

TAKE-OFF DATA

TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS 10°

GROSS WEIGHT POUNDS	IAS AT 50' MPH	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT. & 50°F		AT 5000 FT. & 41°F		AT 7500 FT. & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
2800	70	0	890	1585	1070	1885	1305	2310	1590	2900
		10	635	1215	775	1460	955	1810	1175	2295
		20	420	890	520	1080	655	1360	825	1755
2400	65	0	620	1180	745	1365	900	1615	1090	1935
		10	430	890	525	1035	640	1240	790	1500
		20	270	635	335	745	425	905	530	1110
2000	60	0	410	875	490	990	590	1135	710	1315
		10	275	650	330	735	405	855	495	995
		20	160	450	200	515	255	605	315	715

- NOTES: 1. Increase distance 10% for each 20°F above standard temperature for particular altitude.
2. For operation on a dry, grass runway, increase distances (both "ground run" and "total to clear 50 ft. obstacle") by 8% of the "total to clear 50 ft. obstacle" figure.
3. Landing gear extended until take-off obstacle is cleared.

MAXIMUM RATE-OF-CLIMB DATA

GROSS WEIGHT POUNDS	AT SEA LEVEL & 59°F			AT 5000 FT. & 41°F			AT 10,000 FT. & 23°F			AT 15,000 FT. & 5°F		
	IAS MPH	RATE OF CLIMB FT/MIN	GAL. OF FUEL USED	IAS MPH	RATE OF CLIMB FT/MIN	FROM S.L. FUEL USED	IAS MPH	RATE OF CLIMB FT/MIN	FROM S.L. FUEL USED	IAS MPH	RATE OF CLIMB FT/MIN	FROM S.L. FUEL USED
2800	95	925	1.5	93	685	3.1	91	440	5.1	89	200	7.7
2400	93	1170	1.5	91	895	2.8	89	620	4.2	87	350	5.9
2000	90	1490	1.5	89	1175	2.5	87	850	3.6	85	540	4.7

- NOTES: 1. Full throttle, 2700 RPM, flaps and gear up, and mixture at recommended leaning schedule.
2. Fuel used includes warm-up and take-off allowance.
3. For hot weather, decrease rate of climb 30 ft./min. for each 10°F above standard day temperature for particular altitude.

Figure 6-3.

CRUISE PERFORMANCE

EXTENDED RANGE MIXTURE

Standard Conditions $\searrow$ Zero Wind $\searrow$ Gross Weight- 2800 Pounds
2500 FEET

RPM	MP	%BHP	TAS MPH	GAL/ HOUR	60 GAL (NO RESERVE)	
					ENDR. HOURS	RANGE MILES
2500	25	79	167	11.5	5.2	870
	24	75	163	10.8	5.6	910
	23	71	160	10.2	5.9	940
	22	67	156	9.6	6.2	970
2400	25	75	164	10.8	5.5	905
	24	71	160	10.2	5.9	935
	23	67	156	9.7	6.2	965
	22	63	152	9.1	6.6	1000
2300	25	72	160	10.3	5.9	935
	24	68	156	9.7	6.2	965
	23	64	153	9.2	6.5	995
	22	60	149	8.7	6.9	1020
2200	25	67	156	9.7	6.2	970
	24	64	152	9.2	6.5	995
	23	60	149	8.7	6.9	1020
	22	57	145	8.3	7.2	1050
2100	25	64	152	9.2	6.5	995
	24	60	149	8.7	6.9	1020
	23	57	145	8.3	7.2	1050
	22	54	142	7.9	7.6	1080
	21	50	138	7.5	8.0	1105
	20	47	134	7.1	8.4	1130
	19	44	130	6.8	8.9	1150
	18	40	124	6.4	9.3	1155
	17	37	117	6.1	9.8	1145

Figure 6-4 (Sheet 1 of 5).