



DISPATCH RELEASE FORM

FILL IN THE BLANKS AND CHECK THE BOXES THAT APPLY TO YOUR FLIGHT.
BOTH SIDES MUST BE COMPLETED PRIOR TO DISPATCH RELEASE.

DATE AND TIME:

TAIL #:

DEPARTURE TIME:

RETURN TIME:

STUDENT NAME:

INSTRUCTOR NAME:

PASSENGER NAME(S):

PATTERN ☐ APPROACHES ☐ CROSS COUNTRY ☐

DUAL ☐ SOLO ☐ LOCAL ☐ CROSS COUNTRY ☐

PRAC AREA OR ROUTE:

WEATHER BRIEFING VMC ☐ IMC ☐

91.103: CHECK BOXES OF COMPLETED ITEMS

INFO: TIME: WIND: /

☐ NOTAMS ☐ PILOT DOCS

VIS: CEILING: TEMP/DP: /

☐ WT & BAL ☐ TO/LDG DATA

ALT: RETURN WEATHER VERIFIED: YES ☐

☐ ARROW ☐ FUEL REQUIRED

FLT PLN REQUIRED: ALTERNATE REQUIRED:
YES ☐ NO ☐ YES ☐ NO ☐

☐ A AVIATES 91.409 ☐ 50HR / 100HR

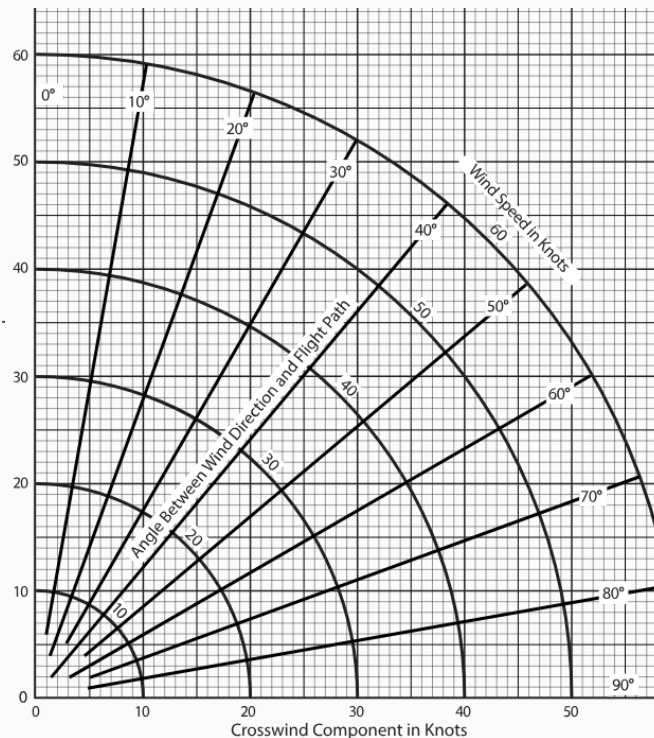
TIME LEFT ____ / ____

INSTRUCTOR SIGNATURE: _____

VERIFY ACCT: ☐

THIS SIDE MUST BE COMPLETED PRIOR INSTRUCTOR SIGNATURE AND DISPATCH RELEASE.

*RUNWAY #:	*LENGTH:
*PRESS ALT:	*DENS ALT:
*HEAD/TAIL COMP:	
*CROSSWIND COMP:	
*T.O. WEIGHT:	*LDG WEIGHT:
*T.O. ROLL:	50FT OBST:
*LDG ROLL:	50FT OBST:



TAKEOFF AND LANDING DATA

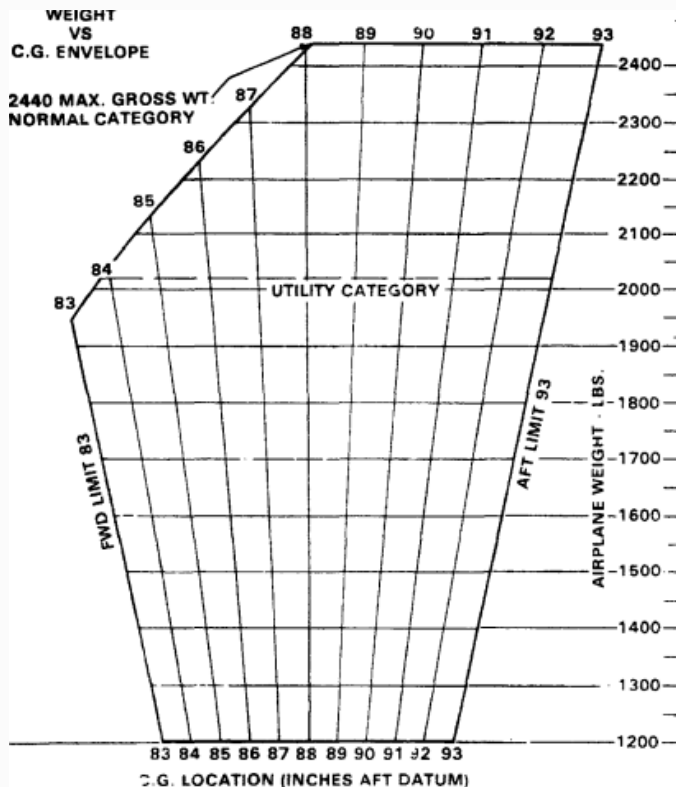
* = REQUIRED.

USE THE POH PERFORMANCE CHARTS TO COMPUTE
TAKEOFF AND LANDING DATA.

DRY ERASE PERFORMANCE CHARTS AND MARKERS
ARE LOCATED ON THE PREFLIGHT DOCUMENT
TABLE IN DISPATCH.

*MANEUVERING SPEED: — KTS

$VA = \sqrt{(\text{CURRENT TAKEOFF WEIGHT} / \text{MAX GROSS TAKEOFF WEIGHT}) \times \text{PUBLISHED } VA \text{ AT MAX GROSS}}$



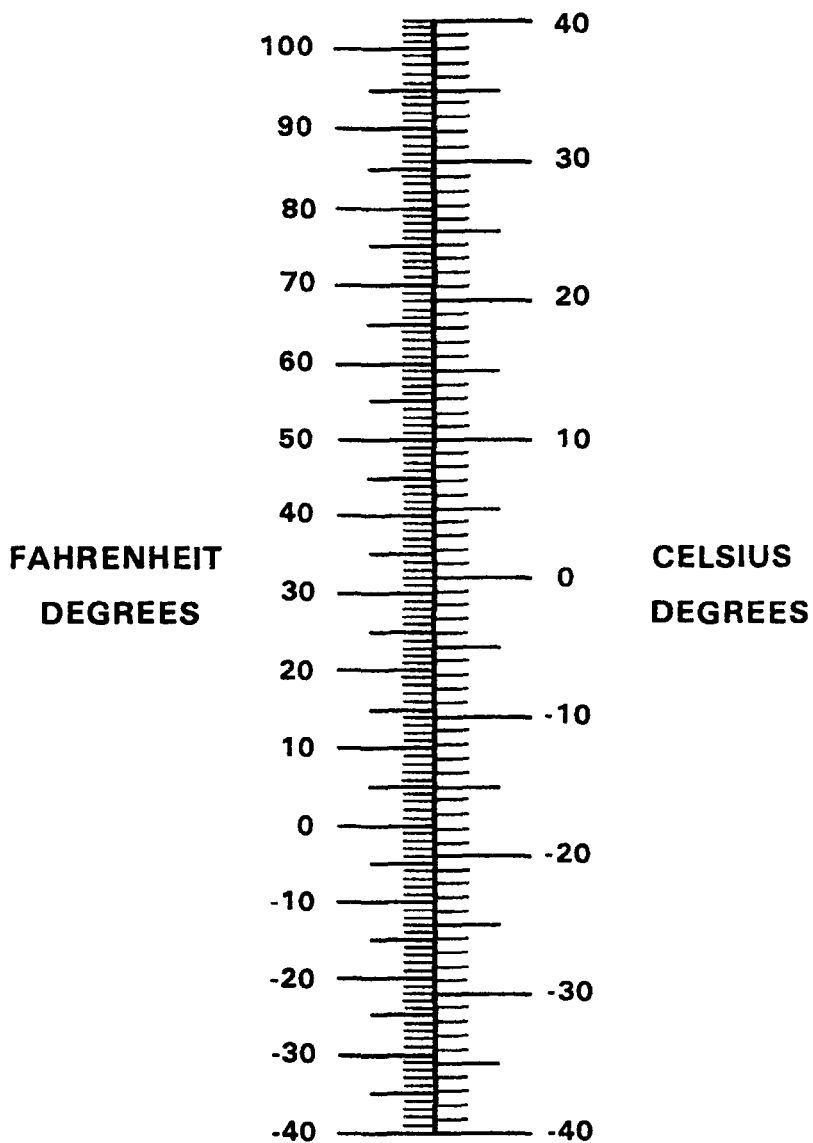
	WEIGHT	ARM	MOMENT
BASIC EMPTY WEIGHT			
PILOT AND FRONT PASSENGER			
BACK SEAT PASSENGERS			
BAGGAGE AREA			
ZERO FUEL WEIGHT			
FUEL (6LBS)			
RAMP WEIGHT			
TAXI FUEL BURN			
TAKEOFF WEIGHT			
FUEL BURN IN FLIGHT (LBS)			
LANDING WEIGHT			

WEIGHT & BALANCE

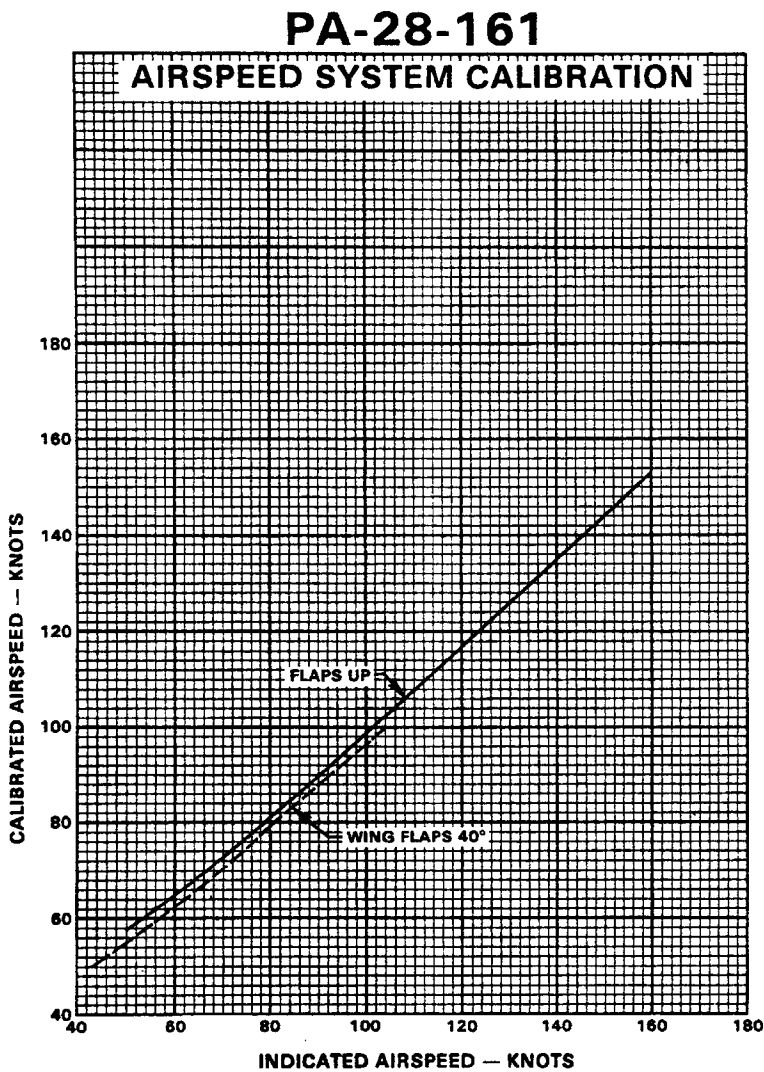
THE BASIC EMPTY WEIGHT AND ARMS ARE DIFFERENT FOR
EACH PLANE. ARMS AND WEIGHTS ARE LOCATED IN THE POH
OR FSP IN THE AIRCRAFT PROFILE PICTURE.

DETERMINE MOMENT BY MULTIPLYING WEIGHT X ARM.
DETERMINE ARM BY DIVIDING MOMENT BY WEIGHT.

PLEASE MARK TAKEOFF WEIGHT AND LANDING FUEL WEIGHT
ON THE CG GRAPH BELOW TO ENSURE THAT YOU WILL BE
WITHIN CG LIMITS THE ENTIRE FLIGHT.

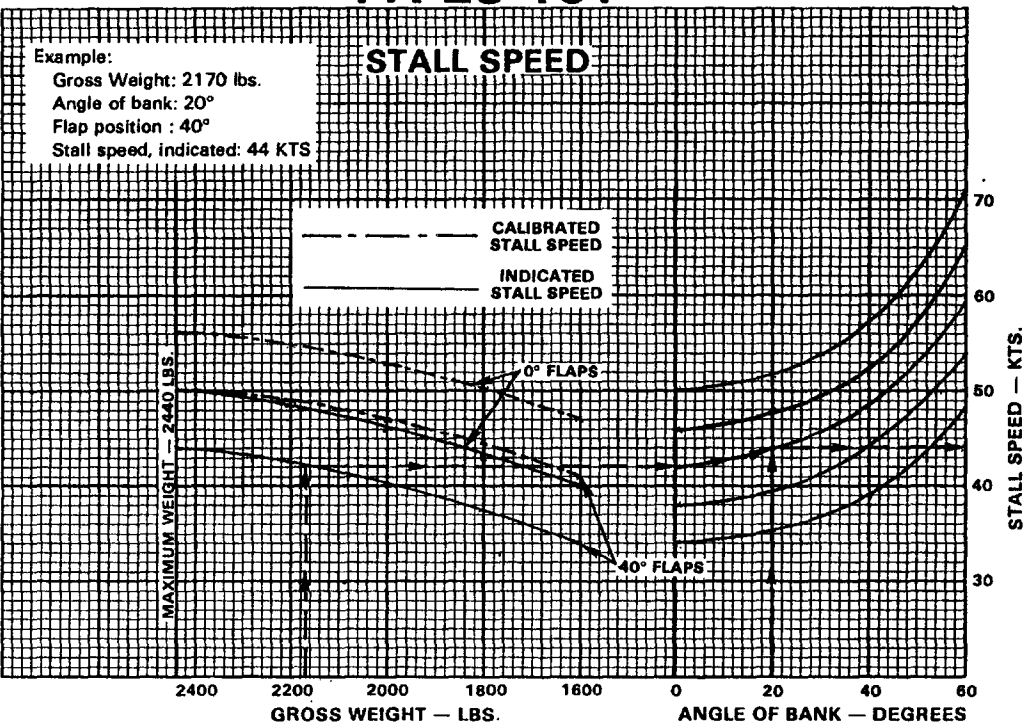


TEMPERATURE CONVERSION
Figure 5-1



AIRSPEED SYSTEM CALIBRATION
Figure 5-3

PA-28-161



STALL SPEED
Figure 5-5

SECTION 5 PERFORMANCE

PIPER AIRCRAFT CORPORATION
PA-28-161, WARRIOR II

PA-28-161

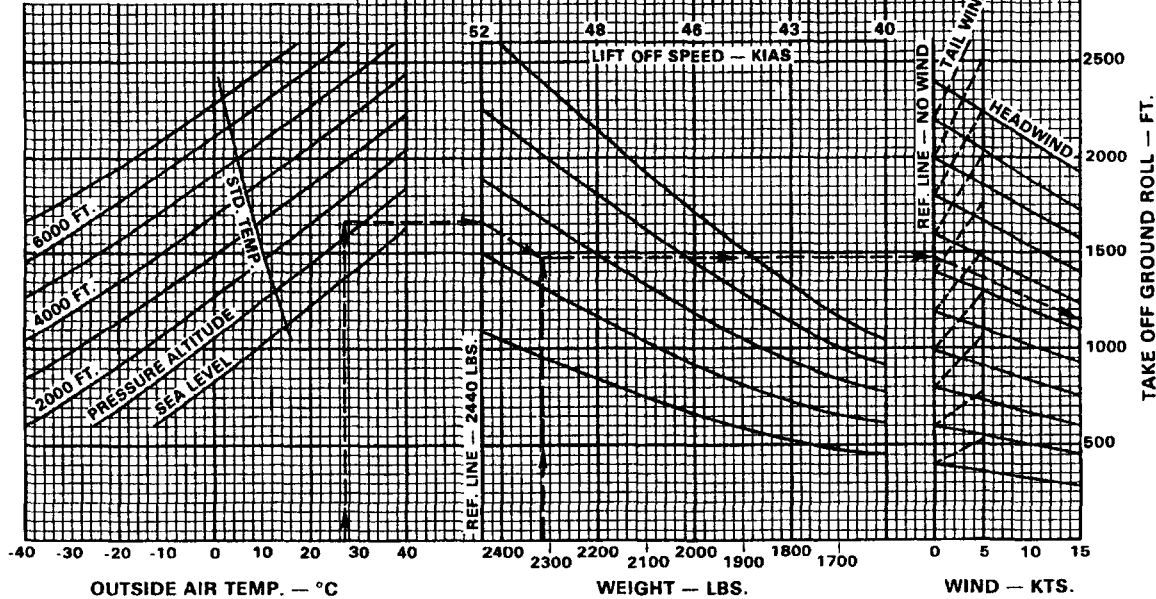
0° FLAPS TAKEOFF GROUND ROLL

ASSOCIATED CONDITIONS:
PAVED, LEVEL, DRY RUNWAY
FULL POWER BEFORE BRAKE RELEASE
FLAPS 0°

Example:

Departure airport pressure altitude: 1500 ft.
Departure airport temperature: 27°C
Weight: 2316 lbs.
Wind: 15 KTS headwind
Ground roll: 1150 ft.
Lift-off speed: 50 KIAS

0° FLAPS TAKEOFF GROUND ROLL
Figure 5-7

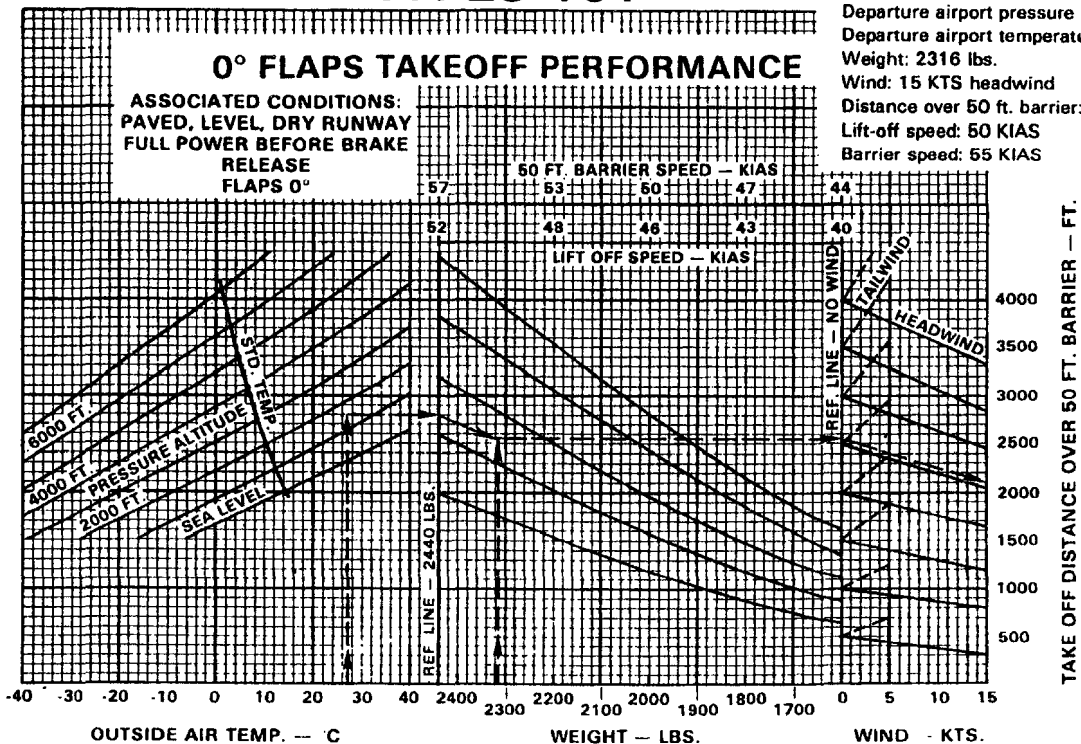


PA-28-161

Example:

Departure airport pressure altitude: 1500 ft.
Departure airport temperature: 27°C
Weight: 2316 lbs.
Wind: 15 KTS headwind
Distance over 50 ft. barrier: 2100 ft.
Lift-off speed: 50 KIAS
Barrier speed: 55 KIAS

0° FLAPS TAKEOFF PERFORMANCE
Figure 5-9



SECTION 5 PERFORMANCE

PIPER AIRCRAFT CORPORATION
PA-28-161, WARRIOR II

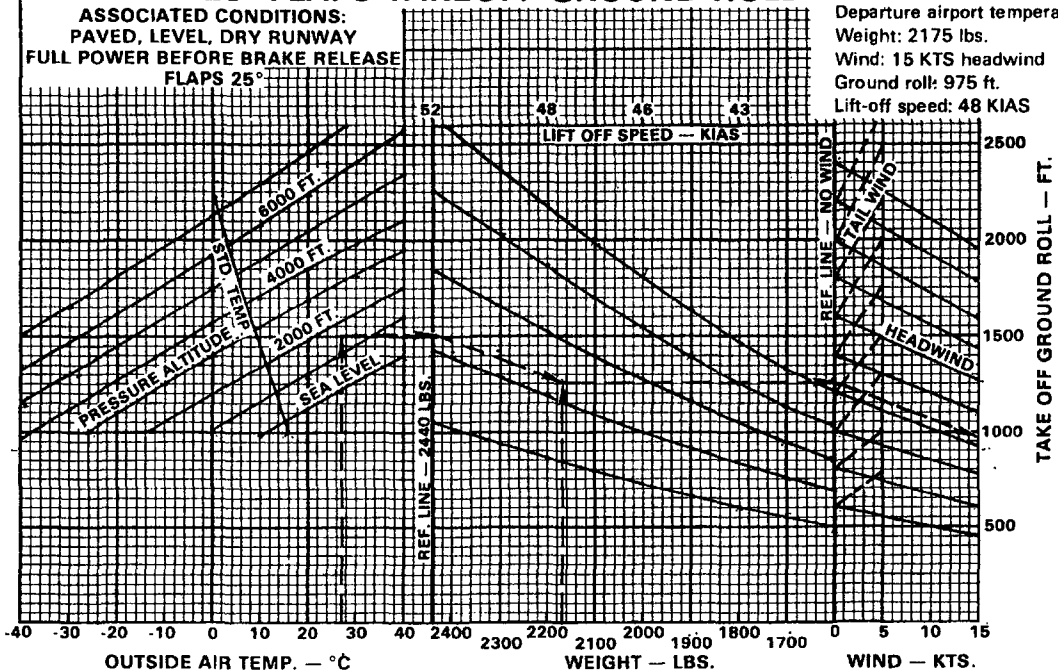
PA-28-161

25° FLAPS TAKEOFF GROUND ROLL

ASSOCIATED CONDITIONS:
PAVED, LEVEL, DRY RUNWAY
FULL POWER BEFORE BRAKE RELEASE
FLAPS 25°

Example: 

Departure airport pressure altitude: 1500 ft.
Departure airport temperature: 27°C
Weight: 2175 lbs.
Wind: 15 KTS headwind
Ground roll: 975 ft.
Lift-off speed: 48 KIAS



25° FLAPS TAKEOFF GROUND ROLL

Figure 5-11

REPORT: VB-1180
5-16

ISSUED: AUGUST 13, 1982

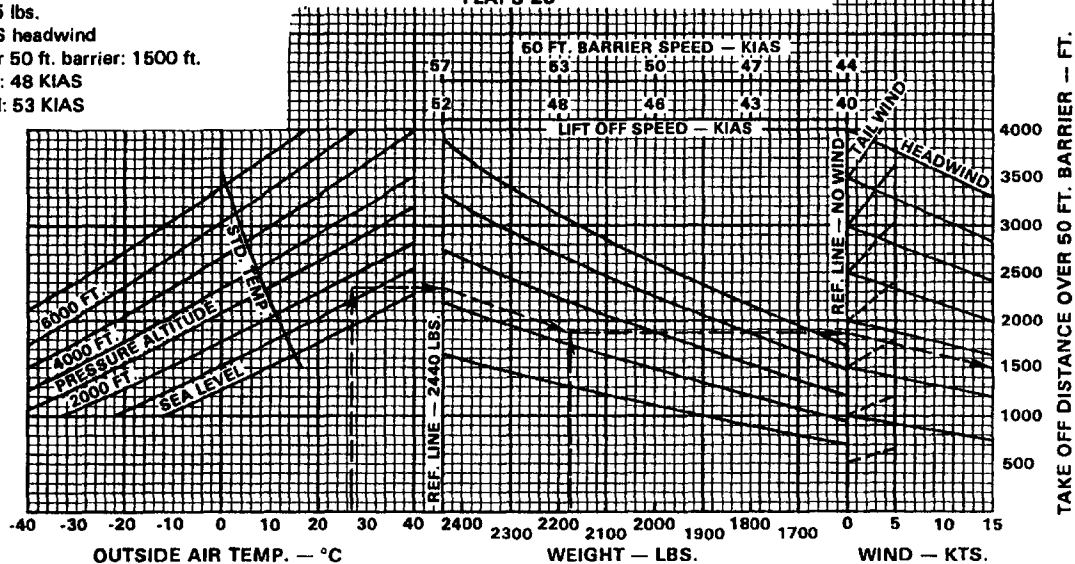
PA-28-161

25° FLAPS TAKEOFF PERFORMANCE

ASSOCIATED CONDITIONS:
PAVED, LEVEL, DRY RUNWAY
FULL POWER BEFORE BRAKE RELEASE
FLAPS 25°

Example:

Departure airport pressure altitude: 1500 ft.
Departure airport temperature: 27°C
Weight: 2175 lbs.
Wind: 15 KTS headwind
Distance over 50 ft. barrier: 1500 ft.
Lift-off speed: 48 KIAS
Barrier speed: 53 KIAS



25° FLAPS TAKEOFF PERFORMANCE

Figure 5-13

PA-28-161

ENGINE PERFORMANCE

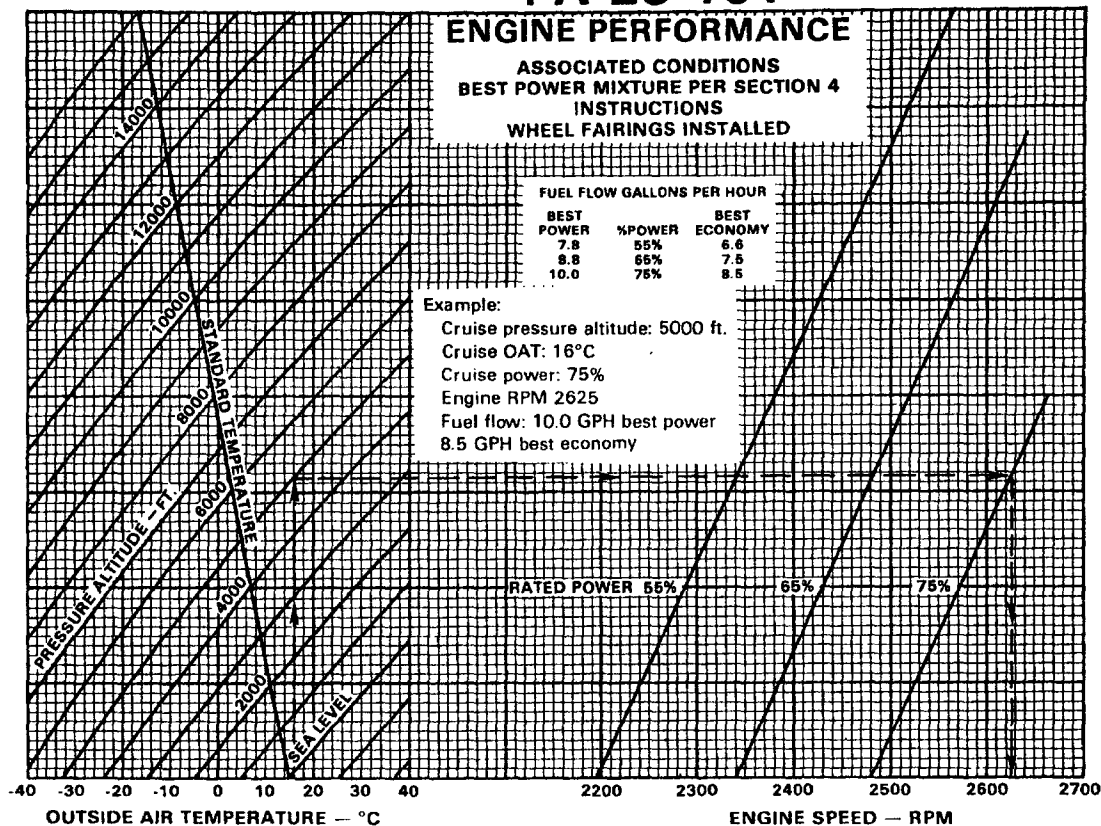
ASSOCIATED CONDITIONS
BEST POWER MIXTURE PER SECTION 4
INSTRUCTIONS
WHEEL FAIRINGS INSTALLED

FUEL FLOW GALLONS PER HOUR

BEST POWER	%POWER	BEST ECONOMY
7.8	55%	6.6
8.8	65%	7.5
10.0	75%	8.5

Example:

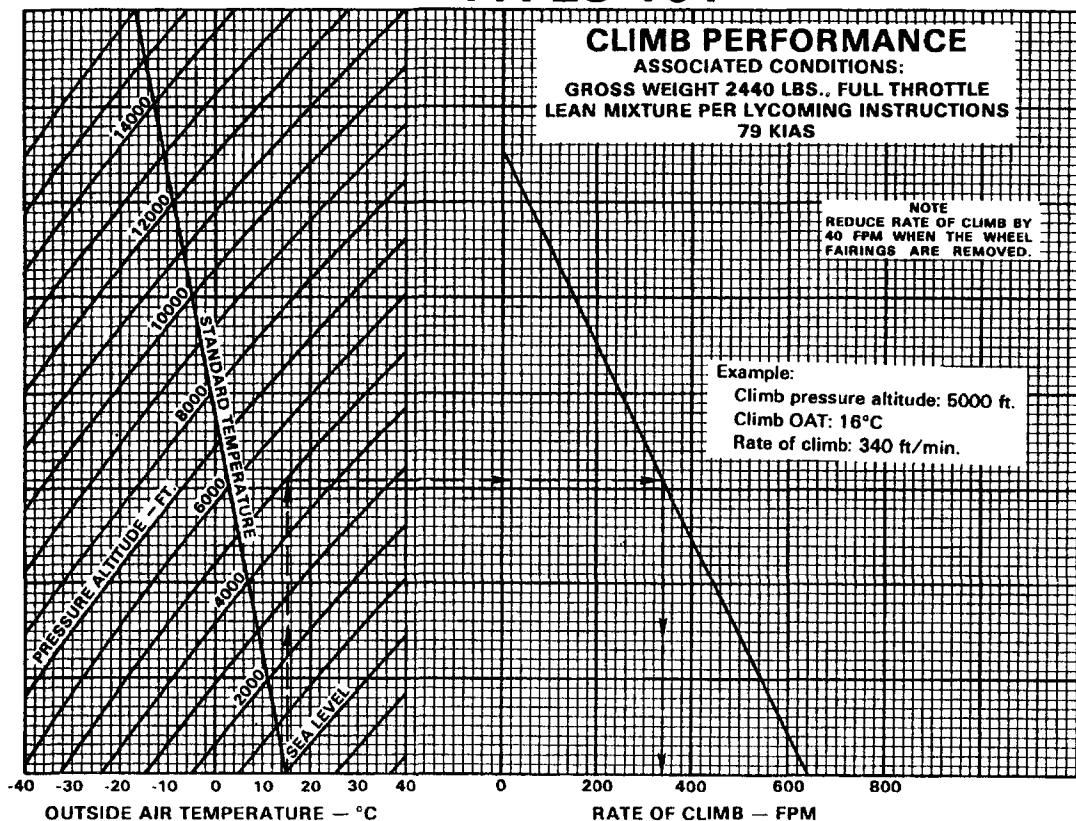
Cruise pressure altitude: 5000 ft.
Cruise OAT: 16°C
Cruise power: 75%
Engine RPM 2625
Fuel flow: 10.0 GPH best power
8.5 GPH best economy



ENGINE PERFORMANCE

Figure 5-15

PA-28-161



CLIMB PERFORMANCE

Figure 5-17

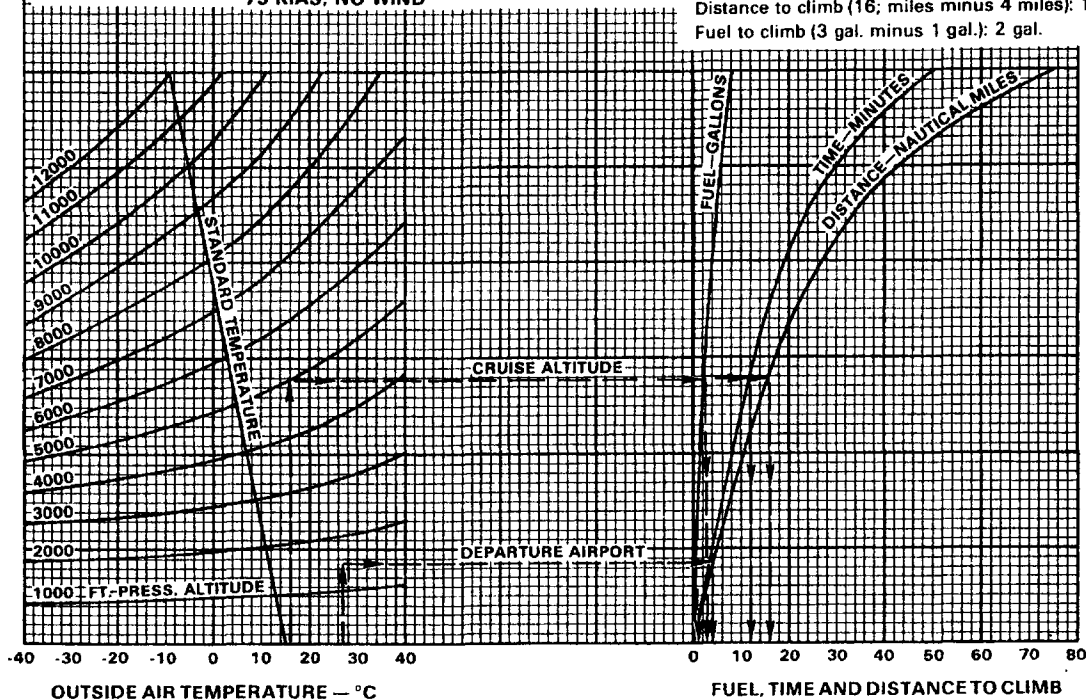
PA-28-161

Example:

Departure airport pressure altitude: 1500 ft.
Departure airport temperature: 27°C
Cruise pressure altitude: 5000 ft.
Cruise OAT: 16°C
Time to climb (12 min. minus 3 min.): 9 min.
Distance to climb (16 miles minus 4 miles): 12 nautical miles
Fuel to climb (3 gal. minus 1 gal.): 2 gal.

FUEL, TIME AND DISTANCE TO CLIMB

ASSOCIATED CONDITIONS:
WEIGHT 2440 LBS., FLAPS 0°, FULL THROTTLE
MIXTURE — LEANED PER LYCOMING INSTRUCTIONS
79 KIAS, NO WIND



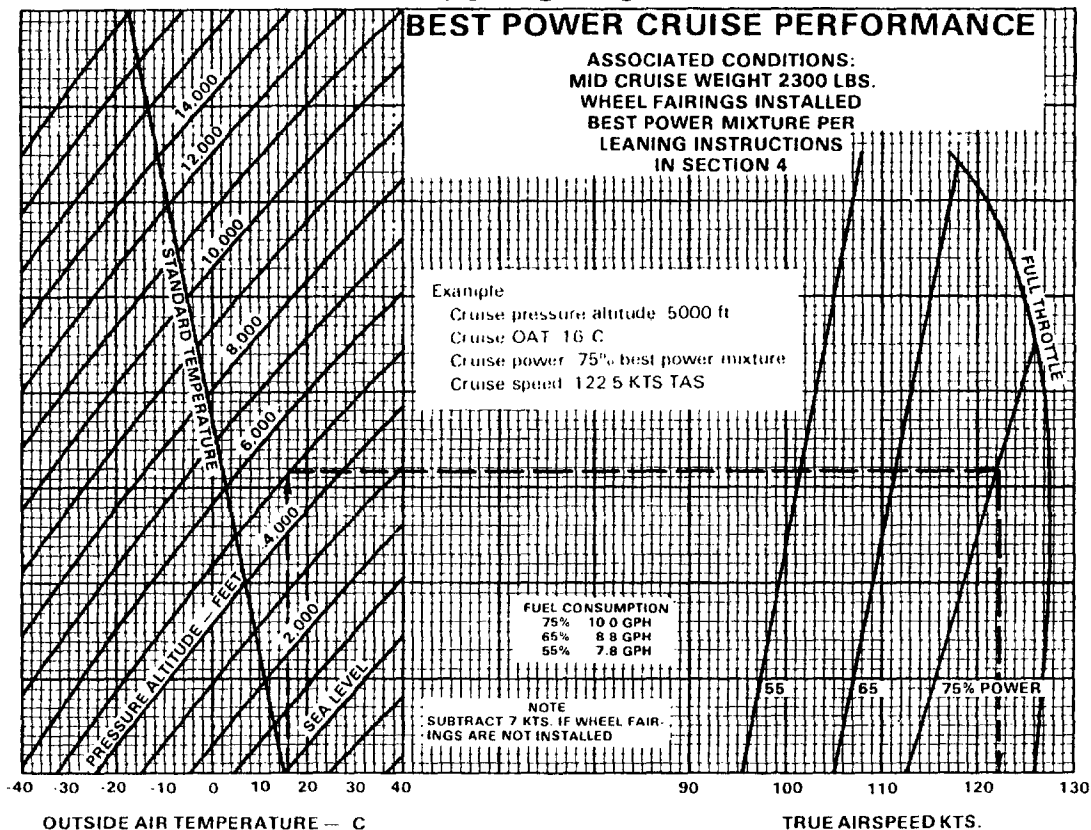
FUEL, TIME AND DISTANCE TO CLIMB

Figure 5-19

PA-28-161

BEST POWER CRUISE PERFORMANCE

ASSOCIATED CONDITIONS:
MID CRUISE WEIGHT 2300 LBS.
WHEEL FAIRINGS INSTALLED
BEST POWER MIXTURE PER
LEANING INSTRUCTIONS
IN SECTION 4



BEST POWER CRUISE PERFORMANCE

Figure 5-21

PA-28-161

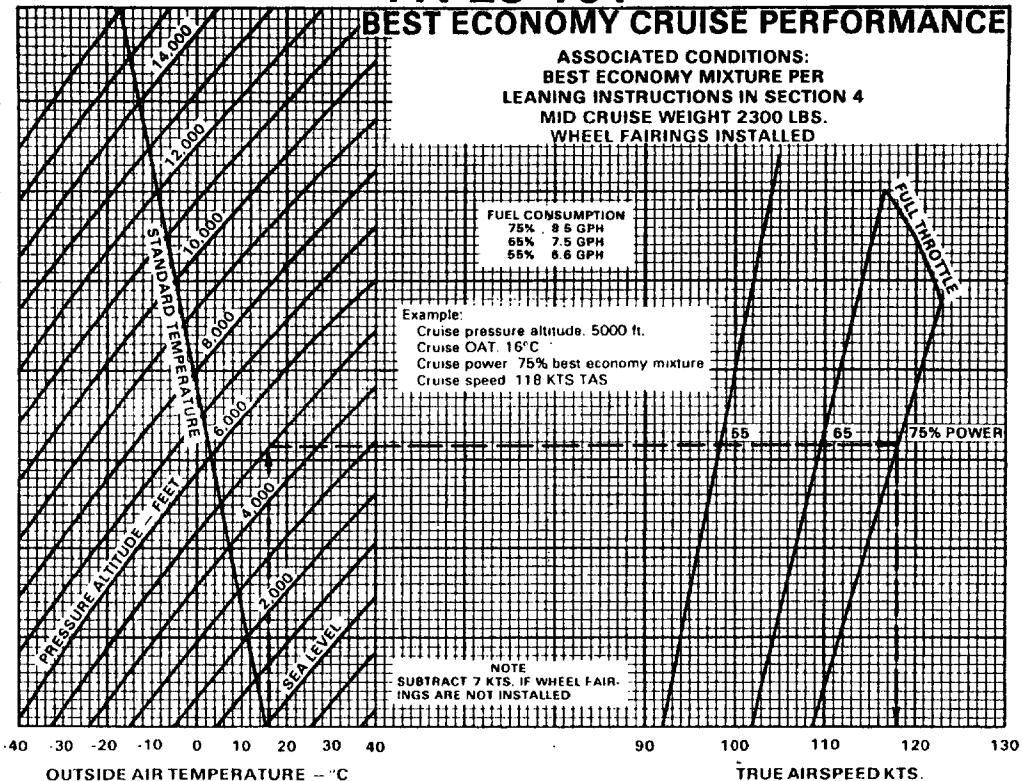
BEST ECONOMY CRUISE PERFORMANCE

ASSOCIATED CONDITIONS:
BEST ECONOMY MIXTURE PER
LEADING INSTRUCTIONS IN SECTION 4
MID CRUISE WEIGHT 2300 LBS.
WHEEL FAIRINGS INSTALLED

FUEL CONSUMPTION
75% . 8.5 GPH
65% . 7.5 GPH
55% . 6.6 GPH

Example:
Cruise pressure altitude. 5000 ft.
Cruise OAT. 16°C
Cruise power. 75% best economy mixture
Cruise speed 118 KTS TAS

NOTE
SUBTRACT 7 KTS. IF WHEEL FAIR-
INGS ARE NOT INSTALLED



BEST ECONOMY CRUISE PERFORMANCE

Figure 5-23

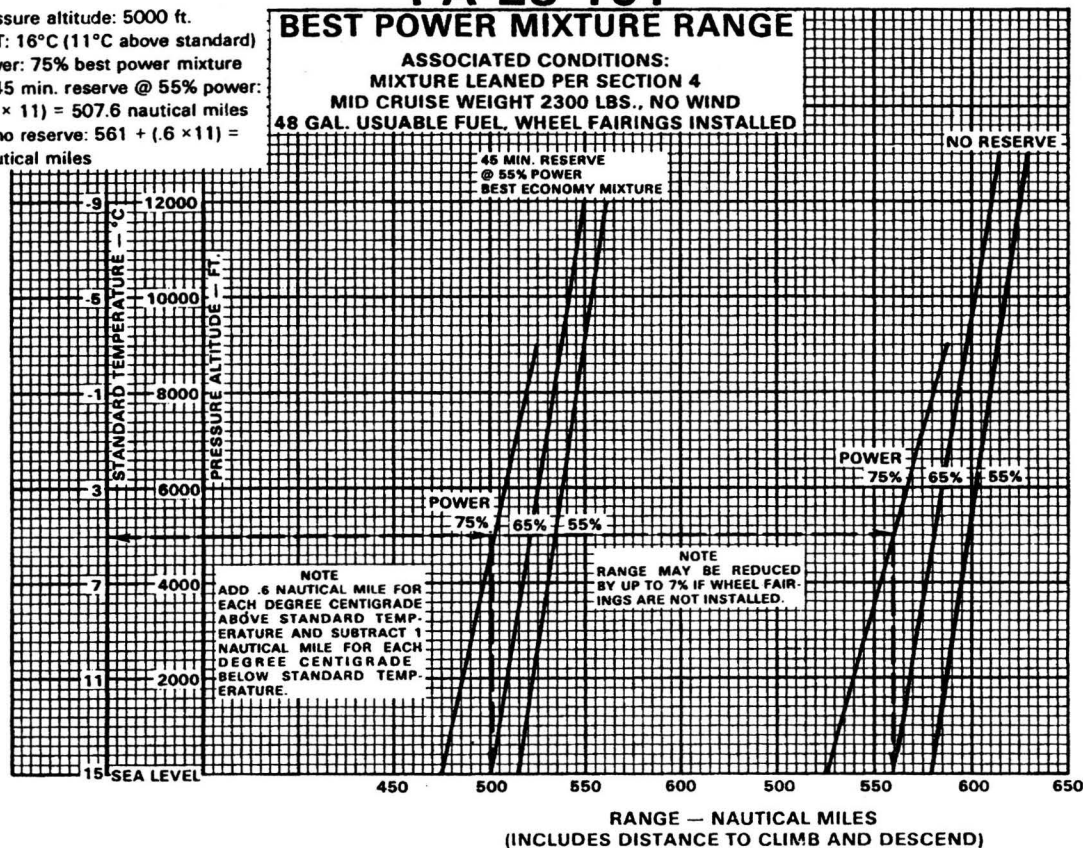
PA-28-161

BEST POWER MIXTURE RANGE

ASSOCIATED CONDITIONS:
MIXTURE LEANED PER SECTION 4
MID CRUISE WEIGHT 2300 LBS., NO WIND
48 GAL. USABLE FUEL, WHEEL FAIRINGS INSTALLED

Example:

Cruise pressure altitude: 5000 ft.
Cruise OAT: 16°C (11°C above standard)
Cruise power: 75% best power mixture
Range w/45 min. reserve @ 55% power:
 $501 + (.6 \times 11) = 507.6$ nautical miles
Range w/no reserve: $561 + (.6 \times 11) = 567.6$ nautical miles



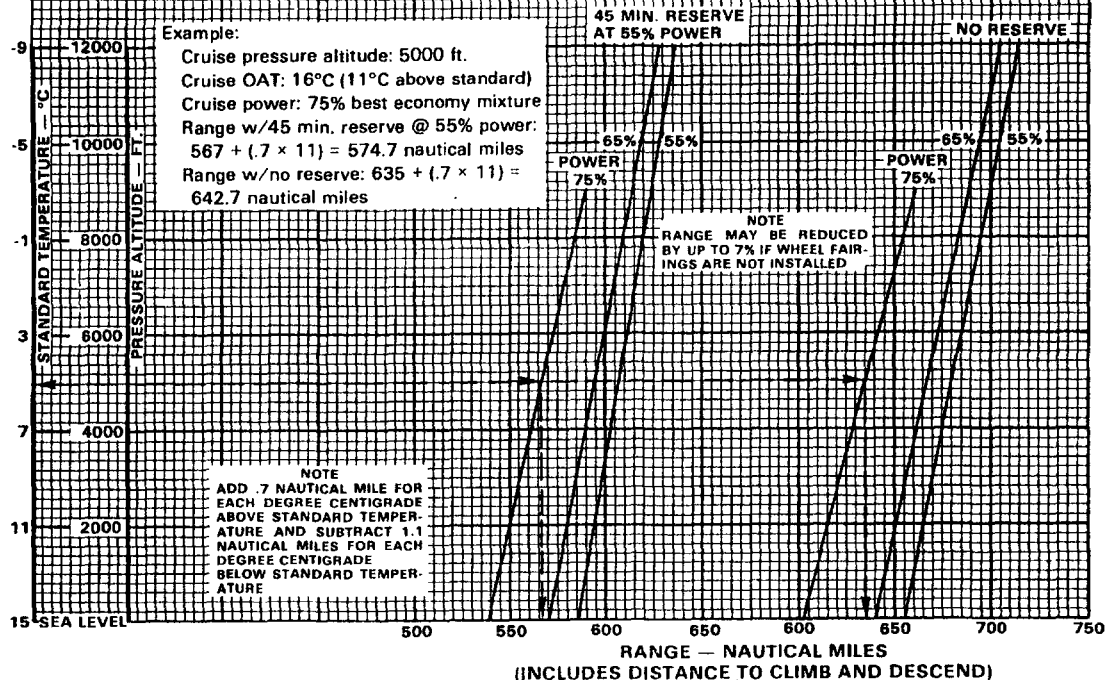
BEST POWER MIXTURE RANGE

Figure 5-25

PA-28-161

BEST ECONOMY MIXTURE RANGE

ASSOCIATED CONDITIONS:
MIXTURE LEANED PER SECTION 4
MID CRUISE WEIGHT 2300 LBS., NO WIND
48 GAL. USUABLE FUEL, WHEEL FAIRINGS INSTALLED



BEST ECONOMY MIXTURE RANGE

Figure 5-27

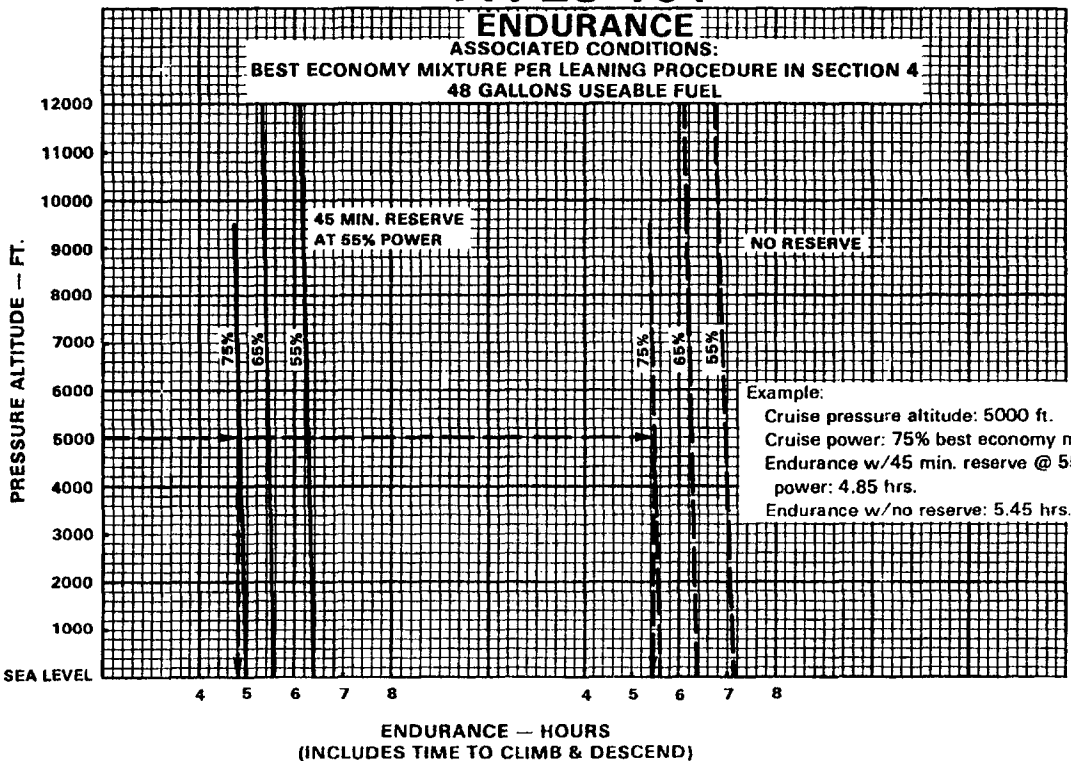
PA-28-161

ENDURANCE

ASSOCIATED CONDITIONS:

BEST ECONOMY MIXTURE PER LEANING PROCEDURE IN SECTION 4

48 GALLONS USEABLE FUEL

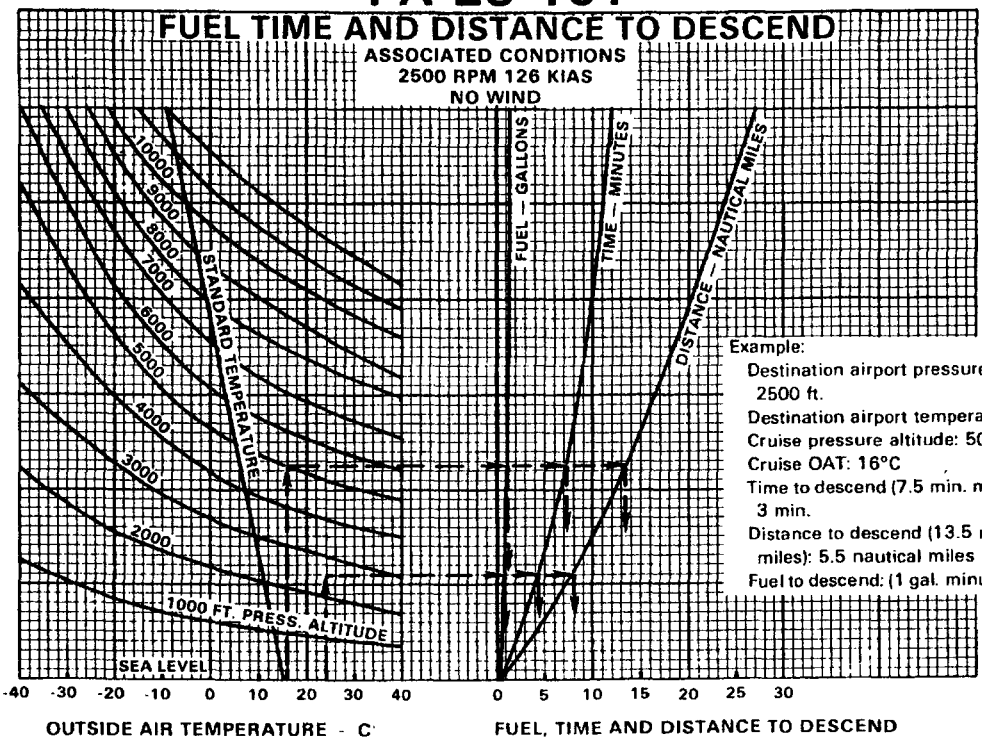


ENDURANCE
Figure 5-29

PA-28-161

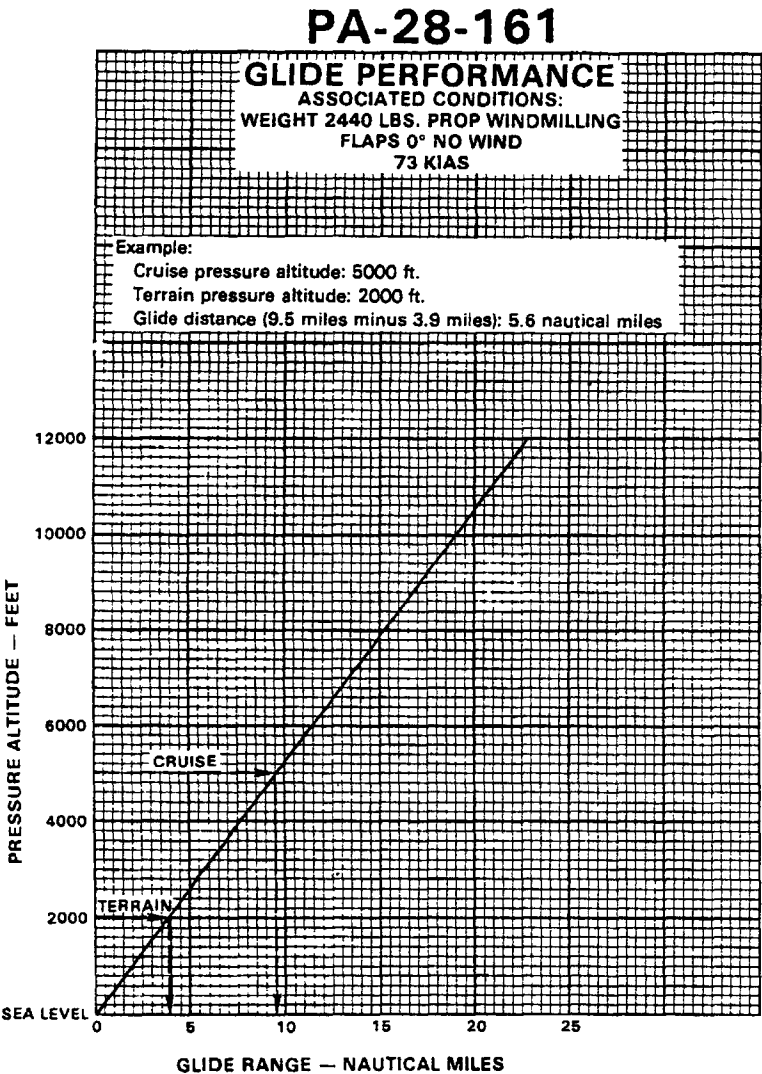
FUEL TIME AND DISTANCE TO DESCEND

ASSOCIATED CONDITIONS
2500 RPM 126 KIAS
NO WIND



FUEL, TIME AND DISTANCE TO DESCEND

Figure 5-31



GLIDE PERFORMANCE
 Figure 5-33

PIPER AIRCRAFT CORPORATION
PA-28-161, WARRIOR II



Destination airport altitude: 2500 ft.
Destination airport temperature: 24°C
Destination airport wind: 0 KTS
Landing Weight: 2179 lbs.
Distance over 50 ft. barrier: 1135 ft.

ISSUED: AUGUST 13, 1982

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LANDING GROUND ROLL DISTANCE

ASSOCIATED CONDITIONS:

POWER OFF, FLAPS - 40°

PAVED LEVEL DRY RUNWAY, MAXIMUM BRAKING

Example:

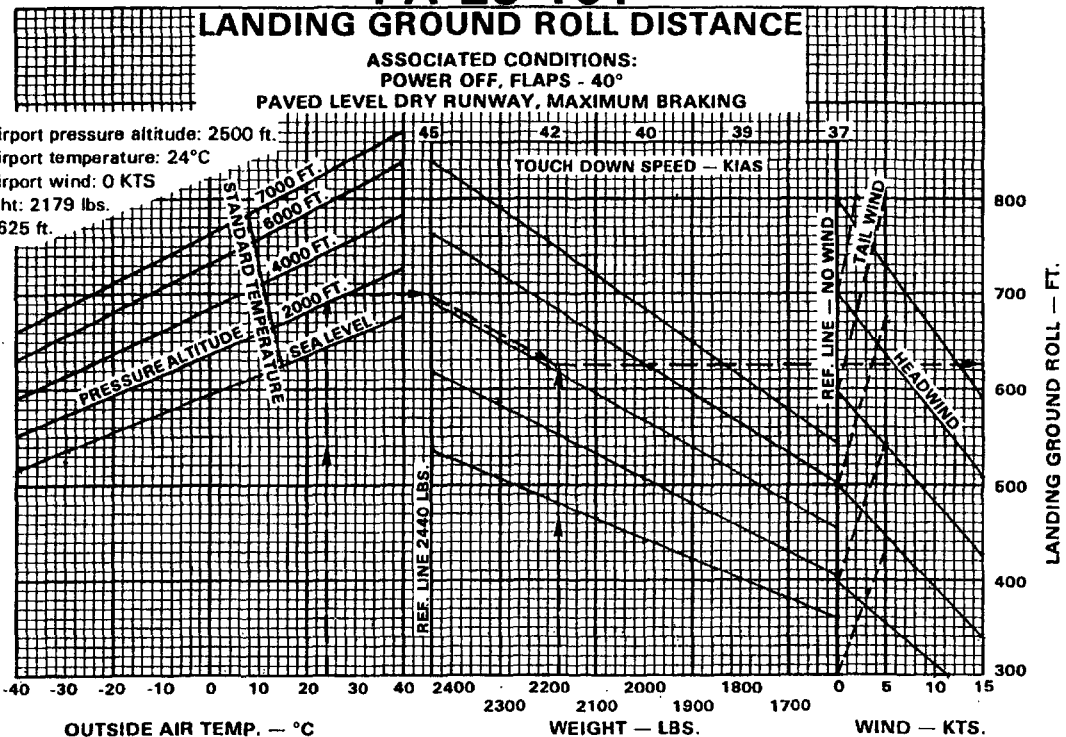
Destination airport pressure altitude: 2500 ft.

Destination airport temperature: 24°C

Destination airport wind: 0 KTS

Landing Weight: 2179 lbs.

Ground Roll: 625 ft.



LANDING GROUND ROLL DISTANCE

Figure 5-37