

# LOAD DATA SHEET

## AIRWEIGH AVIATION SERVICES

P.O. Box 2340, Ivanhoe East, Vic 3079. Phone 0418 166 700.

Aircraft Type: Piper PA44-180 Aircraft Registration: VH-KZN. Sm:44-96274.

Approved Loading System : Piper PA44-180 POH

| AUTHORISED        | DATE     | DATE OF EXPIRY                  | ISSUE |
|-------------------|----------|---------------------------------|-------|
| A.K. SEARLE AV 70 | 29/09/14 | Indefinite Subject to CAO 100.7 | Four. |

ALAN K. SEARLE  
APPROVED  
APPROVAL STAMP

*A. Searle*  
DATE 29-9-14

WEIGHT CONTROL AUTHORITY NO. AV70

AIRCRAFT WEIGHT AND CENTRE OF GRAVITY DATA

| ITEM   | WEIGHT                       | ARM            | MOMENTS          | CONFIG   |
|--------|------------------------------|----------------|------------------|----------|
| EMPTY  | 1211 kg.                     | 2185.9 mm.     | 2,647,126 kg.mm. | 4 Seats. |
| EMPTY  | 2669.8 lb.                   | 86.059 inches. | 229,760 lb.in.   | 4 Seats. |
| DATUM: | 1991mm Fwd of WLE @ STA 106. |                |                  |          |

Notes : Empty Weight includes Unusable Fuel and Full Engine Oil.

It is the responsibility of the Pilot and the Operator to ensure that the aircraft is loaded correctly. Load in accordance with the limitations defined in the approved Flight Manual.

## 6.7 WEIGHT AND BALANCE DETERMINATION FOR FLIGHT

(Continued)

| Weight<br>(Lbs) | Arm Aft<br>Datum<br>(Inches) | Moment<br>(In-Lbs)                               |
|-----------------|------------------------------|--------------------------------------------------|
|                 |                              | Basic Empty Weight                               |
|                 | 80.5                         | Pilot and Front Passenger                        |
|                 | 118.1                        | Passengers (Rear Seats)                          |
|                 | 95.0                         | Fuel (108 Gallon Maximum Usable)                 |
|                 | 142.8                        | Baggage (200 Lb. Limit)                          |
|                 |                              | Ramp Weight (3816 Lbs. Max.)                     |
|                 |                              | Fuel Allowance for Engine<br>Start, Taxi & Runup |
| -16.0           | 95.0                         | Take-off Weight (3800 Lbs. Max.)                 |
|                 |                              | -1520                                            |

The center of gravity (C.G.) for the take-off weight of this loading problem is at \_\_\_\_\_ inches aft of the datum line. Locate this point ( ) on the C.G. range and weight graph. If this point falls within the weight - C.G. envelope, this loading meets the weight and balance requirements.

|                                                                  |      |  |  |
|------------------------------------------------------------------|------|--|--|
| Take-off Weight                                                  |      |  |  |
| Minus Estimated Fuel Burn-off<br>(climb & cruise) @ 6.0 Lbs/Gal. | 95.0 |  |  |
| Landing Weight                                                   |      |  |  |

Locate the center of gravity of the landing weight on the C.G. range and weight graph. If this point falls within the weight-C.G. envelope, the loading may be assumed acceptable for landing.

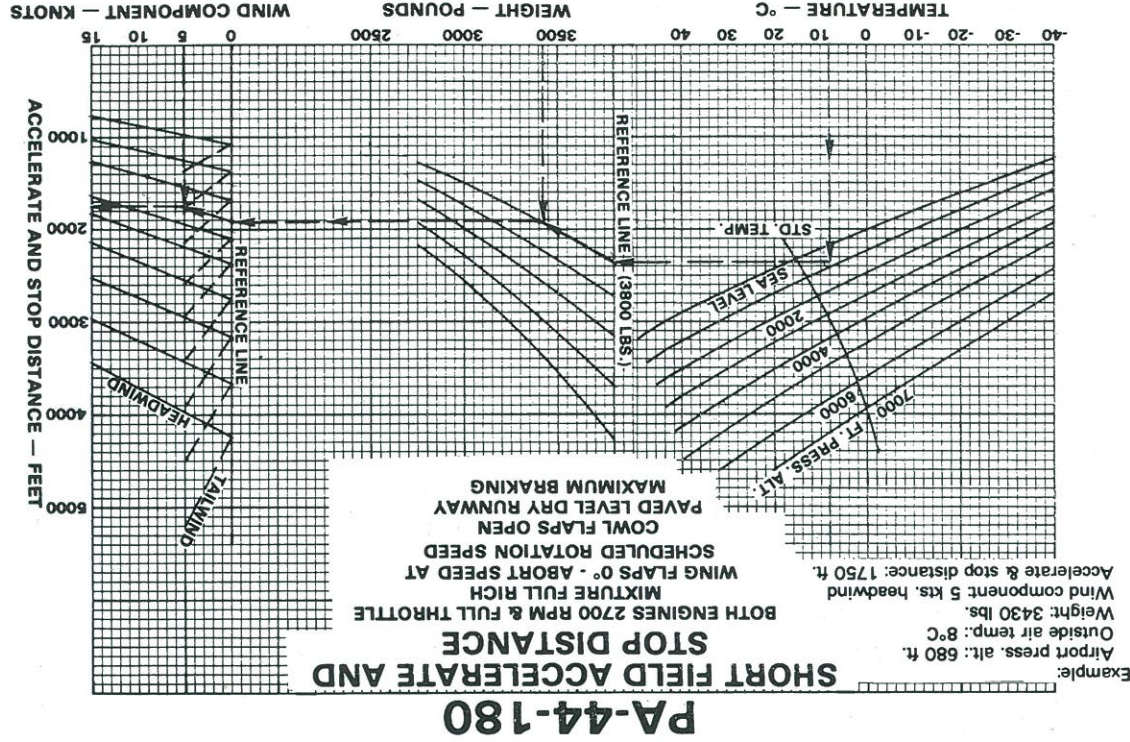
IT IS THE RESPONSIBILITY OF THE PILOT AND AIRCRAFT OWNER TO ENSURE THAT THE AIRPLANE IS LOADED PROPERLY AT ALL TIMES.

## WEIGHT AND BALANCE LOADING FORM

Figure 6-11

# SECTION 5 PERFORMANCE

PA-44-180, SEMINOLE



ACCELERATE AND STOP DISTANCE - SHORT FIELD EFFORT

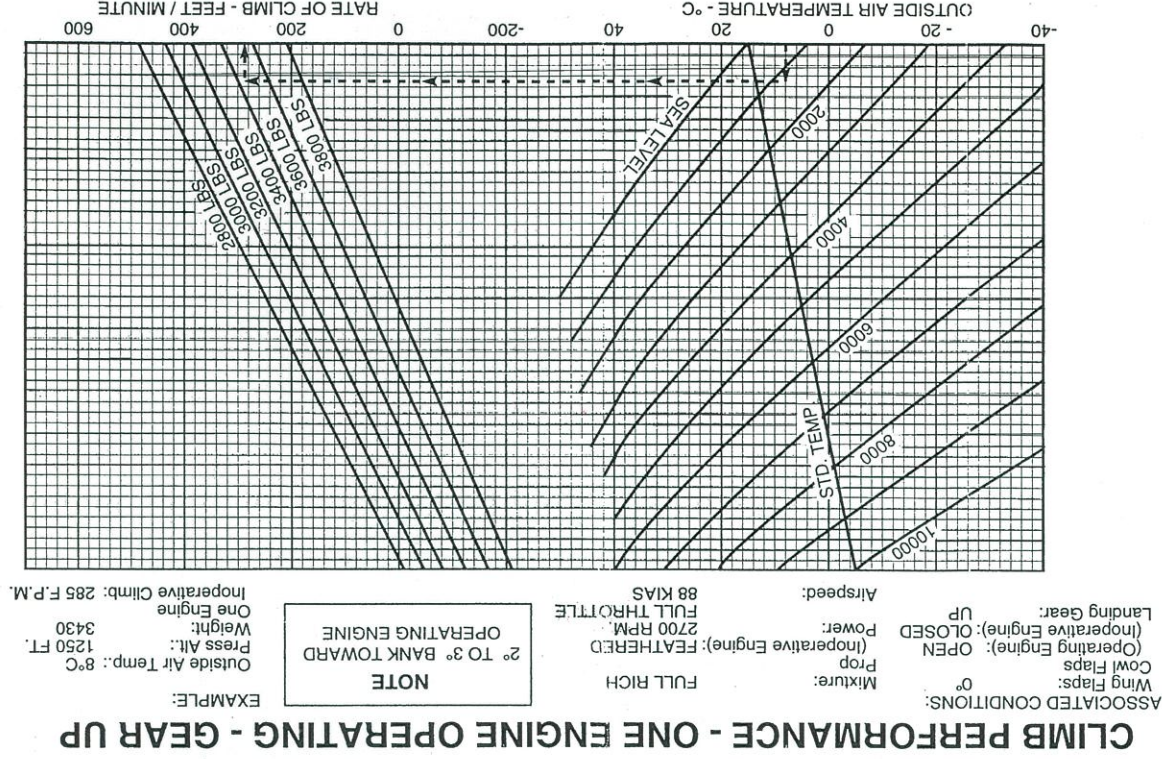
Figure 5-11

REPORT: VB-1942

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ISSUED: May 26, 2006





CLIMB PERFORMANCE - ONE ENGINE OPERATING - GEAR UP

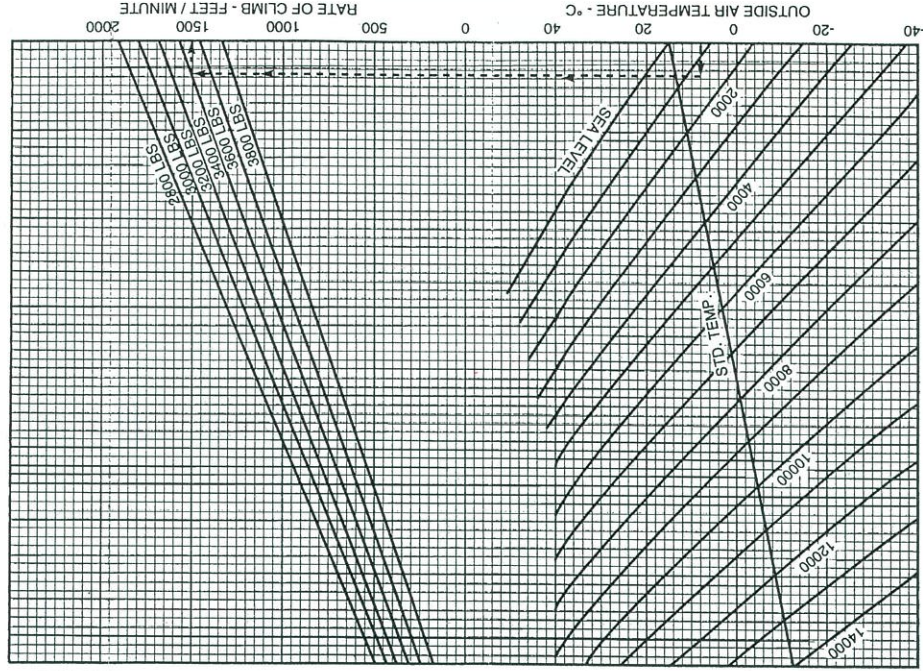
Figure 5-21

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# CLIMB PERFORMANCE - BOTH ENGINES OPERATING - GEAR UP

ASSOCIATED CONDITIONS:  
 FULL THROTTLE, 2700 RPM  
 Power  
 Cowl Flaps  
 OPEN  
 Mixture  
 FULL RICH  
 Airspeed  
 Wing Flaps  
 0°  
 88 KIAS  
 Engines: BOTH OPERATING  
 Landing Gear: UP  
 EXAMPLE:  
 Press. Alt.: 1250 FT.  
 Outside Air Temp. 8°C  
 Weight: 3430 LBS  
 Rate of Climb: 1505 FT/MIN



CLIMB PERFORMANCE - BOTH ENGINES OPERATING - GEAR UP

Figure 5-19

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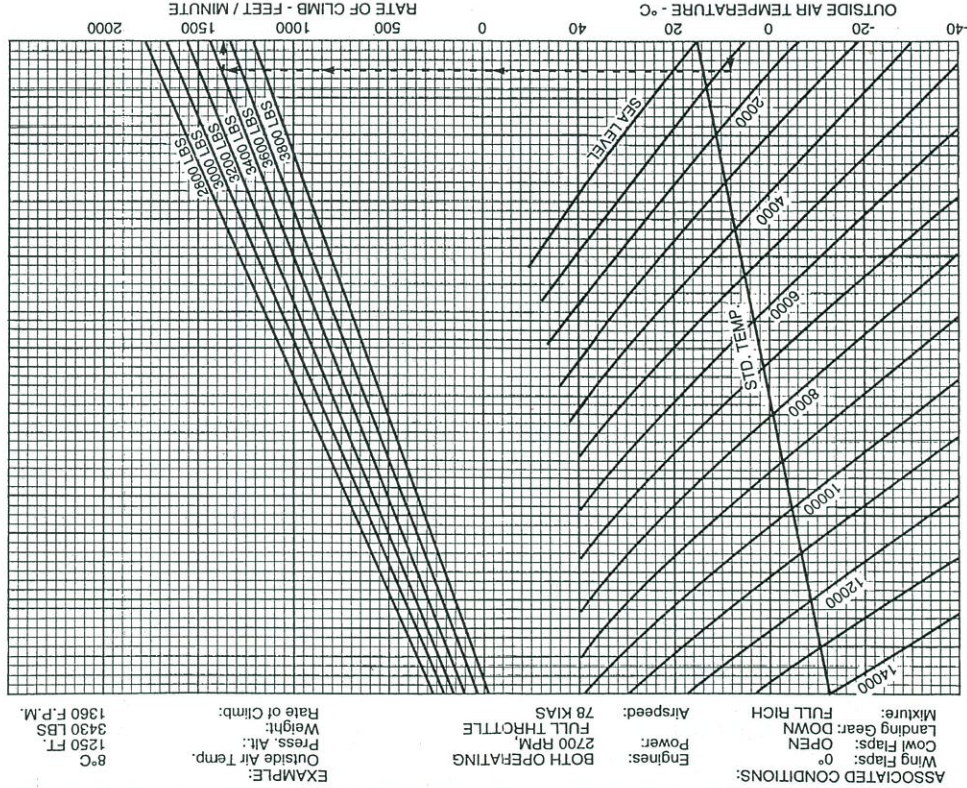
ISSUED: May 26, 2006



# SECTION 5 PERFORMANCE

PA-44-180, SEMINOLE

## CLIMB PERFORMANCE - BOTH ENGINES OPERATING - GEAR DOWN



CLIMB PERFORMANCE - BOTH ENGINES OPERATING - GEAR DOWN

Figure 5-17

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**PA-44-180, SEMINOLE**



**REPORT: VB-1942**

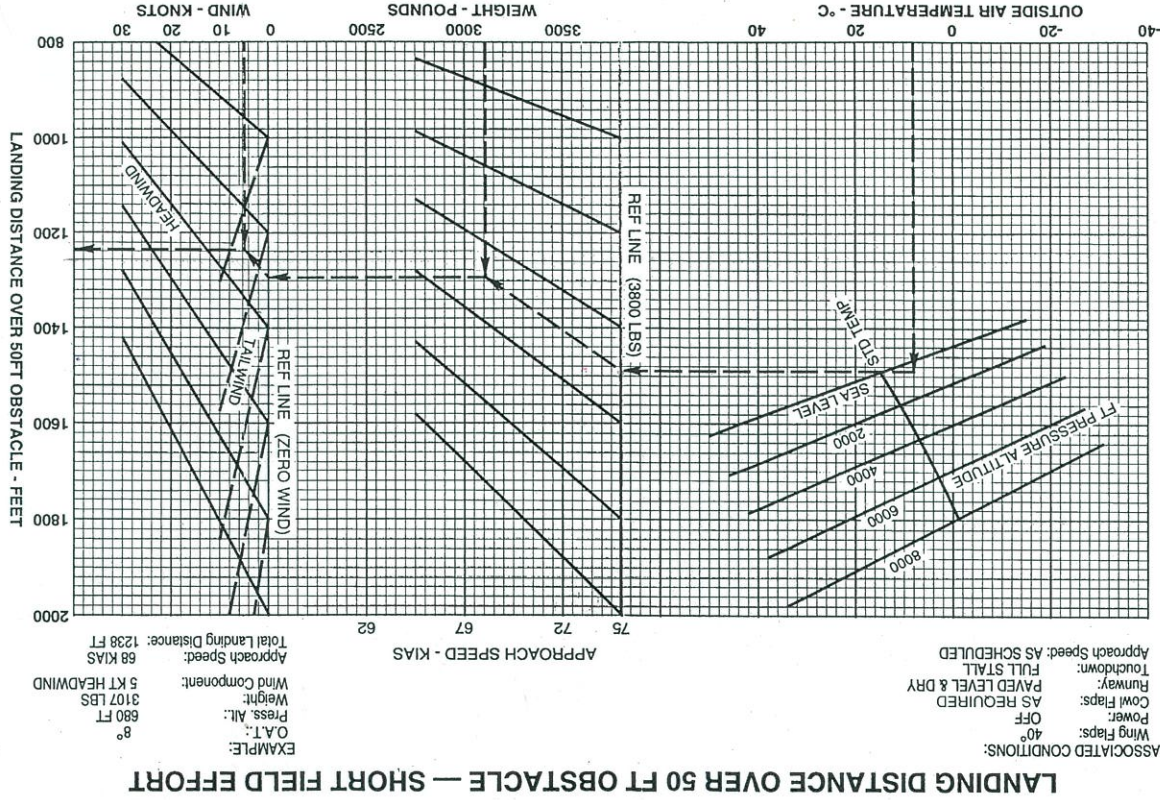
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# SECTION 5 PERFORMANCE

PA-44-180, SEMINOLE



LANDING DISTANCE OVER 50 FT. OBSTACLE - SHORT FIELD EFFORT  
 Figure 5-35

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