

AIRCRAFT WEIGHT AND C.G DETERMINATION

REPORT NO : 03/WB/SND/XII/2022

DATE : 06 DECEMBER 2022

AIRCRAFT REGISTRATION : PK-SND
 AIRCRAFT TYPE : PILATUS PORTER PC-6
 AIRCRAFT SERIAL NUMBER : 1018
 PROPERTY OF : PT. SMART CAKRAWALA AVIATION
 PLACE OF WEIGHING : PILATUS FACTORY
 REASON OF WEIGHING : INITIAL
 CONFIGURATION : AERIAL SURVEY
 PERFORMED BY : PILATUS FACTORY
 SIGNED: DATE: 31 MAY 2022

CHECKED BY : ISTIONO. (TRANSFER TO SCA FORM)
 SIGNED:  DATE: 06 DECEMBER 2022

RESULTS

EMPTY WEIGHT	: 1455.9 Kg
EMPTY C.G FROM DATTUM LINE	: 3.381 M
INDEX MAC %	: 20.05 %
VALID UNTIL	: MAY 2027

WEIGHING EQUIPMENT

PART NUMBER	: N/A
SERIAL NUMBER	: N/A
VALIDATION	: N/A

APPROVED BY:



**YANUAR ABDUL FATAH
CHIEF INSPECTOR**

AIRCRAFT WEIGHT & BALANCE

TABEL 1

DESCRIPTION OF ACTION PERFORMED	WEIGHT (kg)	CG ARM (m)	MOMENT mKg
1 st ROW PAX SEAT REMOVED	9	3.90	35.1
2 nd ROW PAX SEAT REMOVED	9	4.60	41.4
TOTAL	18	4.25	76.5

TABEL 2

AIRCRAFT WEIGHT CALCULATION	WEIGHT (kg)	CG ARM (m)	MOMENT mKg
AIRCRAFT EMPTY WEIGHT	1473.9	3.391	4999
WEIGHT FROM TABLE 1 (-)	18	4.25	76.5
TOTAL	1455.9	3.381	4922.5

CENTER of GRAVITY

$$\begin{aligned}\text{C of G Position from datum} &= \frac{\text{TOTAL MOMENT}}{\text{TOTAL WEIGHT}} \\ &= \frac{4922.5}{1455.9} \\ &= 3.381 \text{ m}\end{aligned}$$

LOCATING PERCENT MAC

$$\begin{aligned}\text{As \% MAC} &= \frac{\text{C of G} - 3.0 \text{ m}}{1.9 \text{ m}} \times 100 \\ &= \frac{3.381 - 3.0 \text{ m}}{1.9 \text{ m}} \times 100 \\ &= 20.05 \%\end{aligned}$$

AIRCRAFT WEIGHT & BALANCE

PRIOR TO WEIGHT AND BALANCE CHECK				
AIRCRAFT TYPE : PILATUS PORTER PC-6 AIRCRAFT REGISTRATION : PK-SND AIRCRAFT SERIAL NUMBER : 1018 DATE OF WEIGHING : 31 MAY 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	8 EA	-
7	Life Raft	X	N/A	-
8	Survival Kit	X	N/A	-

8. State of Empty Weight

Whenever equipment is changed, or after any repair to the aircraft which affects the weight, the relevant items must be inserted in the table below and the new empty weight and moment have to be calculated.

Aircraft Registration No: <u>PK-SND</u>		Aircraft Serial No: <u>1018</u>		
DATE	ITEM	WEIGHT (kg of lb)	ARM (m or in)	MOMENT (mkg or lbin)
31 MAY 2022	Empty weight of new airplane according to equipment list.	1473.9	3.396	4999
	Modifications:			