

**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**

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

**WEIGHING EQUIPMENT**

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

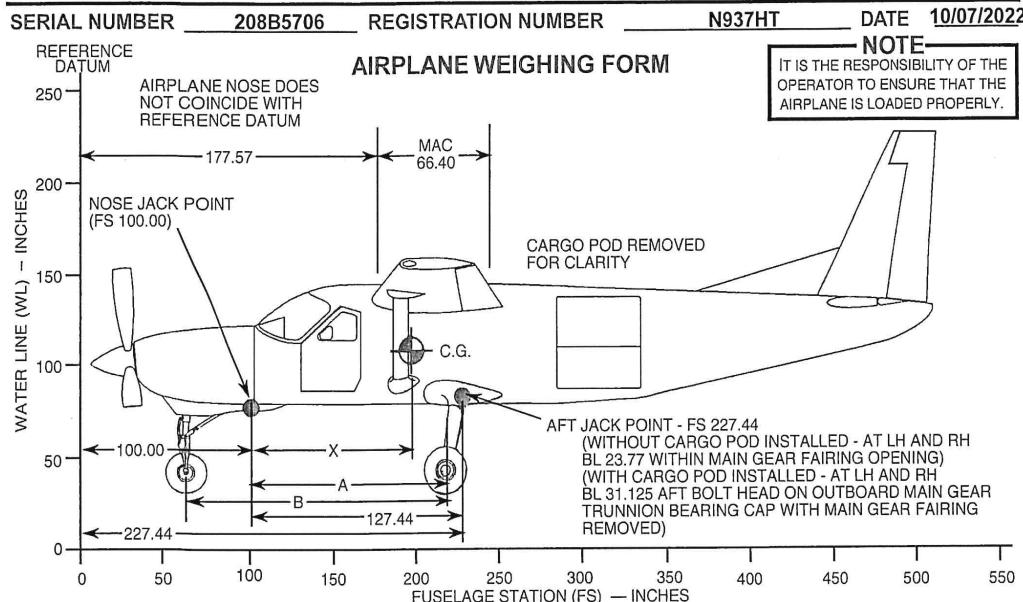
APPROVED BY:



**YANUAR ABDUL FATAH  
CHIEF INSPECTOR**

**MODEL 208B  
CARAVAN I**
**WEIGHT AND  
BALANCE DATA**


A Textron Company


**LOCATING CG WITH AIRPLANE ON LANDING GEAR**

FORMULA for Longitudinal CG

$$(X) = (A) - \frac{(Nose\ Gear\ Net\ Weight)(876) X (B) 157.75}{116.75\ Nose\ and\ Main\ Landing\ Gear\ Weight\ Totaled(5257)} = (90.46) \text{ Inches}$$

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

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

Nose and Aft Jack Point Weight Totaled( )

**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	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

**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 208B0099 Not Modified With SK200-52 S/N 208B0001 Thru 208B0099 Modified With SK200-52 And S/N 208B0090 And On	20.1	-205.7	4.97
	24.1	206.4	
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

**TABEL1**

DESCRIPTION OF ACTION PERFORMED	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT/1000 INCH POUNDS
SINGLE SEAT ASSY 2 <sup>ND</sup> ROW-LH REMOVED	25.85	177.55	4.58
SINGLE SEAT ASSY 3 <sup>RD</sup> ROW-LH REMOVED	25.85	213.55	5.52
SINGLE SEAT ASSY 4 <sup>TH</sup> ROW-LH REMOVED	25.85	249.55	6.45
BENCH ASSY 2 <sup>ND</sup> ROW-RH REMOVED	47.25	195.69	9.24
BENCH ASSY 3 <sup>RD</sup> ROW-RH REMOVED	47.25	231.69	10.94
AFT COUCH, 2 PL REMOVED	34.89	347.14	12.11
SINGLE SEAT ASSY 5 <sup>TH</sup> ROW-LH ADDITIONAL	25.85	285.55	7.38
BENCH ASSY 4 <sup>TH</sup> ROW-RH ADDITIONAL	47.25	267.69	12.64
<b>TOTAL</b>	<b>280.04</b>	<b>245.89</b>	<b>68.86</b>

**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 <sup>TH</sup> ROW-LH ADDITIONAL & BENCH ASSY 4 <sup>TH</sup> ROW-RH ADDITIONAL	5354.2	191.671	1026.24
APE STOL KIT STC #: SAO1805SE ( + )	5.80	203.00	1.17
<b>TOTAL</b>	<b>5360</b>	<b>191.68</b>	<b>1027.41</b>
WEIGHT FROM TABLE 1 ( - )	280.04	245.89	68.86
<b>TOTAL</b>	<b>5079.96</b>	<b>188.69</b>	<b>958.55</b>

### **BASIC EMPTY WEIGHT AND CENTER OF GRAVITY TABLE**

#### **LOCATING PERCENT MAC**

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

$$= \frac{188.69 - 177.57}{0.6640}$$

$$= 16.74 \%$$



## 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
<b>A</b>	<b>STANDARD ITEMS</b>			
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>B</b>	<b>STANDARD EQUIPMENTS</b>			
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	-