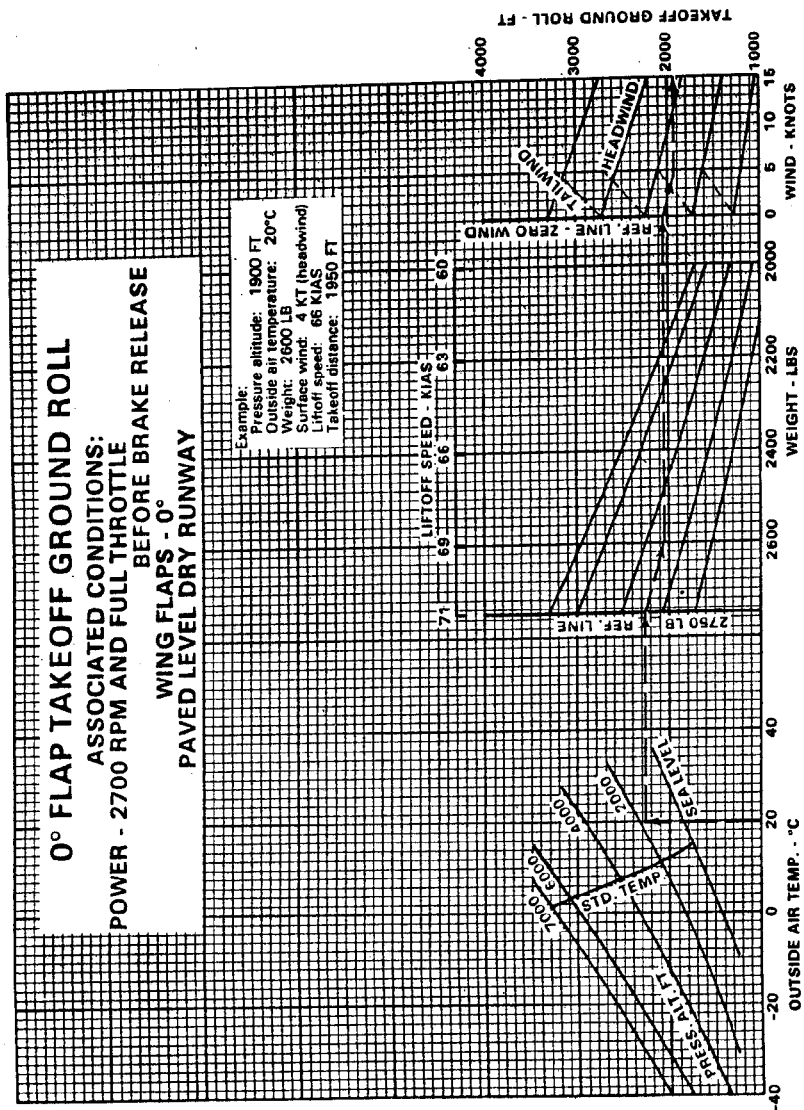


**SECTION 5  
PERFORMANCE**

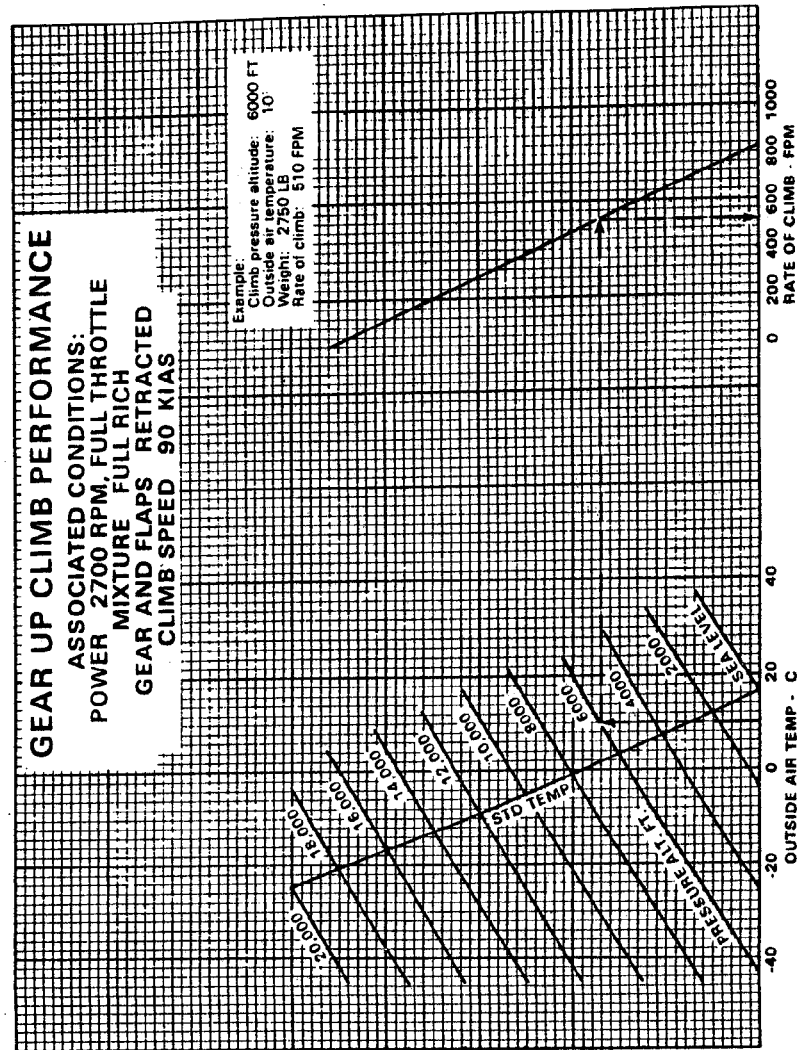
**PIPER AIRCRAFT CORPORATION  
PA-28R-201, ARROW**



**0° FLAP TAKEOFF GROUND ROLL**  
 Figure 5-15

**PIPER AIRCRAFT CORPORATION  
PA-28R-201, ARROW**

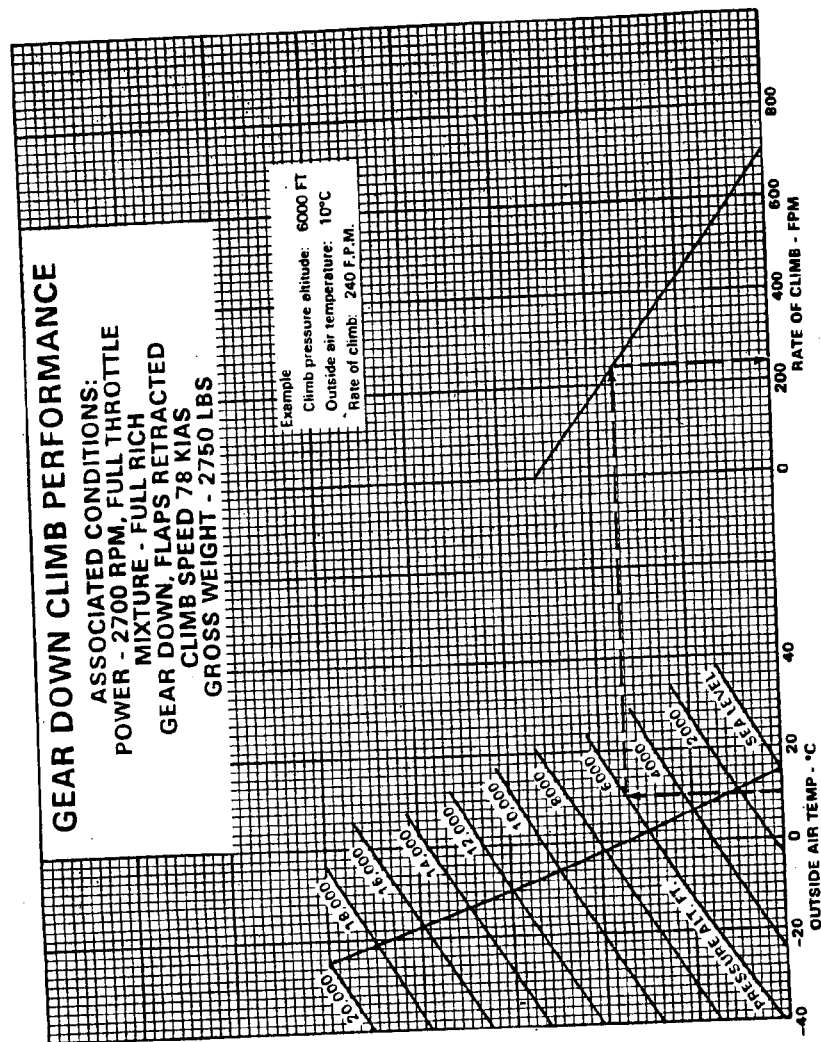
**SECTION 5  
PERFORMANCE**



**GEAR UP CLIMB PERFORMANCE**  
 Figure 5-17

**SECTION 5  
PERFORMANCE**

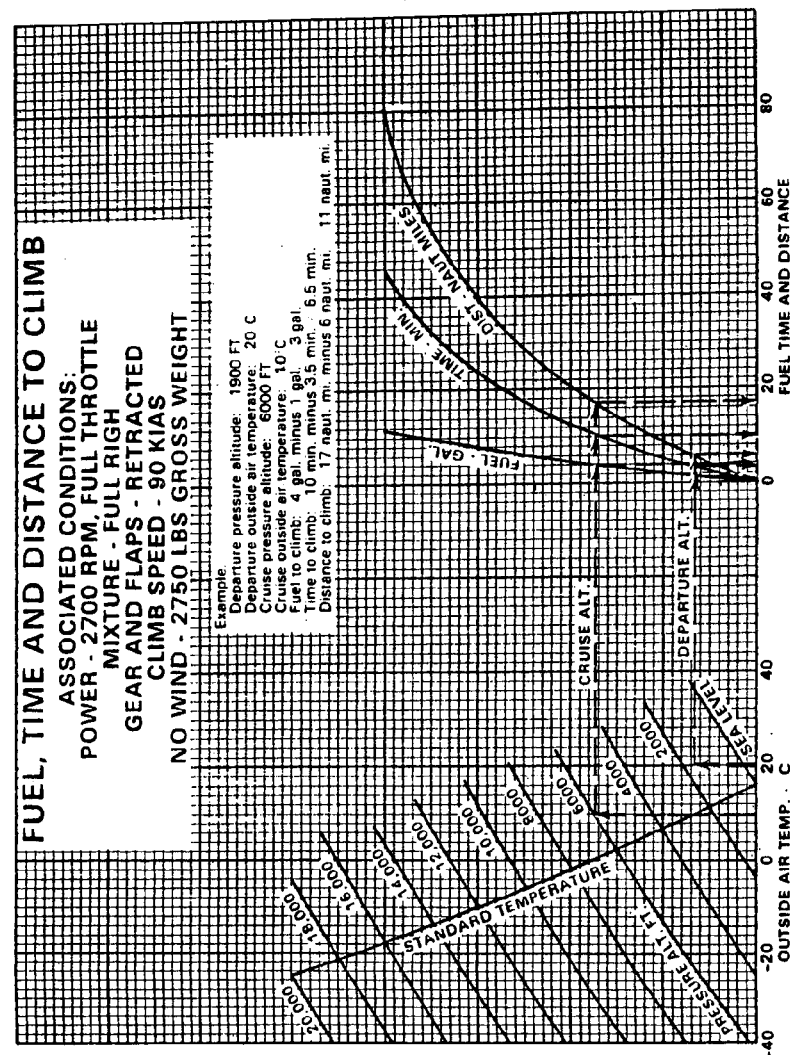
**PIPER AIRCRAFT CORPORATION  
PA-28R-201, ARROW**



**GEAR DOWN CLIMB PERFORMANCE**  
Figure 5-19

**PIPER AIRCRAFT CORPORATION  
PA-28R-201, ARROW**

**SECTION 5  
PERFORMANCE**



**FUEL, TIME AND DISTANCE TO CLIMB**  
Figure 5-21

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Power Setting Table for Lycoming Model IO-360-C1C6  
Engine as Installed in PA-28R-201 Arrow Best Power Mixture

Pressure Altitude	ISA Temperature		55% power 110 BHP @ Prop Mixture Peak EGT + 100° F RPM and Manifold Press.		65% power 130 BHP @ Prop Mixture Peak EGT + 100° F RPM and Manifold Press.		75% power 150 BHP @ Prop Mixture Peak EGT + 100° F RPM and Manifold Press.		Pressure Altitude
	°F	°C	2200 RPM	2500 RPM	2200 RPM	2500 RPM	2200 RPM	2500 RPM	
S.L.	59	15	23.7	21.7	26.1	24.1	24.1	26.3	S.L.
1000	55	13	23.4	21.4	25.8	23.7	23.7	26.0	1000
2000	52	11	23.0	21.1	25.4	23.4	23.4	25.6	2000
3000	48	9	22.6	20.8	25.1	23.1	23.1	25.3	3000
4000	45	7	22.3	20.5	24.7	22.8	22.8	24.9	4000
5000	41	5	21.9	20.2	24.3	22.4	22.4	24.6	5000
6000	38	3	21.6	19.9	24.0	22.1	22.1	24.3	6000
6800	35	2	21.3	19.7	23.7	21.9	21.9	F.T.	6800
7000	34	1	21.2	19.6	23.6	21.8	21.8	F.T.	7000
7500	32	0	21.0	19.4	F.T.	21.6	21.6	F.T.	7500
8000	30	-1	20.8	19.3	F.T.	21.5	21.5	F.T.	8000
9000	27	-3	20.5	19.0	F.T.	21.1	21.1	F.T.	9000
9400	25	-4	20.3	18.9	F.T.	F.T.	F.T.	F.T.	9400
10000	23	-5	F.T.	18.7	F.T.	F.T.	F.T.	F.T.	10000
11000	19	-7	F.T.	18.4	F.T.	F.T.	F.T.	F.T.	11000
12000	16	-9	F.T.	18.1	F.T.	F.T.	F.T.	F.T.	12000
13000	12	-11	F.T.	17.8	F.T.	F.T.	F.T.	F.T.	13000
14000	9	-13	F.T.	17.5	F.T.	F.T.	F.T.	F.T.	14000

POWER SETTING TABLE (Best Power)

Figure 5-23

Note:

To maintain constant power, correct manifold pressure approximately 0.16" Hg for each 10° F (5.5° C) variation in inlet air temperature from standard altitude temperature. Add manifold pressure for air temperatures above standard; subtract for temperatures below standard. Full throttle manifold pressure values may not be obtainable when atmospheric conditions are non-standard.

Power Setting Table for Lycoming Model IO-360-C1C6  
Engine as Installed in PA-28R-201 Arrow Best Economy Mixture

Pressure Altitude	ISA Temperature		55% Power 110 BHP @ Propeller Mixture Peak EGT Manifold Pressure - In. Hg		65% Power 130 BHP @ Propeller Mixture Peak EGT Manifold Pressure - In. Hg		Pressure Altitude
	°F	°C	2200 RPM	2500 RPM	2200 RPM	2500 RPM	
Feet							Feet
S.L.	59	15	24.8	22.2	27.5	24.5	S.L.
1000	55	13	24.4	22.0	27.1	24.3	1000
2000	52	11	24.0	21.8	26.7	24.1	2000
3000	48	9	23.7	21.5	26.3	23.8	3000
4000	45	7	23.3	21.3	26.0	23.6	4000
5000	41	5	22.9	21.1	25.6	23.3	5000
5250	40	4	22.8	21.0	F.T.	23.2	5250
6000	38	3	22.5	20.8	F.T.	23.1	6000
7000	34	1	22.1	20.6	F.T.	22.8	7000
8000	30	-1	21.8	20.4	F.T.	22.6	8000
8750	28	-2	21.5	20.2	F.T.	F.T.	8750
9000	27	-3	F.T.	20.1	F.T.	F.T.	9000
10000	23	-5	19.9	19.9	F.T.	F.T.	10000
11000	19	-7	19.7	19.7	F.T.	F.T.	11000
12000	16	-8	F.T.	F.T.	F.T.	F.T.	12000

POWER SETTING TABLE (Best Economy)

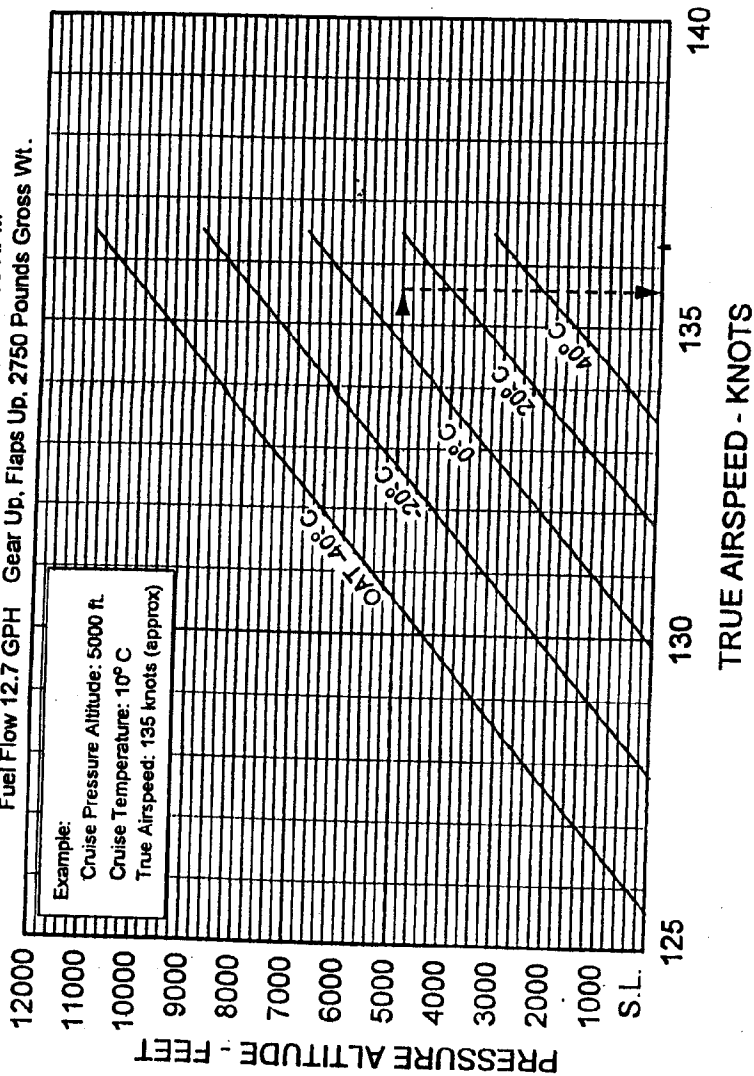
Figure 5-23a

Note: To maintain constant power, correct manifold pressure approximately 0.16" Hg for each 10° F (5.5° C) variation in inlet air temperature from standard altitude temperature. Add manifold pressure for air temperatures above standard; subtract for temperatures below standard. Full throttle manifold pressure values may not be obtainable when atmospheric conditions are non-standard.

BEST POWER CRUISE 75% POWER

MIXTURE: 100° F Rich of Peak EGT 2500 RPM

Fuel Flow 12.7 GPH Gear Up, Flaps Up, 2750 Pounds Gross Wt.

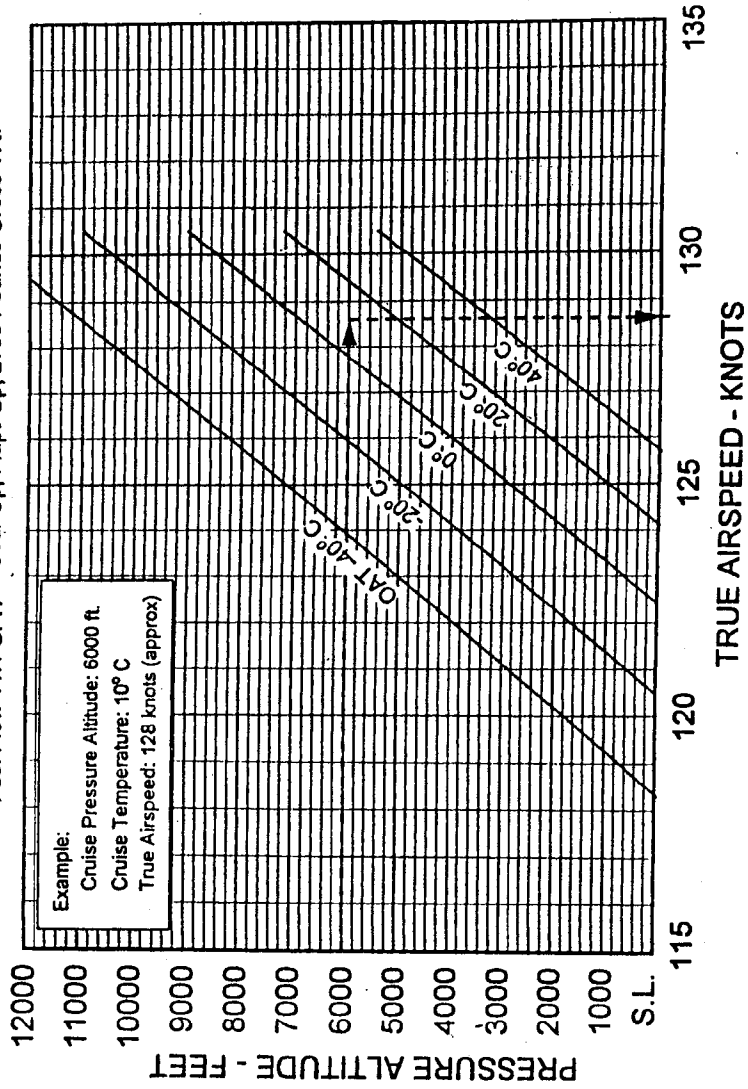


BEST POWER CRUISE (75% Power)

Figure 5-25

**BEST POWER CRUISE 65% POWER**

MIXTURE: 100° F Rich of Peak EGT 2500 RPM  
Fuel Flow 11.4 GPH Gear Up, Flaps Up, 2750 Pounds Gross Wt.



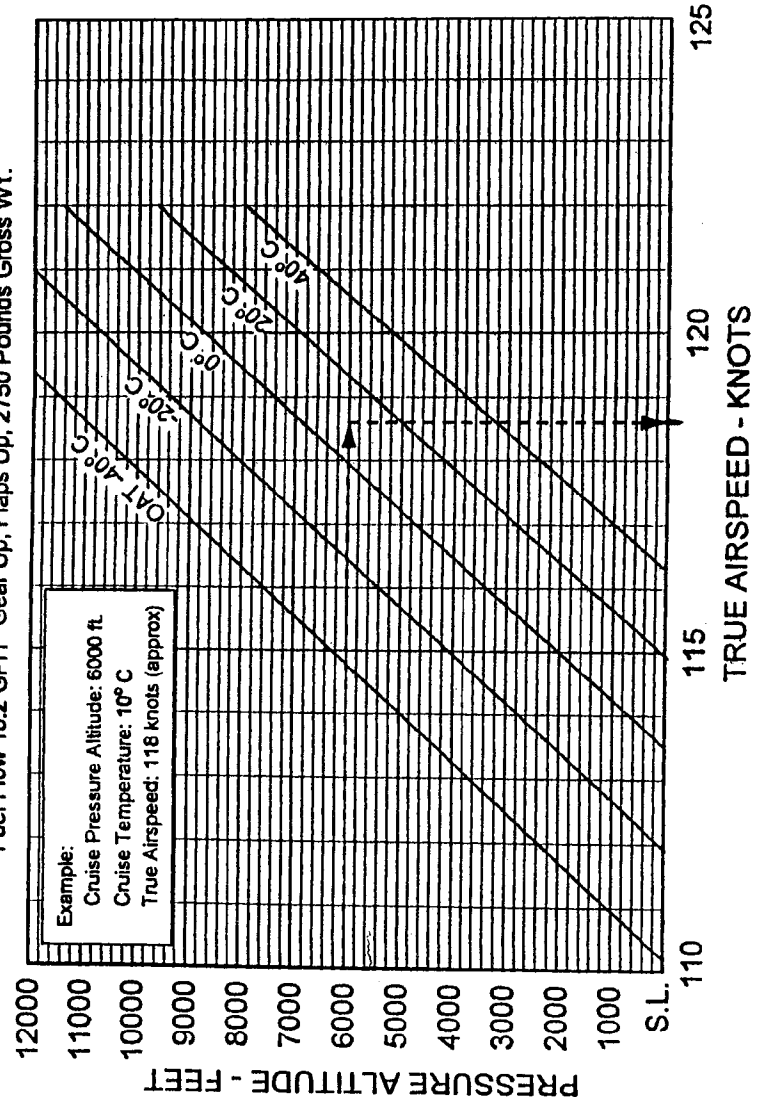
BEST POWER CRUISE (65% Power)

Figure 5-25a



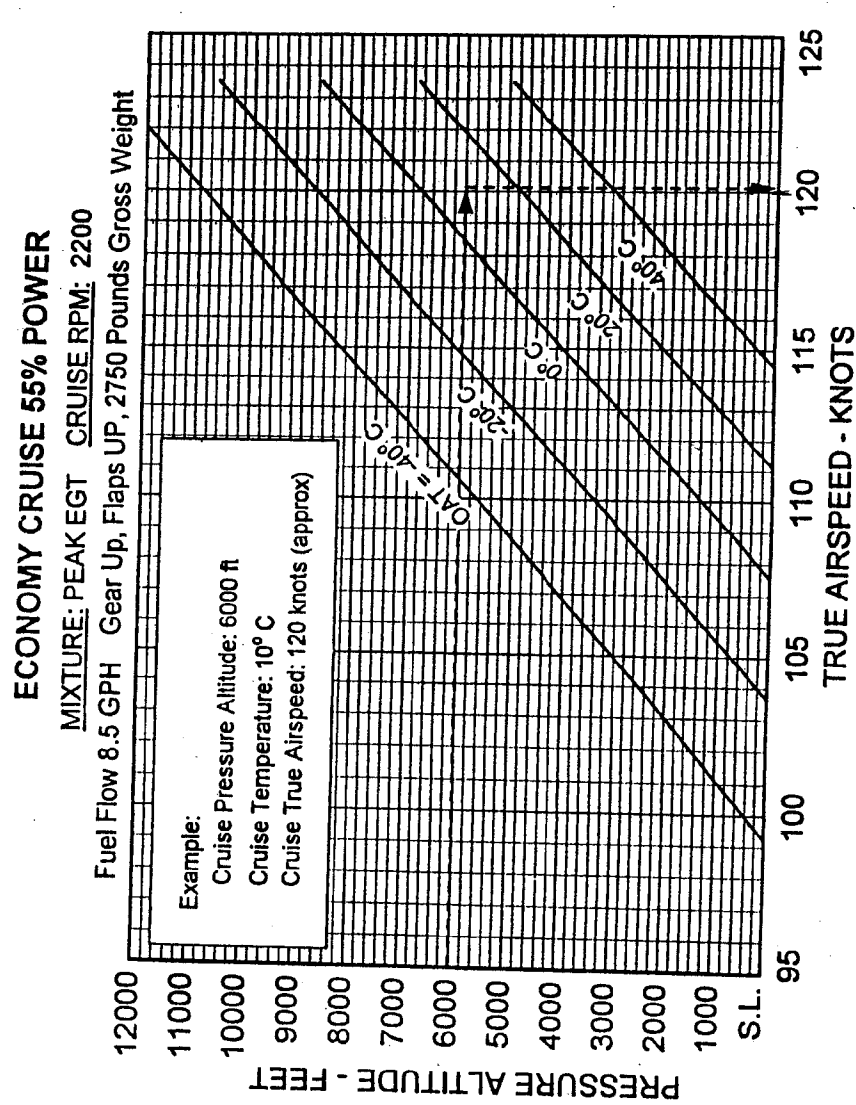
**BEST POWER CRUISE 55% POWER**

MIXTURE: 100° F Rich of Peak EGT 2500 RPM  
Fuel Flow 10.2 GPH Gear Up, Flaps Up, 2750 Pounds Gross Wt.



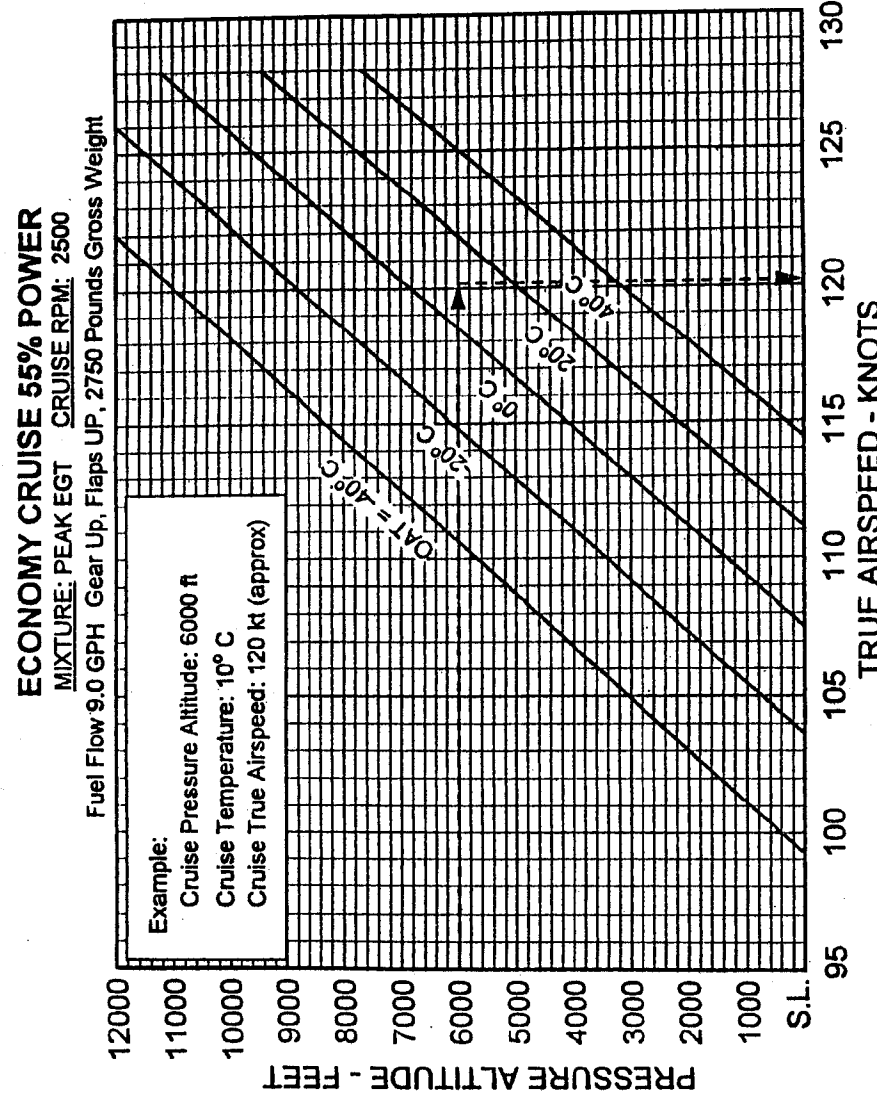
BEST POWER CRUISE (55% Power)

Figure 5-25b



ECONOMY CRUISE (55% Power 2200 RPM)

Figure 5-27

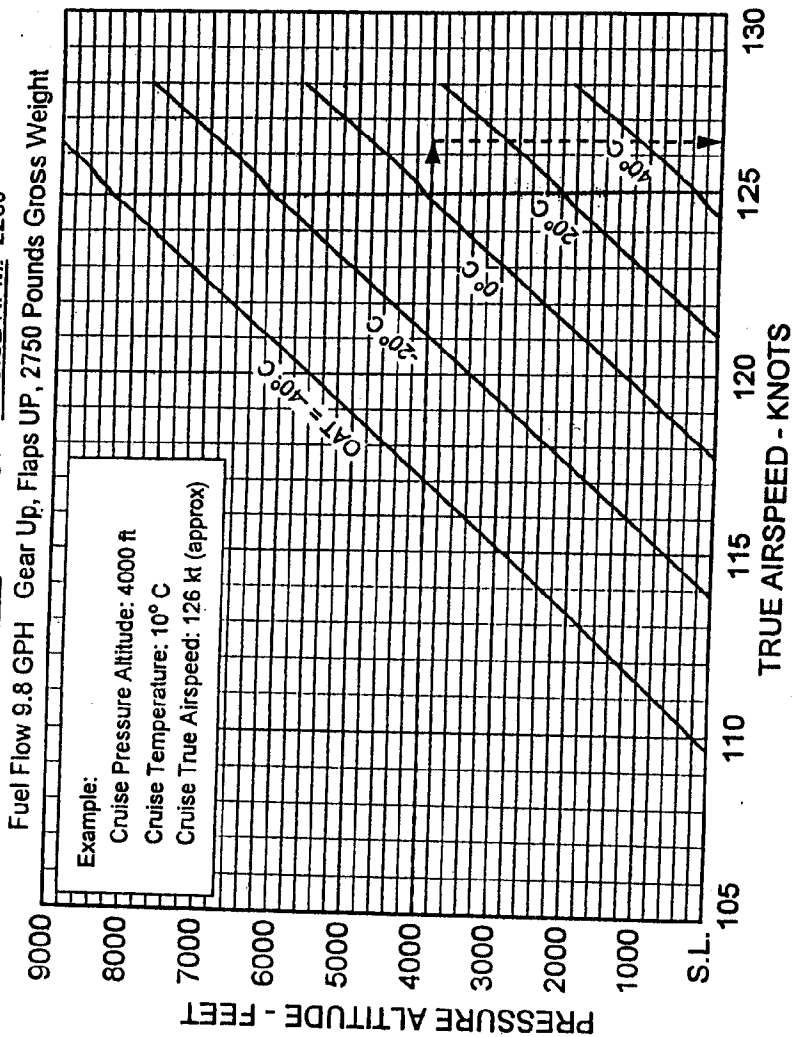


ECONOMY CRUISE (55% Power 2500 RPM)

Figure 5-27a

**ECONOMY CRUISE 65% POWER**

MIXTURE: PEAK EGT CRUISE RPM: 2200

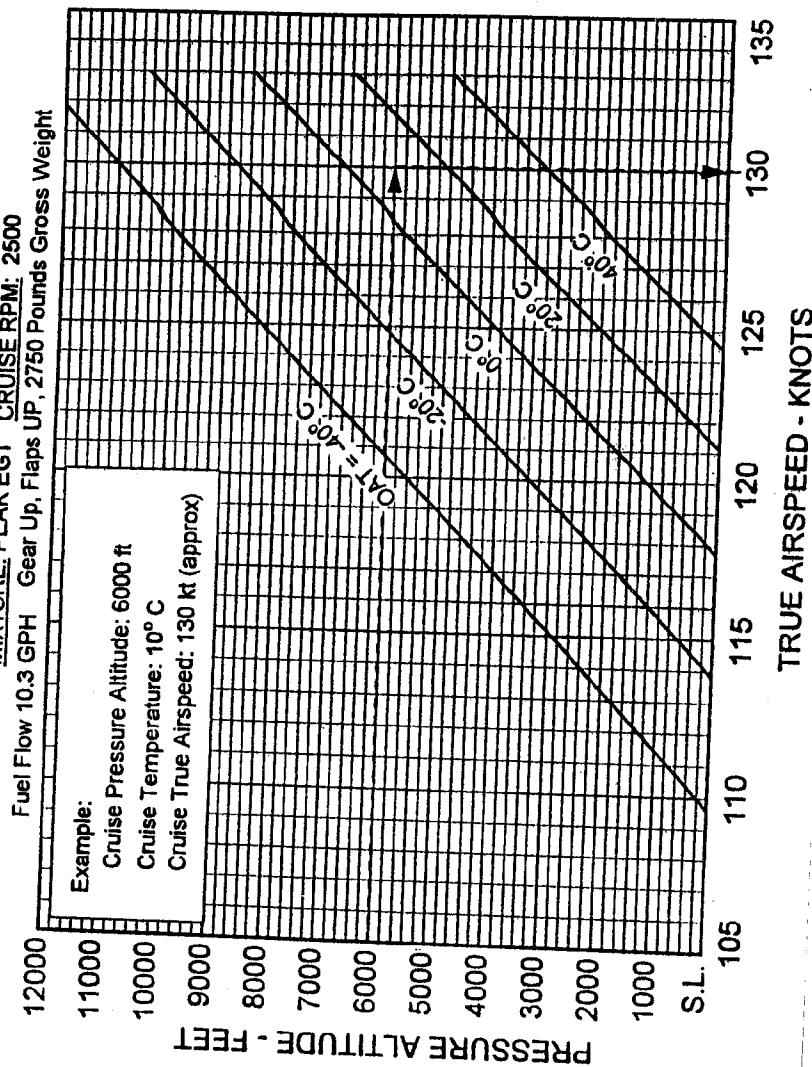


ECONOMY CRUISE (65% Power 2200 RPM)

Figure 5-27b

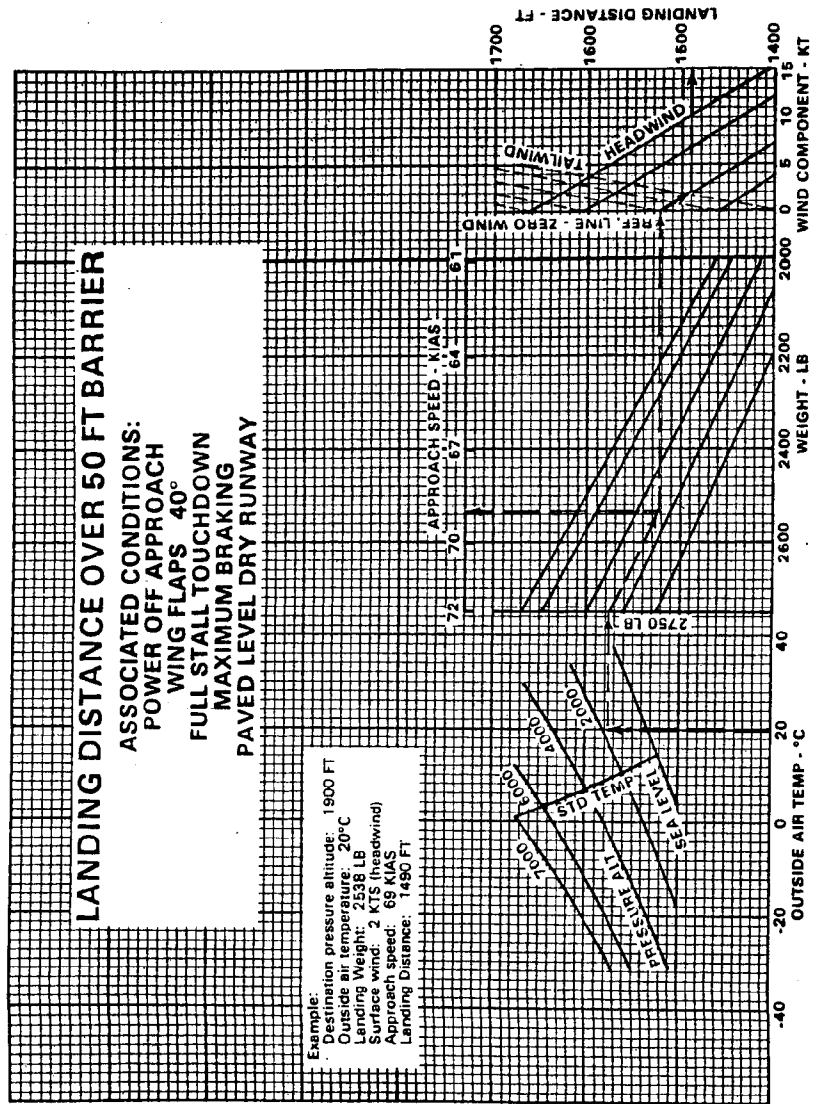
**ECONOMY CRUISE 65% POWER**

MIXTURE: PEAK EGT CRUISE RPM: 2500

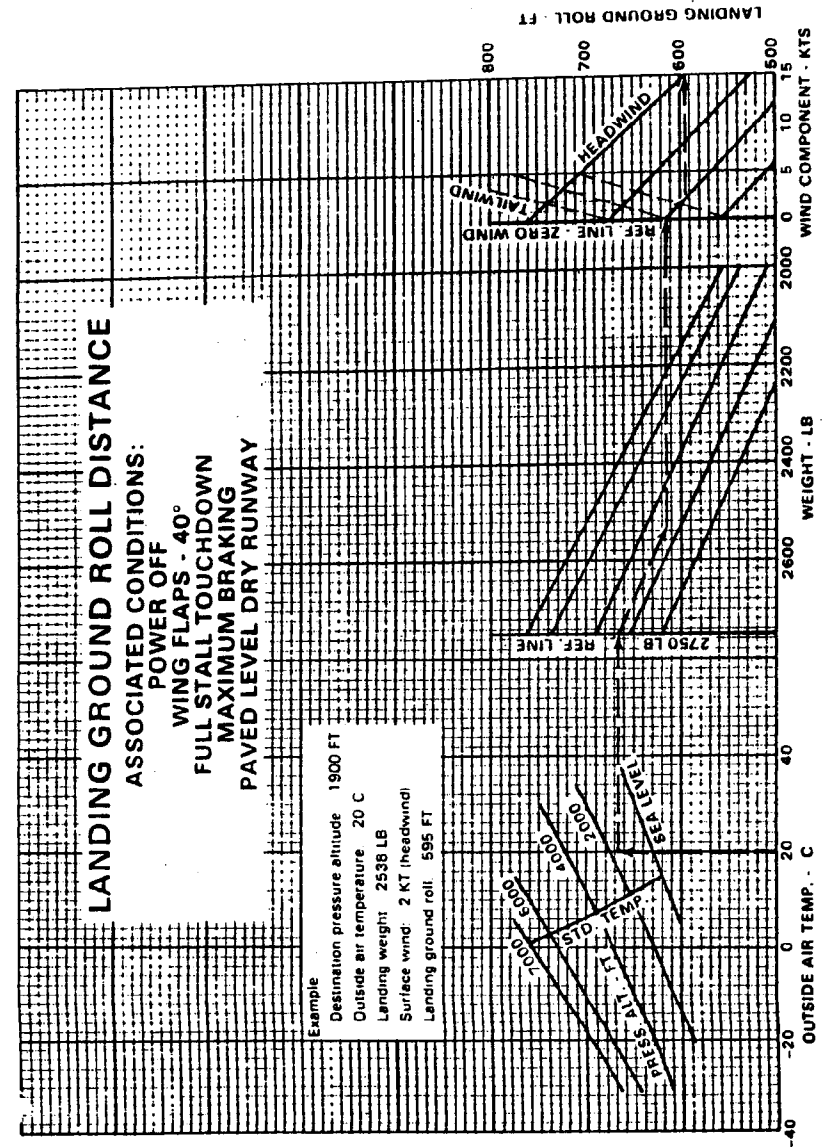


ECONOMY CRUISE (65% Power 2500 RPM)

Figure 5-27c



LANDING DISTANCE OVER 50 FOOT BARRIER  
Figure 5-39



LANDING GROUND ROLL DISTANCE  
Figure 5-41





6.7 WEIGHT AND BALANCE DETERMINATION FOR FLIGHT  
(continued)

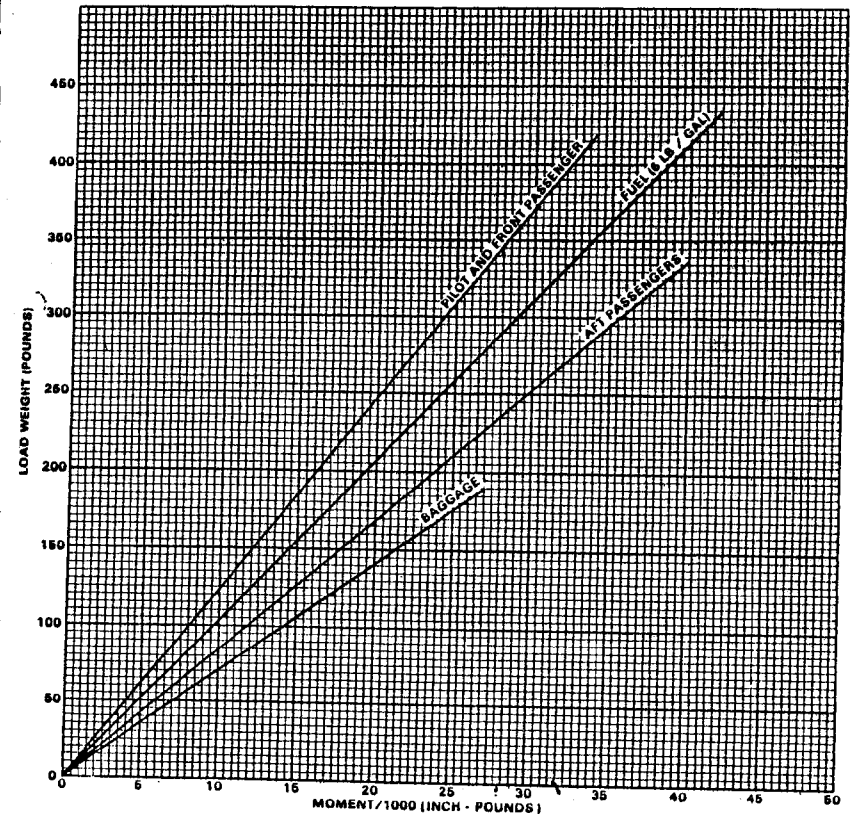
	Weight (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
Basic Empty Weight			
Pilot and Front Passenger		80.5	
Passengers (Rear Seats)		118.1	
Fuel (72 Gallons Maximum)		95.0	
Baggage (200 Lbs. Maximum)		142.8	
Ramp Weight (2758 Lbs. Maximum)			
Fuel Allowance For Engine Start, Taxi, and Run Up	-8	95.0	-760
Moment due to Retraction of Landing Gear			819
Takeoff Weight (2750 Lbs. Maximum)			

Totals must be within approved weight and C.G. limits. It is the responsibility of the airplane owner and the pilot to insure that the airplane is loaded properly. The Basic Empty Weight C.G. is noted on the Weight and Balance Data Form (Figure 6-5). If the airplane has been altered, refer to the Weight and Balance Record for this information.

WEIGHT AND BALANCE LOADING FORM  
Figure 6-11

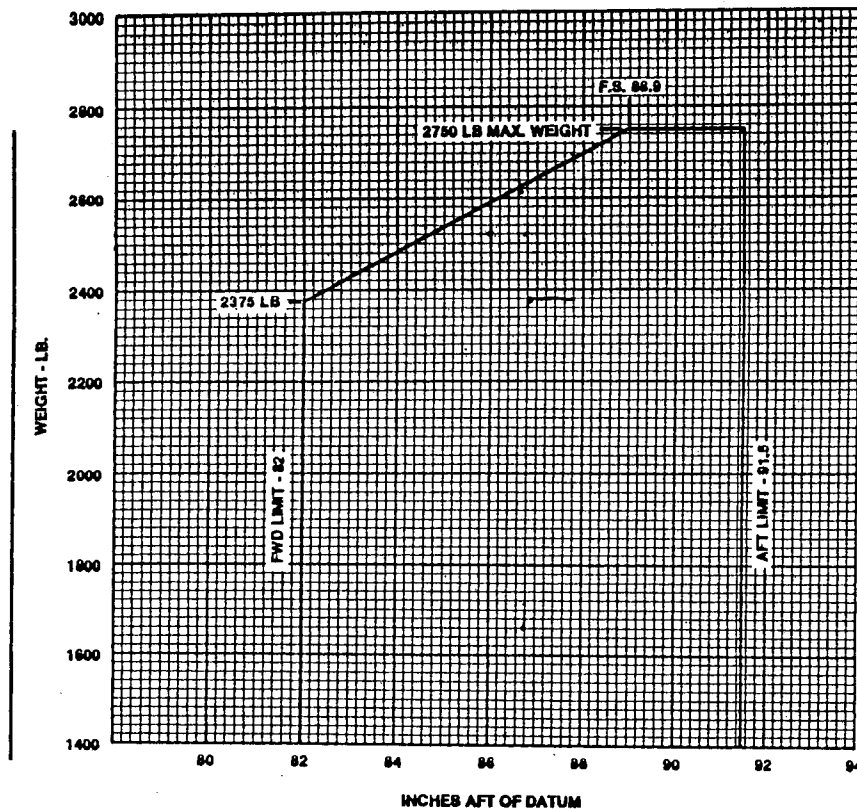


6.7 WEIGHT AND BALANCE DETERMINATION FOR FLIGHT  
(continued)



LOADING GRAPH  
Figure 6-13

6.7 WEIGHT AND BALANCE DETERMINATION FOR FLIGHT  
(continued)



C.G. RANGE AND WEIGHT  
Figure 6-15