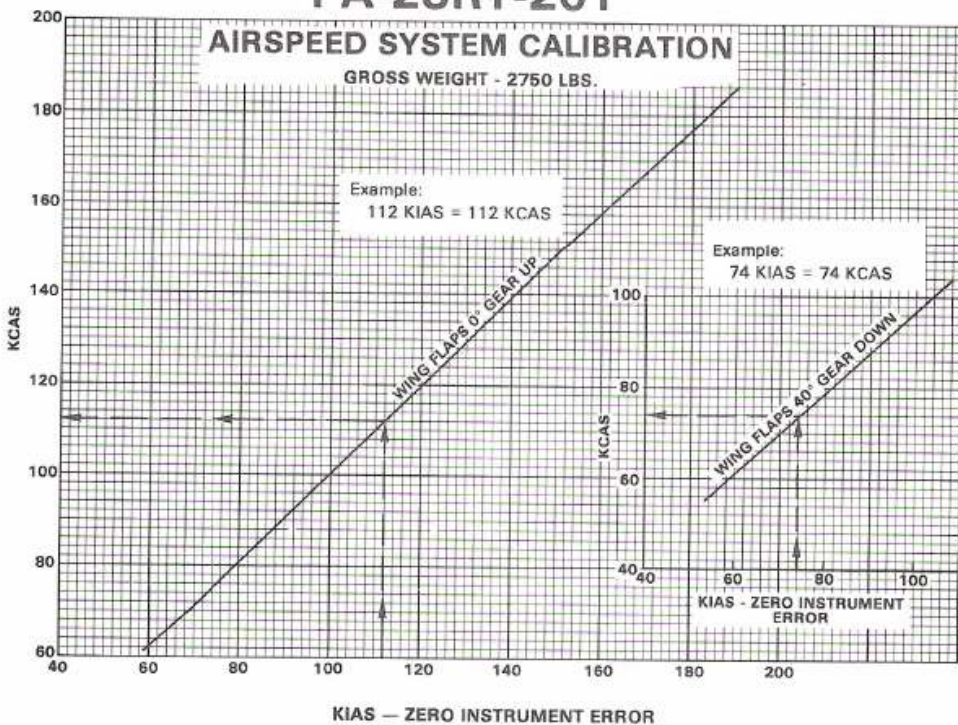
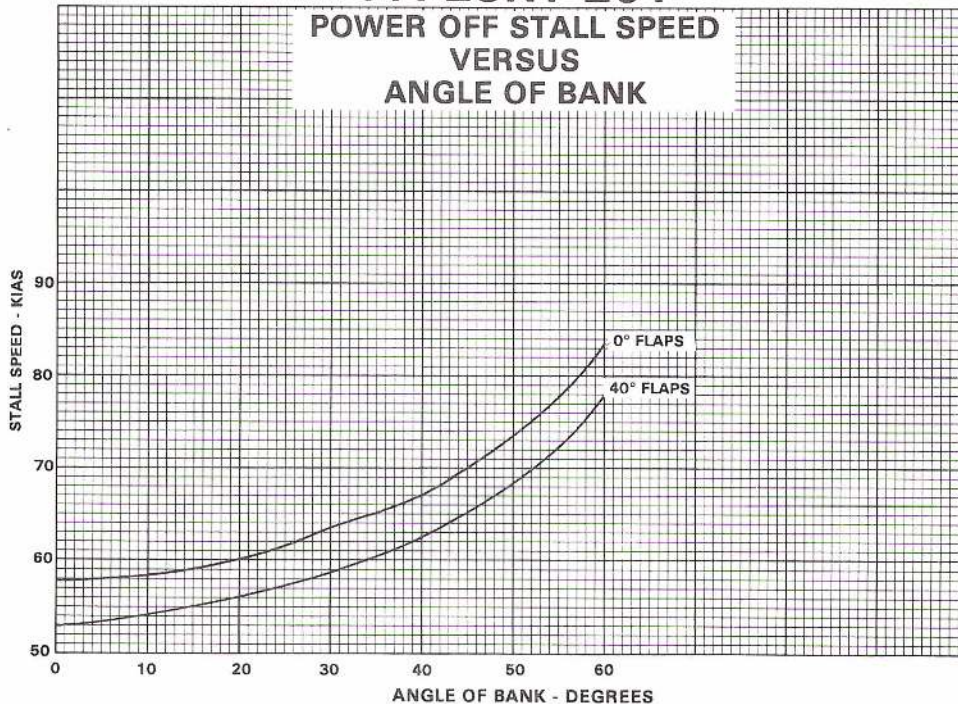


PA-28RT-201



AIRSPEED SYSTEM CALIBRATION
Figure 5-3

PA-28RT-201



POWER OFF STALL SPEED VS. ANGLE OF BANK
Figure 5-5

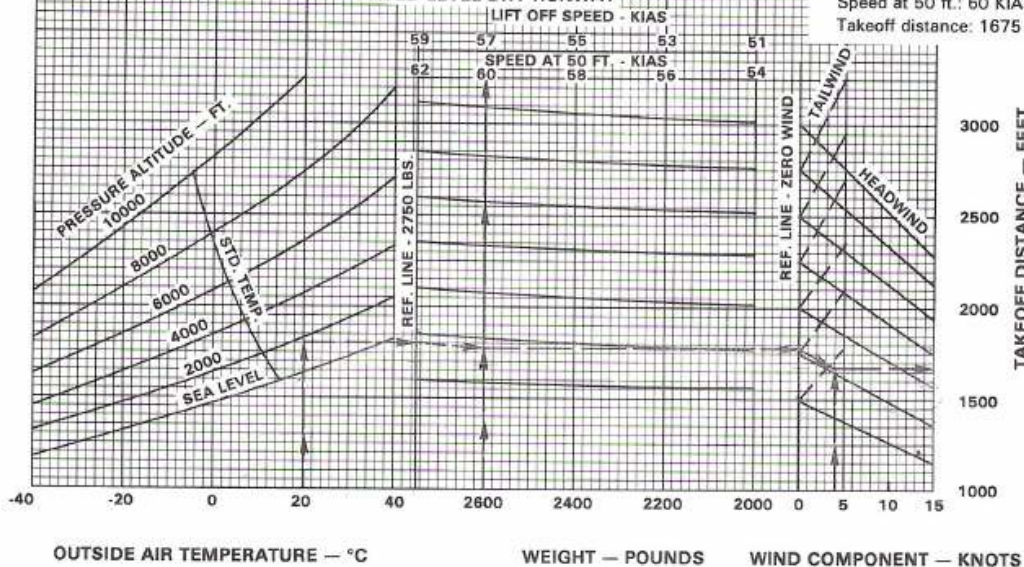
PA-28RT-201

25° FLAP TAKEOFF PERFORMANCE OVER 50' BARRIER

ASSOCIATED CONDITIONS:
POWER - 2700 RPM AND FULL THROTTLE BEFORE BRAKE RELEASE
WING FLAPS - 25°
PAVED LEVEL DRY RUNWAY

Example:

Pressure altitude: 1900 ft.
Outside air temperature: 20°C
Weight: 2600 lbs.
Surface wind: 4 kts (headwind)
Lift off speed: 57 KIAS
Speed at 50 ft.: 60 KIAS
Takeoff distance: 1675 ft.



25° FLAP TAKEOFF PERFORMANCE
Figure 5-7

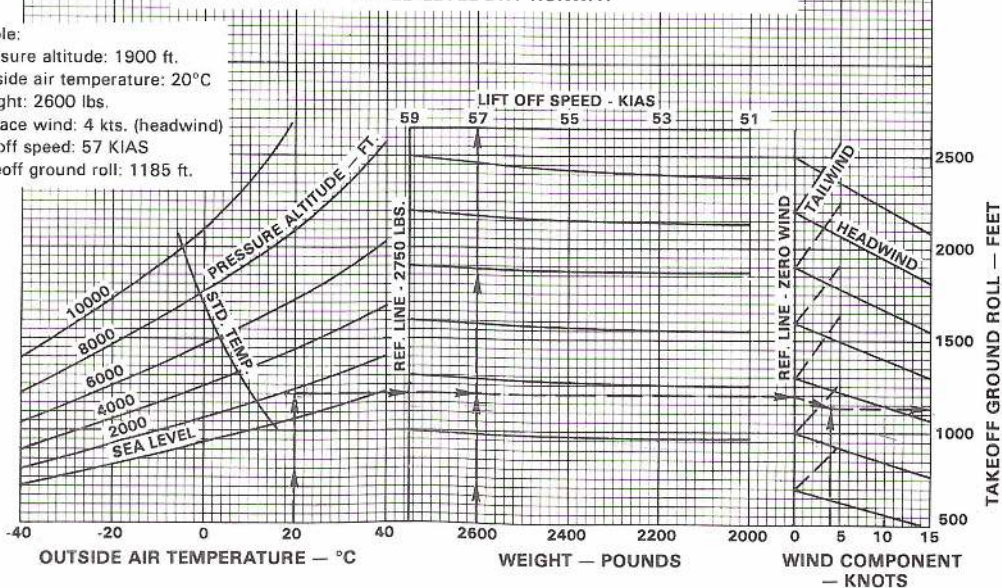
PA-28RT-201

25° FLAP TAKEOFF GROUND ROLL

ASSOCIATED CONDITIONS:
POWER - 2700 RPM AND FULL THROTTLE BEFORE BRAKE RELEASE
WING FLAPS - 25°
PAVED LEVEL DRY RUNWAY

Example:

Pressure altitude: 1900 ft.
Outside air temperature: 20°C
Weight: 2600 lbs.
Surface wind: 4 kts. (headwind)
Lift off speed: 57 KIAS
Takeoff ground roll: 1185 ft.



25° FLAP TAKEOFF GROUND ROLL
Figure 5-9

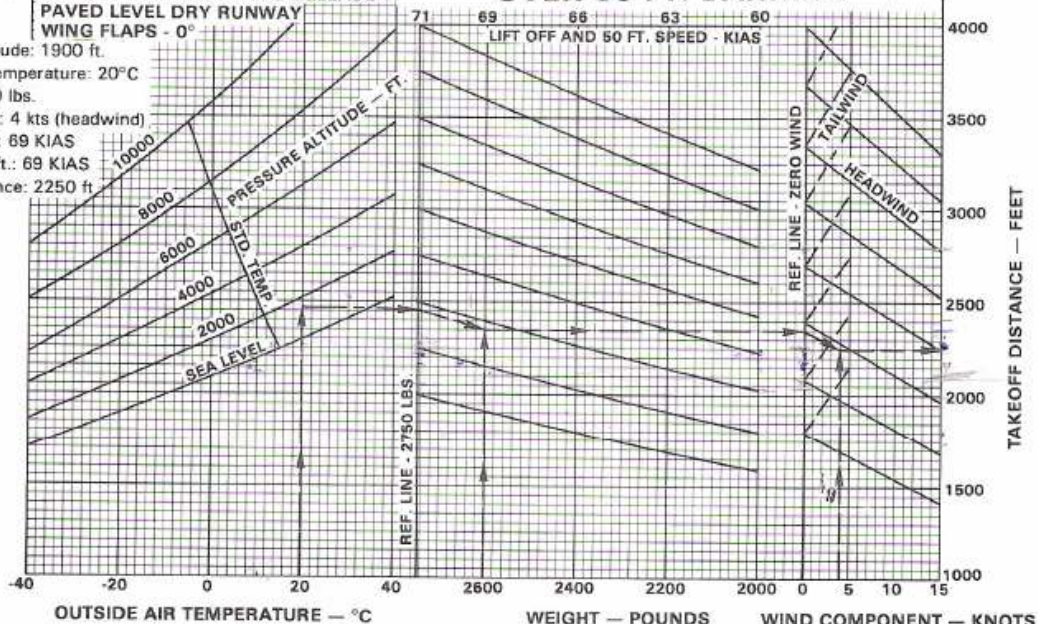
PA-28RT-201

ASSOCIATED CONDITIONS:
POWER - 2700 RPM AND FULL
THROTTLE BEFORE BRAKE RELEASE
PAVED LEVEL DRY RUNWAY
WING FLAPS - 0°

0° FLAP TAKEOFF PERFORMANCE OVER 50 FT. BARRIER

Example:

Pressure altitude: 1900 ft.
Outside air temperature: 20°C
Weight: 2600 lbs.
Surface wind: 4 kts (headwind)
Lift off speed: 69 KIAS
Speed at 50 ft.: 69 KIAS
Takeoff distance: 2250 ft



0° FLAP TAKEOFF PERFORMANCE

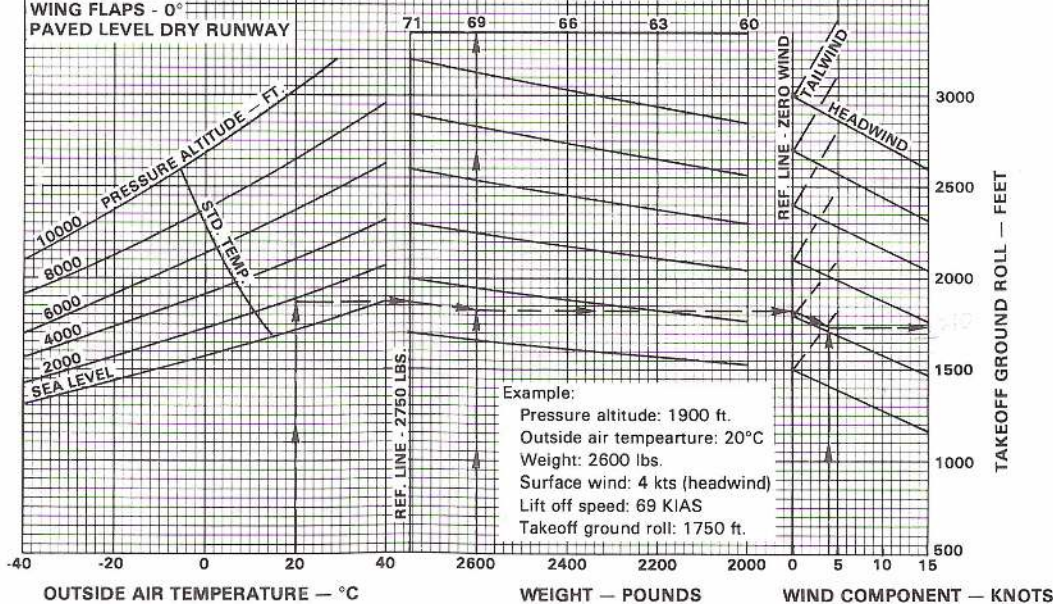
Figure 5-11

PA-28RT-201

0° FLAP TAKEOFF GROUND ROLL

ASSOCIATED CONDITIONS:
POWER - 2700 RPM AND FULL THROTTLE
BEFORE BRAKE RELEASE
WING FLAPS - 0°
PAVED LEVEL DRY RUNWAY

LIFT OFF SPEED - KIAS



Example:

Pressure altitude: 1900 ft.
Outside air temperature: 20°C
Weight: 2600 lbs.
Surface wind: 4 kts (headwind)
Lift off speed: 69 KIAS
Takeoff ground roll: 1750 ft.

0° FLAP TAKEOFF GROUND ROLL

Figure 5-13

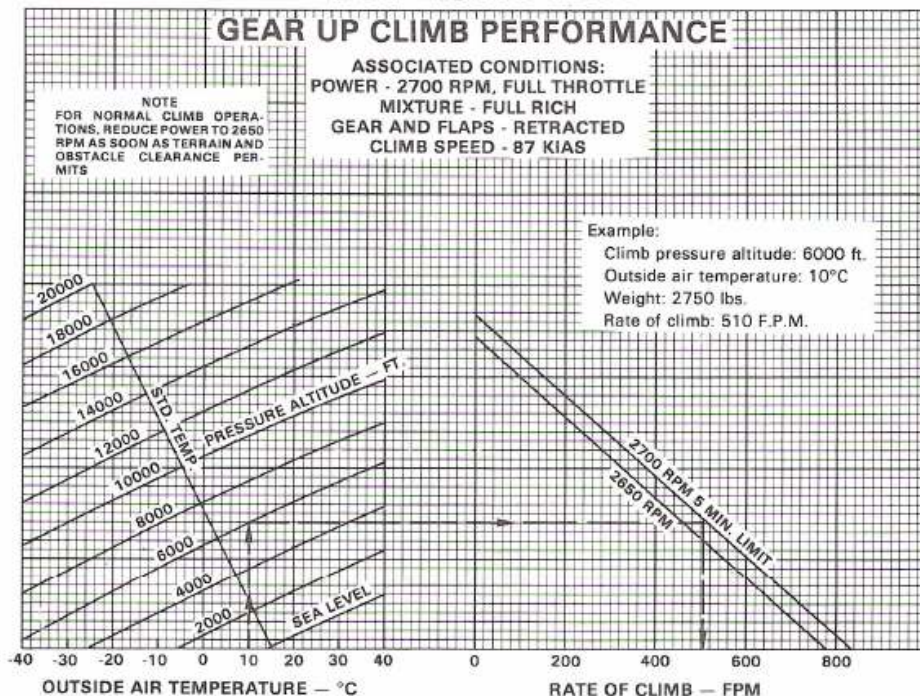
PA-28RT-201

GEAR UP CLIMB PERFORMANCE

ASSOCIATED CONDITIONS:
POWER - 2700 RPM, FULL THROTTLE
MIXTURE - FULL RICH
GEAR AND FLAPS - RETRACTED
CLIMB SPEED - 87 KIAS

NOTE
FOR NORMAL CLIMB OPERATIONS, REDUCE POWER TO 2650 RPM AS SOON AS TERRAIN AND OBSTACLE CLEARANCE PERMITS

Example:
Climb pressure altitude: 6000 ft.
Outside air temperature: 10°C
Weight: 2750 lbs.
Rate of climb: 510 F.P.M.



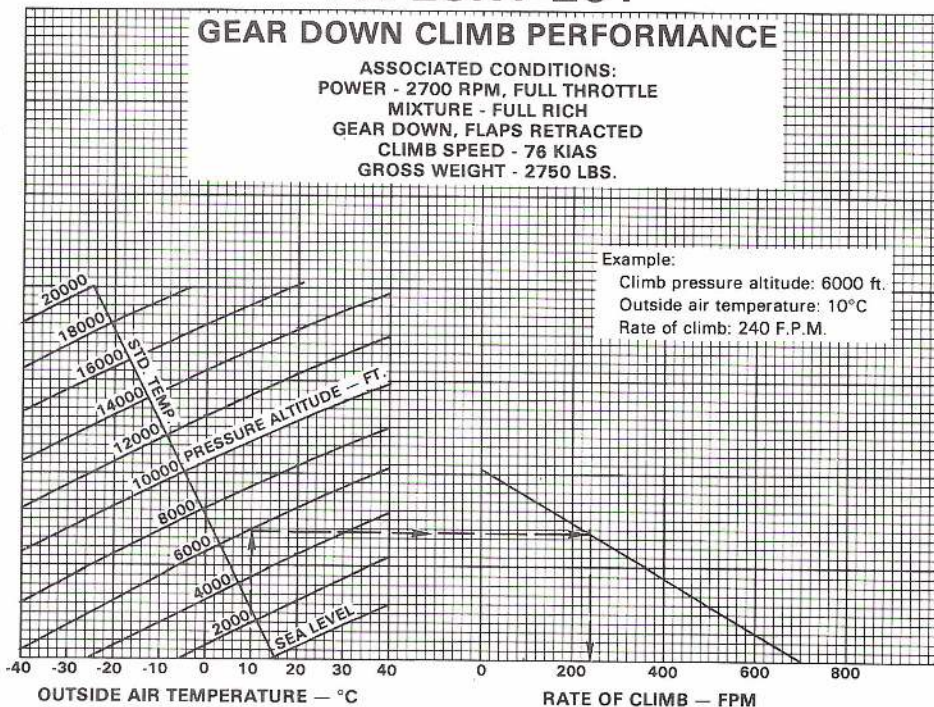
GEAR UP CLIMB PERFORMANCE
Figure 5-15

PA-28RT-201

GEAR DOWN CLIMB PERFORMANCE

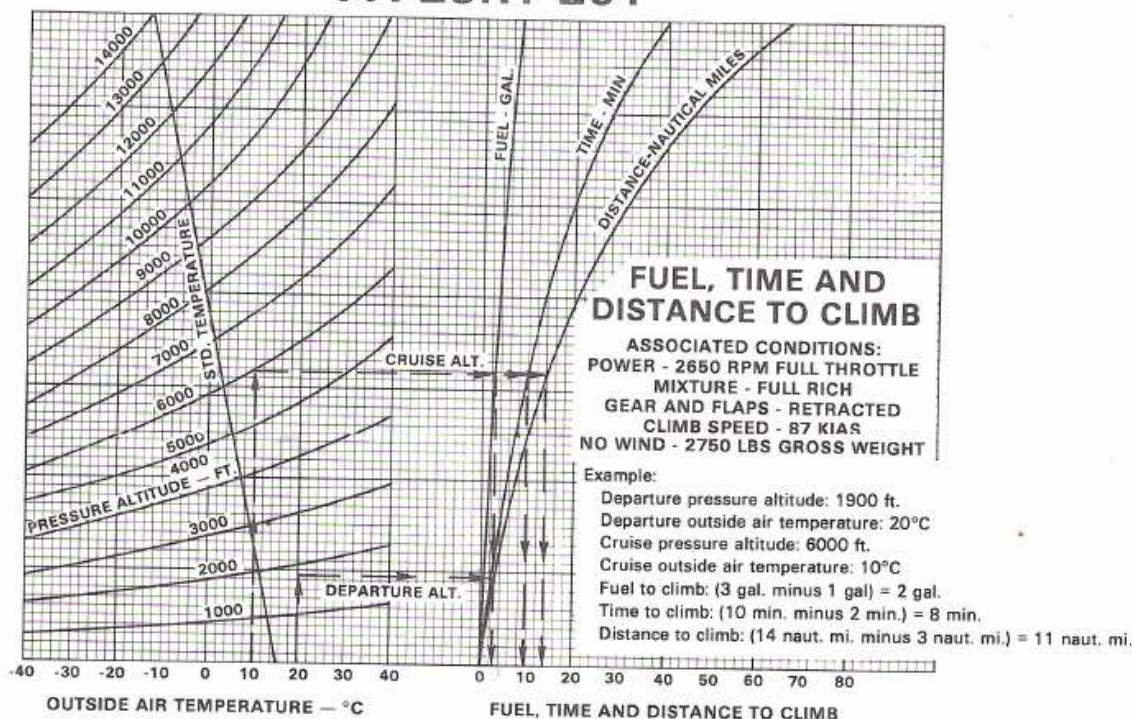
ASSOCIATED CONDITIONS:
POWER - 2700 RPM, FULL THROTTLE
MIXTURE - FULL RICH
GEAR DOWN, FLAPS RETRACTED
CLIMB SPEED - 76 KIAS
GROSS WEIGHT - 2750 LBS.

Example:
Climb pressure altitude: 6000 ft.
Outside air temperature: 10°C
Rate of climb: 240 F.P.M.



GEAR DOWN CLIMB PERFORMANCE
Figure 5-17

PA-28RT-201

FUEL, TIME AND DISTANCE TO CLIMB
Figure 5-19LYCOMING MODEL IO-360-C SERIES, 200 HP ENGINE
AS INSTALLED IN PA-28RT-201

Press. Alt. Feet	Std. Alt. Temp. °C	110 HP - 55% POWER RPM AND MAN. PRESS.		130 HP - 65% POWER RPM AND MAN. PRESS.		150 HP - 75% POWER RPM AND MAN. PRESS.	Press. Alt. Feet
		2200	2500	2200	2500	2500	
S.L.	15	25.0	22.2	27.1	23.5	26.0	S.L.
1000	13	24.6	21.8	26.8	23.3	25.8	1000
2000	11	24.1	21.5	26.4	23.1	25.7	2000
3000	9	23.7	21.2	26.1	23.0	25.6	3000
4000	7	23.3	20.9	25.7	22.9	25.5	4000
5000	5	22.8	20.5	F.T.	22.8	F.T.	5000
6000	3	22.4	20.2		22.7		6000
7000	1	21.9	19.8		22.5		7000
8000	-1	21.5	19.5		F.T.		8000
9000	-3	21.0	19.2				9000
10000	-5	F.T.	18.8				10000
11000	-7	—	18.5				11000
12000	-9	—	18.2				12000
13000	-11	—	17.8				13000
14000	-13	—	17.5				14000

To maintain constant power, correct manifold pressure approximately 0.16" Hg for each 10°F 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
Figure 5-21

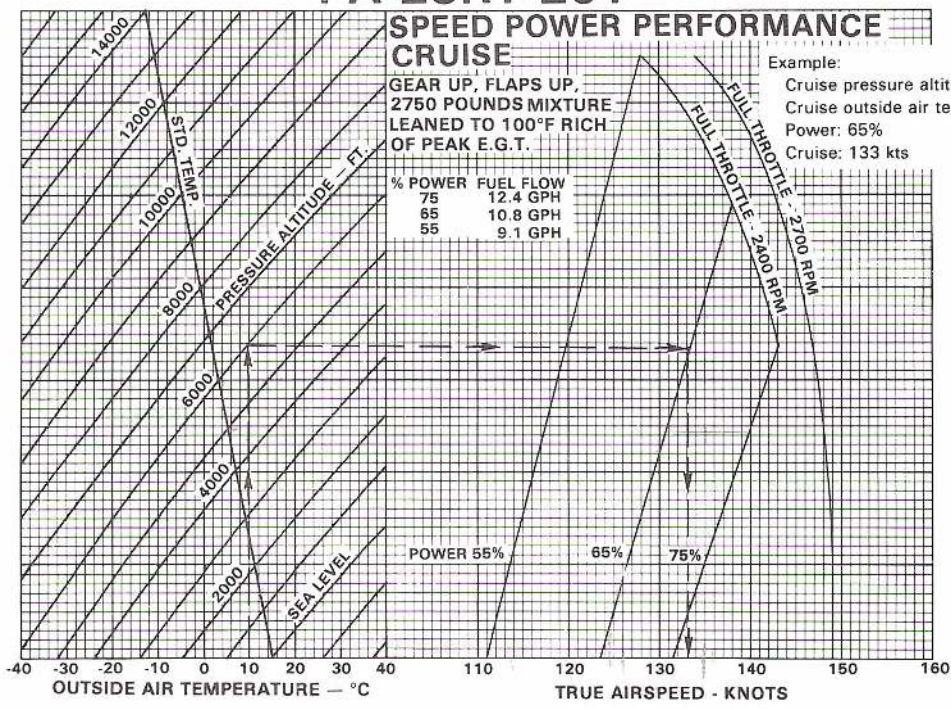
PA-28RT-201

SPEED POWER PERFORMANCE CRUISE

GEAR UP, FLAPS UP,
2750 POUNDS MIXTURE
LEANED TO 100°F RICH
OF PEAK E.G.T.

% POWER	FUEL FLOW
75	12.4 GPH
65	10.8 GPH
55	9.1 GPH

Example:
Cruise pressure altitude: 6000 ft.
Cruise outside air temperature = 10 °C
Power: 65%
Cruise: 133 kts



SPEED POWER - PERFORMANCE CRUISE
Figure 5-23

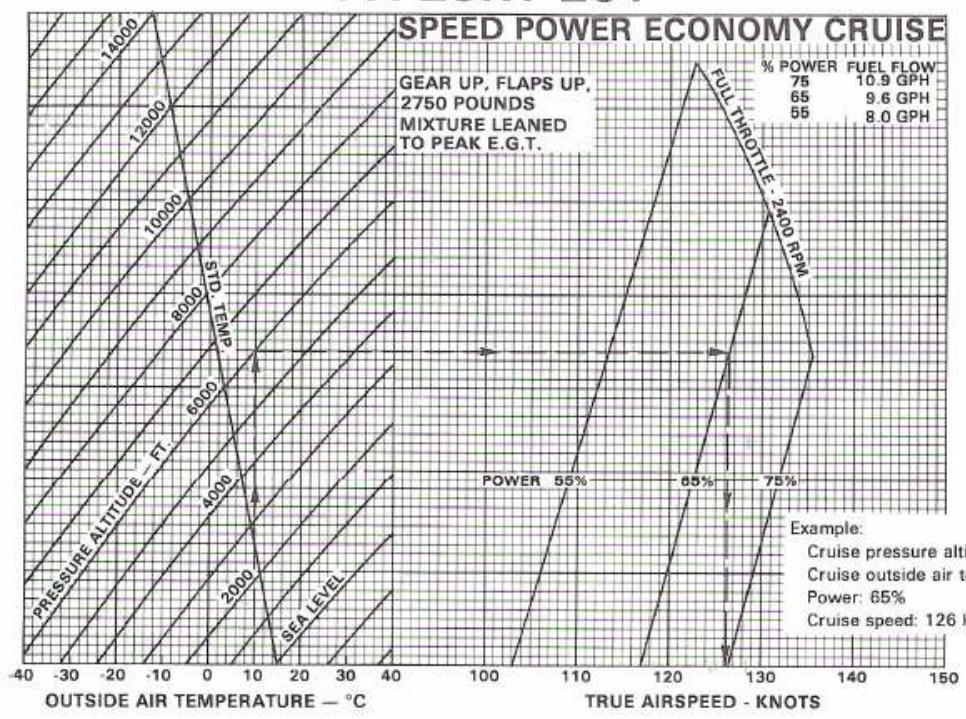
PA-28RT-201

SPEED POWER ECONOMY CRUISE

GEAR UP, FLAPS UP,
2750 POUNDS
MIXTURE LEANED
TO PEAK E.G.T.

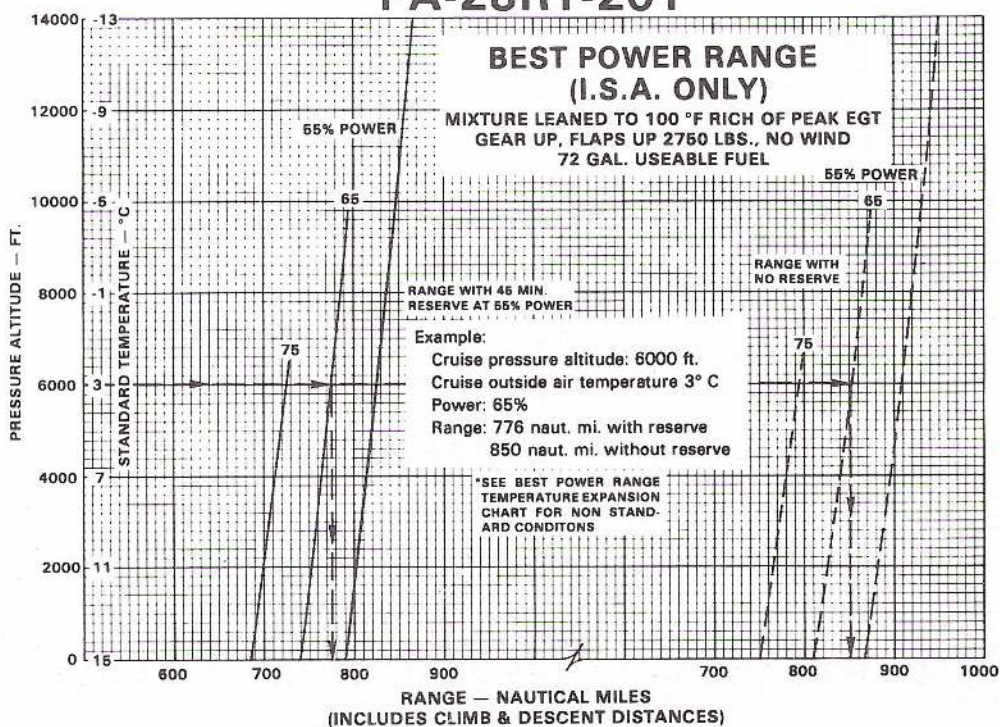
% POWER	FUEL FLOW
75	10.9 GPH
65	9.6 GPH
55	8.0 GPH

Example:
Cruise pressure altitude: 6000 ft.
Cruise outside air temperature: 10°C
Power: 65%
Cruise speed: 126 kts



SPEED POWER - ECONOMY CRUISE
Figure 5-25

PA-28RT-201



BEST POWER RANGE - ISA

Figure 5-27

SECTION 5
PERFORMANCE

PIPER AIRCRAFT CORPORATION
PA-28RT-201, ARROW IV

Pressure Altitude Feet	Outside Air Temp.		45 Min. Reserve At 55% Power			No Reserve		
	°C		% Power			% Power		
			75	65	55	75	65	55
0	ISA -30°C	-15	654	709	754	715	775	824
2000		-19	666	720	766	728	787	838
4000		-23	678	731	777	742	800	851
6000		-27	690	748	789	755	812	864
8000		-31	—	752	800	—	824	877
10,000		-35	—	762	811	—	836	889
12,000		-39	—	—	821	—	—	901
14,000		-43	—	—	833	—	—	912
0	ISA -15°C	0	671	726	772	733	793	844
2000		-4	683	737	784	747	806	858
4000		-8	695	748	796	761	818	871
6000		-12	707	759	808	774	831	884
8000		-16	—	769	819	—	843	897
10,000		-20	—	780	829	—	855	910
12,000		-24	—	—	839	—	—	921
14,000		-28	—	—	849	—	—	930
0	ISA +15°C	30	701	756	805	766	826	880
2000		26	714	767	817	780	839	894
4000		22	726	778	829	794	852	907
6000		18	739	789	841	808	864	921
8000		14	—	800	852	—	876	933
10,000		10	—	810	861	—	888	945
12,000		5	—	—	867	—	—	954
14,000		2	—	—	872	—	—	962
0	ISA +30°C	45	715	769	820	781	841	896
2000		41	728	781	833	796	854	910
4000		37	740	792	844	810	867	924
6000		33	753	803	856	824	879	937
8000		29	—	813	866	—	891	949
10,000		25	—	822	875	—	901	959
12,000		21	—	—	879	—	—	965
14,000		17	—	—	884	—	—	970

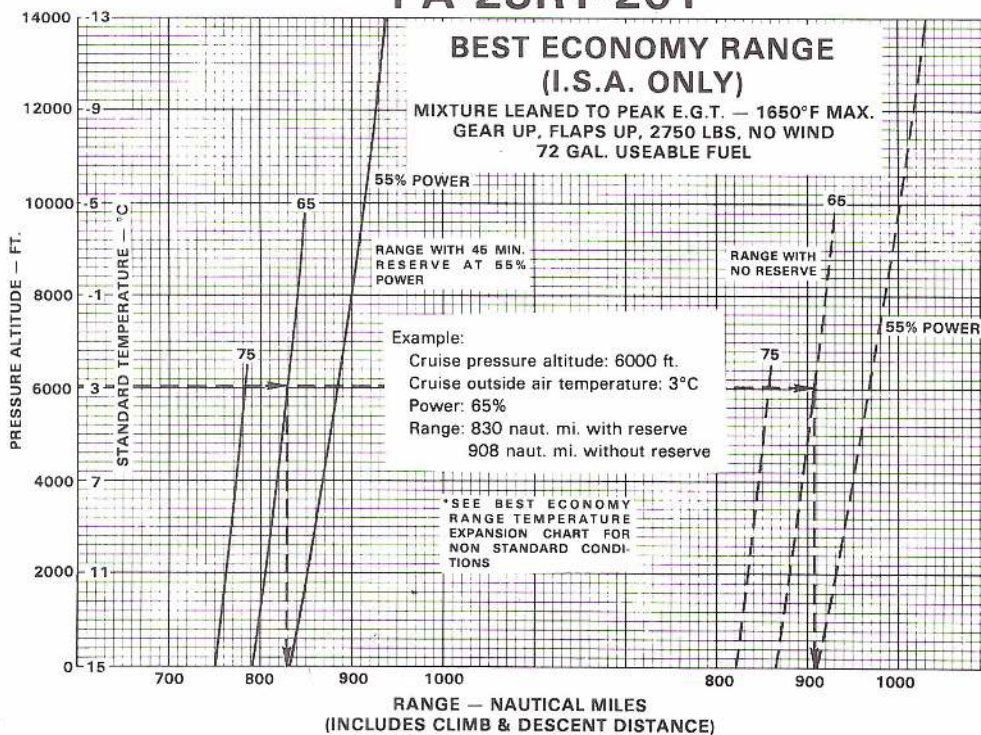
BEST POWER RANGE - NAUTICAL MILES
NON-STANDARD TEMPERATURE EXPANSION CHART

Figure 5-29

REPORT: VB-1130
5-26

ISSUED: SEPTEMBER 14, 1979
REVISED: JANUARY 31, 1987

PA-28RT-201



BEST ECONOMY RANGE - ISA

Figure 5-31

SECTION 5
PERFORMANCE

PIPER AIRCRAFT CORPORATION
PA-28RT-201, ARROW IV

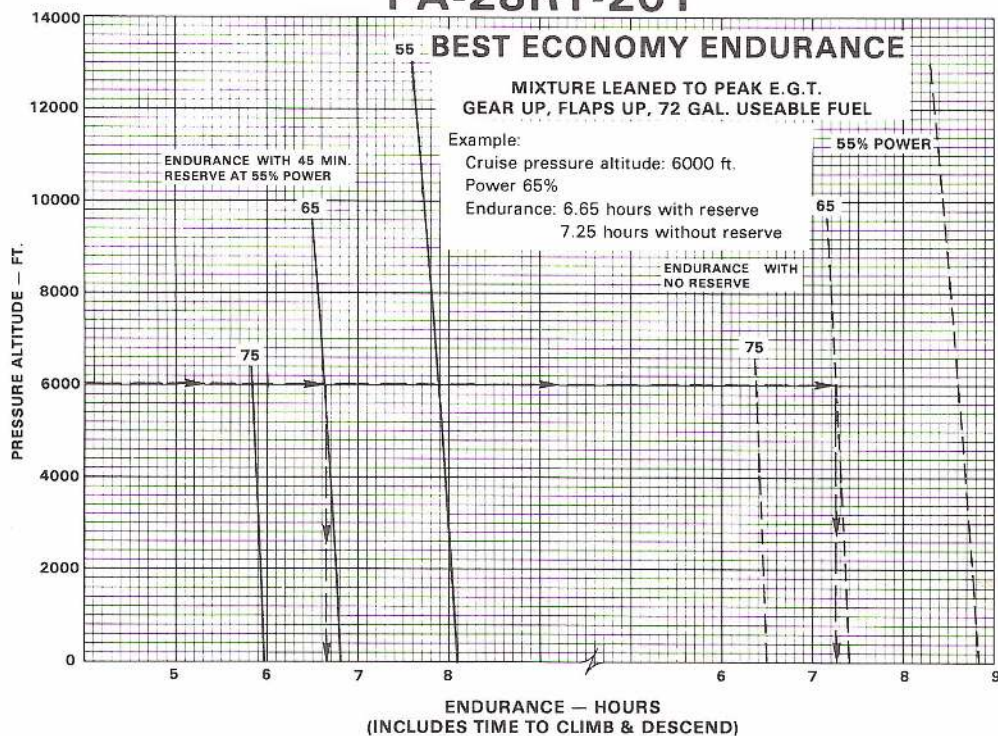
Pressure Altitude Feet	Outside Air Temp. °C		45 Min. Reserve At 55% Power			No Reserve		
			% Power			% Power		
			75	65	55	75	65	55
0	ISA -30°C	-15	721	755	784	787	825	857
2000		-19	730	767	801	799	839	876
4000		-23	740	779	818	810	853	896
6000		-27	750	791	835	821	866	915
8000		-31	—	802	851	—	879	933
10,000		-35	—	814	867	—	892	951
12,000		-39	—	—	881	—	—	968
14,000		-43	—	—	892	—	—	980
0	ISA -15°C	0	736	774	808	804	846	883
2000		-4	746	786	826	816	860	903
4000		-8	756	798	843	827	874	923
6000		-12	766	810	860	839	887	942
8000		-16	—	822	876	—	900	960
10,000		-20	—	833	891	—	913	978
12,000		-24	—	—	905	—	—	994
14,000		-28	—	—	918	—	—	1009
0	ISA +15°C	30	764	808	853	835	882	932
2000		26	775	820	870	847	897	952
4000		22	785	832	888	859	911	971
6000		18	795	844	904	870	924	990
8000		14	—	855	919	—	937	1007
10,000		10	—	865	932	—	949	1023
12,000		5	—	—	943	—	—	1036
14,000		2	—	—	952	—	—	1058
0	ISA +30°C	45	777	823	873	849	899	954
2000		41	788	835	891	861	913	974
4000		37	798	848	907	873	927	993
6000		33	808	859	923	884	941	1011
8000		29	—	870	937	—	953	1028
10,000		25	—	878	949	—	963	1042
12,000		21	—	—	955	—	—	1050
14,000		17	—	—	960	—	—	1057

BEST ECONOMY RANGE - NAUTICAL MILES
NON-STANDARD TEMPERATURE EXPANSION CHART
Figure 5-33

REPORT: VB-1130
5-28

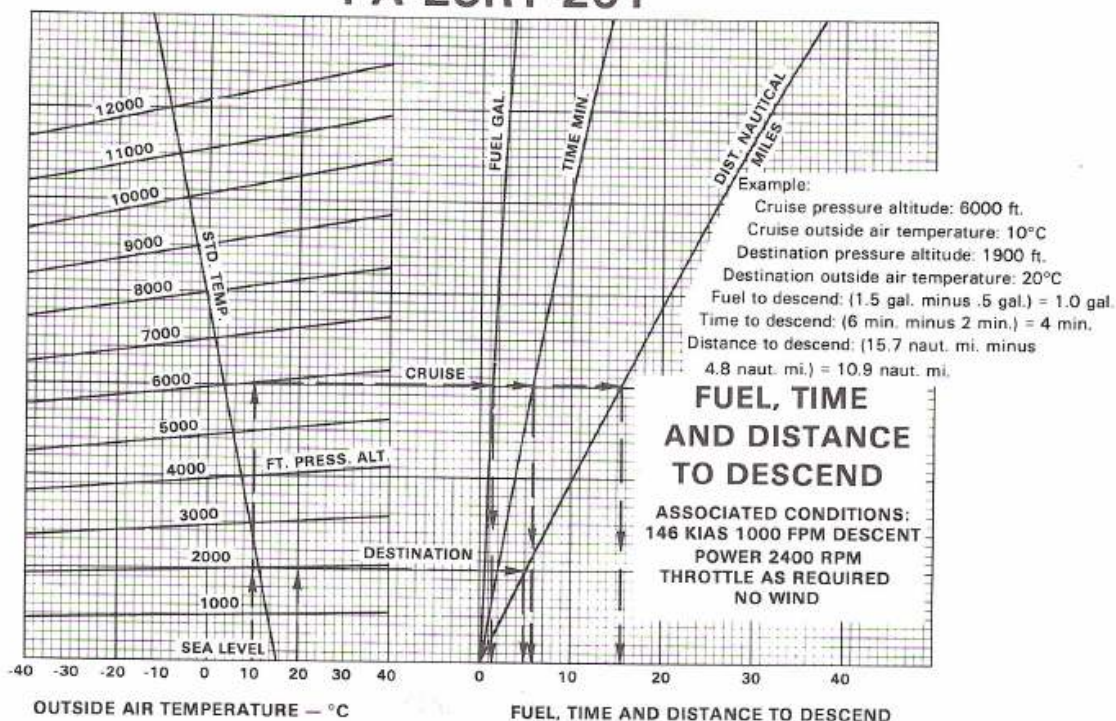
ISSUED: SEPTEMBER 14, 1979
REVISED: NOVEMBER 30, 1981

PA-28RT-201



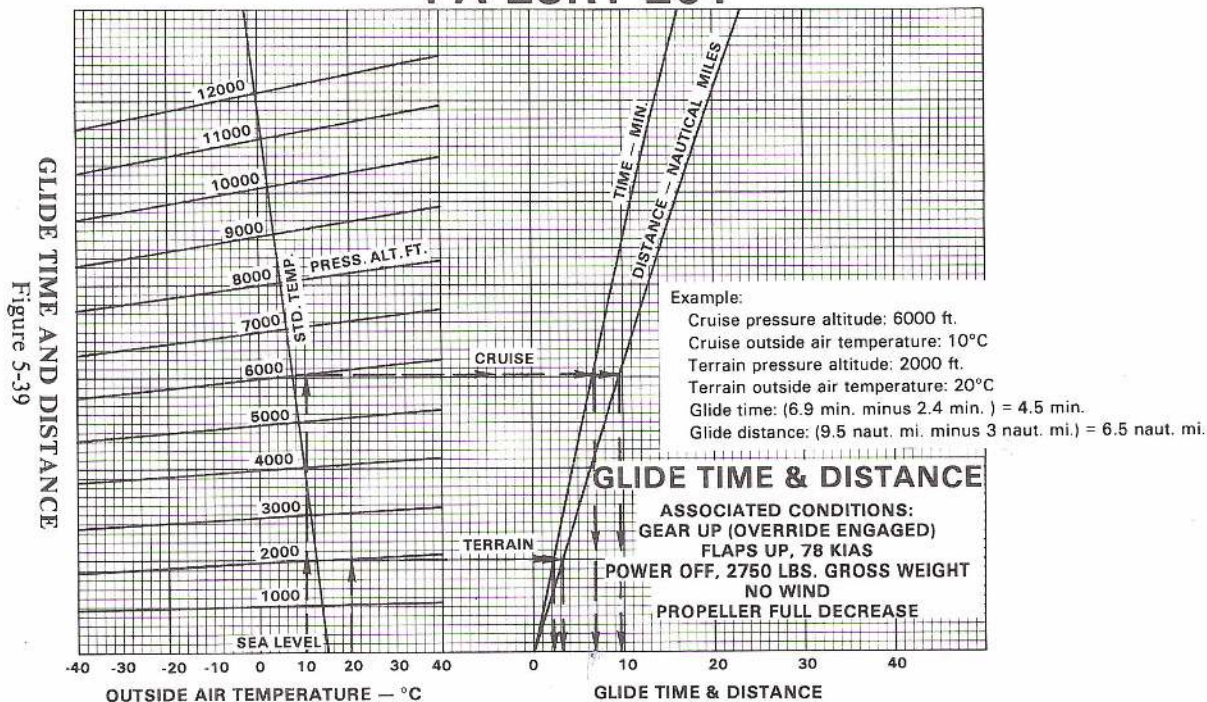
BEST ECONOMY ENDURANCE
Figure 5-35

PA-28RT-201



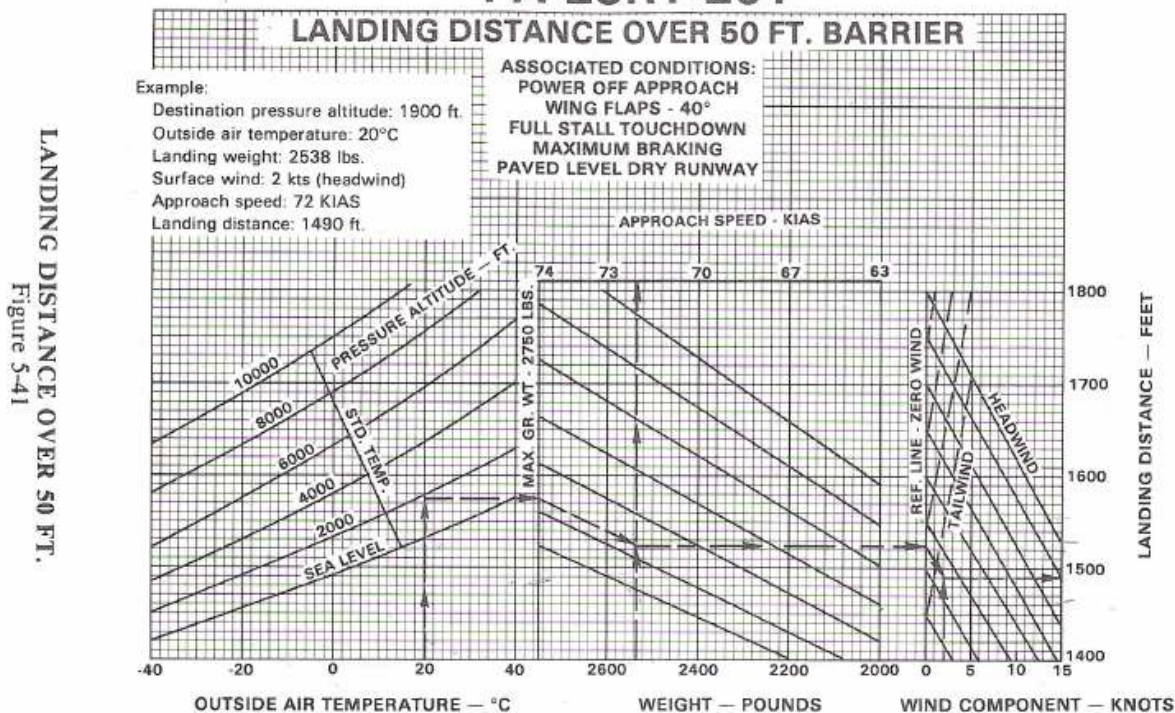
FUEL, TIME AND DISTANCE TO DESCEND
Figure 5-37

PA-28RT-201



PA-28RT-201

LANDING DISTANCE OVER 50 FT. BARRIER



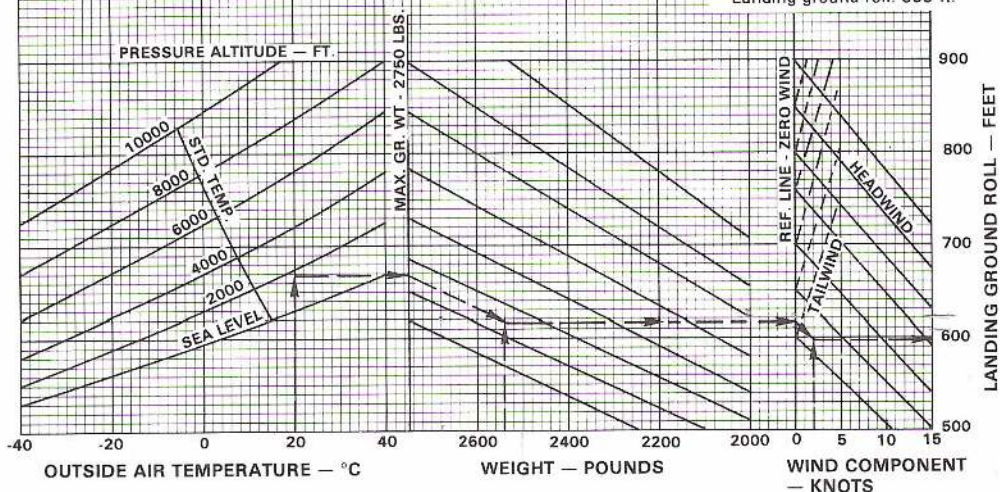
PA-28RT-201

LANDING GROUND ROLL DISTANCE

ASSOCIATED CONDITIONS:
POWER OFF
WING FLAPS - 40°
FULL STALL TOUCHDOWN
MAXIMUM BRAKING
PAVED LEVEL DRY RUNWAY

Example:

Destination pressure altitude: 1900 ft.
Outside air temperature: 20°C
Landing weight: 2538 lbs.
Surface wind: 2 kts. (headwind)
Landing ground roll: 595 ft.



LANDING GROUND ROLL DISTANCE

Figure 5-43