



AIRCRAFT WEIGHT AND C.G DETERMINATION

REPORT NO : 04/WB/SNN/XII/2022

DATE : 21 DECEMBER 2022

AIRCRAFT REGISTRATION : PK-SNN
AIRCRAFT TYPE : C208B EX
AIRCRAFT SERIAL NUMBER : 208B5706
PROPERTY OF : PT. SMART CAKRAWALA AVIATION
PLACE OF WEIGHING : NABIRE (RECALCULATION)
REASON OF WEIGHING : RECALCULATION AFTER AP STOL INSTALLATION
CONFIGURATION : **CARGO**
PERFORMED BY : YANUAR ABDUL FATAH
SIGNED:  DATE: 21/12/2022
CHECKED BY : ISTIONO.
SIGNED:  DATE: 21/12/2022

RESULTS

EMPTY WEIGHT	: 5079.96 Pounds
EMPTY C.G FROM DATTUM LINE	: 188.69 Inchs
INDEX MAC %	: 16.74 %
VALID UNTIL	: OCTOBER 2027

WEIGHING EQUIPMENT

PART NUMBER	: N/A
SERIAL NUMBER	: N/A
VALIDATION	: N/A

APPROVED BY:

A stylized handwritten signature in black ink.**YANUAR ABDUL FATAH
CHIEF INSPECTOR**

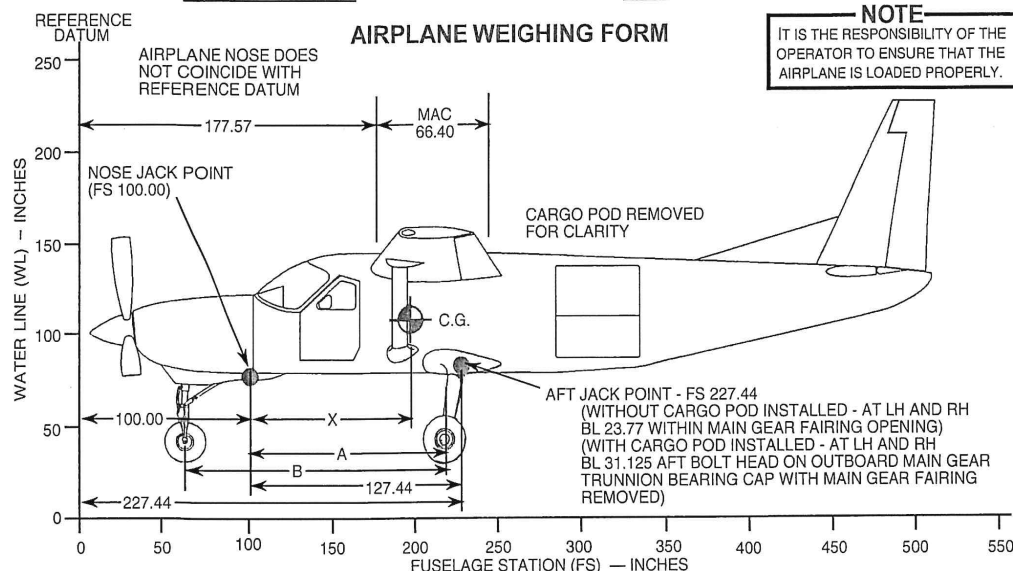
AIRCRAFT WEIGHT & BALANCE

**MODEL 208B
CARAVAN I**

**WEIGHT AND
BALANCE DATA**



SERIAL NUMBER 208B5706 REGISTRATION NUMBER N937HT DATE 10/07/2022



LOCATING CG WITH AIRPLANE ON LANDING GEAR

FORMULA for Longitudinal CG

$$(X) = (A) - \frac{(\text{Nose Gear Net Weight})(876)}{116.75 \text{ Nose and Main Landing Gear Weight Total}(5257)} = (90.46) \text{ Inches}$$

CG Arm of Airplane = 100 + (X) = (190.46) 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

$$\text{CG Arm of Airplane} = 227.44 - \frac{127.44 \times (\text{Nose Jack Point Net Weight})}{\text{Nose and Aft Jack Point Weight Total}} = (\text{Inches Aft of Datum})$$

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

POSITION	SCALE READING	SCALE DRIFT	TARE	NET WEIGHT
LEFT SIDE	2159.00	0	0	2159.00
RIGHT SIDE	2222.00	0	0	2222.00
NOSE	876.00	0	0	876.00
AIRPLANE TOTAL AS WEIGHED				5257.00

LOCATING PERCENT MAC

FORMULA for Percent MAC

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

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)	5257.00	190.46	1001.25
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 24.1	-205.7 206.4	4.97
BASIC EMPTY WEIGHT	5281.10	190.53	1006.22

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	25.85	177.55	4.58
SINGLE SEAT ASSY 3 ND ROW-LH REMOVED	25.85	213.55	5.52
SINGLE SEAT ASSY 4 ND ROW-LH REMOVED	25.85	249.55	6.45
BENCH ASSY 2 ND ROW-RH REMOVED	47.25	195.69	9.24
BENCH ASSY 3 ND ROW-RH REMOVED	47.25	231.69	10.94
AFT COUCH, 2 PL REMOVED	34.89	347.14	12.11
SINGLE SEAT ASSY 5 TH ROW-LH ADDITIONAL	25.85	285.55	7.38
BENCH ASSY 4 TH ROW-RH ADDITIONAL	47.25	267.69	12.64
TOTAL	280.04	245.89	68.86

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. INCLUDE SINGLE SEAT ASSY 5 TH ROW-LH ADDITIONAL & BENCH ASSY 4 TH ROW-RH ADDITIONAL	5354.2	191.671	1026.24
APE STOL KIT STC #: SAO1805SE (+)	5.80	203.00	1.17
TOTAL	5360	191.68	1027.41
WEIGHT FROM TABLE 1 (-)	280.04	245.89	68.86
TOTAL	5079.96	188.69	958.55



AIRCRAFT WEIGHT & BALANCE

BASIC EMPTY WEIGHT AND CENTER OF GRAVITY TABLE

LOCATING PERCENT MAC

$$\begin{aligned}\text{CG Percent MAC} &= \frac{(\text{CG Arm of Airplane}) - 177.57}{0.6640} \\ &= \frac{188.69 - 177.57}{0.6640} \\ &= 16.74 \%\end{aligned}$$

AIRCRAFT WEIGHT & BALANCE

PRIOR TO WEIGHT AND BALANCE CHECK				
AIRCRAFT TYPE : CESSNA C208B EX CARAVAN AIRCRAFT REGISTRATION : PK-SNN AIRCRAFT SERIAL NUMBER : 208B5706 DATE OF WEIGHING : 21 DECEMBER 2022 (RECALCULATION)				
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	-