N617CC

1980 Cessna 421C

Performance Data

Aircraft S/N: 421C-0897



Prepared by the worldwide aviation specialists at RidgeAire, Inc.

STALL SPEEDS

CONDITIONS:

NOTE:

Throttles - IDLE

- Maximum altitude lost during a conventional stall is 800 feet.
- Maximum altitude loss during an engine inoperative stall is 550 feet with a maximum pitch below the horizon of 25°.

HEYOUT					А	NGLE C	F BANK			
WEIGHT Pounds	Config	uration	06)	2	00	4	0 ⁰	6	00
	Flaps	Gear	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS
7450	00	Up	86	83	89	85	98	94	122	117
	150	Down	82	80	85	82	95	91	118	113
	450	Down	77	74	80	76	89	85	110	105
6800	00	Up	82	79	85	81	94	90	117	112
	150	Down	78	76	81	78	90	87	113	107
	450	Down	74	71	76	73	85	81	105	100
6200	00	Up	78	75	81	78	90	86	112	107
	15 ⁰	Down	75	73	77	75	86	83	107	103
1	45 ⁰	Down	71	68	73	70	81	77	100	95
5600	00	Up	74	72	77	74	85	82	106	101
	15 ⁰	Down	71	69	73	71	81	79	102	98
)	450	Down	67	64	69	66	77	73	95	91

Figure 5-8

NORMAL TAKEOFF DISTANCE

- CONDITIONS:
 1. 2235 RPM and 39.0 Inches Hg. Manifold Pressure Before Brake Release.
 2. Mixtures CHECK Fuel Flows In the White Arc.
 3. Wing Flaps UP.
 4. Level, Hard Surface, Dry Runway.

- NOTES:
 1. If full power is applied without brakes set, distances apply from point where full power is applied.
 2. Decrease distance 7% for each 10 knots headwind.
 3. Increase distance 4% for each 2 knots tailwind.

	TAKEOFF TO 50-		-20°C	(-4 ⁰ F)	-10°C	(14 ⁰ F)	0 _o C	(32ºF)	10°C	(50°F)
WEIGHT- POUNDS	FOOT	PRESSURE ALTITUDE- FEET		TOTAL DISTANCE TO CLEAR 50 FEET	ROLL -	TOTAL DISTANCE TO CLEAR 50 FEET	GROUND ROLL - FEET	TOTAL DISTANCE TO CLEAR 50 FEET	GROUND ROLL - FEET	TOTAL DISTANC TO CLEA 50 FEE
7450	100	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	1280 1360 1450 1540 1630 1740 1850 1970 2110 2250 2410	1610 1710 1810 1920 2030 2160 2300 2440 2610 2780 2970	1410 1500 1590 1690 1800 1920 2040 2180 2320 2480 2660	1780 1890 2000 2120 2260 2400 2560 2720 2910 3110 3330	1550 1650 1750 1860 1980 2110 2250 2400 2570 2740 2930	1980 2100 2220 2360 2520 2680 2860 3060 3270 3510 3770	1710 1810 1930 2050 2190 2330 2490 2650 2840 3030 3250	2200 2340 2490 2650 2830 3020 3230 3460 3720 4010 4330
6800	96	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	1010 1070 1140 1240 1320 1400 1490 1590 1700 1810 1930	1280 1350 1430 1540 1630 1730 1840 1950 2080 2210 2360	1110 1180 1280 1360 1450 1540 1640 1750 1870 1990 2130	1410 1490 1610 1700 1800 1910 2030 2160 2300 2460 2620	1220 1330 1410 1500 1590 1690 1800 1920 2050 2190 2350	1550 1670 1770 1880 2000 2120 2260 2400 2560 2740 2930	1370 1460 1550 1650 1750 1870 1990 2120 2270 2420 2590	1750 1850 1970 2090 2220 2360 2520 2690 2880 3080 3300
6200	91	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	810 860 920 980 1040 1130 1200 1280 1360 1450 1550	1030 1090 1150 1220 1290 1390 1480 1570 1670 1770	890 950 1010 1070 1160 1240 1320 1400 1500 1600 1700	1130 1200 1270 1340 1450 1530 1630 1730 1840 1960 2080	980 1040 1100 1200 1280 1360 1450 1540 1640 1750 1870	1240 1320 1390 1500 1590 1690 1800 1910 2030 2170 2310	1070 1140 1240 1320 1400 1490 1590 1690 1810 1930 2060	1370 1450 1570 1660 1760 1870 1990 2120 2260 2410 2570
5600	86	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	640 680 720 770 820 870 930 990 1070 1140 1220	820 860 910 970 1020 1080 1150 1220 1310 1400 1480	700 750 790 840 900 950 1020 1100 1170 1250 1340	900 950 1000 1060 1120 1190 1260 1360 1440 1530	770 820 870 920 980 1040 1130 1210 1290 1370	980 1040 1100 1160 1230 1310 1410 1500 1590 1690 1800	840 890 950 1010 1070 1170 1240 1320 1410 1510	1080 1140 1210 1280 1360 1460 1550 1650 1750 1870 1990

Figure 5-10 (Sheet 1 of 2)

NORMAL TAKEOFF DISTANCE

- CONDITIONS:
 1. 2235 RPM and 39.0 Inches Hg. Manifold Pressure
 Before Brake Release.
 2. Mixtures CHECK Fuel Flows In the White Arc.
 3. Wing Flaps UP.
 4. Level, Hard Surface, Dry Runway.

- NOTES:

 1. If full power is applied without brakes set, distances apply from point where full power is applied.
 2. Decrease distance /% for each 10 knots headwind.
 3. Increase distance 4% for each 2 knots tailwind.

				705
5600	6200	6800	7450	WE IGHT-
86	91	96.	100	TAKEOFF TO 50- FOOT OBSTACLE SPEED- KIAS
Sea Level 1000 2000 3000 4000 5000 6000 7000 8000	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	PRESSURE ALTITUDE- FEET
920 980 1040 1110 1210 1210 1280 1360 1450 1450	1180 1280 1360 1450 1540 1540 1640 1750 1860 1990 2130 2270	1510 1600 1700 1810 1930 2060 2190 2340 2500 2680 2870	1880 2000 2130 2130 2270 2420 2580 2750 2740 3150 3370 3610	20°C GROUND ROLL - FEET
1190 1260 1330 1410 1520 1620 1720 1720 1830 1950	1520 1640 1740 1840 1960 2080 2220 2370 2530 2700 2890	1940 2060 2190 2340 2490 2660 2840 3040 3050 3770	2470 2630 2810 3000 3210 3450 3710 4000 4330 4710 5160	TOTAL DISTANCE TO CLEAR 50 FEET
1010 1080 1140 1240 1320 1410 1500 1600 1710	1300 1410 1500 1590 1700 1810 1930 2960 2250 2350	1660 1770 1880 2000 2130 2280 2430 2600 2780 2970 3180	2080 2210 2360 2510 2680 2680 3060 3060 3270 3500 3750 4020	GROUND ROLL - FEET
1310 1390 1470 1590 1690 1800 1910 2040 2170 2170	1690 1820 1930 2060 2190 2340 2490 2490 2670 2860 3060 3300	2180 2320 2470 2640 2820 3020 3020 3240 3490 2760 4080 4430	2800 3000 3210 3450 3720 4030 4380 4380 4800 5290 5290 5730	TOTAL DISTANCE TO CLEAR 50 FEET
1110 1190 1290 1370 1460 1550 1660 1770 1890 7010	1460 1550 1760 1760 1880 2000 2140 2280 2280 2440 2610 2790	1840 1950 2080 2220 2370 2530 2700 2890 3090 3310 3550	2300 2450 2620 2790 2980 3190 3410 3650 3910 4200 4510	GROUND ROLL - FEET
1460 1550 1670 1780 1890 2010 2150 2290 2290 2450 2630	1920 2040 2170 2320 2480 2650 2840 3050 3290 3850 3850	2460 2630 2820 3020 3250 3790 4130 4520 4990 5570	3230 3490 3780 4110 4500 4570 6570 6380 7570 9690 15,290	TOTAL DISTANCE TO CLEAR 50 FEET
- 1				



ACCELERATE STOP DISTANCE

- CONDITIONS:

 1. 2235 RPM and 39.0 Inches Hg. Manifold Pressure
 Before Brake Release.

 2. Mixtures CHECK Fuel Flows In the White Arc.

 3. Wing Flaps UP.

 4. Level, Hard Surface, Dry Runway.

 5. Engine Failure at Engine Failure Speed.

 6. Idle Power and Maximum Effective Braking
 After Engine Failure.
 - NOTE:

 1. If full power is applied without brakes set, distances apply from point where full power is applied.

 2. Decrease distance 3% for each 4 knots headwind.

 3. Increase distance 5% for each 2 knots tailwind.

4730	4390	4090	3810	3560	3330	3120	10,000		
4470	4150	_	3610	3380	3160	2960	9000		
4230	3930	_	3430	3210	3000	2810	8000		
4010	3730	_	3250	3050	2850	2670	7000		
3800	3540	_	_	2890	2710	2540	6000		
3600	3360	_	_	2750	2580	2420	5000		
3420	3190	_	2800	2620	2460	2280	4000		
3250	3030	2840	2660	2500	2320	2180	3000		
3090	2880	_	2530	2350	2210	2080	2000		
2930	2750	_	2390	2240	2110	1980			
2790	2590	_	2280	2140	2010	1890	Sea Level	91	6200
2920	5480	2090	4/30	4420	4120	3850	10,000		
5590	5180	_	4480	4180	3910	3650	0000		
5290	4900	_	4250	39/0	3/10	34/0	0008		
500	4640	_	4030	3//0	3530	3300	2000		
4/30	4400	_	3830	3580	3350	3140	6000		
4490	41/0	_	3640	3400	3190	2990	5000		
4260	3960	_	3460	3240	3040	2850	4000		
4040	3760	_	3290	3080	2890	2710	3000		
3840	3580	_	3130	2940	2760	2560	2000		
3650	3400	_	2990	2800	2600	2440	1000		
3470	3240	_	2850	2640	2480	2330	Sea Level	96	6800
7410	6830	6320	58/0	5460	5090	4/50	10,000		
6990	6450	5980	5560	5180	4830	4510	9000		
6600	6100	5660	5260	4910	4580	4280	8000		
6240	5770	5360	4990	4660	4350	4060	7000		
5900	5470	5080	4740	4420	4130	3860	6000		
5580	5180	4820	4500	4200	3930	3680	5000		
5290	4910	4580	4270	4000	3740	3500	4000		
5020	4670	4350	4060	3800	3560	3340	3000		
4760	4430	4140	3870	3620	3390	3180	2000		
4520	4210	3940	3680	3450	3240	3030			,
4300	4010	3750	3510	3290	3090	2900	Sea Level	100	7450
+104°F	+86°F	+68°F	+50°F	32°F	+140F		FEET	KIAS	POUNDS
+40°C	+30°C	+20°C	+10°C	000	-10°C	-20°c	ALTITUDE -	SPEED -	WEIGHT -
	FEET	ı	DISTANCE	TOTAL I	_		דמונים	ENGINE	

Sea Level 1000 2000 3000 4000 5000 5000 7000 8000

1650 1730 1730 1810 1900 2000 2100 2230

1670 1750 1840 1930 2030 2130 2230 2380

1700 1800 1780 1890 1870 1980 1960 2080 2060 2190 2160 2330 2290 2440 2410 2570 2540 2710

2010 2110 2220 2360 2480 2610 2750 2890

2140 2250 2390 2520 2650 2790 2790 2940 3090

2290 2430 2560 2690 2830 2980 3150 3320

ACCELERATE GO DISTANCE

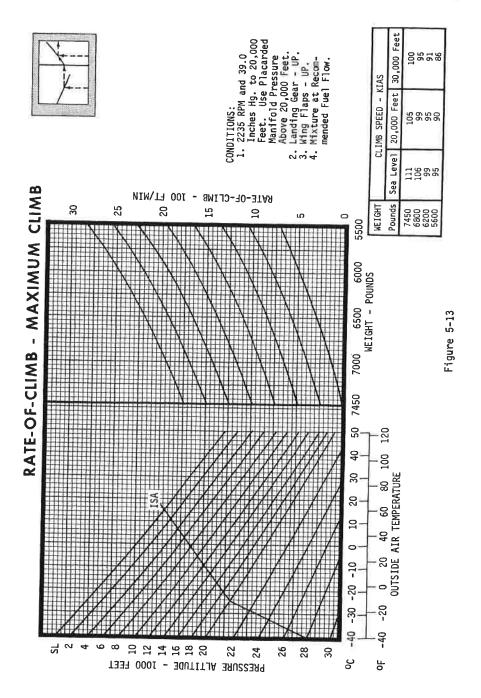
PERFORMANCE SECTION 5

CONDITIONS:
1. 2235 RPM and 39.0 Inches Hg. Manifold Pressure
Before Brake Release.
2. Mixtures - CHECK Fuel Flows In the White Arc.
3. Wing Flaps - UP.
4. Level Hard Surface Dry Runway.
5. Engine Failure At Engine Failure Speed.
6. Propeller Feathered and Landing Gear Retracted
During Climb.
7. Maintain Engine Failure Speed Until Clear of
Obstacle.

NOTE:

1. If full power is applied without brakes set, distances apply from point where full power is applied.
2. Decrease distance 6% for each 10 knots headwind.
3. Increase distance 2% for each 1 knots of tailwind.
4. Distance in boxes represent rates of climb less than 50 ft/min.

5600	6200	6800	7450	WEIGHT -
86	9)	96	100	ENGINE FAILURE - SPEED - KIAS
Sea Level 1000 2000 3000 4000 5000 6000 6000 7000 8000 9000	Sea Level 1000 2000 3000 4000 5000 5000 6000 7000 8000 9000 10,000	Sea Level 1000 2000 3000 4000 5000 5000 5000 7000 8000 9000 10,000	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	PRESSURE ALTITUDE FEET
1070 1130 1190 1260 1330 1400 1490 1580 1690	1380 1460 1540 1630 1730 1770 1860 1970 2100 2240 2390 2560	1770 1180 2000 2150 2250 2450 2620 2810 3020 3270 3550	2390 2550 2740 2940 3170 3440 3750 4120 4120 4570 5130 5870	TOTAL -20°C -4°F
1180 1240 1310 1390 1470 1550 1650 1770 1880	1530 1620 1720 1720 1820 1960 2080 2220 2370 2370 2540 2720 2930	2000 2120 2290 2450 2620 2810 3030 3270 3270 3890 4280	2770 2980 3220 3500 3830 4220 4710 5340 5340 6190 7430 9480	DISTANCE -10°C +14°F
1300 1370 1450 1540 1630 1730 1860 1980 2110	1710 1810 1930 2080 2210 2210 2360 2520 2520 2710 2910 3150 3410	2270 2460 2640 2630 3050 3310 3600 3950 4370 4890 5560	3290 3590 3950 4940 4940 5670 6710 8330 11,350	3200 10
1440 1530 1620 1720 1820 1960 2090 2230 2380	1930 2050 2210 2360 2360 2530 2720 2920 2920 3160 3430 3750 4130	2670 2870 3100 3370 3690 4060 4530 4530 5120 5900 7040 8880	4120 4630 5280 6190 7570 9990 15,590	CLEAR 50- +10°C +50°F
1610 1710 1820 1930 2090 2230 2380 2550 2740	2200 2380 2550 2740 2960 3210 3500 3840 4760 4760 5420	3180 3470 3820 4240 4780 4780 5490 6480 8040 10,930	5800 7020 9100 13,540	50-F00T 0ESTACLE OC +20°C +30°C +68°F +86°F
1820 1940 2070 2240 2390 2570 2576 2760 2990 3240	2570 2800 3030 3290 3610 3980 4450 5050 5860 7060 9060	4010 4510 5170 6080 7480 9990 16,070	12,210	2STACLE +30°C +86°F
2090 2240 2430 2610 2610 2820 3050 3330 3650 4050	3120 3420 3780 4220 4780 4780 6650 8470 12,200	5770 7070 9360 9360 14,690		- FEET +40°C +104°F

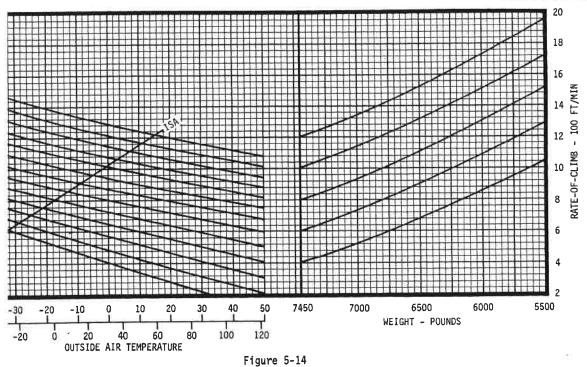


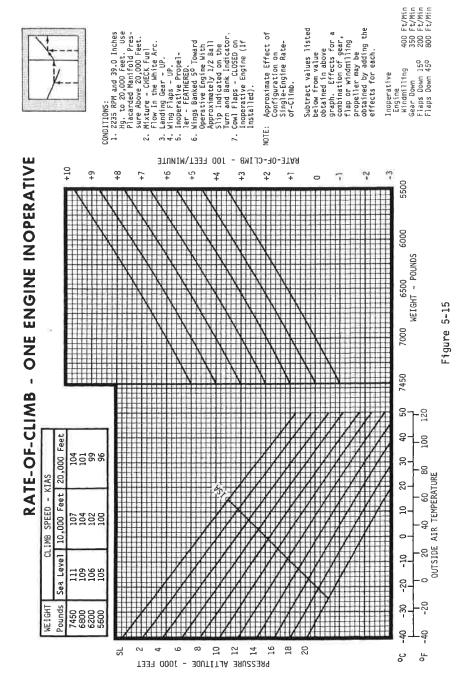
RATE-OF-CLIMB - CRUISE CLIMB

ONDITIONS:
1. 1900 RPM and 32.5 Inches Hg.
2. Landing Gear - UP.
3. Wing Flaps - UP.

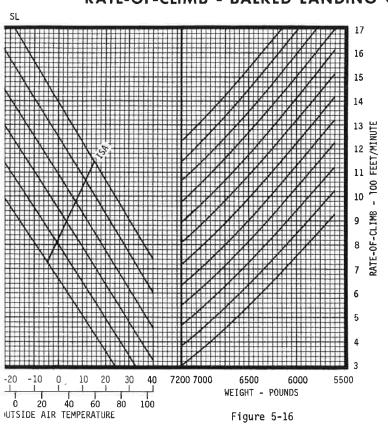
Airspeed - 120 KIAS.
 Mixtures - Recommended Fuel Flow.







RATE-OF-CLIMB - BALKED LANDING CLIMB





CONDITIONS:
1. 2235 RPM and 39.0 Inches Hg.
2. Mixtures - CHECK Fuel Flows
In The White Arc.
3. Landing Gear - DOWN.
4. Wing Flaps - 45°.
5. Climb Speed - 96 KIAS.

SECTION 5
PERFORMANCE

ENGINE INOPERATIVE SERVICE CEILING

CONDITIONS:

1. Engine Inoperative Climb Configuration.

NOTE

- Engine inoperative service ceiling is the maximum altitude where the airplane has the capability of climbing 50 feet per minute with one engine inoperative and feathered.
- Increase indicated service ceiling 100 feet for each 0.10 inches Hg. altimeter setting greater than 29.92.
- Decrease indicated service ceiling 100 feet for each 0.10 inches Hg. altimeter setting less than 29.92.
- 29.92.
 4. This chart provides performance information to aid in route selection when operating under FAR 135.145 and 91.119 requirements.

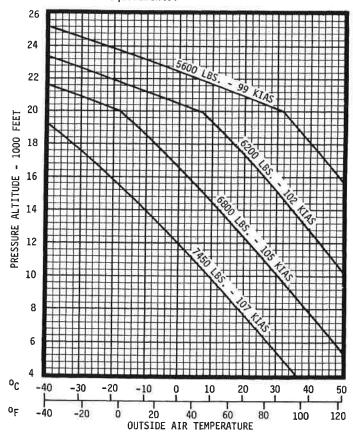
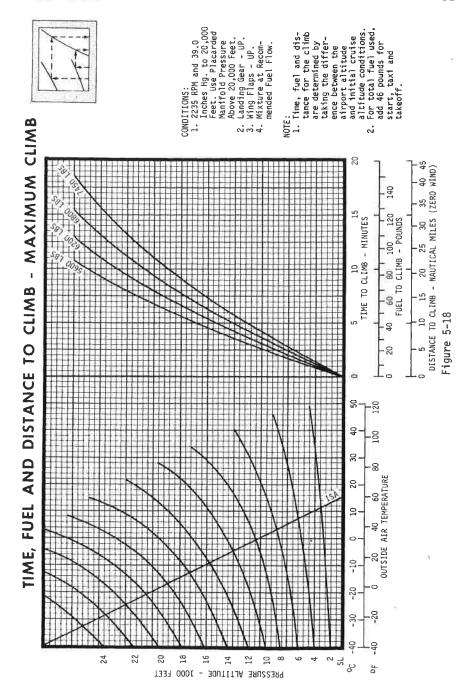


Figure 5-17



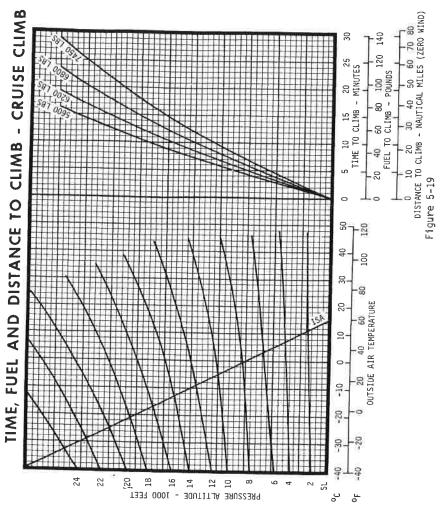


1. 1900 RPM and 32.5

NOTE:

1. Time, fuel and distance for the climb are determined by taking the difference between the althort alitude and initial cruise altitude conditions.

2. For total fuel used, add 46 pounds for start, taxi and takeoff.



CRUISE PERFORMANCE WITH RECOMMENDED LEAN MIXTURE

- NOTE:
 1. At Sea Level, increase speed by 4
 KTAS for each 1000 pounds below
 7450 pounds.
 2. At 5000 feet, increase speed by 4
 KTAS for each 1000 pounds below
 7450 pounds.
- Operations at peak EGT may be utilized with power settings within the boxes if the airplane is equipped with the optional EGT system.

				-5 ⁰ C 23 ⁰ F)		15 ⁰ C ((STD 1 59 ⁰ F)	TEMP)		35 ⁰ C 95 ⁰ F)	
ALTITUDE	RPM	MP	PERCENT BHP	KTAS	TOTAL LB/HR	PERCENT BHP	KTAS	TOTAL LB/HR	PERCENT 8HP	KTAS	TOTAL LB/H
PEAET PEAET	1900 1900 1900 1900 1800 1800 1800 1800	23.0 32.5 31.0 29.0 27.0	78.0 74.3 68.8 63.0 57.1 73.2 69.9 64.3 58.8 53.0 47.4 69.2 65.5 60.5 54.9 49.6 44.1 63.4 60.0 55.3 45.5	186 183 177 171 165 182 178 167 160 152 178 174 169 162 155 147 172 168 163 156 149	271 260 241 204 256 245 227 210 191 173 230 215 197 180 163 224 213 199 183 167	73.5 70.0 64.8 59.3 53.8 69.0 65.9 60.6 55.4 449.9 65.2 61.7 57.7 46.8 41.6 59.7 56.6 52.1 442.9	186 183 177 171 164 182 178 172 166 159 151 177 174 168 161 154 146 171 168 165 155 148	257 246 228 211 194 242 232 215 199 181 165 230 219 204 187 171 155 212 203 188 173 159	69.0 65.7 60.8 55.7 50.5 64.8 61.2 56.9 52.0 46.9 61.2 57.9 548.6 43.9 39.0 56.1 56.1 48.9 44.9 44.9	185 182 176 170 163 181 177 171 165 157 149 177 173 167 160 152 143 170 166 160 153 145	242 231 216 200 183 228 219 204 188 172 156 217 207 193 177 162 147 201 192 178 164 151
			15°C 5°F)			STD TE	MP)		25 ⁰ C 77 ⁰ F)		
5000 FEET	1900 1900 1900 1900 1900 1800 1800 1800	31.0 29.0 27.0 25.0 32.5 31.0 29.0 27.0 23.0 32.5 31.0 29.0 27.0 25.0 27.0 25.0 27.0 27.0 27.0 27.0 27.0	78.0 74.3 68.8 63.0 657.1 73.2 69.9 64.3 58.8 53.0 67.4 69.2 65.5 60.5 60.5 44.1 69.6 44.1 69.0 55.3 60.0 55.3	195 191 185 179 172 190 187 181 181 167 158 186 182 176 169 162 153 179 176 176 176 176 176 176 176	271 260 241 223 204 256 245 227 210 191 173 243 230 215 197 180 163 199 183 199 183	73.5 70.0 64.8 59.3 53.8 69.0 65.9 60.6 55.4 49.9 65.2 61.7 57.7 46.8 41.6 59.7 56.6 52.1 47.4 42.9	195 191 185 178 171 190 186 180 173 165 157 186 181 175 168 161 151 179 175 169 162 162 163	257 246 228 211 194 242 232 215 199 181 165 230 219 204 187 171 155 212 203 188 173 159	69.0 65.7 60.8 55.7 50.5 64.8 61.8 56.9 52.0 46.9 42.0 61.2 57.9 53.6 43.9 39.0 56.1 48.6 43.9 44.9 44.2	194 190 184 177 170 189 185 179 172 164 154 180 174 166 158 178 178 173 167 159	242 231 216 200 183 228 219 204 188 172 156 217 207 162 147 201 192 178 164 151 164 151

Figure 5-20 (Sheet 1 of 3)

CRUISE PERFORMANCE WITH RECOMMENDED LEAN MIXTURE

- NOTE:
 1. At 10,000 Feet, increase speed by
 5 KTAS for each 1000 pounds below
 7450 pounds.
 2. At 15,000 Feet, increase speed by
 6 KTAS for each 1000 pounds below
 7450 pounds.
- Operations at peak EGT may be utilized with power settings within the boxes if the airplane is equipped with the optional EGT system.

				-25 ⁰ C -13 ⁰ F)	-5°C	(STD 23°F)	TEMP)		15 ⁰ C 59 ⁰ F)	
ALTITUDE	RPM	MP	PERCENT BHP	KTAS	TOTAL LB/HR	PERCENT BHP	KTAS	TOTAL LB/HR	PERCENT BHP	KTAS	TOTAL L8/HR
10,000 FEET	1800 1800 1800 1800 1700 1700 1700 1700	25.0 32.5 31.0 29.0 27.0 25.0 23.0 32.5 31.0 29.0 27.0 23.0 32.5 31.0 29.0 27.0	78.0 74.3 68.8 63.0 57.1 73.2 69.9 64.3 58.8 53.0 69.2 65.5 60.5 54.9 49.6 44.1 63.4 60.0 55.3 45.5	204 200 194 187 180 199 182 173 165 194 176 169 158 188 183 177 170 161	271 260 241 223 204 256 245 227 210 191 173 243 230 215 197 180 163 224 213 199 183 167	73.5 70.0 64.8 59.3 53.8 69.0 65.9 60.6 55.4 49.9 65.2 61.7 57.0 51.7 46.8 41.6 59.7 56.6 52.1 47.4 47.9	204 200 194 187 179 199 195 188 181 172 162 194 190 183 175 167 155 187 183 176 183 176 183 176 183 176 185 187 188 181	257 246 228 211 194 242 232 215 199 181 165 230 219 204 187 171 155 212 203 188 173 159	69.0 65.7 60.8 55.7 50.5 64.8 61.8 56.9 52.0 46.9 61.2 57.9 53.5 48.6 43.9 39.0 56.1 56.1 44.5 44.5	203 199 193 187 187 198 194 187 179 169 157 193 188 182 173 163 145 181 174 164 164	242 231 216 200 183 228 219 204 188 172 207 193 177 162 147 201 192 178 164 151
				-35 ⁰ C -30 ⁰ F)			STD T 6°F)	EMP)	(4	5ºC 42ºF)	
1	1900 1900 1900 1900 1800 1800 1800 1800	27.0 25.0 32.5 31.0 29.0 27.0 25.0 23.0 32.5 31.0 29.0 27.0 25.0 32.5 31.0 29.0	78.0 74.3 68.8 63.0 57.1 73.2 69.9 64.3 58.8 53.0 47.4 69.2 65.5 60.5 54.9 49.6 63.4 60.0 55.3 55.3	214 210 203 196 187 209 205 198 190 181 171 204 199 192 184 175 196 192 185 177	271 260 241 223 204 256 245 227 210 191 173 243 230 215 197 180 224 213 199 183	73.5 70.0 64.8 59.3 53.8 69.0 65.9 60.6 55.4 49.9 44.7 57.0 51.7 46.8 59.7 56.6 59.7 56.2	214 210 203 195 186 208 204 197 189 179 166 203 198 191 183 172 195 191 183 174	257 246 228 211 194 242 232 215 199 181 165 230 219 204 187 171 212 203 188 173	69.0 65.7 60.8 55.7 50.5 64.8 61.8 56.9 42.0 46.9 42.0 53.5 48.9 53.5 48.9 43.9	213 208 201 193 183 207 203 195 186 174 153 202 197 189 179 165 194 188 180 167	242 231 216 200 183 228 219 204 188 172 156 217 207 193 177 162 201 192 178 164

Figure 5-20 (Sheet 2 of 3)



CRUISE PERFORMANCE WITH RECOMMENDED LEAN MIXTURE

- NOTE: 1. At 20,000 Feet, increase speed by 6 KTAS for each 1000 pounds below 7450 pounds. 2. At 25,000 Feet, increase speed by 6 KTAS for each 1000 pounds below 7450 pounds.
- Operations at peak EGT may be utilized with power settings within the boxes if the airplane is equipped with the optional EGT system.

) ()				-45°C -48°F)			(STD) -12 ^o f)		(-5 ⁰ C 24 ⁰ F)	
ALTITUDE	RPM	MP	PERCENT BHP	KTAS	TOTAL LB/HR	PERCENT BHP	KTAS	TOTAL LB/HR	PERCENT BHP	KTAS	TOTAL LB/HR
20,000 FEET	1900 1900 1900 1900 1800 1800 1800 1700 1700 1700 1700 17	32.5 31.0 29.0 27.0 25.0 32.5 31.0 29.0 25.0 32.5 31.0 29.0 27.0 25.0 31.0 29.0	78.0 74.3 68.8 63.0 57.1 73.2 69.9 64.3 58.8 53.0 69.2 65.5 60.5 54.9 49.6 60.0 55.3	225 220 213 205 196 219 214 207 199 188 214 208 201 192 181 200 193	271 260 241 223 204 256 245 227 210 191 243 230 215 197 180 213 199	73.5 70.0 64.8 59.3 53.8 69.0 65.9 60.6 55.4 49.9 65.2 61.7 57.0 51.7 46.8 56.6 52.1	224 220 212 204 194 219 214 206 197 185 213 208 200 189 175 199	257 246 228 211 194 242 232 215 199 181 230 219 204 187 171 203 188	69.0 65.7 60.8 55.7 50.5 64.8 61.8 56.9 52.0 61.2 57.9 53.5 48.9	223 218 211 201 188 217 212 203 192 175 211 205 196 182 195 183	242 231 216 200 183 228 219 204 188 172 217 207 193 177 192 178
	-54°C (-66°F)					-34°C (STD TEMP) (-30°F)			-14 ^o C (6 ^o F)		
25,000 FEET	1900 1900 1900 1900 1800 1800	32.5 31.0 29.0 27.0 25.0 29.0 27.0 27.0	78.0 74.3 68.8 63.0 57.1 64.3 58.8 54.9	236 231 223 215 204 217 207 199	271 260 241 223 204 227 210 197	73.5 70.0 64.8 59.3 53.8 60.6 55.4 51.7	236 231 223 212 200 215 204 194	257 246 228 211 194 215 199 187	69.0 65.7 60.8 55.7 50.5 56.9 52.0	234 229 219 207 188 210 195	242 231 216 200 183 204 188

SECTION 5
PERFORMANCE

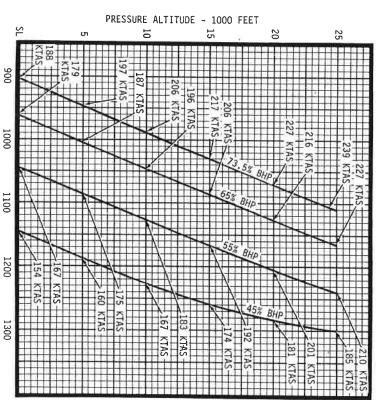
RANGE PROFILE

- CONDITIONS:
- 1. Starting Weight 7450 Pounds.
 2. Cruise Climb to Desired Altitude.
 3. Recommended Lean Fuel Flow.
 4. Zero Wind.
 5. Standard Day.

- Range computations include fuel required for start, taxi, takeoff, climb, cruise, descent and 45 minutes holding fuel at 45% power.
 The distances shown are the sum of the distances to climb, cruise and
- descend.







APPROXIMATE RANGE - NAUTICAL MILES (1404 POUNDS USABLE FUEL)

ENDURANCE PROFILE

- CONDITIONS:
 1. Starting Weight 7450 Pounds.
 2. Cruise Climb to Desired Altitude.
 3. Recommended Lean Fuel Flow.
 4. Standard Day.

- NOTE:
 1. Endurance computations include fuel required for start, taxi, takeoff, climb, cruise, descent and 45 minutes holding fuel at 45% power.
 2. The endurance shown is the sum of the times to climb, cruise and descend.



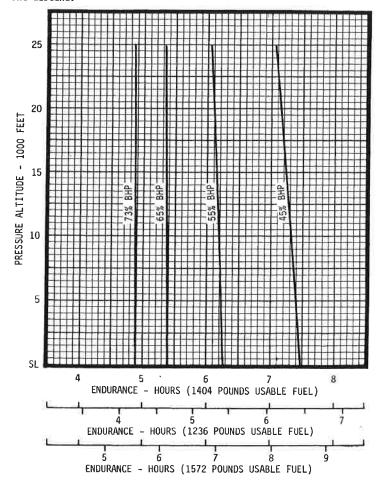


Figure 5-22

HOLDING TIME

- CONDITIONS:
 1. 1800 RPM and 23 Inches Hg.
 Manifold Pressure (45% Power).
 2. Recommended Lean Fuel Flow
 (166 Pounds Per Hour Total).



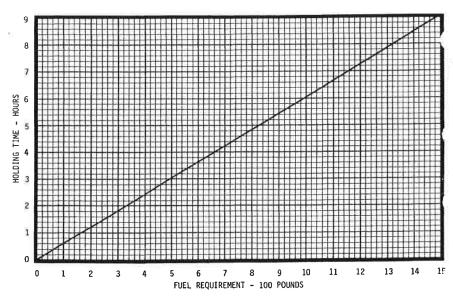


Figure 5-23

TIME, FUEL AND DISTANCE TO DESCEND

- CONDITIONS:
 1. Power 1800 RPM and 23 Inches Hg.
 Manifold Pressure (45% Power).
 2. Fuel Flow RECOMMENDED LEAN
- (Approximately 83.0 Pounds Per Hour Per Engine).

 3. Landing Gear UP.

 4. Wing Flaps UP.

 5. Airspeed 180 KIAS.



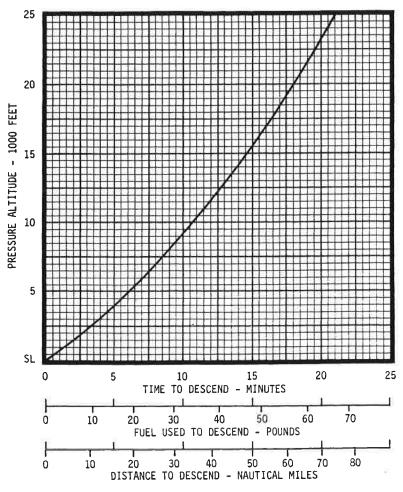


Figure 5-24

NORMAL LANDING DISTANCE

- CONDITIONS:

 1. Throttles IDLE at 50 feet above around leve
- ground level.

 Landing Gear DOWN.
 Wing Flaps 450.
 Touchdown FULL STALL.
 Level, Hard Surface Runway.
 Maximum Effective Braking.

- NOTE:
 1. If necessary to land with wing flaps UP, the approach speed should be increased above the normal approach speed by 12 knots. Expect total landing distance to increase by 35%.
 2. Decrease total distances by 3% for each 4 knots headwind. For operations with tailwinds up to 10 knots, increase total distances by 8% for each 3 knots wind.

			-20 ⁰ C	(-4 ^O F)	-10°C	(14 ^o F)	00C	(32 ⁰ F)	10°C	(50 º F)
WEIGHT~ POUNDS	SPEED AT 50-FOOT OBSTACLE KIAS	PRESSURE ALTITUDE - FEET	GROUND ROLL - FEET	TOTAL DISTANCE TO CLEAR 50-FOOT OBSTACLE	GROUND ROLL - FEET	TOTAL DISTANCE TO CLEAR 50-FOOT OBSTACLE	ROLL -	TOTAL DISTANCE TO CLEAR 50-FOOT OBSTACLE	ROLL -	TOTAL DISTANCE TO CLEAR 50-FOOT OBSTACLE
7200	100	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	640 660 690 710 740 770 790 820 860 890 920	2210 2230 2260 2280 2310 2340 2370 2400 2430 2460 2500	660 690 710 740 770 800 830 860 890 920 960	2240 2260 2290 2310 2340 2370 2400 2430 2460 2500 2530	690 710 740 770 800 830 860 890 920 960 1000	2260 2290 2310 2340 2370 2400 2430 2460 2500 2530 2570	710 740 770 790 820 860 890 920 960 990 1030	2290 2310 2340 2370 2400 2430 2460 2490 2530 2570 2610
6600	96	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	530 550 570 590 610 630 660 680 710 740 760	2100 2120 2140 2160 2180 2210 2230 2250 2280 2310 2340	550 570 590 610 630 660 680 710 740 760 790	2120 2140 2160 2180 2210 2230 2260 2280 2310 2340 2370	570 590 610 630 660 680 710 740 760 790 820	2140 2160 2180 2210 2230 2260 2280 2310 2340 2370 2400	590 610 630 660 680 710 730 760 790 820 850	2160 2180 2210 2230 2250 2280 2310 2340 2360 2400 2430
6000	91	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	430 440 460 480 500 510 530 550 580 600 620	2000 2020 2030 2050 2070 2090 2110 2130 2150 2170 2190	450 460 480 500 510 530 550 580 600 620 650	2020 2030 2050 2070 2090 2110 2130 2150 2170 2190 2220	460 480 500 510 530 550 580 600 620 640 670	2040 2050 2070 2090 2110 2130 2150 2170 2190 2220 2240	480 500 510 530 550 570 600 620 640 670 690	2050 2070 2090 2110 2130 2150 2170 2190 2220 2240 2270
5400	86	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	340 350 370 380 390 410 420 440 460 470 490	1910 1930 1940 1950 1970 1980 2000 2010 2030 2050 2070	350 370 380 390 410 420 440 460 480 490 510	1930 1940 1950 1970 1980 2000 2010 2030 2050 2070 2090	370 380 390 410 420 440 460 470 490 510 530	1940 1950 1970 1980 2000 2010 2030 2050 2070 2090 2110	380 390 410 420 440 460 470 490 510 530 550	1950 1970 1980 2000 2010 2030 2050 2060 2060 2100 2120

Figure 5-25 (Sheet 1 of 2)



NORMAL LANDING DISTANCE

- CONDITIONS:

 1. Throttles IDLE at 50 feet above round leve feet above ground level.

 2. Landing Gear - DOWN.

 3. Wing Flaps - 450.

 4. Touchdown - FULL STALL.

 5. Level, Hard Surface Runway.

 6. Maximum Effective Braking.

- NOTE:
 1. If necessary to land with wing flaps UP, the approach speed should be increased above the normal approach speed by 12 knots. Expect total landing distance to increase by 35%.
 2. Decrease total distances by 3% for each 4 knots headwind. For operations with tailwinds up to 10 knots, increase total distances by 8% for each 3 knots wind.

			20 ⁰ C	(68 ⁰ F)	30°C	(86 ⁰ F)	40°C	(104 ⁰ F)
WEIGHT- POUNDS	SPEED AT 50-F00T OBSTACLE KIAS	PRESSURE ALTITUDE - FEET	GROUND ROLL - FEET	TOTAL DISTANCE TO CLEAR 50-FOOT OBSTACLE	GROUND ROLL - FEET	TOTAL DISTANCE TO CLEAR 50-FOOT OBSTACLE	ROLL -	TOTAL DISTANCE TO CLEAR 50-FOOT OBSTACLE
7200	100	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	740 760 790 820 850 890 920 950 990 1030 1070	2310 2340 2370 2400 2430 2460 2490 2530 2560 2600 2640	760 790 820 850 880 920 950 990 1020 1060 1110	2340 2360 2390 2420 2460 2490 2520 2560 2600 2640 2680	790 820 850 880 910 950 980 1020 1060 1100 1140	2360 2390 2420 2450 2480 2520 2550 2590 2630 2670 2720
6600	96	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	610 630 660 680 710 730 760 790 820 850 880	2180 2210 2230 2250 2280 2300 2330 2360 2390 2420 2460	630 650 680 700 730 760 790 820 850 880 910	2200 2230 2250 2280 2300 2330 2360 2390 2420 2450 2490	650 680 700 730 750 780 810 840 870 910 940	2220 2250 2270 2300 2330 2350 2380 2420 2450 2480 2520
6000	91	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	500 510 530 550 570 590 620 640 670 690 720	2070 2090 2110 2130 2150 2170 2190 2210 2240 2260 2290	510 530 550 570 590 610 640 660 690 710 740	2090 2100 2120 2140 2170 2190 2210 2240 2260 2290 2320	530 550 570 590 610 630 660 680 710 740 770	2100 2120 2140 2160 2180 2210 2230 2260 2280 2310 2340
5400	86	Sea Level 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000	390 410 420 440 460 470 490 510 530 550 570	1970 1980 2000 2010 2030 2050 2060 2080 2100 2120 2140	410 420 440 450 470 490 510 530 550 570 590	1980 2000 2010 2030 2040 2060 2080 2100 2120 2140 2160	420 440 450 470 490 500 520 540 560 590 610	1990 2010 2020 2040 2060 2080 2100 2120 2140 2160 2180

Figure 5-25 (Sheet 2 of 2)