N949AF

# ELMENDORF AERO CLUB

DEPARTURE

DESTINATION

ALTERNATE

ENROUTE

WINDS ALOFT

FREEZING LEVELS & NOTES

NOTAMS

## SHORT FIELD TAKE-OFF DISTANCE

AT 2450 lbs

## C-172R

**CONDITIONS:**

Flaps - $10^0$
Full throttle prior to brake release
Paved, level, dry runway

Zero Wind
Lift Off: 51 KIAS
Speed at 50 Ft: 57 KIAS

| PRESS ALT (FT) | $0^0$ C | | $10^0$ C | | $20^0$ C | |
|---|---|---|---|---|---|---|
| | GRND ROLL (FT) | TOTAL FT TO CLEAR 50 FT OBS | GRND ROLL (FT) | TOTAL FT TO CLEAR 50 FT OBS | GRND ROLL (FT) | TOTAL FT TO CLEAR 50 FT OBS |
| S.L. | 845 | 1510 | 910 | 1625 | 980 | 1745 |
| 1000 | 925 | 1660 | 1000 | 1790 | 1075 | 1925 |
| 2000 | 1015 | 1830 | 1095 | 1970 | 1185 | 2125 |
| 3000 | 1115 | 2020 | 1205 | 2185 | 1305 | 2360 |
| 4000 | 1230 | 2245 | 1330 | 2430 | 1435 | 2630 |

| PRESS ALT (FT) | $30^0$ C | | $40^0$ C | |
|---|---|---|---|---|
| | GRND ROLL (FT) | TOTAL FT TO CLEAR 50 FT OBS | GRND ROLL (FT) | TOTAL FT TO CLEAR 50 FT OBS |
| S.L. | 1055 | 1875 | 1135 | 2015 |
| 1000 | 1160 | 2070 | 1245 | 2220 |
| 2000 | 1275 | 2290 | 1365 | 2455 |
| 3000 | 1400 | 2540 | 1505 | 2730 |
| 4000 | 1545 | 2830 | 1655 | 3045 |

**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 run-up.
3. Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distance by 10% for each 2 knots.
4. For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.
5. Where distance value has been deleted, climb performance is minimal.

## WEIGHT AND BALANCE

| N949AF | WEIGHT (lbs) | ARM | MOMENT in LBS/1000 |
|---|---|---|---|
| AIRPLANE EMPTY WEIGHT | 1658.5 | 39.06 | 64.787 |
| PILOT & FRONT PASSENGER | | 37.00 | |
| REAR PASSENGERS | | 73.00 | |
| BAGGAGE AREA (AREA 1, 120 LBS)[1] | | 95.00 | |
| BAGGAGE AREA (AREA 2, 50 LBS)[1] | | 123.00 | |
| | | | |
| ZERO FUEL WEIGHT | | | |
| FUEL (50 GAL USEABLE) | | 48.00 | |
| TOTAL MAX TAKEOFF WEIGHT: 2450 | | | |

NOTE 1: 120 POUNDS MAXIMUM BAGGAGE IN BOTH AREAS COMBINED

WEIGHT AND BALANCE WITHIN LIMITS _____