



AIRCRAFT WEIGHT AND C.G DETERMINATION

REPORT NO : 01/WB/SN0/IV/2022

DATE : 04 APRIL 2022

AIRCRAFT REGISTRATION : PK-SN0
AIRCRAFT TYPE : C208B
AIRCRAFT SERIAL NUMBER : 208B-2375
PROPERTY OF : PT. SMART CAKRAWALA AVIATION
PLACE OF WEIGHING : NABIRE
REASON OF WEIGHING : PERIODIC INSPECTION
CONFIGURATION : **PAX**
PERFORMED BY : AGUS SULAEMAN
SIGNED:  DATE: 04/04/2022

CHECKED BY : YANUAR ABDUL FATAH
SIGNED:  DATE: 04/04/2022



RESULTS

| | |
|-----------------------------------|---------------------|
| EMPTY WEIGHT | : 5283.1 |
| EMPTY C.G FROM DATTUM LINE | : 191.87 |
| INDEX MAC % | : 21.43 |
| VALID UNTIL | : APRIL 2027 |

WEIGHING EQUIPMENT

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

APPROVED BY:

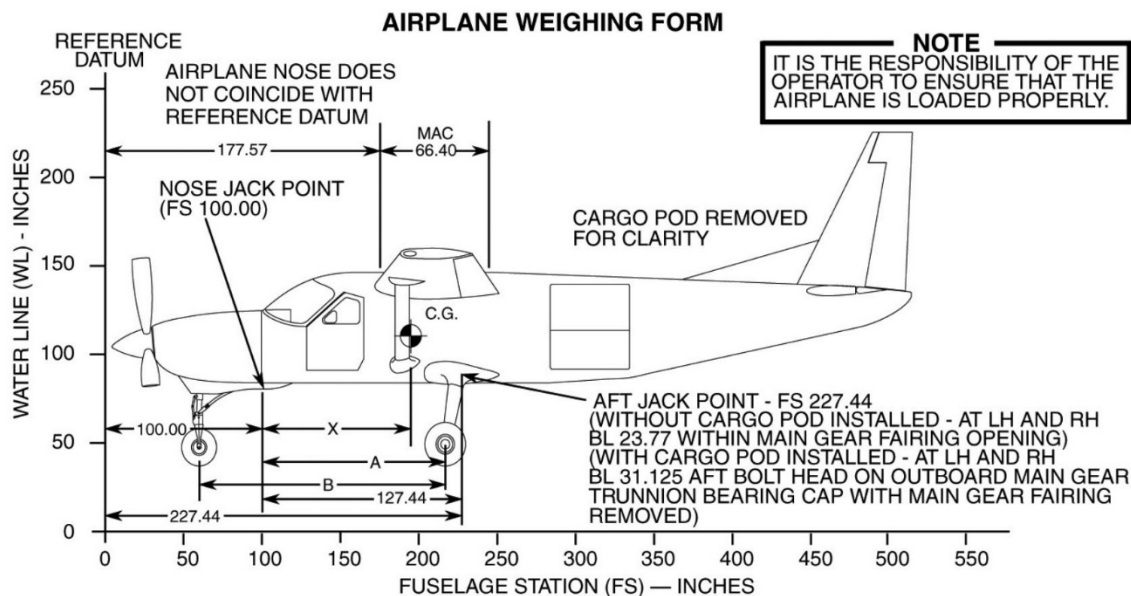


YANUAR ABDUL FATAH
CHIEF INSPECTOR

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

$$(X) = (A) - \frac{(\text{Nose Gear Net Weight})(\text{Distance from Datum to Nose Gear})}{\text{Nose and Main Landing Gear Weight Totaled}} = (\text{Distance from Datum to CG}) \text{ Inches}$$

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

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

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

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 This 208B0001 Not Measured With CRKES 02 ON 208B0001 This 208B0001 Not Measured With CRKES 02 And S/N 208B0090 And On | 24.1 | 206.4 | 5.0 |
| BASIC EMPTY WEIGHT | 5283.1 | 191.87 | 1013.67 |



AIRCRAFT WEIGHT & BALANCE

TABEL1

| BASIC ITEM NOT INCLUDED WHEN WEIGHING | WEIGHT (POUNDS) | CG ARM (INCHES) | MOMENT/1000 INCH POUNDS |
|---------------------------------------|--------------------|--------------------|----------------------------|
| | | | |
| | | | |
| | | | |
| TOTAL | | | |

TABEL 2

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

LOCATING PERCENT MAC

$$\begin{aligned}
 \text{CG Percent MAC} &= \frac{(\text{CG Arm of Airplane}) - 177.57}{0.6640} \\
 &= \frac{191.8 - 177.57}{0.6640} \\
 &= \mathbf{21.43\%}
 \end{aligned}$$

AIRCRAFT WEIGHT & BALANCE

| PRIOR TO WEIGHT AND BALANCE CHECK | | | | |
|--|---|------|-------|---------------|
| AIRCRAFT TYPE : CESSNA C208B GRAND 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 |