

AIRCRAFT WEIGHT AND C.G DETERMINATION

REPORT NO : 01/WB/III/2021

DATE : 08 MARCH 2021

AIRCRAFT REGISTRATION	:	PK-SNG
AIRCRAFT TYPE	:	C208B EX
AIRCRAFT SERIAL NUMBER	:	208B-5543
PROPERTY OF	:	PT. SMART CAKRWALA AVIATION
PLACE OF WEIGHING	:	WICHITA
REASON OF WEIGHING	:	APE STOL MODIFICATION
CONFIGURATION	:	PAX
PERFORMED BY	:	YINLING AIRCRAFT, INC.
CHECKED BY	SIGNED:	DATE: 20/11/2019
	SIGNED:	DATE: 20/11/2019

RESULTS

EMPTY WEIGHT	:	5375.89
EMPTY C.G FROM DATTUM LINE	:	192.36
INDEX MAC %	:	22.27 %
VALID UNTIL	:	NOVEMBER 2024

WEIGHING EQUIPMENT

PART NUMBER	:	UNK
SERIAL NUMBER	:	UNK
VALIDATION	:	UNK

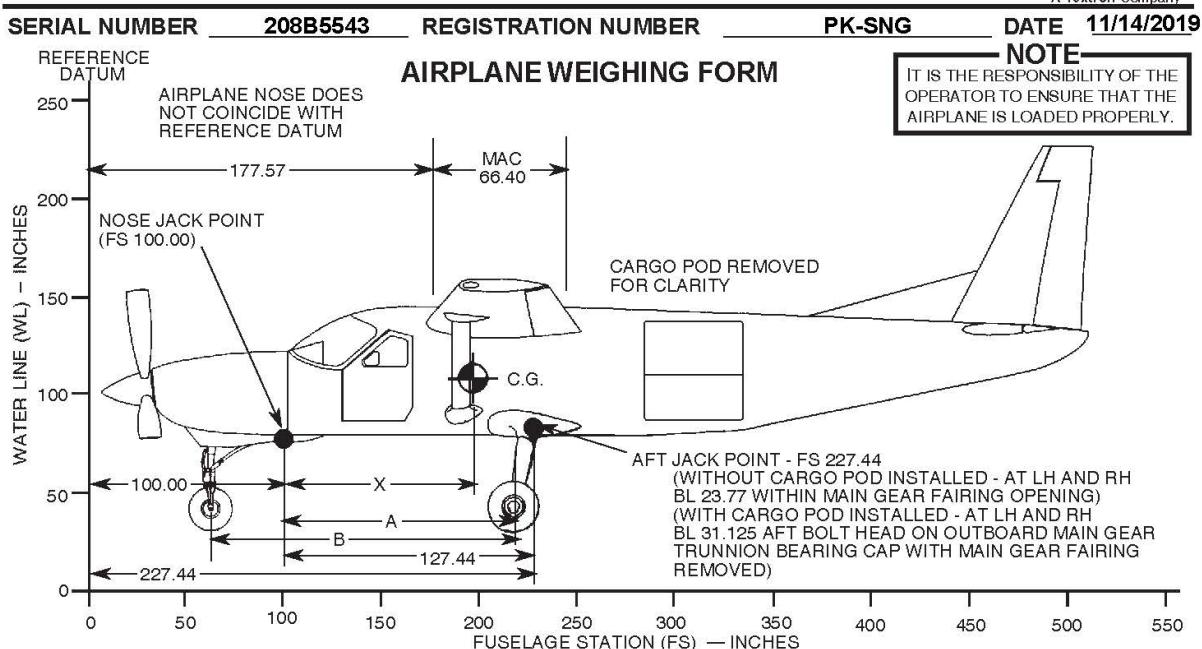
APPROVED BY:



**YANUAR ABDUL FATAH
CHIEF INSPECTOR**

MODEL 208B CARAVAN I

WEIGHT AND BALANCE DATA



LOCATING CG WITH AIRPLANE ON LANDING GEAR

FORMULA for Longitudinal CG

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

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

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

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

POSITION	SCALE READING	SCALE DRIFT	TARE	NET WEIGHT
LEFT SIDE	2176.00	0	0	2176.00
RIGHT SIDE	2240.00	0	0	2240.00
NOSE	870.00	0	0	870.00
AIRPLANE TOTAL AS WEIGHED				5286.00

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)	5286.00	190.79	1008.52
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	5310.10	190.86	1013.49

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

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

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
AFT COUCH, 2 PL	34.89	344.00	12.00
SINGLE SEAT ASSY	25.10	297.55	7.46
TOTAL	65.79	313.57	20.63

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)	5310.10	190.86	1013.49
WEIGHT FROM TABLE 1 (+)	65.79	313.57	20.63
TOTAL	5375.89	192.36	1034.12

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)			
BASIC EMPTY WEIGHT	5375.89	192.36	1034.12



AIRCRAFT WEIGHT & BALANCE

LOCATING PERCENT MAC

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

$$= \frac{192.36 - 177.57}{0.6640}$$

$$= 22.27 \%$$

PRIOR TO WEIGHT AND BALANCE CHECK				
AIRCRAFT TYPE : CESSNA C208B EX CARAVAN AIRCRAFT REGISTRATION : PK-SNG AIRCRAFT SERIAL NUMBER : 208B-5543 DATE OF WEIGHING : NOVEMBER 2019				
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	-