

AIRCRAFT WEIGHT AND C.G DETERMINATION

REPORT NO : 02/WB/SNO/IV/2022

DATE : 04 APRIL 2022

AIRCRAFT REGISTRATION : PK-SNO
AIRCRAFT TYPE : C 208B
AIRCRAFT SERIAL NUMBER : 208B-2375
PROPERTY OF : PT. SMART CAKRAWALA AVIATION
PLACE OF WEIGHING : NABIRE
REASON OF WEIGHING : PERIODIC INSPECTION
CONFIGURATION : **CARGO**
PERFORMED BY : AGUS SULAEMAN

SIGNED:



DATE: 04/04/2022

CHECKED BY

: YANUAR ABDUL FATAH

SIGNED:



DATE: 04/04/2022

RESULTS

EMPTY WEIGHT	: 4977.07
EMPTY C.G FROM DATTUM LINE	: 188.95
INDEX MAC %	: 17.13 %
VALID UNTIL	: APRIL 2027

WEIGHING EQUIPMENT

PART NUMBER	: TA4
SERIAL NUMBER	: 0730M310245
VALIDATION	: AUGUST 2022

APPROVED BY:



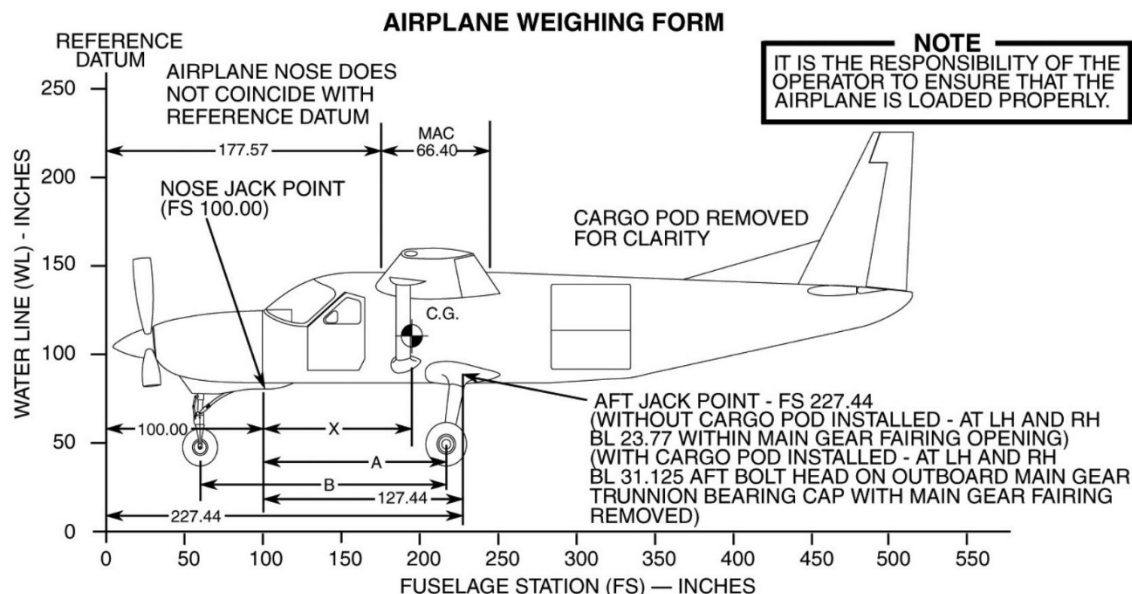
**YANUAR ABDUL FATAH
CHIEF INSPECTOR**

PK-SNO / 208B2375
NABIRE, 04 APRIL 2022

CESSNA
MODEL 208B G1000

AIRPLANE WEIGHING FORM

130620



LOCATING CG WITH AIRPLANE ON LANDING GEAR

FORMULA for Longitudinal CG

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

$$\text{CG Arm of Airplane} = 100 + (X) = () \text{ Inches Aft of Datum}$$

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	2214	0	0	2214
RIGHT SIDE	2213	0	0	2213
NOSE	832	0	0	832
AIRPLANE TOTAL AS WEIGHED				5259

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/100)
AIRPLANE (CALCULATED OR AS WEIGHED) (INCLUDES ALL UNDRAINABLE FLUIDS AND FULL OIL)	5259	191.8	1008.67
DRAINABLE UNUSABLE FUEL AT 6.7 POUNDS PER GALLON ON 208B0001 And 208B0003 Not Included With 208B0001 ON 208B0001 And 208B0003 Not Included With 208B0001 And S/N 208B0090 And On	24.1 24.1	206.4 206.4	4.1 5.0
BASIC EMPTY WEIGHT	5283.1	191.87	1013.67

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	30.86	177.55	5.47
SINGLE SEAT ASSY 3 ND ROW-LH REMOVED	30.86	213.55	6.59
SINGLE SEAT ASSY 4 ND ROW-LH REMOVED	30.86	249.55	7.70
BENCH ASSY 2 ND ROW-RH REMOVED	59.52	195.69	11.64
BENCH ASSY 3 ND ROW-RH REMOVED	59.52	231.69	13.79
BENCH ASSY 4 ND ROW-RH REMOVED	59.52	267.69	15.93
AFT COUCH, 2 PL REMOVED	34.89	347.14	12.11
TOTAL	306.03	239.29	73.23

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	5283.1	191.87	1013.67
WEIGHT FROM TABLE 1 (-)	306.03	239.29	73.23
TOTAL	4977.07	188.95	940.44

LOCATING PERCENT MAC

$$\begin{aligned}
 \text{CG Percent MAC} &= \frac{(\text{CG Arm of Airplane}) - 177.57}{0.6640} \\
 &= \frac{188.95 - 177.57}{0.6640} \\
 &= \mathbf{17.13\%}
 \end{aligned}$$

AIRCRAFT WEIGHT & BALANCE

PRIOR TO WEIGHT AND BALANCE CHECK				
AIRCRAFT TYPE : CESSNA C 208B CARAVAN AIRCRAFT REGISTRATION : PK-SN0 AIRCRAFT SERIAL NUMBER : 208B-2375 DATE OF WEIGHING : 04 APRIL 2022				
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	-
9	Single Seat	√	3 ea	30.86 lb/each
10	Bench	√	3 EA	59.52 lb/each
11	AFT Couch	√	2 PL	34.89 lb