

VALIDATION OF EMPTY WEIGHT AND EMPTY C.G.

Aeroplane Type:..... PIPER PA28-181
Registration Marking:..... VH-ZFN Serial No: 2881487

CURRENT LOAD DATA SHEET/ FLIGHT MANUAL DETAILS

Issue Number..... N/A Date..... 12-Aug-21

Details from previous validation or weighing..... Factory W & B

Empty Weight..... 799.32 Empty Centre of Gravity..... 2275.65

LOG BOOKS/AIRCRAFT/FLIGHT MANUAL INSPECTED ON..... 17-Jan-22

Last Recorded Running Total Empty Wt..... 1762.2 lb

Last Recorded Running Total Empty CG..... 89.59 in

Last Recorded Running Total Empty Moment..... 157880 in.lb

ANY CHANGES SINCE LAST RECORDED RUNNING TOTAL..... YES

The original empty weight was derived from a Weight & Balance Report by The New Piper Aircraft Inc, Vero Beach, Florida, USA and is recorded to include unusable fuel and FULL engine oil.

A "WET" compass was installed by Sun Aviation after the factory weight & balance was completed. The installation of the compass is included in this report.

This is now acceptable under the current amendment to CAO 100.7, therefore revision to the Basic Empty Weight is not required.

Australian Changes:-

Placards, etc. considered negligible.

EMPTY WEIGHT REVISION REQUIRED..... YES (see page 2)

AIRCRAFT ACCEPTABLE FOR RE-VALIDATION OF EMPTY WEIGHT..... YES

FOR REVISED EMPTY WEIGHT DETAILS, NEW ISSUE NUMBER, EXPIRY DATE, ETC.

REFER RECORD OF WEIGHT ALTERATIONS NUMBER BC/ZFN/1

WEIGHT CONTROL OFFICER.....  DATE..... 17-Jan-22

RECORD OF WEIGHT ALTERATIONS

NUMBER.... BC/ZFN/1

	Reg:	Type/Serial No:	Datum:
BRUCE CLISSOLD AN-9 AeroWeigh Pty Ltd PH: (02) 6628 2117 MOBILE: 0412 585 551	VH-ZFN	PIPER PA28-181 2881487	1991.4 mm fwd of W.L.E.

Reweigh Aircraft on or before..... INDEFINITE

LIMIT DATA:-

Maximum Take-off Weight(Kg).....	1157.00
1/2 % Max. Take-off Weight(Kg) OR 10 Kg.....	10.00
Maximum C.G. Range.....	279.40
2 % Max C.G. Range OR 5 mm.....	5.59

REVISE LOADING SYSTEM/LOAD DATA SHEET:-

Basic Empty Weight Less Than(Kg).....	789.8
Basic Empty Weight Greater Than(Kg).....	809.8
Basic Empty C.G. Forward of(mm).....	2269.6
Basic Empty C.G. Aft of (mm).....	2280.8

DATE:	DESCRIPTION/ALTERATION/ETC	(Kg)	(mm)	(Kg.mm)
17-Jan-22	Initial Australian Weight FOUR Seats Total Basic Empty (unusable fuel and FULL engine oil).....	799.81	2275.18	1819706

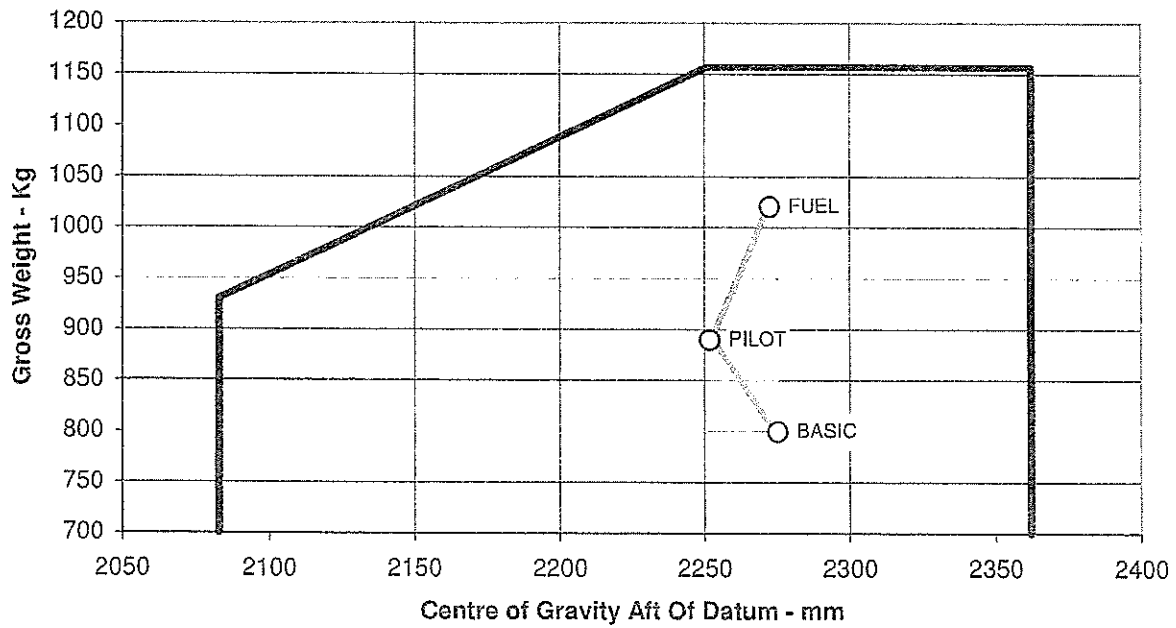
STANDARD CABIN CONFIGURATION

FLIGHT MANUAL LOAD DATA ISSUE..... ONE

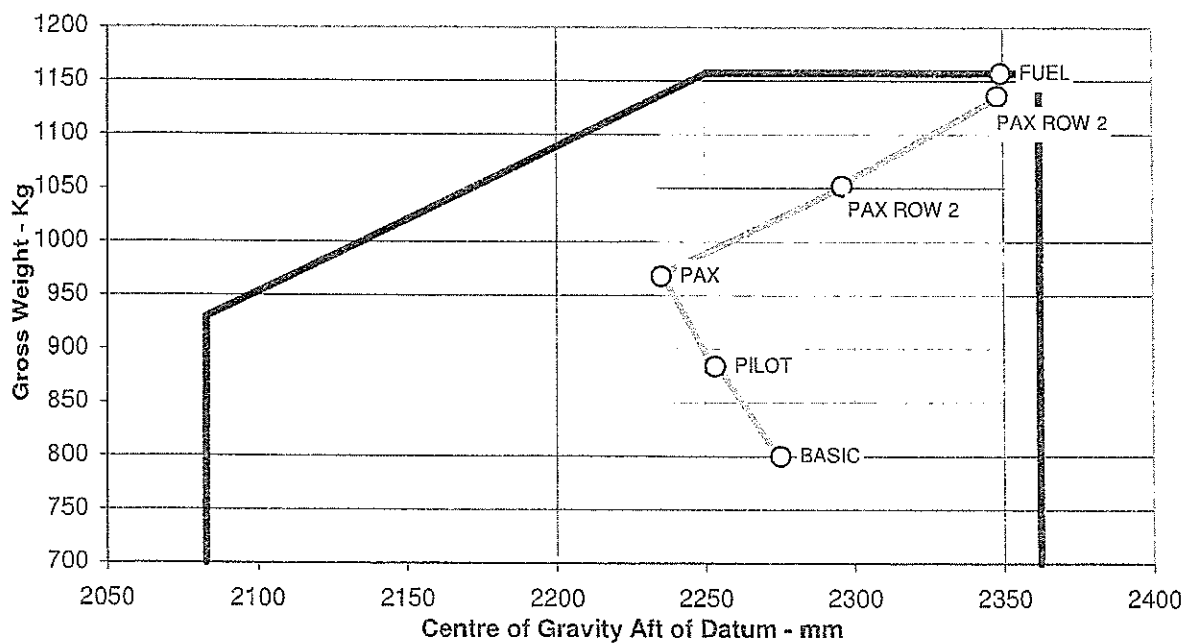
NOTE: This Empty weight is based upon the validation of
Running Totals of changes contained in the U.S.
history records and the Australian Validation report
dated..... 17-Jan-22

PIPER PA28-181

VH-ZFN



PLOT #1 - BASIC AIRCRAFT PLUS PILOT @ 90 Kg AND FULL FUEL



PLOT #2 - BASIC AIRCRAFT PLUS PILOT AND PAX @ 84 Kg EACH
TWO PAX IN ROW 2 @ 84 Kg EACH
WITH FUEL TO TAKE-OFF WEIGHT (Very Little Fuel)

SECTION 6
WEIGHT AND BALANCE

PA-28-181, ARCHER III

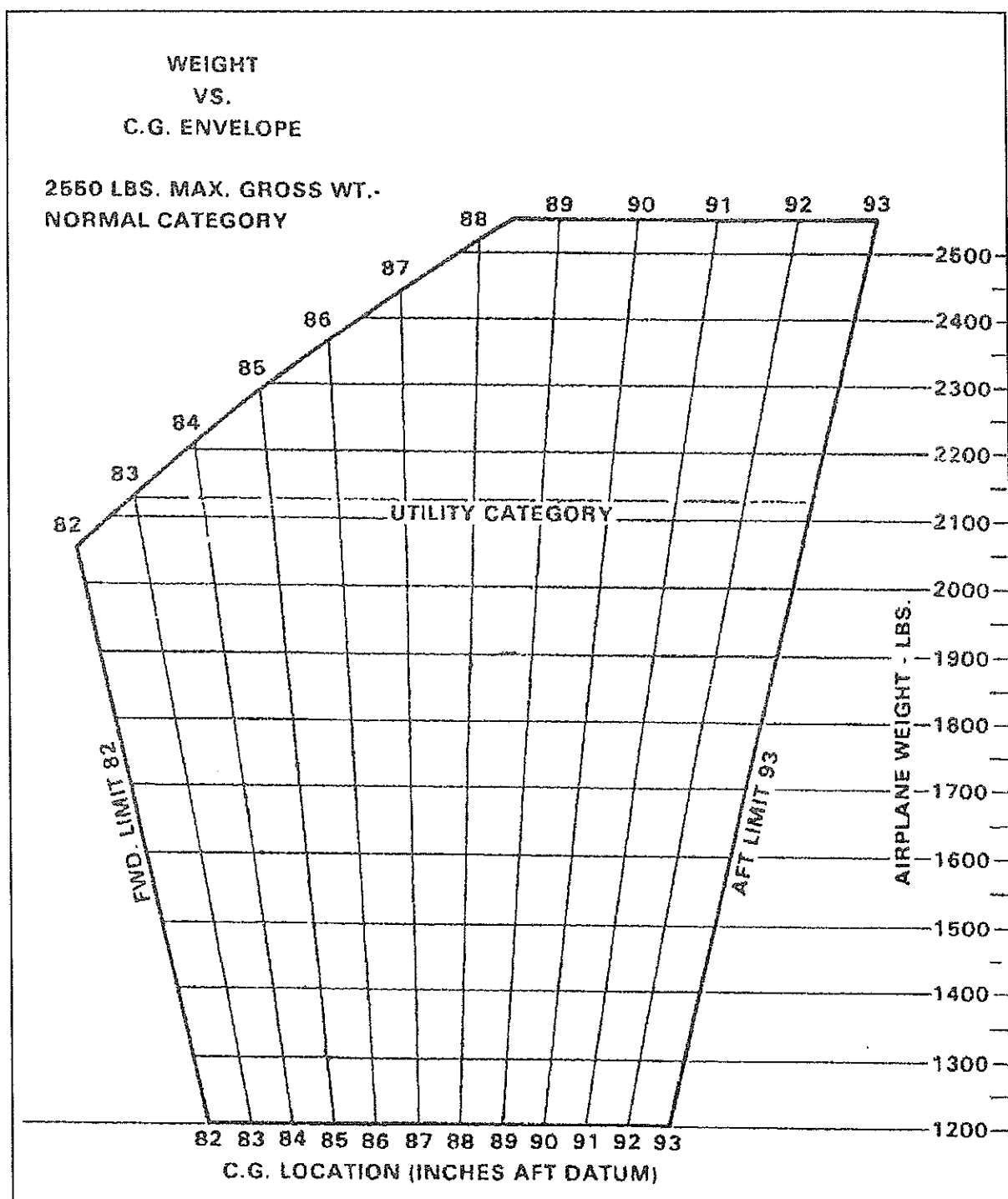
	Weight (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
Basic Empty Weight			
Pilot and Front Passenger		80.5	
Passengers (Rear Seats)*		118.1	
Fuel (48 Gallon Maximum)		95.0	
Baggage (200 Lbs. Maximum)*		142.8	
Ramp Weight (2558 Lbs. Normal, 2138 Lbs. Utility Maximum)			
Fuel Allowance For Engine Start, Taxi and Run Up	-8	95.0	-760
Takeoff Weight (2550 Lbs. Normal, 2130 Lbs. Utility Maximum)			

Totals must be within approved weight and C.G. limits. It is the responsibility of the airplane owner and the pilot to ensure 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.

*Utility Category Operation - No baggage or rear passengers allowed.

WEIGHT AND BALANCE LOADING FORM

Figure 6-11



C.G. RANGE AND WEIGHT

Figure 6-15

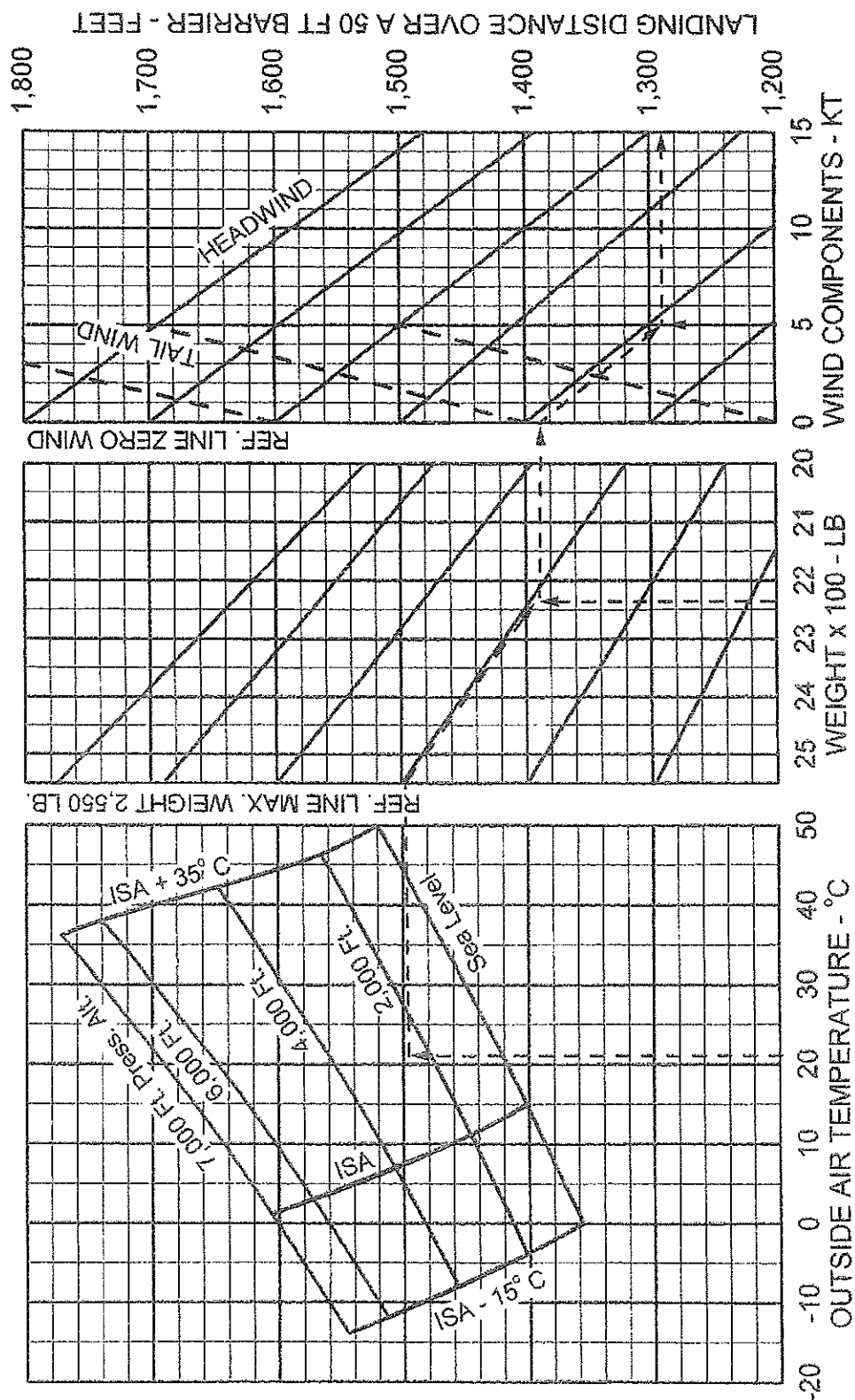
LANDING PERFORMANCE

ASSOCIATED CONDITIONS

Power Off Approach, 40° Flaps, 66 KIAS, Full Stall
Touchdown, Maximum Braking, Paved, Level, Dry Runway

EXAMPLE:

Airport Pressure Altitude: 2,500 FT.
O.A.T.: 21°C
Gross Weight: 2,240 LB.
Headwind: 5 KT.
Landing Distance: 1,290 FT.



LANDING PERFORMANCE

Figure 5-41

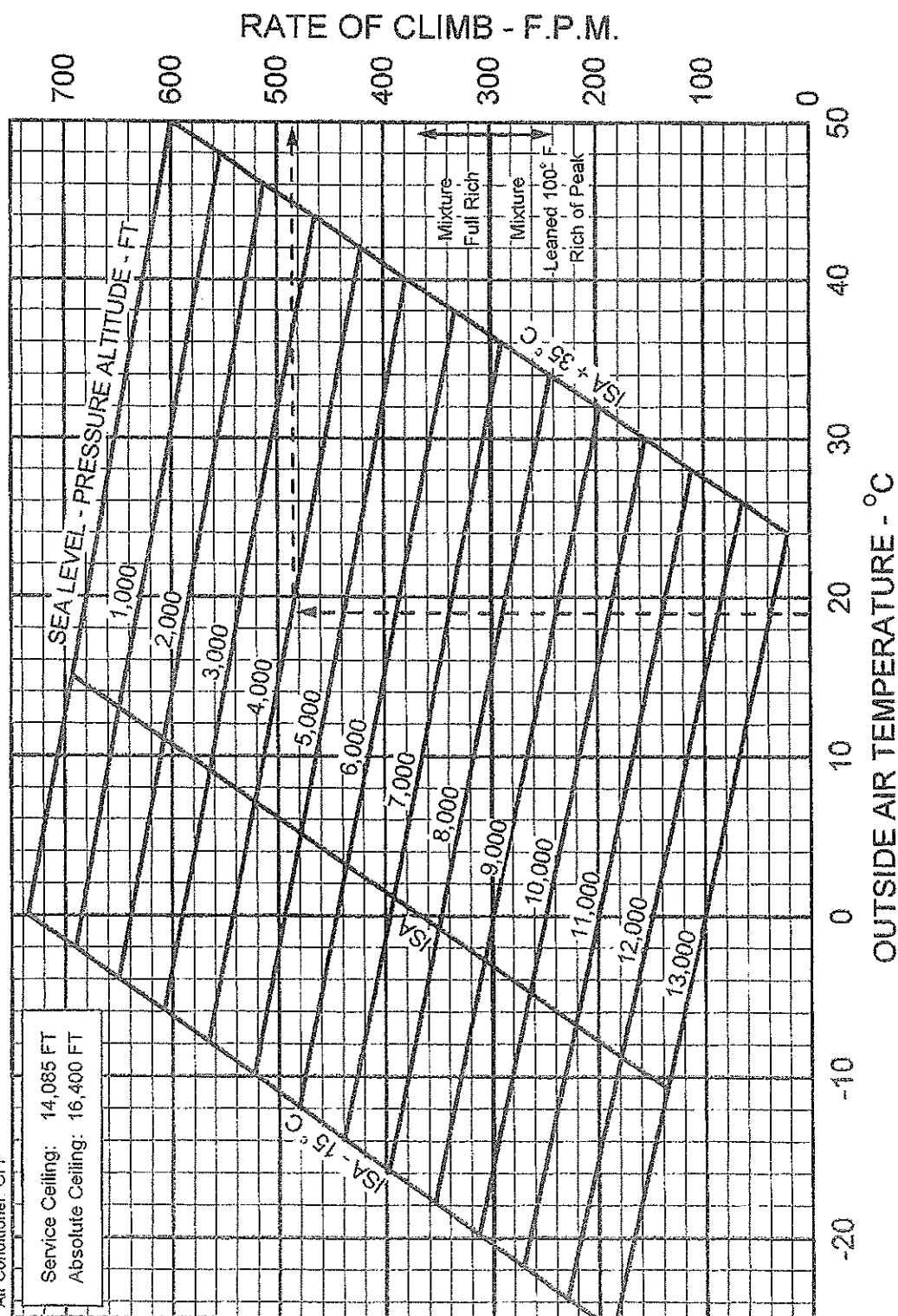
CLIMB PERFORMANCE

ASSOCIATED CONDITIONS:
Gross Weight: 2550 LBS.
Power: FULL THROTTLE
Airspeed: 75 KIAS
Flaps: UP
Air Conditioner: OFF

Service Ceiling: 14,085 FT
Absolute Ceiling: 16,400 FT

EXAMPLE:

Climb Pressure Alt. 4000 FT.
Temperature: 19°C
Rate of Climb: 487 F/Min.



CLIMB PERFORMANCE

Figure 5-15

FLAPS UP TAKEOFF PERFORMANCE

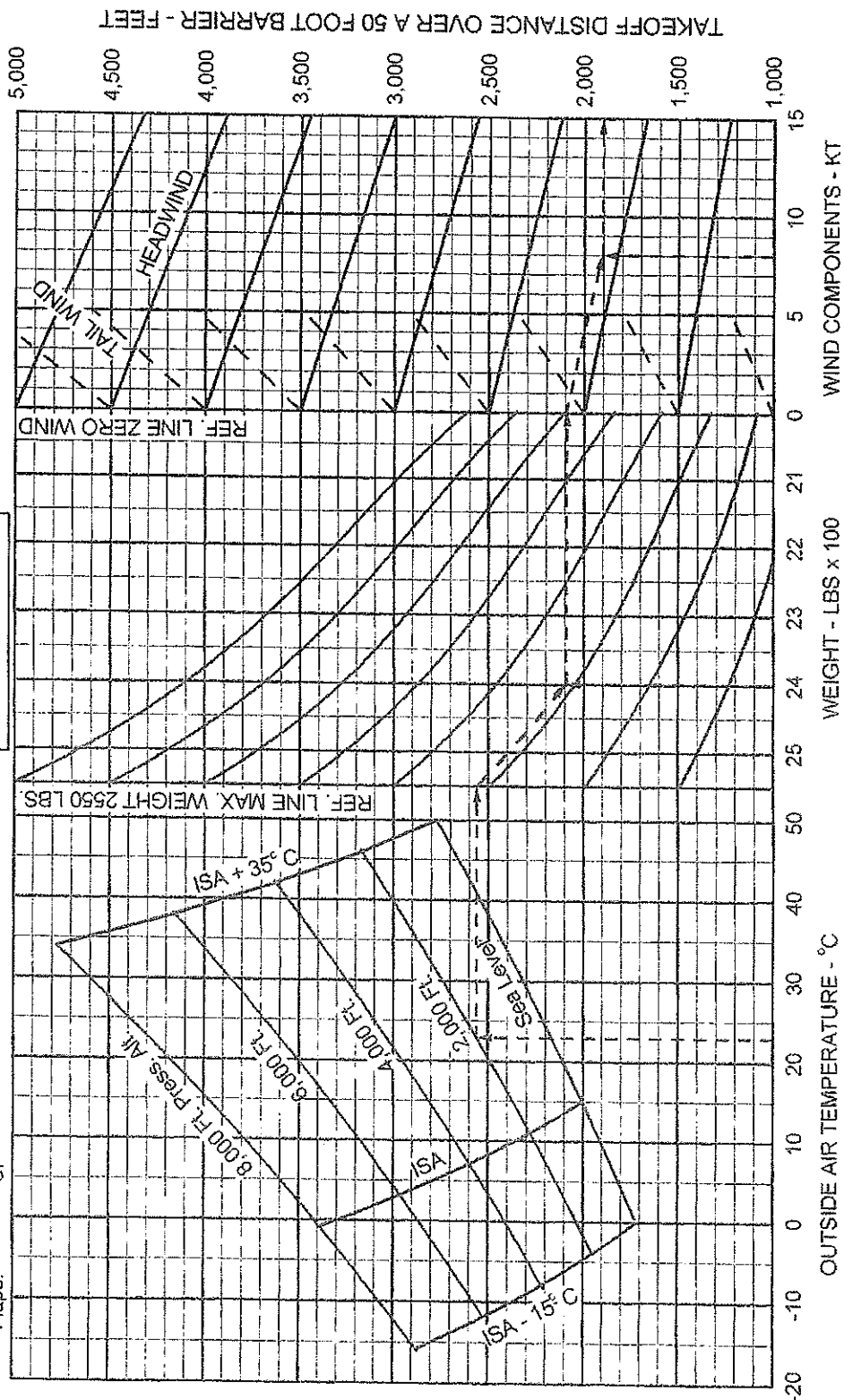
ASSOCIATED CONDITIONS:

Power: FULL THROTTLE BEFORE BRAKE RELEASE
Air Conditioner: OFF
Runway: PAVED, LEVEL, & DRY
Airspeed: REFER TO TABLE AT RIGHT
Propeller: SENSENICH 76EM8S14-Q-62
Flaps: UP

EXAMPLE:

Depart Airport Pressure Alt: 2,000 Ft.
Temperature: 23° C
Gross Weight: 2,400 Lb.
Headwind: 8 Kt.
Takeoff Distance: 1907 Ft.

TAKEOFF SPEEDS		KIAS
WT	LIFTOFF	50 FT
2,550	60	65
2,450	58	64
2,350	57	63
2,250	56	61



FLAPS UP TAKEOFF PERFORMANCE

Figure 5-7