



AIRCRAFT WEIGHT & BALANCE

AIRCRAFT WEIGHT AND C.G DETERMINATION

REPORT NO : 02/WB/SNI/II/2022
DATE : 07 FEBRUARY 2022

AIRCRAFT REGISTRATION : PK-SNI
AIRCRAFT TYPE : C208B EX
AIRCRAFT SERIAL NUMBER : 208B-5068
PROPERTY OF : PT. SMART CAKRAWALA AVIATION
PLACE OF WEIGHING : SENTANI
REASON OF WEIGHING : PERIODIC INSPECTION
CONFIGURATION : CARGO
PERFORMED BY : YANUAR ABDUL FATAH (TRANSFER TO SCA FORM)
SIGNED:  DATE: 07/02/2022

CHECKED BY : ISTIONO.
SIGNED:  DATE: 07/02/2022

RESULTS

EMPTY WEIGHT	: 4987.21
EMPTY C.G FROM DATTUM LINE	: 187.37
INDEX MAC %	: 14.75 %
VALID UNTIL	: NOVEMBER 2024

WEIGHING EQUIPMENT

PART NUMBER	: HH2400-3-10KP
SERIAL NUMBER	: UNK
VALIDATION	: UNK

APPROVED BY:



YANUAR ABDUL FATAH
CHIEF INSPECTOR



AIRCRAFT WEIGHT & BALANCE

**MODEL 208B
CARAVAN I**

WEIGHT AND BALANCE DATA



SERIAL NUMBER	208B5068	REGISTRATION NUMBER	PK-SNI
		DATE 18/11/2019	
AIRPLANE WEIGHING FORM			
<p>REFERENCE DATUM</p> <p>AIRPLANE NOSE DOES NOT COINCIDE WITH REFERENCE DATUM</p> <p>NOTE: IT IS THE RESPONSIBILITY OF THE OPERATOR TO ENSURE THAT THE AIRPLANE IS LOADED PROPERLY.</p>			

LOCATING CG WITH AIRPLANE ON LANDING GEAR

FORMULA for Longitudinal CG

$$(X) = (A) - \frac{(\text{Nose Gear Net Weight})(870) X (B) 157.75}{116.75 \text{ Nose and Main Landing Gear Weight Totaled (5286)}} = (90.79) \text{ Inches}$$

CG Arm of Airplane = 100 + (X) = (190.79) Inches Aft of Datum

MEASURING A AND B

MEASURE A and B PER PILOT'S OPERATING HANDBOOK INSTRUCTIONS TO ASSIST IN LOCATING CG WITH AIRPLANE WEIGHED ON LANDING GEAR

LOCATING CG WITH AIRPLANE ON JACK PADS

FORMULA for Longitudinal CG

$$\text{CG Arm of Airplane} = 227.44 - \frac{127.44 X}{(\text{Nose Jack Point Net Weight})} = \frac{(\text{Nose and Aft Jack Point Weight Totaled})}{0.6640}$$

LEVELING PROVISIONS

LONGITUDINAL - LEFT SIDE OF FUSELAGE AT FS 239.00 & 272.00
LATERAL - SEAT RAILS AFT OF PILOT AND FRONT PASSENGER SEATS

AIRPLANE AS WEIGHED TABLE

LOCATING PERCENT MAC

FORMULA for Percent MAC

$$\text{CG Percent MAC} = \frac{(\text{CG Arm of Airplane}) - 177.57}{0.6640}$$

POSITION	SCALE READING	SCALE DRIFT	TARE	NET WEIGHT
LEFT SIDE	2100	0	0	2100
RIGHT SIDE	2330	0	0	2330
NOSE	870	0	0	870
AIRPLANE TOTAL AS WEIGHED				5300

BASIC EMPTY WEIGHT AND CENTER-OF-GRAVITY TABLE

ITEM	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT/1000 (INCH-POUNDS)
AIRPLANE (CALCULATED OR AS WEIGHED) (INCLUDES ALL UNDRAINABLE FLUIDS AND FULL OIL)	5300	190.85	1011.53
DRAINABLE UNUSABLE FUEL AT 6.75 POUNDS PER GALLON S/N 208B0001 Thru 208B0089 Not Modified With SK208-52 S/N 208B0001 Thru 208B0089 Modified With SK208-52 And S/N 208B0090 And On	20.1	-205.7	4.97
	24.1	206.4	
BASIC EMPTY WEIGHT	5324.10	190.92	1016.5

CESSNA AIRCRAFT COMPANY, AIRCRAFT DIVISION, P.O. BOX 7704, WICHITA, KANSAS 67277

FORM NUMBER 1692-2, 15 July 1986
REVISED 22 January 2002



AIRCRAFT WEIGHT & BALANCE

TABEL1

DESCRIPTION OF ACTION PERFORMED	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT/1000 INCH POUNDS
SINGLE SEAT ASSY 2 ND ROW-LH REMOVED	30.86	177.55	5.47
SINGLE SEAT ASSY 3 ND ROW-LH REMOVED	30.86	213.55	6.59
SINGLE SEAT ASSY 4 ND ROW-LH REMOVED	30.86	249.55	7.70
SINGLE SEAT ASSY 5 ND ROW-LH REMOVED	30.86	285.55	8.81
BENCH ASSY 2 ND ROW-RH REMOVED	59.52	195.69	11.64
BENCH ASSY 3 ND ROW-RH REMOVED	59.52	231.69	13.79
BENCH ASSY 4 ND ROW-RH REMOVED	59.52	267.69	15.93
AFT COUCH, 2 PL REMOVED	34.89	347.14	12.11
TOTAL	336.89	243.52	82.04

TABEL 2

AIRCRAFT WEIGHING REPORT	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT/1000 INCH POUNDS
AIRPLANE (CALCULATED OR AS WEIGHED) (INCLUDES ALL UNDRAINABLE FLUIDS AND FULL OIL) INCLUDED DRAINABLE UNUSABLE FUEL AT 6.75 POUNDS PER GALON	5324.10	190.92	1016.5
WEIGHT FROM TABLE 1 (-)	336.89	243.52	82.04
TOTAL	4987.21	187.37	934.46

BASIC EMPTY WEIGHT AND CENTER OF GRAVITY TABLE

LOCATING PERCENT MAC

$$\begin{aligned}\text{CG Percent MAC} &= \frac{(\text{CG Arm of Airplane}) - 177.57}{0.6640} \\ &= \frac{187.37 - 177.57}{0.6640} \\ &= 14.75\%\end{aligned}$$

PRIOR TO WEIGHT AND BALANCE CHECK				
NO.	DESCRIPTION	APPL	CHECK	REMARKS
A	STANDARD ITEMS			
1	All fuel tank EMPTY or recorded / FULL	√	Empty	-
2	All engine oil tanks EMPTY or recorded / FULL	√	Full	-
3	All others oil tanks FULL (included Propeller, Starters, Gearbox and Air Cycle)	√	Full	-
4	Hydraulic tanks FULL	√	Full	-
B	STANDARD EQUIPMENTS			
1	Technical supply or Flight Kits	x	N/A	-
2	Aircraft Books, Manuals and Papers	x	1 Bag	-
3	AXE	x	1 EA	-
4	Fire Extinguisher	√	1 EA	-
5	First Aid Kit	x	1 Box	-
6	Life Vests	x	11 EA	-
7	Life Raft	x	N/A	-
8	Survival Kit	x	N/A	-
9	Single Seat	√	4 ea	30.86 lb/each
10	Bench	√	3 EA	59.52 lb/each
11	AFT Couch	√	2 PL	34.89 lb