

TL 3000 Sirius

VFR Flight

Weight & Balance

Registration: **PH - 4H1**

Standard tanks

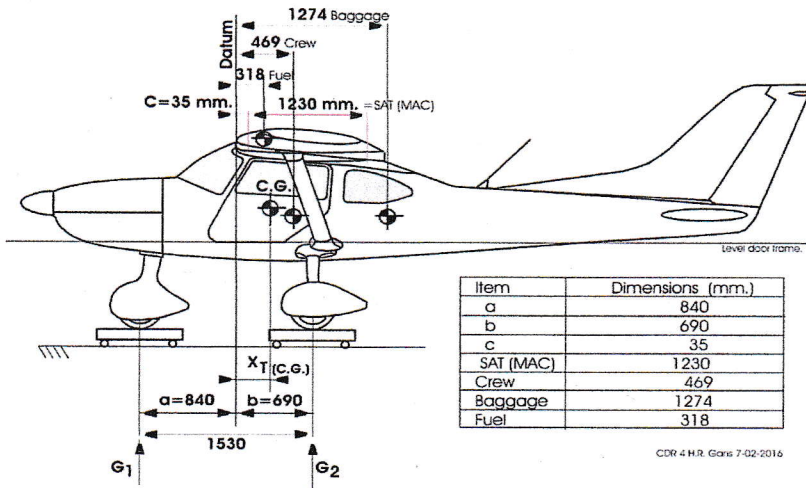
Pilot's Operating Handbook
Section 6 page 6-6

Date:		Fuel flow c.a.: 16,2 ltr/h.	75 % pwr.
Pilot:		L tank fuel: 65 ltr.	Total usable fuel in airplane 75% pwr. Ca.16,2 ltr./h
Co Pilot:		R tank fuel: 65 ltr.	
Passenger:		Total fuel: 130 ltr.	120 ltr. Endurance: 7:24 h:m.max.

Configuration: (Empty weight including the operating fluids of the engine and standard equipment).

Datum point (DP): Wing leading edge.

SAT (MAC)= Length of central aerodynamic chord of wing.



Item	Dimensions (mm.)
a	840
b	690
c	35
SAT (MAC)	1230
Crew	469
Baggage	1274
Fuel	318

Flight and operational manual	
Measured value of aircraft:	
SAT (MAC)=	1230 mm.
G1 = Weight sheet	83 kg.
G2 = Weight sheet	239,2 kg.
Gvzl =Weight sheet	322,2 kg.
La =	840 mm.
Lb =	690 mm.
L a+b =	1530 mm.
C =	35 mm.

Weight and Balance

Weight sheet and determination of centre of gravity

List 1 and 2 Serial no.: 10 SI 18 TL 3000 Sirius PH-4H1

	Weight (kg):	Distant from DP (mm)	Moment (kg mm.)
--	--------------	----------------------	-----------------

Empty aeroplane

Nose wheel	G1 (Weight sheet)	83,0	a= -840	-69720,0	
Main undercarriage	G2 (Weight sheet)	239,2	b= 690	165048,0	
Total empty Weight:	Gvzl (Weight sheet)	322,2	kg.	Moment:	95328,0 kgmm.

(Oil and coolant including)

Maximum crew weight 180 kg.

Maximum weight in baggage compartment 25 kg.

Crew (two persons)		x	469	=	
Baggage: (luggage)		x	1274	=	
Zero fuel weight:					

Fuel ltr.:		0,72 kg/ltr.	G Fuel		x	318	=	
Total weight:	G =	kg.	Total Moment:					kgmm.

CENTER OF GRAVITY (M of DATUM POINT) is total moment/ total weight of the airplane

$$C.G. = X_T \frac{\text{Total moment}}{\text{Total weight}} = \text{mm.}$$

C.G. v % MAC (MAC = 1230 mm.) (MAC = Mean Aerodynamic Chord)

$$X_T - C(35) = \text{mm.}$$

$$X_{CT} \% \text{ MAC} = \frac{X_T - 35}{\text{SAT}} \times 100 \% = \text{mm.} \times 100 \% = \text{\% MAC}$$

(SAT = 1230)

Permitted position of C.G. in flight is 22 up to 32,5 % MAC

Hoewel wij de uiterste zorgvuldigheid hebben betracht, blijft de verantwoordelijkheid van het gebruik van dit werkblad bij de gebruiker.