WEIGHT AND BALANCE RECORD

Part A - Weight & Balance Maintenance Data(to be completed by a Weight and Balance Control Officer (WBCO))

	Weight and Balance Report Ref: BC/XHE/1	**Revision and Re-Issue Required** INDEFINITE
	Centre of Gravity Position (CG) is LONGITUDINAL (delete as appropriate) AFT measured.....of datum **Configuration:** FOUR SEATS	**Empty Weight and Empty Weight CG** Weighing or Validation dated..... 01-Nov-21
	Aircraft Longitudinal/Lateral Datum 1991.4 MM FWD OF W.L.E.	**Maximum and Minimum Empty Weight & Empty Weight CG.** Revision and Re-issue by WBCO is required when calculated running totals are

Empty Weight and Empty Weight CG	Weight (Kg)	Arm (mm)	Index
	802.95	2270.1	1822738

Maximum and Minimum Empty Weight & Empty Weight CG.	Weight (Kg)	Arm (mm)
MORE THAN	812.95	2275.64
or LESS THAN	792.95	2264.47

Part B - Record of Empty Weight and Balance Changes (the person co-ordinating maintenance shall ensure that Part B is calculated and recorded in accordance with CAO 100.7)

Date	Description of Alteration	Moment Arm from Datum (mm)	Weight and Balance Change				Running Total of Empty Weight & Empty Weight CG		
			Added (+)		Removed (-)				
			Weight (Kg)	Index	Weight (Kg)	Index	Weight (Kg)	Arm (mm)	Index
01-Nov-21	BASIC EMPTY WEIGHT "INITIAL VALIDATION" PER CAO 100.7 - UNUSABLE FUEL AND FULL OIL						802.95	2270.1	1822738
[illegible] 21	Film application	2687.32	3.66	9835.51			806.61	2271.9	1832573.59

Organisation	HAWKER PACIFIC - BANKSTOWN	Aircraft Type	PIPER PA28-181	Registration	VH-XHE	Page	ONE
				Serial	2881485		

WEIGHT AND BALANCE RECORD

LOAD DATA SHEET - PAGE 1 OF 3 - AEROPLANE WEIGHT

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

Registration Marking:..... VH-XHE Serial No: 2881485

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

AEROPLANE WEIGHT AND CENTRE OF GRAVITY DATA

ITEM	WEIGHT (Kg)	ARM (mm aft of datum)	MOMENT (Kg.mm)	CABIN CONFIGURATION
EMPTY	802.9	2270.1	1822738	FOUR SEATS TOTAL
STANDARD CABIN CONFIGURATION				
THE FOLLOWING IMPERIAL UNITS ARE FOR USE WITH THE PILOTS HANDBOOK SECTION SIX				
	(lb)	(in)	(in.lb)	
EMPTY	1770.2	89.37	158207	FOUR SEATS TOTAL

NOTE: The above empty weights include:-

EMPTY - unusable fuel and full oil

AeroWeigh Pty. Ltd.
BRUCE CUSSOLD
AUTHORITY NUMBER [illegible]
MOBILE 0412 58 5551

LOAD DATA SHEET - PAGE 2 OF 3 - EQUIPMENT LIST

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

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

Registration Marking:..... VH-XHE Serial No 2881485

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

ENGINES/PROPELLERS
Lycoming I0-360-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*
Hourmeters..... 2
Fuel Flow..... 1*
Attitude 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 GIA64W(x2)
Audio/Mkr....	GARMIN GMA1360
Txponder.....	GARMIN GTX345R
PFD.....	GARMIN GDU1050
MFD.....	GARMIN GDU1054
ADAHRS.....	GARMIN GSU75
Magntomtr..	GARMIN GMU44B
Analizer.....	GARMIN GEA71B
Traffic.....	GARMIN GTS800
TAWS-B.....	GARMIN G1000
Standby.....	GARMIN G5
Magntomtr..	GARMIN GMU11

INSTRUMENTS
Altimeters..... 1*
Standby Altimeters..... G5
Volt/Ammeters..... 1*
Clocks..... 1*

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

LIGHTS
Tail Strobe..... 1
White Strobes (Tips)..... 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 Pitot..... 1
Cabin Heat (Muff)..... 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..... Artex 1000
Tow Bar..... 1

* ITEMS MARKED ARE PART OF ELECTRONIC DISPLAYS

LOAD DATA SHEET - PAGE 3 OF 3 - LOADING SYSTEM

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

Registration Marking:..... VH-XHE Serial No: 2881485

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)	68.3 Kg
Two	90.7 Kg
Three	39.0 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	Aircraft Type	Serial Number
VH-XHE	PIPER PA28-181	2881485

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

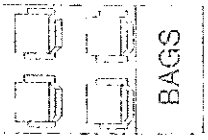
*APPLICABLE TO ALL PA28-181 ARCHER II AND III AIRCRAFT S/N 28-7690001 AND ON

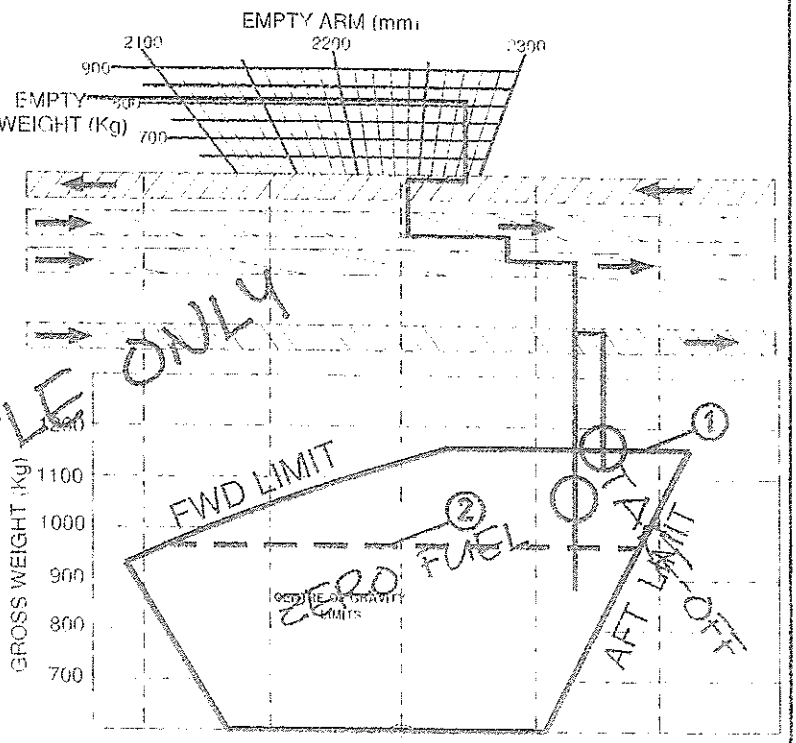
		kg PER DIVISION
EMPTY WEIGHT	803	
PILOT CO-PILOT	150	50
REAR SEATS	75	50
BAGS (MAX 90.7)	30	50
ZERO FUEL WEIGHT	1058	
FUEL (MAX 130)	99	50
TAKE-OFF WEIGHT	1157	
FUEL BURN-OFF	75	
LANDING WEIGHT	1082	

MAXIMUM TAKE-OFF WEIGHT

① NORMAL ——— 1157 Kg

② UTILITY ——— 966 Kg





SAMPLE ONLY

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

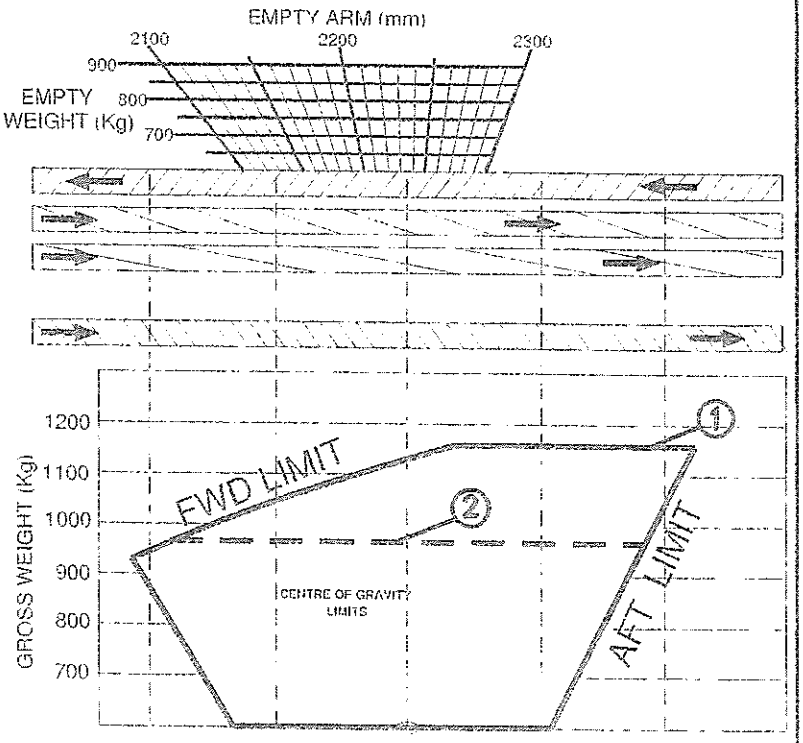
		kg PER DIVISION
EMPTY WEIGHT		
PILOT CO-PILOT		50
REAR SEATS		50
BAGS (MAX 90.7)		50
ZERO FUEL WEIGHT		
FUEL (MAX 130)		50
TAKE-OFF WEIGHT		
FUEL BURN-OFF		
LANDING WEIGHT		

MAXIMUM TAKE-OFF WEIGHT

① NORMAL ——— 1157 Kg

② UTILITY ——— 966 Kg

BAGS



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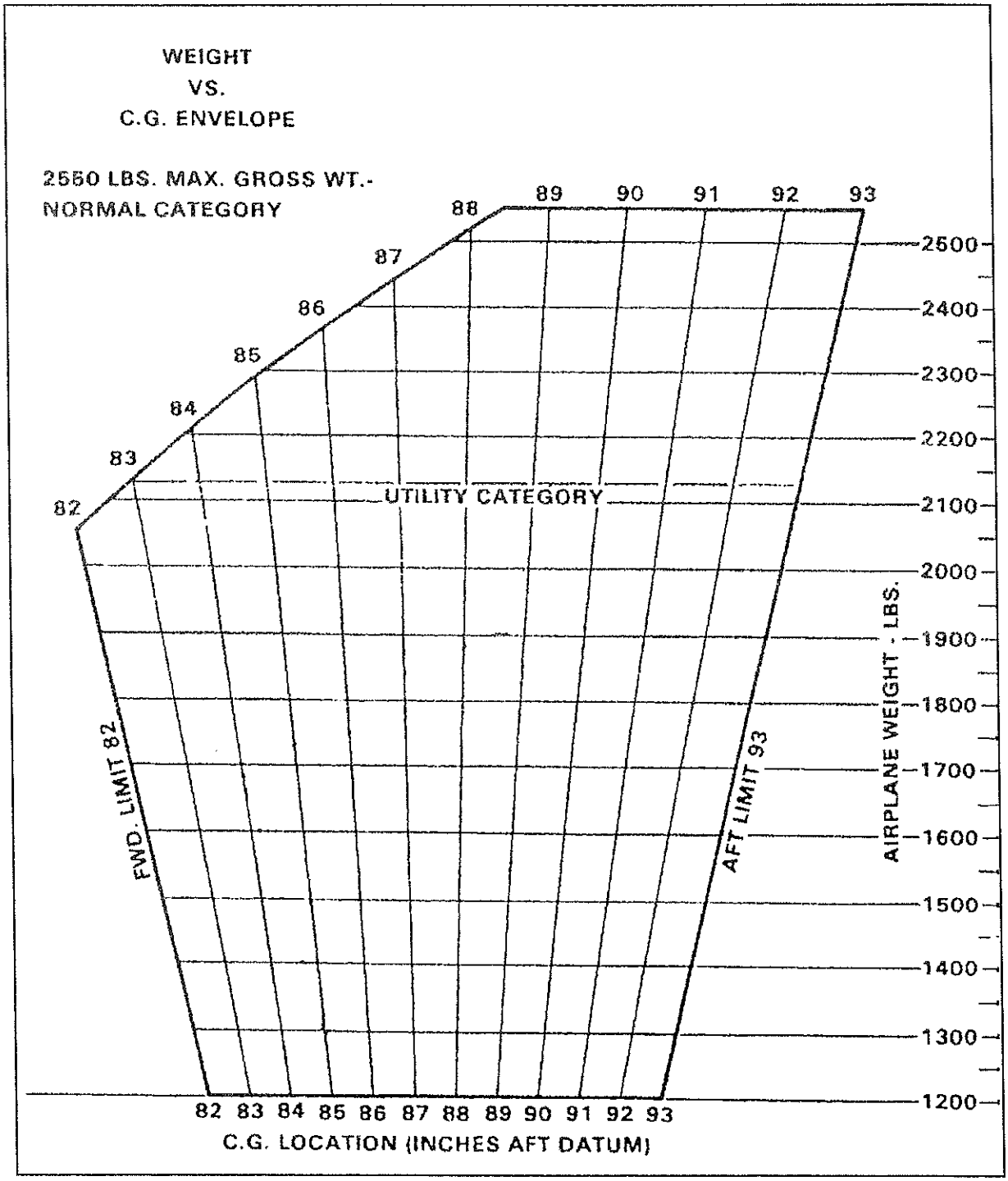
BC PA181/1 14 SEPT 95

	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)			

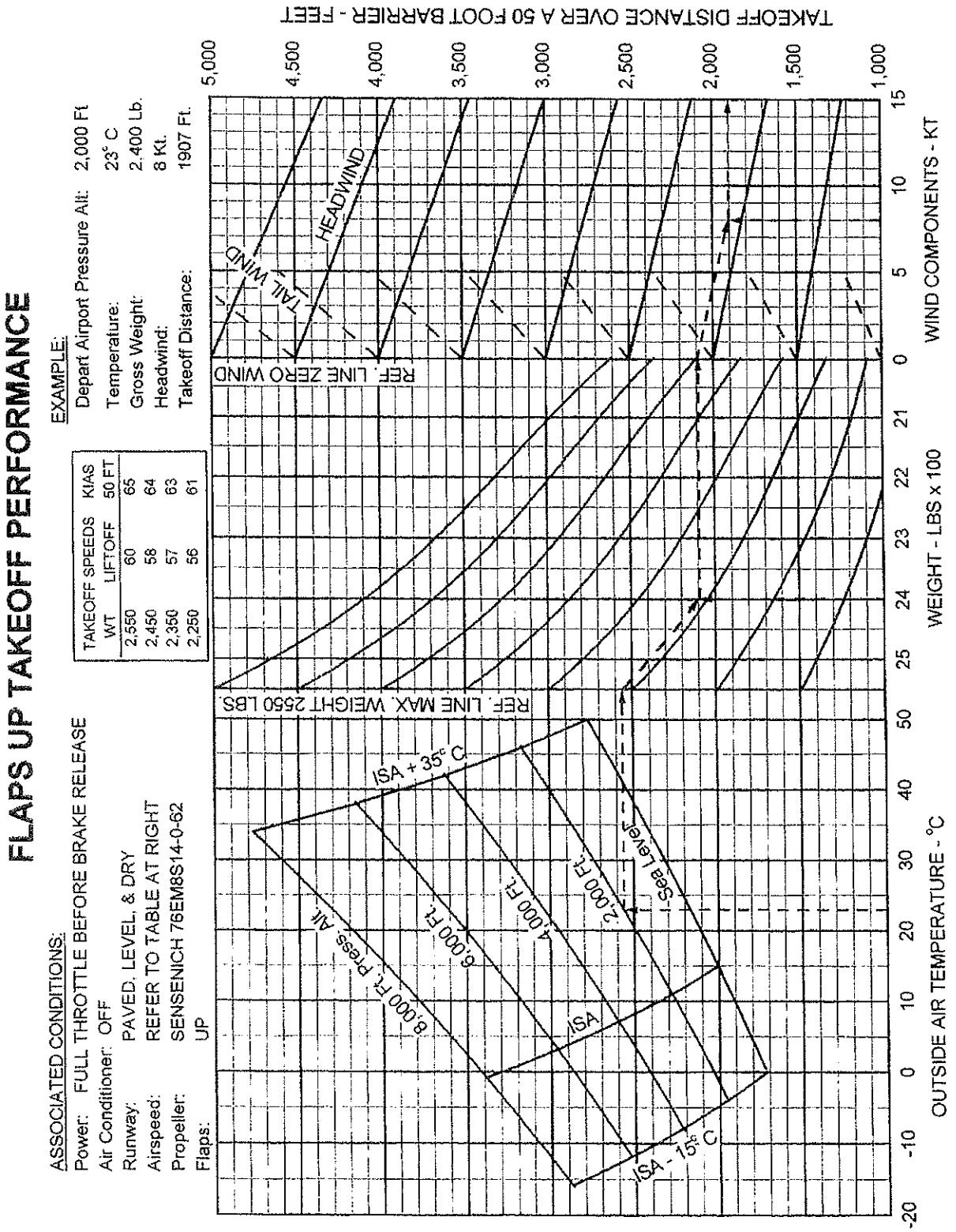
Totals must be within approved weight and C.G. limits. It is the responsibility of the airplane owner and the pilot to ensure that the airplane is loaded properly. The Basic Empty Weight C.G. is noted on the Weight and Balance Data Form (Figure 6-5). If the airplane has been altered, refer to the Weight and Balance Record for this information.

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

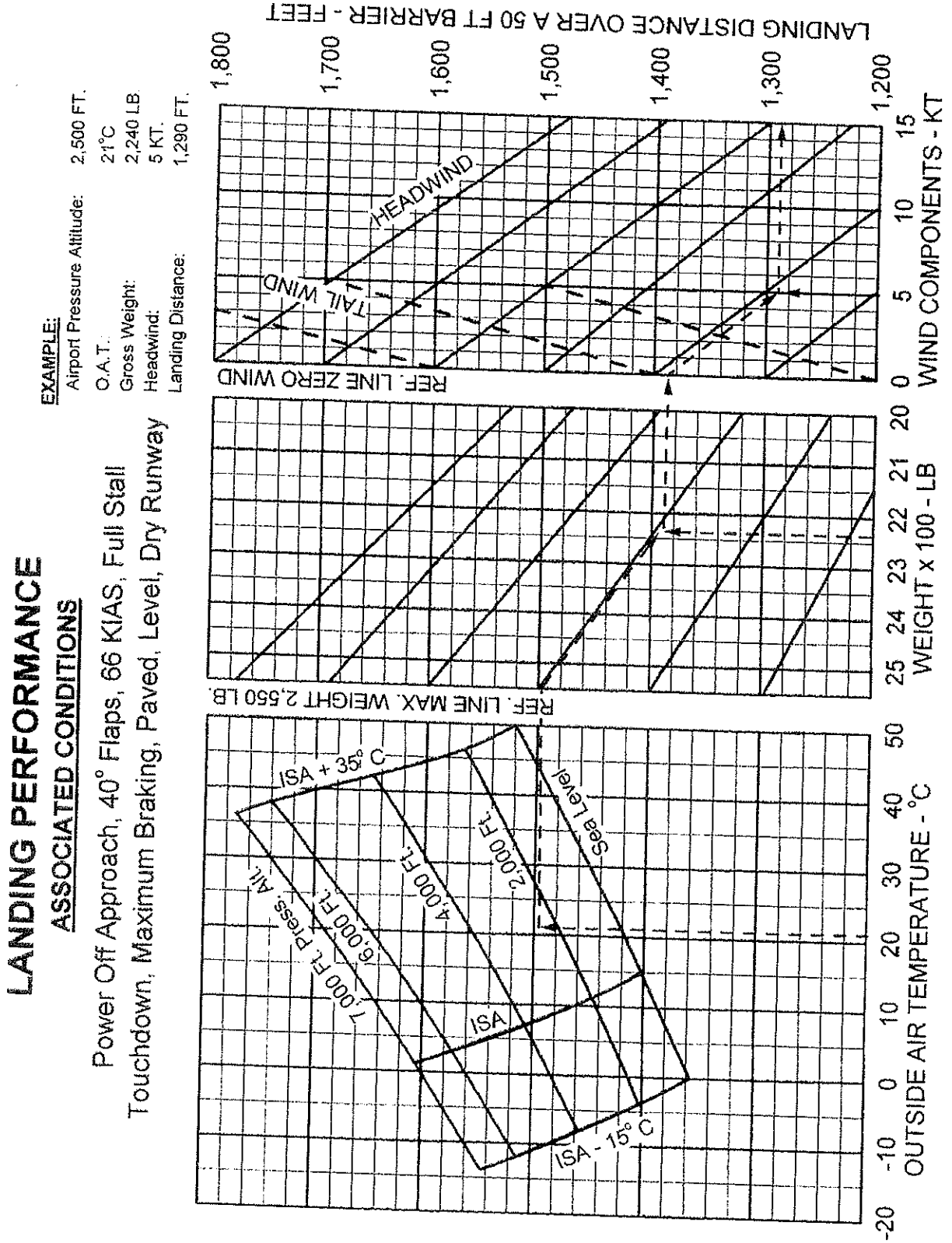
WEIGHT AND BALANCE LOADING FORM
Figure 6-11



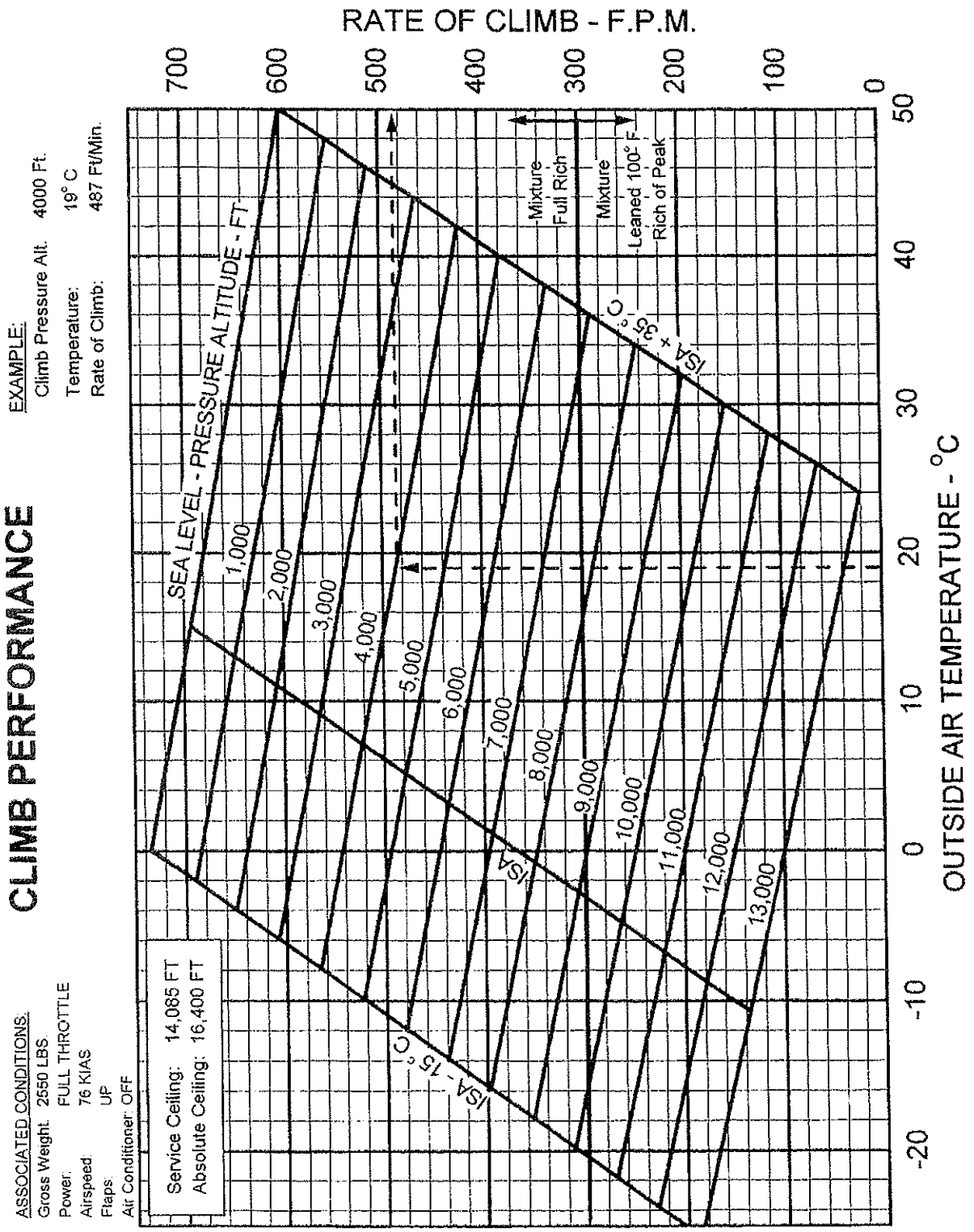
C.G. RANGE AND WEIGHT
Figure 6-15



FLAPS UP TAKEOFF PERFORMANCE
Figure 5-7



LANDING PERFORMANCE
Figure 5-41



CLIMB PERFORMANCE
Figure 5-15