

AIRCRAFT WEIGHT AND C.G DETERMINATION

REPORT NO : 04/WB/SNT/XII/2022
 DATE : 21 DECEMBER 2022

AIRCRAFT REGISTRATION	:	PK-SNT
AIRCRAFT TYPE	:	C208B EX
AIRCRAFT SERIAL NUMBER	:	208B5707
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	:	5091.96 Pounds
EMPTY C.G FROM DATTUM LINE	:	188.60 Inchs
INDEX MAC %	:	16.61 %
VALID UNTIL	:	OCTOBER 2027

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

SERIAL NUMBER 208B5707 REGISTRATION NUMBER N937JT DATE 10/14/2022

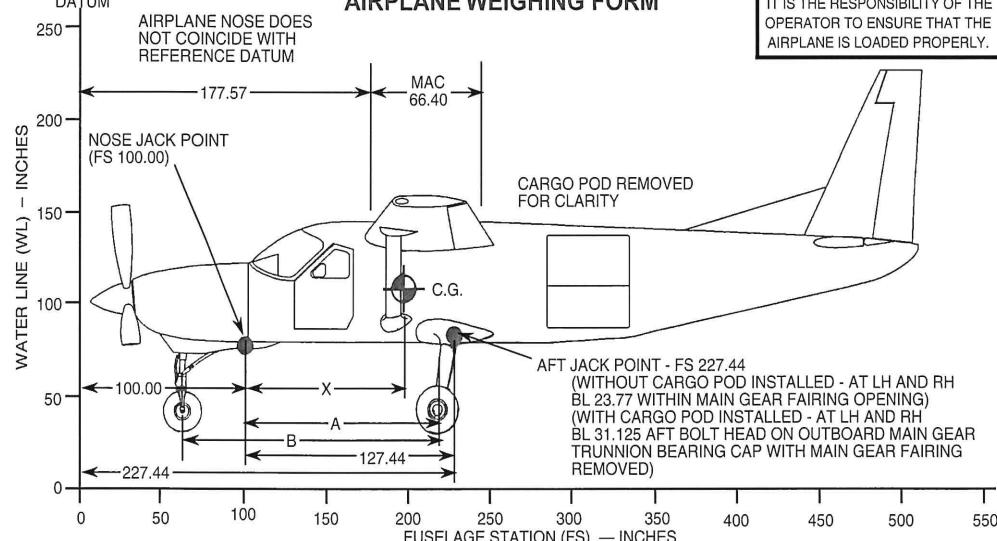
REFERENCE DATUM

AIRPLANE NOSE DOES
NOT COINCIDE WITH
REFERENCE DATUM

AIRPLANE WEIGHING FORM

NOTE

IT IS THE RESPONSIBILITY OF THE
OPERATOR TO ENSURE THAT THE
AIRPLANE IS LOADED PROPERLY.



LOCATING CG WITH AIRPLANE ON LANDING GEAR

FORMULA for Longitudinal CG

$$(X) = (A) - \frac{(Nose\ Gear\ Net\ Weight)(881) X (B) 157.75}{116.75 \text{ Nose and Main Landing Gear Weight Totaled/5269}} = (90.37) \text{ Inches}$$

CG Arm of Airplane = 100 + (X) = (190.37) 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

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

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

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	2164.00	0	0	2164.00
RIGHT SIDE	2224.00	0	0	2224.00
NOSE	881.00	0	0	881.00
AIRPLANE TOTAL AS WEIGHED				5269.00

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)	5269.00	190.37	1003.06
DRAINABLE UNUSABLE FUEL AT 6.75 POUNDS PER GALLON S/N 208B0001 Thru 208B0099 Not Modified With SK208-52 S/N 208B0001 Thru 208B0099 Modified With SK208-52 And S/N 208B0090 And On	20.1	205.7	4.97
	24.1	206.4	
BASIC EMPTY WEIGHT	5293.10	190.44	1008.03

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 RD ROW-LH REMOVED	25.85	213.55	5.52
SINGLE SEAT ASSY 4 TH 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 RD 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 GALLON. INCLUDE SINGLE SEAT ASSY 5 TH ROW-LH ADDITIONAL & BENCH ASSY 4 TH ROW-RH ADDITIONAL	5366.2	191.57	1028.05
APE STOL KIT STC #: SAO1805SE (+)	5.80	203.00	1.17
TOTAL	5372	191.58	1029.22
WEIGHT FROM TABLE 1 (-)	280.04	245.89	68.86
TOTAL	5091.96	188.60	960.36



AIRCRAFT WEIGHT & BALANCE

BASIC EMPTY WEIGHT AND CENTER OF GRAVITY TABLE

LOCATING PERCENT MAC

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

$$= \frac{188.60 - 177.57}{0.6640}$$

$$= 16.61 \%$$

PRIOR TO WEIGHT AND BALANCE CHECK				
AIRCRAFT TYPE : CESSNA C208B EX CARAVAN AIRCRAFT REGISTRATION : PK-SNT AIRCRAFT SERIAL NUMBER : 208B5707 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	-