AIRCRAFT WEIGHT & BALANCE

AIRCRAFT WEIGHT AND C.G DETERMINATION
REPORT NO   :   01/SNW/WB/XI/2020
DATE   :   29 NOVEMBER 2020

AIRCRAFT REGISTRATION   : PK-SNW
AIRCRAFT TYPE   : C208B EX
AIRCRAFT SERIAL NUMBER   : 208B-5579
PROPERTY OF   : PT. SMART CAKRWALA AVIATION
PLACE OF WEIGHING   : WICHITA
REASON OF WEIGHING   : APE STOL MODIFICATION
CONFIGURATION   : PAX
PERFORMED BY   : YINLING AIRCRAFT, INC.
   SIGNED: DATE: 11/25/2020
CHECKED BY   : YINLING AIRCRAFT, INC.
      SIGNED: DATE: 11/25/2020

RESULTS

EMPTY WEIGHT	**: 5359.30**
EMPTY C.G FROM DATTUM LINE	**: 191.75**
INDEX MAC %	**: 21.35**
VALID UNTIL	**: 24 NOVEMBER 2025**

WEIGHING EQUIPMENT

PART NUMBER	: UNK
SERIAL NUMBER	: UNK
VALIDATION	: UNK

APPROVED BY:

YANUAR ABDUL FATAH
CHIEF INSPECTOR

AIRCRAFT WEIGHT & BALANCE
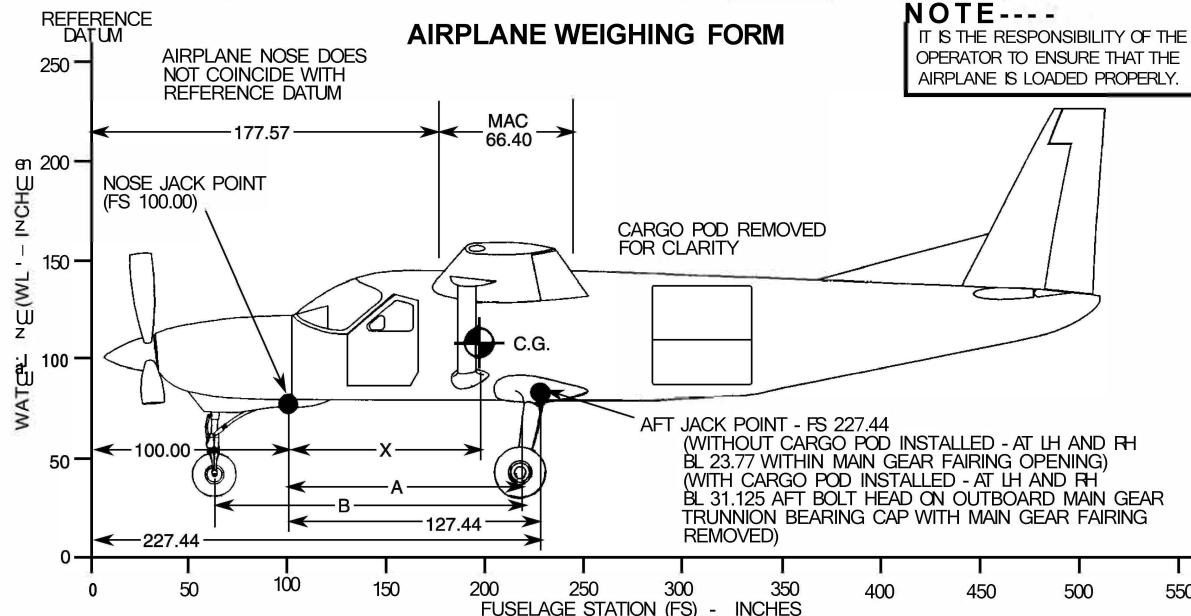
MODEL 208B CARAVAN I

WEIGHT AND BALANCE DATA

Cessna — A Textron Company

SERIAL NUMBER __ 208B5579_   REGISTRATION NUMBER _____ PK-SNW _____ DATE ___11/25/20___

AIRPLANE WEIGHING FORM

REFERENCE DATUM

AIRPLANE NOSE DOES NOT COINCIDE WITH REFERENCE DATUM

MAC 66.40

177.57

NOSE JACK POINT (FS 100.00)

CARGO POD REMOVED FOR CLARITY

C.G.

100.00

X

A

B

127.44

227.44

AFT JACK POINT - FS 227.44
(WITHOUT CARGO POD INSTALLED - AT LH AND RH BL 23.77 WITHIN MAIN GEAR FAIRING OPENING)
(WITH CARGO POD INSTALLED - AT LH AND RH BL 31.125 AFT BOLT HEAD ON OUTBOARD MAIN GEAR TRUNNION BEARING CAP WITH MAIN GEAR FAIRING REMOVED)

WATERLINE (WL) - INCHES

FUSELAGE STATION (FS) - INCHES

LOCATING CG WITH AIRPLANE ON LANDING GEAR

FORMULA for Longitudinal CG

$$(X) = (A)\ \underset{116.75}{\_}\ \frac{\text{(Nose Gear Net Weight)}(\ 873\ ) \times (B)\ 157.75}{\text{Nose and Main Landing Gear Weight Totaled}(\ 5258\ )} = (\ 90.56\ )\ \text{Inches}$$

CG Arm of Airplane= 100 + (X) = (190.56) 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

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

LEVELING PROVISIONS

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

LOCATING PERCENT MAC

FORMULA for Percent MAC

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

AIRPLANE AS WEIGHED TABLE

POSITION	SCALE READING	SCALE DRIFT	TARE	NET WEIGHT
LEFT SIDE	2152			2152
RIGHT SIDE	2233			2233
NOSE	873			873
AIRPLANE TOTAL AS WEIGHED				5258

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)	5258	190.56	1001.96
DRAINABLE UNUSABLE FUEL AT 6.75 POUNDS PER GALLON ·S¡◆·2888888◆·i:Ii:1·28888889·◆·et·Meei◆iee·1ₒ1iI·SI◆88·52· ·S •·2888888◆·it<IFI¢28888888·Meei#iee·◆ₒ<it·8◆288·62· And S/N 208B0090 And On	-29:-1- 24.1	206.4	4.97
BASIC EMPTY WEIGHT	5282.1	190.63	1006.93

AIRCRAFT WEIGHT & BALANCE

TABEL1

BASIC ITEM NOT INCLUDED WHEN WEIGHING	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT/1000 INCH POUNDS
APE STOL KIT STC #: SAO1805SE	5.80	203.00	1.17
BENCH ASSY	46.30	267.69	12.39
SINGLE SEAT ASSY	25.10	285.55	7.16
TOTAL	77.2	268.63	20.73

TABEL 2

DESCRIPTION OF ACTION PERFORMED	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT/1000 INCH POUNDS
TOTAL			

TABEL 3

AIRCRAFT WEIGHING REPORT	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT/1000 INCH POUNDS
AIRPLANE (CALCULATED OR AS WEIGHED) (INCLUDES ALL UNDRAINABLE FLUIDS AND FULL OIL)	5258	190.56	1001.96
WEIGHT FROM TABLE 1 (+)	77.2	268.63	20.73
TOTAL	5335.2	191.68	1022.70

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)	5335.2	191.68	1022.70
DRAINABLE UNUSABLE FUEL AT 6.75 POUNDS PER GALON S/N 208B0090 And On	24.1	206.4	4.97
BASIC EMPTY WEIGHT	5359.30	191.75	1027.67

LOCATING PERCENT MAC

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

$$= \frac{191.75 - 177.57}{0.6640}$$

$$= \boxed{21.35\ \%}$$

AIRCRAFT WEIGHT & BALANCE

PRIOR TO WEIGHT AND BALANCE CHECK

AIRCRAFT TYPE	:	**CESSNA C208B EX CARAVAN**
AIRCRAFT REGISTRATION	:	**PK-SNW**
AIRCRAFT SERIAL NUMBER	:	**208B-5579**
DATE OF WEIGHING	:	**25 NOVEMBER 2020**

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	-