

LOAD DATA SHEET - PAGE 1 OF 3 - AEROPLANE WEIGHT

Aeroplane Type: PIPER PA28-181

Registration Marking: VH-XKV Serial No: 2881486

ISSUE: ONE	DATE: 01-Nov-21	EXPIRY: INDEFINITE
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AEROPLANE WEIGHT AND CENTRE OF GRAVITY DATA

ITEM	WEIGHT (kg)	ARM (mm aft of datum)	MOMENT (kg.mm)	CABIN CONFIGURATION
EMPTY	805.2	2280.5	1836312	FOUR SEATS TOTAL
STANDARD CABIN CONFIGURATION				
THE FOLLOWING IMPERIAL UNITS ARE FOR USE WITH THE PILOTS HANDBOOK SECTION SIX				
	(lb)	(in)	(in lb)	
EMPTY	1775.2	89.78	159385	FOUR SEATS TOTAL

NOTE: The above empty weights include:-

EMPTY - unusable fuel and full oil

AeroWeigh Pty. Ltd.
 BRUCE GUSSELL
 AIRCRAFT WEIGHTS
 MOBILE 0800 88 5551

LOAD DATA SHEET - PAGE 2 OF 3 - EQUIPMENT LIST

This list details the items included in the empty weight shown on Page 1.

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ENGINES/PROPELLERS

Lycoming IO-360 B4A 1
 Sensenich 76EM8S14 1

COMPASSES

Magnetic 1
 Remote Indicating 1*

THERMOMETERS

Cyl Head Temp 1*
 Oil Temp 1*
 Outside Air Temp 1*

INDICATORS

Airspeed 1*
 Standby Airspeed G5
 Direction Indicator 1*
 Exhaust Gas Temp 1*
 Hourmeter 2
 Fuel Flow 1*
 Altitude Indicator 1*
 Standby Gyro Horizon G5
 Tacho Non-recording 1*
 Trim Indicator 2
 Vertical Speed 1*
 Altitude Alert 1*
 CO Detector Guardian

RADIO EQUIPMENT (TYPE)

ADF 0
 Autopilot GARMIN GFC700
 Speakers 1
 G/Slope PART NAVS
 Headsets 1
 GPS Com GARMIN GMA64W(x2)
 Audio/Mkr GARMIN GMA1360
 Typewriter GARMIN GTX345R
 PFD GARMIN GDU1050
 MFD GARMIN GDU1054
 ADAHRS GARMIN GSU75
 Magnetron GARMIN GML44B
 Analyzer GARMIN GEA71B
 Traffic GARMIN GTS800
 TAWS-B GARMIN GT1000
 Standby GARMIN G6
 Magnetron GARMIN GML11

INSTRUMENTS

Altimeters 1*
 Standby Altimeters G5
 Volt/Amperes 1*
 Clocks 1*

GAUGES

Engine Oil Pressure 1*
 Fuel Contents 2*
 Fuel Pressure 1*

LIGHTS

Tail Strobe 1
 White Strobes (Tps) 2
 Inst. Full Panel 1
 Inst. Overhead 2
 Landing 2
 Map 2
 Navigation 4
 Cockpit Courtesy 1
 Passenger O/Head 2

RESTRAINT EQUIPMENT

Lap-sash Inertia 4
 Inflatable Restraints 2
 Rear Baggage Straps 2

ELECTRICAL EQUIPMENT

Alternator 1
 Batteries 2
 Starters 1
 External Power 1

MISCELLANEOUS EQUIPMENT

Dual Controls 1
 Fire Ext.(Portable) 1
 Heated Pilot 1
 Cabin Heat (Aurfi) 1
 Alternate Static 1
 Piper Vent Fan 1
 Airconditioner 1
 Electric Trim 1
 Wheel Fairings 0

DISPOSABLE LOAD LIST

Torch 1
 V.S.Beacon/E.L.T. 1
 Tow Bar 1
 Aftco 1000

* ITEMS MARKED ARE PART OF ELECTRONIC DISPLAYS

LOAD DATA SHEET - PAGE 3 OF 3 - LOADING SYSTEM

Aeroplane Type:..... PIPER PA28-181

Registration Marking:..... VH-XKV Serial No: 2881486

ISSUE:..... ONE DATE:..... 01-Nov-21

The following is valid only for the Empty Weight specified in Page 1 of 3 Aeroplane Weight dated: 01-Nov-21 and is based on calculations using Occupant Weights of 60 to 90 Kg each.

A...NORMAL CATEGORY OPERATIONS:-

1. OCCUPANTS:-

Load Front to Rear (i.e. Front seats first)
Load Heaviest Passenger in front row

2. BAGGAGE COMPARTMENT LIMITATIONS:-

Number of Occupants	Maximum Baggage
One (pilot)	61.8 Kg
Two	90.7 Kg
Three	32.4 Kg
Four	0.0 Kg

3. FUEL:-

Fuel is limited only by All Up Weight

MAXIMUM TAKE-OFF WEIGHT.....1157 Kg

B...UTILITY CATEGORY OPERATIONS:-

No limitations except Utility Category all up weight limit

MAXIMUM TAKE-OFF WEIGHT.....966 Kg

NOTE: In utility category operations the baggage compartment must be empty and the rear seat unoccupied

NOTE: If a full Loading Check is required, refer to Instructions and Charts in the Pilots Handbook Section Six.

PIPER PA28-181 LOADING SYSTEM

Registration VH-XKV Aircraft Type PIPER PA28-181 Serial Number 2881486

INSTRUCTIONS FOR LOAD CHART BC/PA181/1

(14 SEP 1997)

PIPER PA28-181 ARCHER

1. Use standard trim sheet procedures. Enter top of chart using current Basic EMPTY Weight and Arm obtained from the Load Data Sheet.
2. Total load weights in left hand column obtaining Zero Fuel Weight and Take-off Weight.
Draw horizontal lines on the C.G. Limits Graph at the bottom of the chart.
3. From the Basic Weight Versus Arm point at the top of the chart, draw a line VERTICALLY down until it intersects one of the oblique lines on the first load item scale.
4. Move HORIZONTALLY along the load item scale in the direction of the arrow and mark a point appropriate to the load indicated in the left hand column. [e.g. with 50 Kg/Div a 100 Kg load = 2 Div.]
5. Draw a VERTICAL line down to the next load item scale and repeat the above process. (Exercise care in plotting values of segments, noting that occupant scale segments are 50 Kg)
6. Proceed VERTICALLY down the load item scales, moving to left or right as indicated by the arrows and marking scale divisions as appropriate to each load.
7. From the last cabin load item scale draw a line VERTICALLY down to intersect the Zero Fuel line previously drawn on the limits graph.
8. Continue down to the fuel scales and mark off the appropriate load, noting that FUEL has 50 Kg/Div scales. Then draw a line VERTICALLY down from the last fuel point to intersect the Take-off Weight line previously drawn on the limits graph.
9. The two intersection points above must not exceed the boundaries of the limits graph (heavily lined). If either point does, then the load must be rearranged and loading rechecked with steps 2 to 8.

DO NOT EXCEED MAXIMUM WEIGHTS SHOWN ON THE CHART

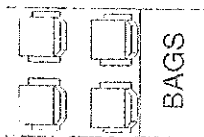
LOAD CHART BC/PA181/1 PIPER PA28-181 ARCHER

*APPLICABLE TO ALL PA28-181
ARCHER II AND III AIRCRAFT
S/N 28-7690001 AND ON

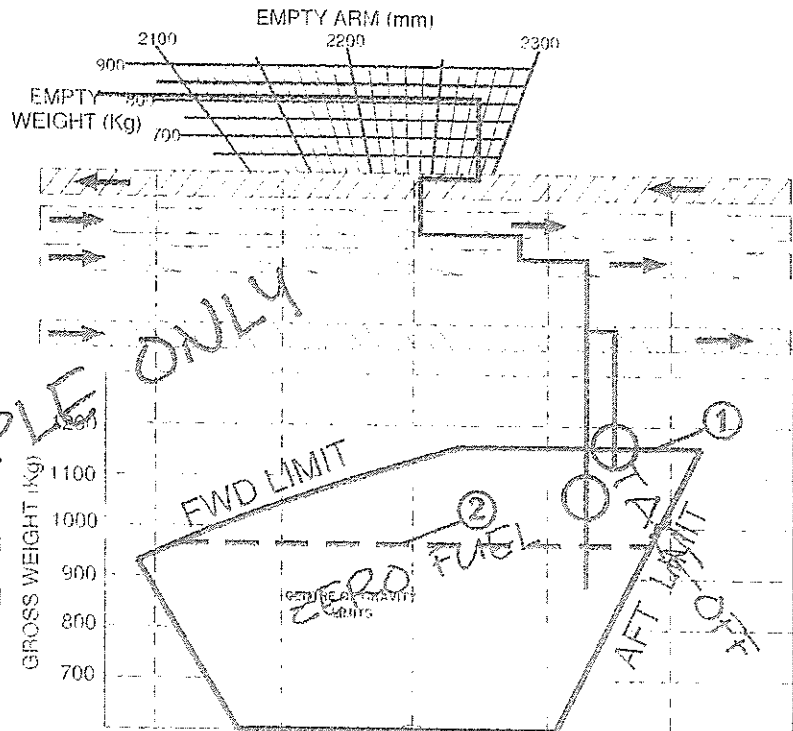
EMPTY WEIGHT	805
PILOT/CO-PILOT	150
REAR SEATS	75
BAGS (MAX 90.7)	30
ZERO FUEL WEIGHT	1060
FUEL (MAX 130)	97
TAKE-OFF WEIGHT	1157
FUEL BURN-OFF	75
LANDING WEIGHT	1082

MAXIMUM TAKE-OFF WEIGHT

- ① NORMAL — 1157 Kg
② UTILITY — 966 Kg



Kg PER DIVISION



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BC/PA181/1 14 SEP 07

LOAD CHART BC/PA181/1 PIPER PA28-181 ARCHER

*APPLICABLE TO ALL PA28-181
ARCHER II AND III AIRCRAFT
S/N 28-7690001 AND ON

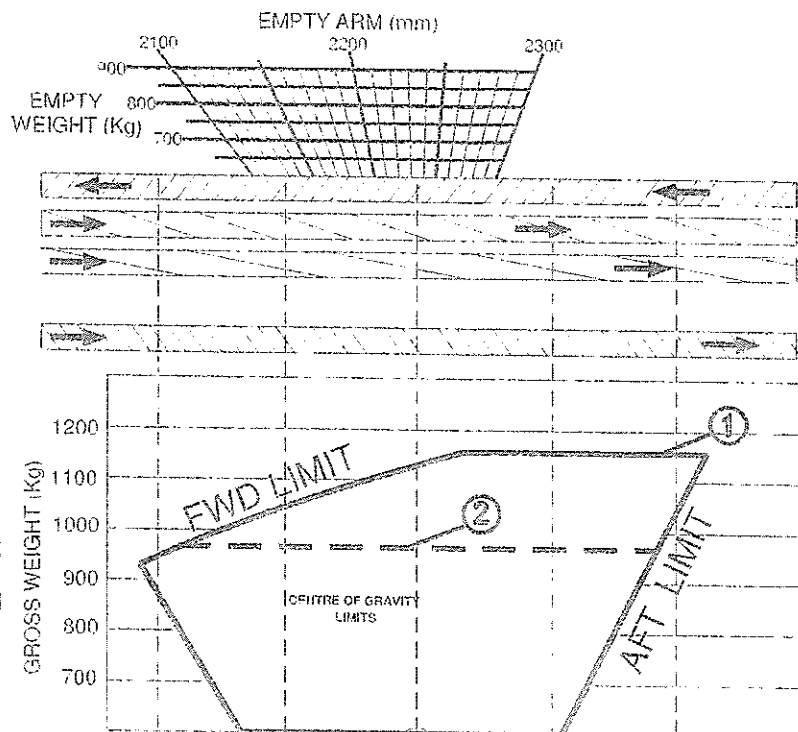
EMPTY WEIGHT	
PILOT/CO-PILOT	
REAR SEATS	
BAGS (MAX 90.7)	
ZERO FUEL WEIGHT	
FUEL (MAX 130)	
TAKE-OFF WEIGHT	
FUEL BURN-OFF	
LANDING WEIGHT	

MAXIMUM TAKE-OFF WEIGHT

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② UTILITY — 966 Kg



Kg PER DIVISION



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BC/PA181/1 14 SEP 07

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

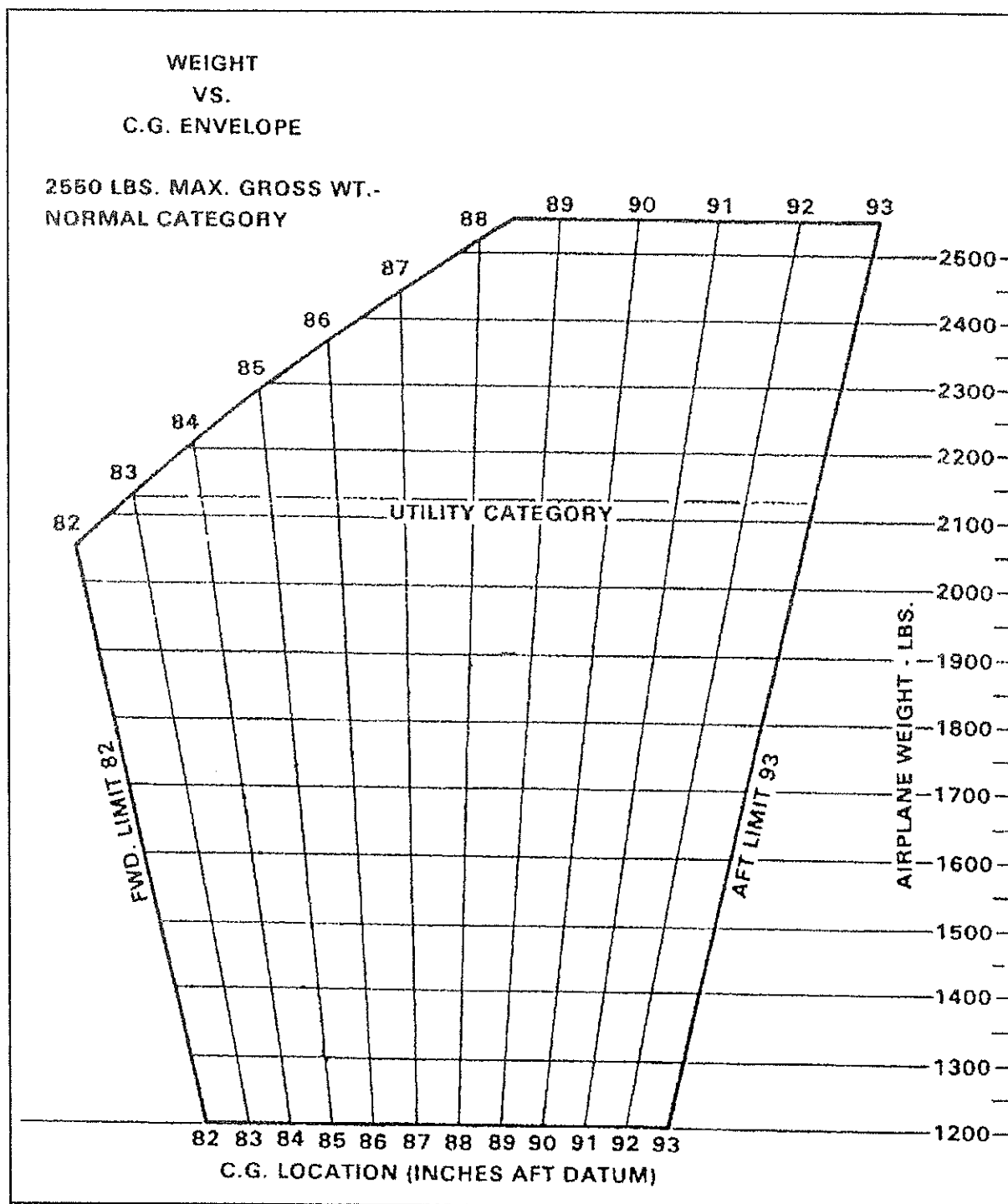
**C.G. RANGE AND WEIGHT**

Figure 6-15

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 76EM8S14-0-62

Flaps: UP

EXAMPLE:

Depart Airport Pressure Alt: 2,000 Ft

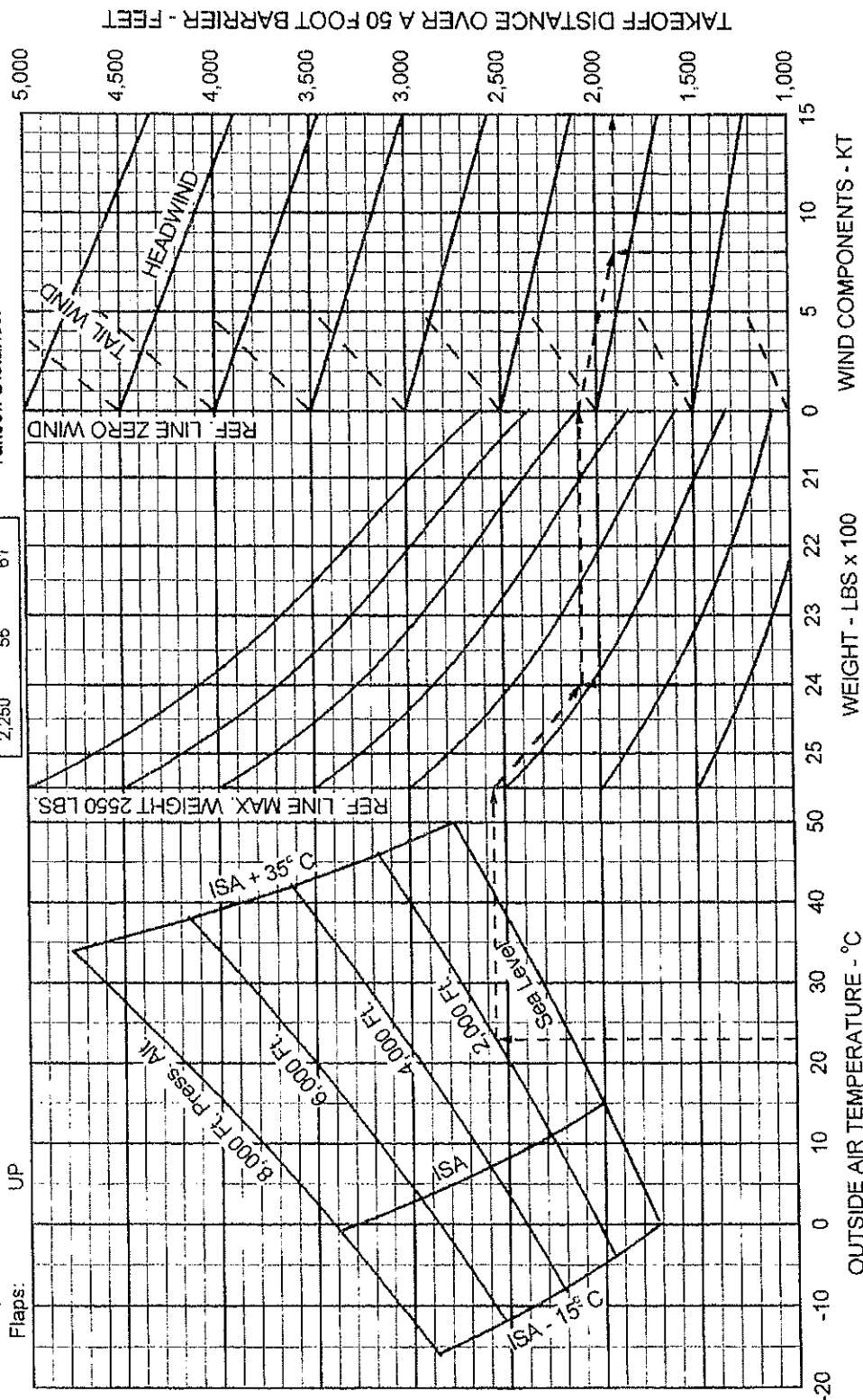
Temperature: 23° C

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

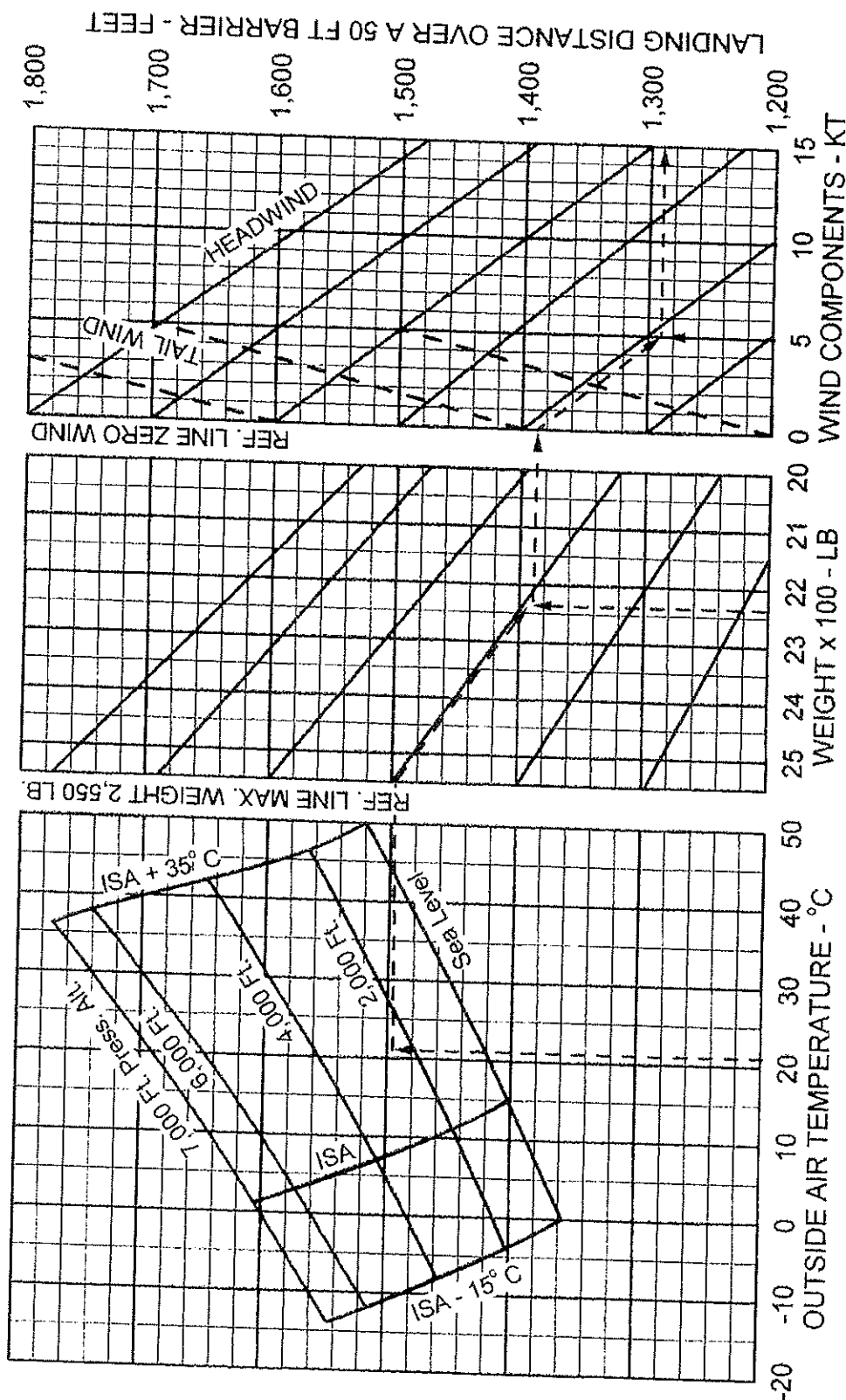
LANDING PERFORMANCE

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

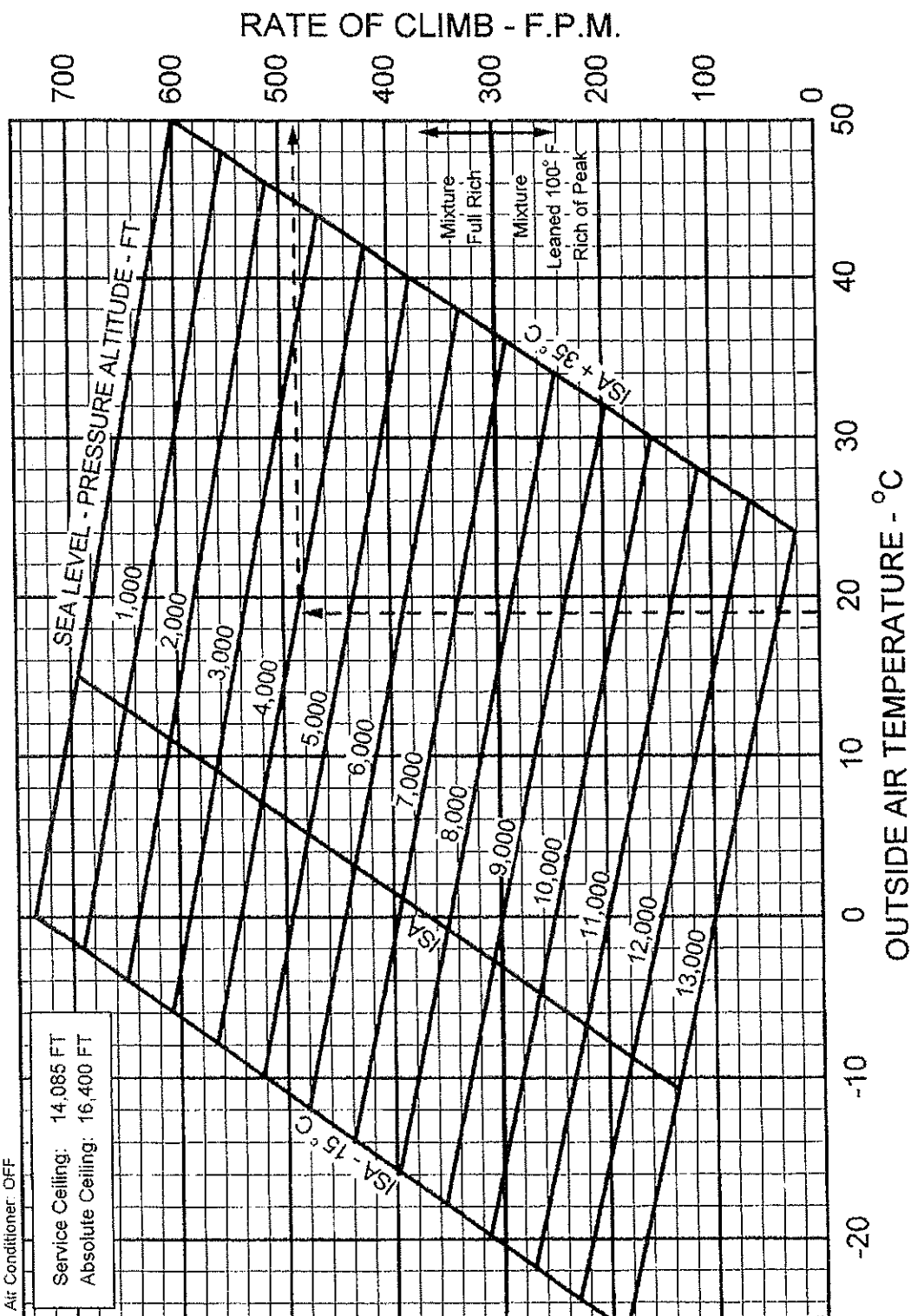
ASSOCIATED CONDITIONS:

Gross Weight: 2550 LBS
Power: FULL THROTTLE
Airspeed: 76 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 Ft/Min.



CLIMB PERFORMANCE

Figure 5-15