

Except as noted, all airspeeds quoted in this section are indicated airspeeds (IAS) and assume zero instrument error.

INTRODUCTION TO PERFORMANCE

REQUIRED CORRECTIONS TO PERFORMANCE GRAPHS AND TABLES

1. For the airplanes specified below, the performance obtained from the following graphs must be adjusted by the specified percentage or fixed amount at all altitudes above sea level. The resulting performance is approximate and will vary with airspeed, temperature, and other ambient conditions.

- [REDACTED]
- Prior airplanes in compliance with S. B. 28-3052, or
- Prior airplanes in compliance with TCM SID 97-3, or
- Prior airplanes incorporating kit 36-9015 with s/n's 135 and after.

TAKE-OFF DISTANCE - FLAPS UP

TAKE-OFF DISTANCE - FLAPS APPROACH

-Increase Distance by 6%

[REDACTED]

[REDACTED]

TIME, FUEL, AND DISTANCE TO CRUISE CLIMB

-Increase Time to Climb by 8%

RANGE PROFILES and ENDURANCE PROFILES

-Decrease Range and Endurance by:

SL to 4000 ft	0.5%
4000 to 8000 ft.	1.0%

8000 to 12,000 ft	2.0%
12,000 to 16,000 ft.	4.0%

2. After the previous corrections have been made, the following additional corrections must be made for all airplanes when the ambient temperature exceeds that for a standard (ISA) day. Linearly interpolate to obtain corrections for other ambient temperatures between ISA and ISA + 30°C.

GRAPHS/TABLES	ISA + 10°C	ISA + 20°C	ISA + 30°C
TAKE-OFF DISTANCE - FLAPS UP			
TAKE-OFF DISTANCE - FLAPS APPROACH			
Increase Take-Off Distance by:	8%	15%	23%
CLIMB			
Decrease Rate-of-Climb by:	90 fpm	180 fpm	270 fpm
TIME, FUEL, AND DISTANCE TO CRUISE CLIMB			
Increase Time to Climb by:	15%	30%	45%
CRUISE POWER SETTINGS			
Decrease cruise speeds by:	4 KIAS	7 KIAS	11 KIAS

TAKE-OFF DISTANCE – FLAPS UP

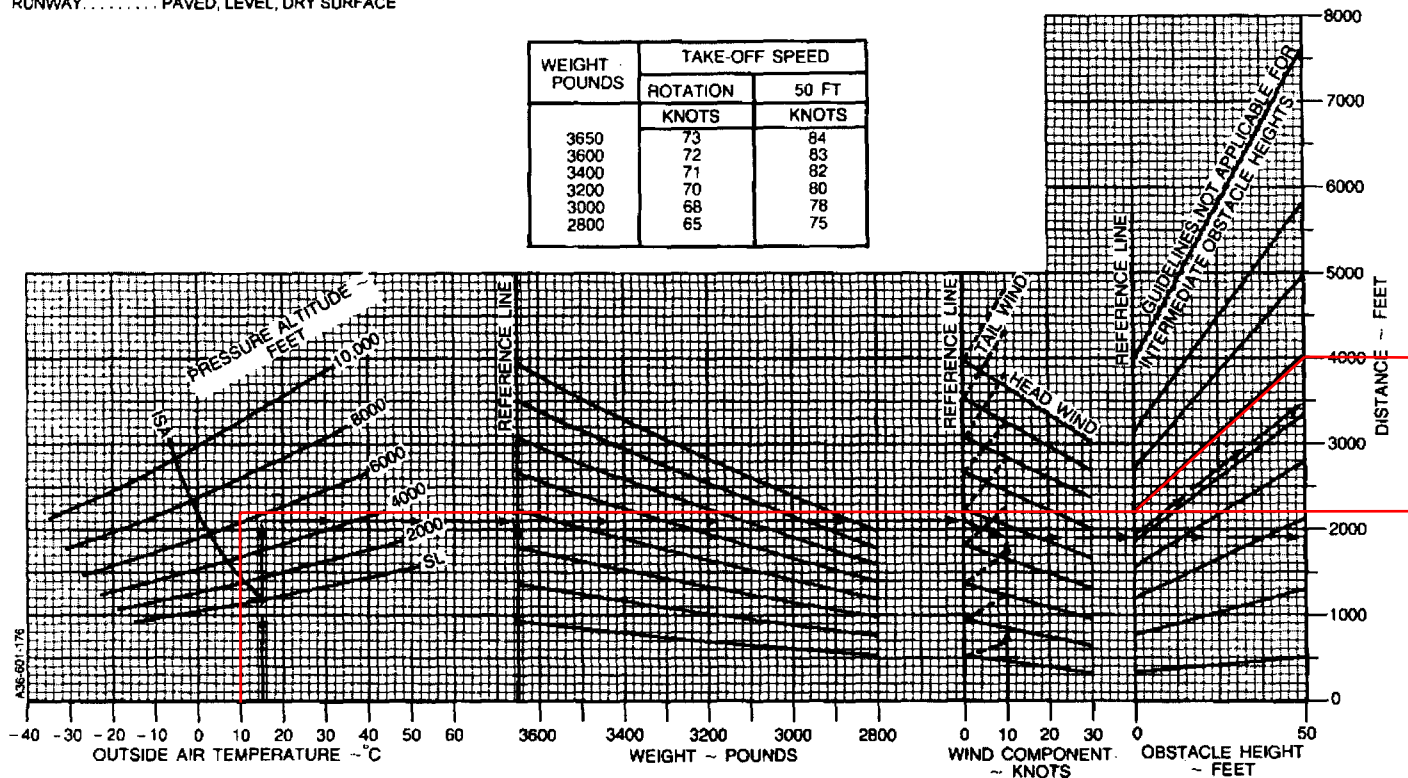
ASSOCIATED CONDITIONS:

POWER TAKE-OFF POWER SET BEFORE BRAKE RELEASE
MIXTURE FULL RICH (E-1946, E-2104, E-2111 THRU E-3144, NOT IN COMPLIANCE WITH RAYTHEON AIRCRAFT S.B. 28-3052)
AS REQUIRED BY FIELD ELEVATION (E-3145 AND AFTER, AND PRIOR AIRPLANES IN COMPLIANCE WITH RAYTHEON AIRCRAFT S.B. 28-3052)
FLAPS UP
LANDING GEAR RETRACT AFTER POSITIVE CLIMB ESTABLISHED
COWL FLAPS OPEN
RUNWAY PAVED, LEVEL, DRY SURFACE

EXAMPLE:

OAT 15°C
PRESSURE ALTITUDE 5653 FT
TAKE-OFF WEIGHT 3650 LBS
HEAD WIND COMPONENT 10 KTS
GROUND ROLL 1900 FT
TOTAL DISTANCE OVER 50-FT OBSTACLE 3475 FT
TAKE-OFF SPEED AT
ROTATION 73 KTS
50-FT 84 KTS

WEIGHT POUNDS	TAKE-OFF SPEED	
	ROTATION	50 FT
	KNOTS	KNOTS
3650	73	84
3600	72	83
3400	71	82
3200	70	80
3000	68	78
2800	65	75



ASSOCIATED CONDITIONS:

POWER..... FULL THROTTLE, 2700 RPM
MIXTURE..... FULL RICH (E-1946, E-2104, E-2111 THRU E-3144, NOT IN COMPLIANCE WITH RAYTHEON AIRCRAFT S.B. 28-3052)
AS REQUIRED BY ALTITUDE (E-3145 AND AFTER, AND PRIOR AIRPLANES IN COMPLIANCE WITH RAYTHEON AIRCRAFT S.B. 28-3052)
FLAPS..... UP
LANDING GEAR..... UP
COWL FLAPS..... AS REQUIRED

CLIMB

CLIMB SPEED: 100 KNOTS ALL WEIGHTS

EXAMPLE:

OAT..... -5°C
PRESSURE ALTITUDE..... 11,500 FT
WEIGHT..... 3600 LBS
RATE OF CLIMB..... 515 FT/MIN
CLIMB GRADIENT..... 3.8%

