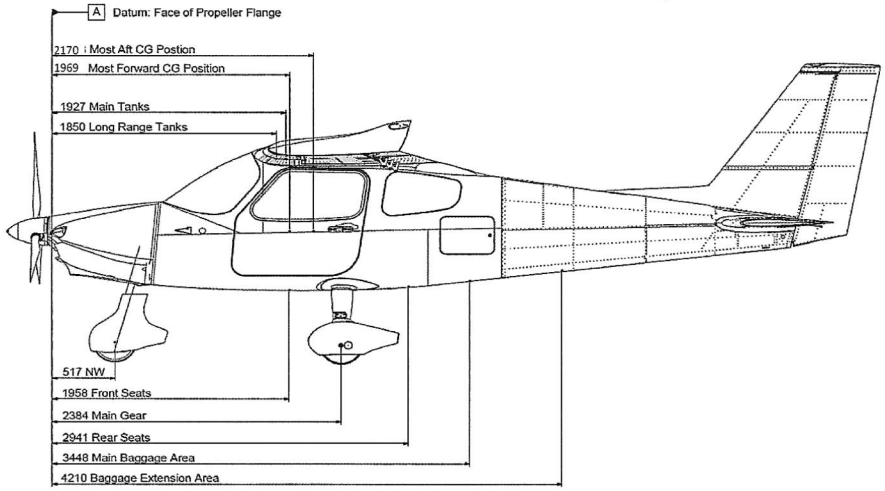
SLING AIRCRAFT (PTY) LTD
MASS AND BALANCE REPORT

AIRCRAFT TYPE : Sling 4 HW
SERIAL NO. : 018g
REGISTRATION : ZU-ALS



The method of calculation of the aircraft empty mass, total aircraft moment, centre of gravity and percentage mean aerodynamic chord appear from formulae set out in the table and the formulae below.
(Comply with the provisions of the aircraft maintenance manual when performing aircraft empty mass and balance)

	Item	Weight [kg]	Arm [mm]	Moment [kg.mm]
Aircraft Empty CG	Nose Wheel	W_N = 118 kg	L_N = 517 mm	$M_N = W_N \times L_N$ = 61006 kg.mm
	Left Main Wheel	W_L = 282 kg	L_L = 2384 mm	$M_L = W_L \times L_L$ = 672288 kg.mm
	Right Main Wheel	W_R = 279 kg	L_R = 2384 mm	$M_R = W_R \times L_R$ = 665136 kg.mm
	Computed CG Empty	Empty weight W_E = 679.0 kg		Total aircraft moment: M_T = 1398430 kg.mm

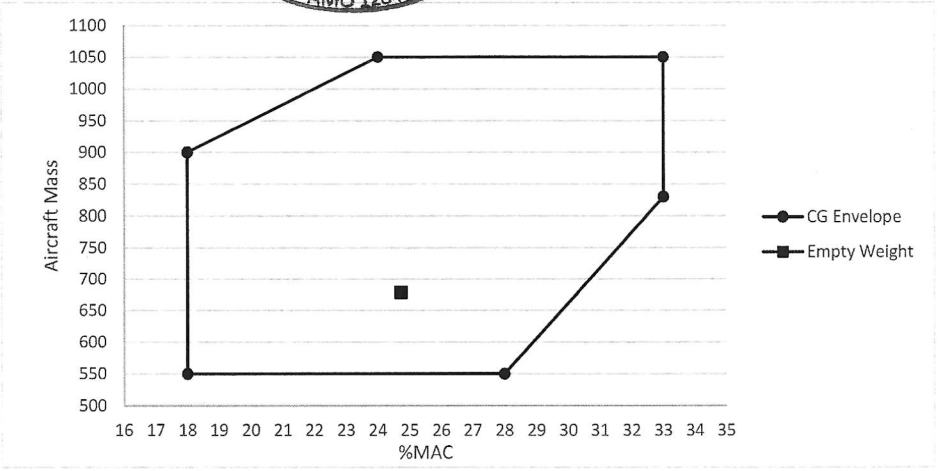
$$\text{Aircraft CG} = \frac{\text{Total aircraft moment}}{\text{Aircraft empty weight}} = \frac{M_T}{W_E} = \frac{1398430}{679.0} = 2060 \text{ mm}$$

$$\text{CG as percentage of MAC} = \frac{(CG - 1728)}{1340} \times 100 = \frac{2060 - 1728}{1340} \times 100 = 24.7\ \%$$

I hereby certify that the information as recorded above is correct in every respect to the best of my knowledge

Name: S. Theron Signature: .....

Stamp: SLING AIRCRAFT Inspector 02 AMO 1264 Date: 24 05 2024



NOTES:
Empty header tank