SLING AIRCRAFT (PTY) LTD
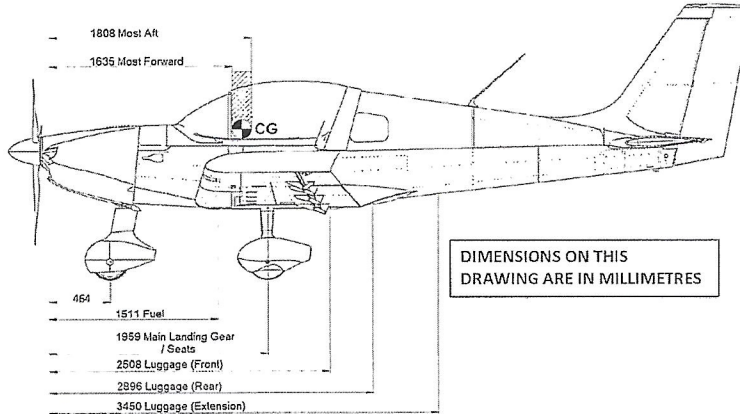## MASS AND BALANCE REPORT

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N 425SK

Empty: 932.56 lbs.

CG : 66.69 inch

Empty Moment: 62192.43

AIRCRAFT TYPE : Sling LSA

SERIAL NO. : 425a

REGISTRATION : N425SK

► |A| * DATUM IS SET AT THE CENTREPOINT
OF THE FRONT FACE OF THE PROP FLANGE

1808 Most Aft
1635 Most Forward
CG
464
1511 Fuel
1959 Main Landing Gear / Seats
2508 Luggage (Front)
2896 Luggage (Rear)
3450 Luggage (Extension)

DIMENSIONS ON THIS
DRAWING ARE IN MILLIMETRES

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]		
	Nose Wheel	W_N =	75.0 kg	L_N	=	464 mm	$M_N = W_N \times L_N$	=	34800 kg.mm
Aircaft Empty CG	Left Main Wheel	W_L =	177.0 kg	L_L	=	1959 mm	$M_L = W_L \times L_L$	=	346743 kg.mm
	Right Main Wheel	W_R =	171.0 kg	L_R	=	1959 mm	$M_R = W_R \times L_R$	=	334989 kg.mm
	Computed CG Empty	Empty weight					Total aircraft moment:		
		W_E =	423.0 kg				M_T	=	716532 kg.mm

$$\text{Aircraft CG} = \frac{\text{Total aircraft moment}}{\text{Aircraft empty weight}} = \frac{M_T}{W_E} = \frac{716532}{423.0} = 1694 \text{ mm}$$

$$\text{CG as percentage of MAC} = \frac{(CG - 1366)}{1339} \times 100 = \frac{1694 - 1366}{1339} \times 100 = 24.5 \%$$

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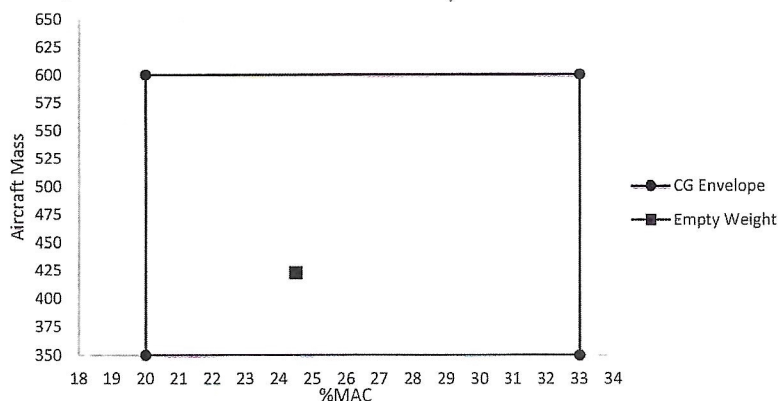
Name: Stephan Theron

Signature: ....

Stamp: ....

stamp: SLING AIRCRAFT Inspector 26 Manuf. Org. M677

Date: 12 11 2024

CG Envelope

NOTES:
MAC Sling