.4 | 62 | 122 | 11.1 | 60 | 123 | 10.8 |
| | 20 | 60 | 118 | 10.7 | 58 | 118 | 10.4 | 56 | 118 | 10.2 |
| 2300 | 27 | | | | | | | 84 | 141 | 14.5 |
| | 26 | | | | 82 | 137 | 14.2 | 79 | 139 | 13.7 |
| | 25 | 80 | 133 | 13.9 | 78 | 135 | 13.4 | 75 | 136 | 13.0 |
| | 24 | 76 | 130 | 13.2 | 73 | 132 | 12.7 | 71 | 132 | 12.3 |
| | 23 | 71 | 127 | 12.4 | 69 | 128 | 12.0 | 67 | 129 | 11.7 |
| | 22 | 67 | 124 | 11.7 | 65 | 124 | 11.4 | 62 | 125 | 11.1 |
| | 21 | 62 | 120 | 11.1 | 60 | 120 | 10.8 | 58 | 121 | 10.5 |
| | 20 | 58 | 116 | 10.4 | 56 | 116 | 10.2 | 54 | 116 | 9.9 |
| 2200 | 27 | | | - | 83 | 137 | 14.4 | 80 | 139 | 13.9 |
| | 26 | 82 | 133 | 14.2 | 79 | 135 | 13.6 | 76 | 136 | 13.2 |
| | 25 | 77 | 131 | 13.4 | 75 | 133 | 12.9 | 72 | 134 | 12.6 |
| | 24 | 73 | 129 | 12.7 | 71 | 130 | 12.3 | 68 | 130 | 11.9 |
| | 23 | 69 | 126 | 12.0 | 66 | 126 | 11.7 | 64 | 126 | 11.3 |
| | 22 | 65 | 122 | 11.4 | 62 | 122 | 11.1 | 60 | 123 | 10.8 |
| | 21 | 60 | 118 | 10.8 | 58 | 119 | 10.5 | 56 | 118 | 10.2 |
| | 20 | 56 | 114 | 10.2 | 54 | 114 | 9.9 | 52 | 114 | 9.7 |

- Maximum cruise power is 80% MCP. Those powers above that value in the table are for interpolation purposes only.
- For best economy, operate at peak EGT.



CRUISE PERFORMANCE PRESSURE ALTITUDE SEA LEVEL (Continued)

CONDITIONS: 3100 Pounds Recommended Lean Mixture Cowl Flaps Closed

| | | STAI | °C BELO | | | TANDAF IPERAT | | | °C ABO | |
|------|----|----------|---------|------|----------|------------------|------|----------|--------|------|
| RPM | MP | % BPH | KTAS | GPH | % BPH | KTAS | GPH | % BPH | KTAS | GPH |
| 2100 | 27 | 82 | 133 | 14.2 | 79 | 135 | 13.7 | 76 | 136 | 13.2 |
| | 26 | 78 | 131 | 13.4 | 75 | 133 | 13.0 | 73 | 134 | 12.6 |
| | 25 | 74 | 129 | 12.8 | 71 | 130 | 12.4 | 69 | 130 | 12.0 |
| | 24 | 70 | 126 | 12.1 | 67 | 127 | 11.8 | 65 | 127 | 11.4 |
| | 23 | 66 | 123 | 11.5 | 63 | 123 | 11.2 | 61 | 123 | 10.9 |
| | 22 | 61 | 119 | 10.9 | 59 | 120 | 10.6 | 57 | 120 | 10.4 |
| | 21 | 57 | 115 | 10.4 | 55 | 116 | 10.1 | 54 | 115 | 9.9 |
| | 20 | 53 | 111 | 9.8 | 51 | 111 | 9.6 | 50 | 111 | 9.3 |
| 2000 | 27 | 78 | 131 | 13.4 | 75 | 133 | 13.0 | 72 | 134 | 12.6 |
| | 26 | 74 | 129 | 12.8 | 71 | 130 | 12.4 | 69 | 131 | 12.0 |
| | 25 | 70 | 126 | 12.2 | 67 | 127 | 11.8 | 65 | 127 | 11.5 |
| | 24 | 66 | 123 | 11.6 | 64 | 124 | 11.3 | 62 | 124 | 11.0 |
| | 23 | 62 | 120 | 11.0 | 60 | 120 | 10.7 | 58 | 121 | 10.5 |
| | 22 | 58 | 116 | 10.5 | 56 | 117 | 10.2 | 54 | 116 | 10.0 |
| | 21 | 54 | 113 | 10.0 | 53 | 112 | 9.7 | 51 | 112 | 9.5 |
| | 20 | 51 | 108 | 9.4 | 49 | 108 | 9.2 | 47 | 108 | 9.0 |

NOTE

- Maximum cruise power is 80% MCP. Those powers above that value in the table are for interpolation purposes only.
- For best economy, operate at peak EGT.

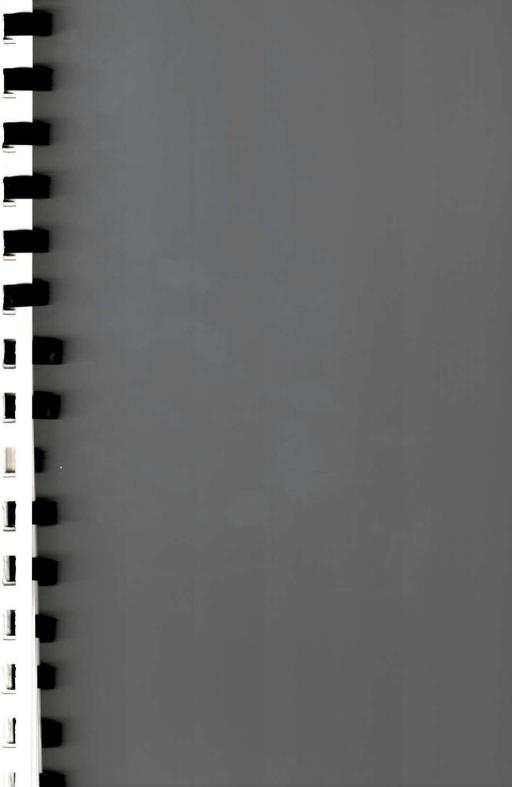
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CRUISE PERFORMANCE PRESSURE ALTITUDE 2000 FEET

CONDITIONS: 3100 Pounds Recommended Lean Mixture Cowl Flaps Closed

| | | STAN | 20°C BELOW STANDARD TEMP | | | TANDAF IPERAT | 0.003 | STAN | °C ABO | |
|-----------|----|----------|-----------------------------|------|----------|------------------|-------|----------|--------|------|
| RPM | MP | % BPH | KTAS | GPH | % BPH | KTAS | GPH | % BPH | KTAS | GPH |
| 2400 | 26 | | | | | | - | | | |
| | 25 | | | | 83 | 140 | 14.4 | 80 | 142 | 13.9 |
| | 24 | 81 | 136 | 14.1 | 79 | 138 | 13.6 | 76 | 139 | 13.2 |
| | 23 | 77 | 133 | 13.3 | 74 | 134 | 12.8 | 71 | 135 | 12.4 |
| | 22 | 72 | 130 | 12.5 | 69 | 131 | 12.1 | 67 | 131 | 11.7 |
| | 21 | 67 | 126 | 11.8 | 65 | 126 | 11.4 | 63 | 127 | 11.1 |
| | 20 | 62 | 122 | 11.0 | 60 | 122 | 10.7 | 58 | 122 | 10.5 |
| 2300 | 26 | | | | | | | 82 | 143 | 14.2 |
| | 25 | 83 | 137 | 14.4 | 80 | 139 | 13.9 | 77 | 140 | 13.4 |
| | 24 | 78 | 134 | 13.6 | 76 | 136 | 13.1 | 73 | 137 | 12.7 |
| | 23 | 74 | 131 | 12.8 | 71 | 133 | 12.4 | 69 | 133 | 12.0 |
| | 22 | 69 | 128 | 12.1 | 67 | 128 | 11.7 | 65 | 129 | 11.4 |
| | 21 | 65 | 124 | 11.4 | 62 | 124 | 11.1 | 60 | 125 | 10.8 |
| | 20 | 60 | 120 | 10.7 | 58 | 120 | 10.5 | 56 | 120 | 10.2 |
| 2200 | 26 | | 7 <u>2-12-1</u> | | 81 | 139 | 14.1 | 78 | 140 | 13.6 |
| 570=76160 | 25 | 80 | 135 | 13.8 | 77 | 137 | 13.3 | 74 | 138 | 12.9 |
| | 24 | 75 | 132 | 13.1 | 73 | 134 | 12.6 | 70 | 134 | 12.3 |
| | 23 | 71 | 129 | 12.4 | 69 | 130 | 12.0 | 66 | 130 | 11.6 |
| | 22 | 67 | 126 | 11.7 | 64 | 126 | 11.4 | 62 | 127 | 11.0 |
| | 21 | 62 | 122 | 11.1 | 60 | 122 | 10.8 | 58 | 122 | 10.5 |
| | 20 | 58 | 118 | 10.5 | 56 | 118 | 10.2 | 54 | 118 | 9.9 |

- Maximum cruise power is 80% MCP. Those powers above that value in the table are for interpolation purposes only.
- For best economy, operate at peak EGT.



CRUISE PERFORMANCE PRESSURE ALTITUDE 2000 FEET (Continued)

CONDITIONS: 3100 Pounds Recommended Lean Mixture Cowl Flaps Closed

| | | | °C BELC | 7.510 | | TANDAR | | 20°C ABOVE STANDARD TEMP | | | |
|------|----|----------|---------|-------|----------|--------|------|-----------------------------|------|------|--|
| RPM | MP | % BPH | KTAS | GPH | % BPH | KTAS | GPH | % BPH | KTAS | GPH | |
| 2100 | 26 | 80 | 135 | 13.9 | 77 | 137 | 13.4 | 75 | 138 | 12.9 | |
| | 25 | 76 | 133 | 13.1 | 73 | 134 | 12.7 | 71 | 134 | 12.3 | |
| | 24 | 72 | 130 | 12.5 | 69 | 131 | 12.1 | 67 | 131 | 11.7 | |
| | 23 | 68 | 127 | 11.8 | 65 | 127 | 11.5 | 63 | 127 | 11.2 | |
| | 22 | 64 | 123 | 11.2 | 61 | 123 | 10.9 | 59 | 124 | 10.6 | |
| | 21 | 59 | 119 | 10.6 | 57 | 119 | 10.4 | 55 | 119 | 10.1 | |
| | 20 | 55 | 115 | 10.1 | 53 | 115 | 9.8 | 52 | 115 | 9.6 | |
| 2000 | 26 | 76 | 133 | 13.1 | 73 | 134 | 12.7 | 71 | 134 | 12.3 | |
| | 25 | 72 | 130 | 12.5 | 69 | 131 | 12.1 | 67 | 131 | 11.8 | |
| | 24 | 68 | 127 | 11.9 | 66 | 127 | 11.5 | 64 | 128 | 11.2 | |
| | 23 | 64 | 124 | 11.3 | 62 | 124 | 11.0 | 60 | 124 | 10.7 | |
| | 22 | 60 | 120 | 10.8 | 58 | 120 | 10.5 | 56 | 120 | 10.2 | |
| | 21 | 56 | 116 | 10.2 | 54 | 116 | 10.0 | 53 | 116 | 9.7 | |
| | 20 | 52 | 112 | 9.7 | 51 | 112 | 9.4 | 49 | 111 | 9.2 | |

- Maximum cruise power is 80% MCP. Those powers above that value in the table are for interpolation purposes only.
- For best economy, operate at peak EGT.



CRUISE PERFORMANCE PRESSURE ALTITUDE 4000 FEET

CONDITIONS: 3100 Pounds Recommended Lean Mixture Cowl Flaps Closed

| | | | °C BELC | | | TANDAR IPERATI | | 20°C ABOVE STANDARD TEMP | | |
|------|-------|----------|------------|------|----------|-------------------|------|-----------------------------|------|------|
| RPM | MP | % BPH | KTAS | GPH | % BPH | KTAS | GPH | % BPH | KTAS | GPH |
| 2400 | 25 | | | | | | | 83 | 146 | 14.4 |
| 2100 | 24 | 84 | 140 | 14.6 | 81 | 142 | 14.0 | 78 | 143 | 13.6 |
| | 23 | 79 | 138 | 13.7 | 76 | 139 | 13.2 | 74 | 139 | 12.8 |
| | 22 | 74 | 134 | 12.9 | 72 | 135 | 12.5 | 69 | 135 | 12.1 |
| | 21 | 70 | 130 | 12.1 | 67 | 131 | 11.7 | 65 | 131 | 11.4 |
| | 20 | 65 | 126 | 11.4 | 62 | 126 | 11.1 | 60 | 126 | 10.8 |
| 2300 | 25 | | | | 83 | 143 | 14.3 | 80 | 144 | 13.8 |
| 2300 | 24 | 81 | 138 | 14.0 | 78 | 140 | 13.5 | 75 | 141 | 13.1 |
| | 23 | 76 | 135 | 13.2 | 74 | 137 | 12.8 | 71 | 137 | 12.4 |
| | 22 | 72 | 132 | 12.5 | 69 | 133 | 12.1 | 67 | 133 | 11.7 |
| | 21 | 67 | 128 | 11.7 | 65 | 128 | 11.4 | 62 | 129 | 11.1 |
| | 20 | 62 | 124 | 11.1 | 60 | 124 | 10.7 | 58 | 124 | 10.5 |
| | 0.5 | 00 | 139 | 14.2 | 79 | 141 | 13.7 | 77 | 142 | 13.2 |
| 2200 | 25 | 82 | 136 | 13.4 | 75 | 138 | 13.0 | 72 | 138 | 12.6 |
| | 24 | 78 | 133 | 12.7 | 71 | 134 | 12.3 | 68 | 134 | 11.9 |
| | 23 | 73 | 130 | 12.0 | 66 | 130 | 11.7 | 64 | 130 | 11.3 |
| | 22 | 69 | 10.750.000 | 11.4 | 62 | 126 | 11.0 | 60 | 126 | 10.7 |
| | 21 20 | 65 60 | 126 122 | 10.7 | 58 | 122 | 10.4 | 56 | 121 | 10.2 |

- Maximum cruise power is 80% MCP. Those powers above that value in the table are for interpolation purposes only.
- For best economy, operate at peak EGT.



CRUISE PERFORMANCE PRESSURE ALTITUDE 4000 FEET (Continued)

CONDITIONS: 3100 Pounds Recommended Lean Mixture Cowl Flaps Closed

| | | STAN | °C BELO | 500 | | TANDAF IPERAT | | 20°C ABOVE STANDARD TEMP | | |
|------|----|----------|---------|------|----------|------------------|------|-----------------------------|------|------|
| RPM | MP | % BPH | KTAS | GPH | % BPH | KTAS | GPH | % BPH | KTAS | GPH |
| 2100 | 25 | 78 | 137 | 13.5 | 75 | 138 | 13.0 | 73 | 138 | 12.6 |
| | 24 | 74 | 134 | 12.8 | 71 | 135 | 12.4 | 69 | 135 | 12.0 |
| | 23 | 70 | 131 | 12.2 | 67 | 131 | 11.8 | 65 | 131 | 11.4 |
| | 22 | 66 | 127 | 11.5 | 63 | 127 | 11.2 | 61 | 127 | 10.9 |
| | 21 | 61 | 123 | 10.9 | 59 | 123 | 10.6 | 57 | 123 | 10.3 |
| | 20 | 57 | 119 | 10.3 | 55 | 119 | 10.1 | 53 | 118 | 9.8 |
| 2000 | 25 | 74 | 134 | 12.8 | 71 | 135 | 12.4 | 69 | 135 | 12.1 |
| | 24 | 70 | 131 | 12.2 | 68 | 131 | 11.8 | 65 | 132 | 11.5 |
| | 23 | 66 | 127 | 11.6 | 64 | 128 | 11.3 | 62 | 128 | 11.0 |
| - | 22 | 62 | 124 | 11.0 | 60 | 124 | 10.7 | 58 | 124 | 10.4 |
| | 21 | 58 | 120 | 10.5 | 56 | 120 | 10.2 | 54 | 120 | 9.9 |
| | 20 | 54 | 116 | 9.9 | 52 | 115 | 9.7 | 51 | 115 | 9.4 |

- Maximum cruise power is 80% MCP. Those powers above that value in the table are for interpolation purposes only.
- For best economy, operate at peak EGT.



CRUISE PERFORMANCE PRESSURE ALTITUDE 6000 FEET

CONDITIONS: 3100 Pounds

Recommended Lean Mixture Cowl Flaps Closed

| | гіарѕ | 20 | C BELC | Carlo | | FANDAR IPERATI | | STAN | °C ABO\ IDARD T | |
|------|-------|----------|--------|---|----------|-------------------|------|----------|--------------------|------|
| RPM | MP | % BPH | KTAS | GPH | % BPH | KTAS | GPH | % BPH | KTAS | GPH |
| 2400 | 23 | 82 | 142 | 14.2 | 79 | 143 | 13.6 | 76 | 144 | 13.2 |
| .= | 22 | 77 | 138 | 13.3 | 74 | 139 | 12.8 | 72 | 139 | 12.4 |
| | 21 | 72 | 135 | 12.5 | 69 | 135 | 12.1 | 67 | 135 | 11.7 |
| | 20 | 67 | 130 | 11.7 | 65 | 130 | 11.4 | 62 | 131 | 11.1 |
| | 19 | 62 | 126 | 11.0 | 60 | 126 | 10.7 | 58 | 125 | 10.4 |
| 2300 | 23 | 79 | 140 | 13.6 | 76 | 141 | 13.1 | 73 | 141 | 12.7 |
| 2000 | 22 | 74 | 136 | 12.8 | 71 | 137 | 12.4 | 69 | 137 | 12.0 |
| | 21 | 69 | 132 | 12.1 | 67 | 133 | 11.7 | 64 | 133 | 11.4 |
| | 20 | 65 | 128 | 11.4 | 62 | 128 | 11.0 | 60 | 128 | 10.7 |
| | 19 | 60 | 124 | 10.7 | 58 | 123 | 10.4 | 56 | 123 | 10.1 |
| 2200 | 23 | 76 | 137 | 13.1 | 73 | 138 | 12.6 | 70 | 138 | 12.3 |
| 2200 | 22 | 71 | 134 | 12.4 | 69 | 134 | 12.0 | 66 | 135 | 11.6 |
| | 21 | 67 | 130 | 11.7 | 64 | 130 | 11.3 | 62 | 130 | 11.0 |
| | 20 | 62 | 126 | 11.0 | 60 | 126 | 10.7 | 58 | 125 | 10.4 |
| | 19 | 58 | 121 | 10.4 | 56 | 121 | 10.1 | 54 | 120 | 9.9 |
| 2100 | 23 | 72 | 135 | 12.5 | 69 | 135 | 12.1 | 67 | 135 | 11.7 |
| 2100 | 22 | 68 | 131 | 11.8 | 65 | 131 | 11.5 | 63 | 131 | 11.1 |
| | 21 | 63 | 127 | 11.2 | 61 | 127 | 10.9 | 59 | 127 | 10.6 |
| | 20 | 59 | 123 | 10.6 | 57 | 122 | 10.3 | 55 | 122 | 10.0 |
| | 19 | 55 | 118 | 10.0 | 53 | 118 | 9.8 | 51 | 117 | 9.5 |
| 2000 | 23 | 68 | 131 | 11.9 | 66 | 132 | 11.5 | 63 | 132 | 11.2 |
| 2000 | 22 | 64 | 127 | 11.3 | 62 | 128 | 11.0 | 60 | 128 | 10.7 |
| | 21 | 60 | 124 | 10.7 | 58 | 123 | 10.4 | 56 | 123 | 10.2 |
| | 20 | 56 | 119 | 10.2 | 54 | 119 | 9.9 | 52 | 118 | 9.7 |
| | 19 | 52 | 115 | 9.6 | 50 | 114 | 9.4 | 48 | 113 | 9.1 |

- Maximum cruise power is 80% MCP. Those powers above that value in the table are for interpolation purposes only.
- For best economy, operate at peak EGT.



CRUISE PERFORMANCE PRESSURE ALTITUDE 8000 FEET

CONDITIONS: 3100 Pounds

Recommended Lean Mixture
Cowl Flaps Closed

| | | STAN | °C BELC | | TEM | TANDAR IPERAT | 51051.1 | STAN | °C ABO | |
|------|----|----------|---------|------|----------|------------------|---------|----------|--------|------|
| RPM | MP | % BPH | KTAS | GPH | % BPH | KTAS | GPH | % BPH | KTAS | GPH |
| 2400 | 21 | 74 | 139 | 12.9 | 72 | 139 | 12.5 | 69 | 140 | 12.1 |
| | 20 | 69 | 134 | 12.1 | 67 | 135 | 11.7 | 65 | 135 | 11.4 |
| | 19 | 64 | 130 | 11.4 | 62 | 130 | 11.0 | 60 | 130 | 10.7 |
| | 18 | 59 | 125 | 10.6 | 57 | 124 | 10.3 | 55 | 124 | 10.1 |
| 2300 | 21 | 72 | 136 | 12.5 | 69 | 137 | 12.0 | 67 | 137 | 11.7 |
| | 20 | 67 | 132 | 11.7 | 64 | 132 | 11.3 | 62 | 132 | 11.0 |
| | 19 | 62 | 128 | 11.0 | 60 | 127 | 10.7 | 58 | 127 | 10.4 |
| | 18 | 57 | 122 | 10.3 | 55 | 122 | 10.1 | 53 | 121 | 9.8 |
| 2200 | 21 | 69 | 134 | 12.0 | 66 | 134 | 11.6 | 64 | 134 | 11.3 |
| | 20 | 64 | 130 | 11.3 | 62 | 130 | 11.0 | 60 | 129 | 10.7 |
| | 19 | 60 | 125 | 10.7 | 57 | 125 | 10.4 | 55 | 124 | 10.1 |
| | 18 | 55 | 120 | 10.1 | 53 | 119 | 9.8 | 51 | 119 | 9.5 |
| 2100 | 21 | 65 | 131 | 11.5 | 63 | 131 | 11.2 | 61 | 131 | 10.8 |
| | 20 | 61 | 127 | 10.9 | 59 | 126 | 10.6 | 57 | 126 | 10.3 |
| | 19 | 57 | 122 | 10.3 | 55 | 121 | 10.0 | 53 | 121 | 9.7 |
| | 18 | 52 | 117 | 9.7 | 50 | 116 | 9.4 | 49 | 115 | 9.2 |
| 2000 | 21 | 62 | 128 | 11.0 | 60 | 127 | 10.7 | 58 | 127 | 10.4 |
| | 20 | 58 | 123 | 10.4 | 56 | 123 | 10.1 | 54 | 122 | 9.9 |
| | 19 | 54 | 118 | 9.9 | 52 | 118 | 9.6 | 50 | 117 | 9.4 |

NOTE

- Maximum cruise power is 80% MCP. Those powers above that value in the table are for interpolation purposes only.
- For best economy, operate at peak EGT.

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CRUISE PERFORMANCE PRESSURE ALTITUDE 10,000 FEET

CONDITIONS: 3100 Pounds Recommended Lean Mixture Cowl Flaps Closed

| | | 20°C BELOW STANDARD TEMP | | | 100 | TANDAR IPERATI | Williams | 20°C ABOVE STANDARD TEMP | | |
|------|----|-----------------------------|------|------|----------|-------------------|----------|-----------------------------|------|------|
| RPM | MP | % BPH | KTAS | GPH | % BPH | KTAS | GPH | % BPH | KTAS | GPH |
| 2400 | 20 | 72 | 139 | 12.5 | 69 | 139 | 12.1 | 67 | 139 | 11.7 |
| | 19 | 67 | 134 | 11.7 | 64 | 134 | 11.3 | 62 | 134 | 11.0 |
| | 18 | 62 | 129 | 11.0 | 59 | 129 | 10.6 | 57 | 128 | 10.3 |
| 2300 | 21 | 74 | 141 | 12.8 | 71 | 141 | 12.4 | 69 | 142 | 12.0 |
| | 20 | 69 | 136 | 12.1 | 66 | 137 | 11.7 | 64 | 136 | 11.3 |
| | 19 | 64 | 132 | 11.3 | 62 | 132 | 11.0 | 60 | 131 | 10.7 |
| | 18 | 59 | 126 | 10.6 | 57 | 126 | 10.3 | 55 | 125 | 10.1 |
| 2200 | 20 | 66 | 134 | 11.6 | 64 | 134 | 11.3 | 62 | 133 | 10.9 |
| | 19 | 62 | 129 | 11.0 | 59 | 129 | 10.6 | 57 | 128 | 10.4 |
| | 18 | 57 | 124 | 10.3 | 55 | 123 | 10.0 | 53 | 123 | 9.8 |
| 2100 | 20 | 63 | 131 | 11.2 | 61 | 130 | 10.8 | 59 | 130 | 10.5 |
| 2100 | 19 | 59 | 126 | 10.5 | 56 | 125 | 10.2 | 54 | 125 | 10.0 |
| | 18 | 54 | 121 | 9.9 | 52 | 120 | 9.7 | 50 | 119 | 9.4 |
| 2000 | 20 | 60 | 127 | 10.7 | 58 | 127 | 10.4 | 55 | 126 | 10. |
| 2000 | 19 | 56 | 122 | 10.1 | 54 | 122 | 9.8 | 52 | 121 | 9.6 |
| | 18 | 51 | 117 | 9.6 | 50 | 116 | 9.3 | 48 | 115 | 9.0 |

- Maximum cruise power is 80% MCP. Those powers above that value in the table are for interpolation purposes only.
- For best economy, operate at peak EGT.



CRUISE PERFORMANCE PRESSURE ALTITUDE 12,000 FEET

CONDITIONS: 3100 Pounds
Recommended Lean Mixture
Cowl Flaps Closed

| | | 20°C BELOW STANDARD TEMP | | | | TANDAF IPERAT | 355 | 20°C ABOVE STANDARD TEMP | | |
|------|----------|-----------------------------|------------|-------------|----------|------------------|-------------|-----------------------------|------------|------------|
| RPM | MP | % BPH | KTAS | GPH | % BPH | KTAS | GPH | % BPH | KTAS | GPH |
| 2400 | 18 | 64 | 133 | 11.3 | 61 | 133 | 10.9 | 59 | 133 | 10.6 |
| | 17 | 59 | 127 | 10.5 | 56 | 127 | 10.2 | 54 | 126 | 10.0 |
| | 16 | 53 | 121 | 9.8 | 51 | 120 | 9.6 | 50 | 119 | 9.3 |
| 2300 | 18 | 61 | 131 | 10.9 | 59 | 130 | 10.6 | 57 | 130 | 10.3 |
| | 17 | 56 | 125 | 10.2 | 54 | 124 | 10.0 | 52 | 123 | 9.7 |
| | 16 | 52 | 118 | 9.6 | 50 | 118 | 9.3 | 48 | 117 | 9.0 |
| 2200 | 18 | 59 | 128 | 10.6 | 57 | 128 | 10.3 | 55 | 127 | 10.0 |
| | 17 | 54 | 122 | 9.9 | 52 | 121 | 9.7 | 50 | 121 | 9.4 |
| 2100 | 18 | 56 | 125 | 10.2 | 54 | 124 | 9.9 | 52 | 123 | 9.6 |
| | 17 | 52 | 119 | 9.6 | 50 | 118 | 9.3 | 48 | 117 | 9.1 |
| 2000 | 19 18 | 57 53 | 126 121 | 10.4 9.8 | 55 51 | 125 120 | 10.1 9.5 | 53 49 | 125 119 | 9.8 9.3 |

NOTE

- Maximum cruise power is 80% MCP. Those powers above that value in the table are for interpolation purposes only.
- For best economy, operate at peak EGT.

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CRUISE PERFORMANCE PRESSURE ALTITUDE 14,000 FEET

CONDITIONS: 3100 Pounds Recommended Lean Mixture Cowl Flaps Closed

| RPM | MP | 20°C BELOW STANDARD TEMP | | | STANDARD TEMPERATURE | | | 20°C ÁBOVE STANDARD TEMP | | |
|------|----|-----------------------------|------|------|-------------------------|------|-----|-----------------------------|------|-----|
| | | % BPH | KTAS | GPH | % BPH | KTAS | GPH | % BPH | KTAS | GPH |
| 2400 | 16 | 56 | 126 | 10.1 | 53 | 125 | 9.8 | 51 | 124 | 9.6 |
| | 15 | 50 | 118 | 9.4 | 48 | 117 | 9.1 | 47 | 116 | 8.9 |
| 2300 | 16 | 53 | 123 | 9.8 | 51 | 122 | 9.6 | 50 | 121 | 9.3 |
| 2200 | 16 | 51 | 120 | 9.6 | 49 | 119 | 9.3 | 48 | 118 | 9.0 |
| 2100 | 16 | 49 | 116 | 9.2 | 47 | 115 | 8.9 | 45 | 114 | 8.7 |

- Maximum cruise power is 80% MCP. Those powers above that value in the table are for interpolation purposes only.
- For best economy, operate at peak EGT.



SHORT FIELD LANDING DISTANCE AT 2950 POUNDS

CONDITIONS:

- Flaps FULL
- Maximum BrakingZero Wind

- Power Off
- Paved, Level, Dry Runway
- · Speed at 50 Feet: 60 KIAS

| | 0°C | | 10°C | | 20°C | | 30°C | | 40°C | |
|---------------------------------|--------------|--|--------------|--|--------------|--|--------------|--|--------------|--|
| Pressure Altitude in Feet | Grnd Roll | Total Ft to Clear 50 Ft Obst |
| S.L. | 560 | 1300 | 580 | 1335 | 600 | 1365 | 620 | 1400 | 640 | 1435 |
| 1000 | 580 | 1265 | 600 | 1365 | 620 | 1400 | 645 | 1440 | 665 | 1475 |
| 2000 | 600 | 1370 | 625 | 1405 | 645 | 1440 | 670 | 1480 | 690 | 1515 |
| 3000 | 625 | 1410 | 645 | 1445 | 670 | 1485 | 695 | 1525 | 715 | 1560 |
| 4000 | 650 | 1450 | 670 | 1485 | 695 | 1525 | 720 | 1565 | 740 | 1600 |
| 5000 | 670 | 1485 | 695 | 1525 | 720 | 1565 | 745 | 1610 | 770 | 1650 |
| 6000 | 700 | 1530 | 725 | 1575 | 750 | 1615 | 775 | 1660 | 800 | 1700 |
| 7000 | 725 | 1575 | 750 | 1615 | 780 | 1665 | 805 | 1710 | 830 | 1750 |
| 8000 | 755 | 1625 | 780 | 1655 | 810 | 1715 | 835 | 1760 | 865 | 1805 |

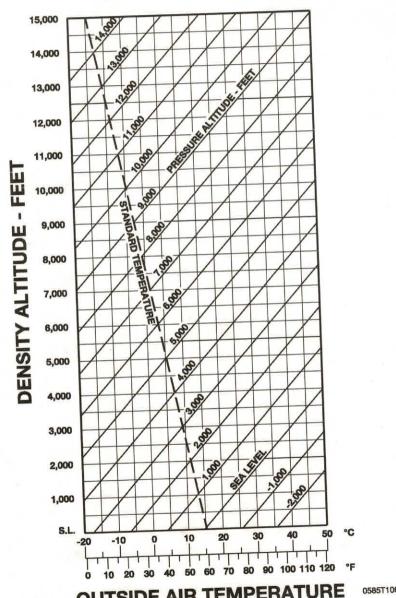
- Short field technique as specified in NORMAL PROCEDURES page N-21.
- Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2 knots.
- For operation on dry, grass runway, increase distances by 45% of the "ground roll" figure.
- If a landing with flaps up is necessary, increase the approach speed by 10 KIAS and allow for 40% longer distances.





DENSITY ALTITUDE CHART

B4019



OUTSIDE AIR TEMPERATURE

Figure 4*