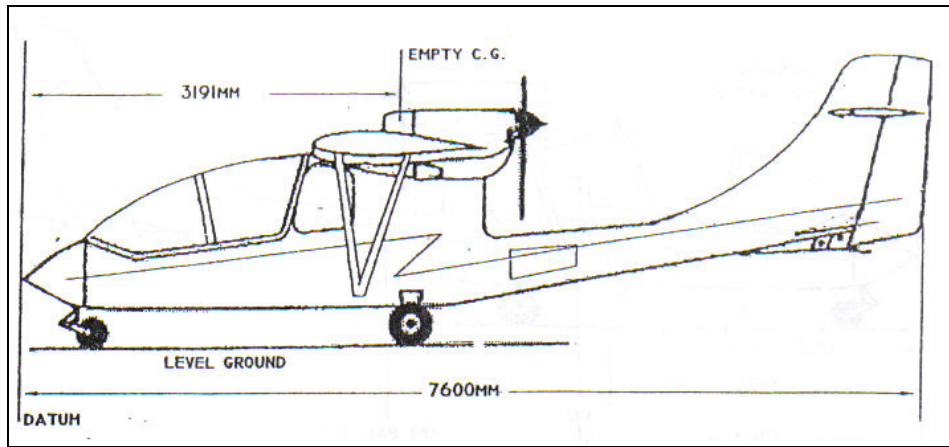


SAMPLE WEIGHT AND BALANCE RECORD FORM (METRIC)



WEIGHT AND BALANCE RECORD

FORM LAA/WB (METRIC)
Date: APRIL 2009

Aircraft Type LAA CLOUDPUSHER Serial No. 001 Reg G-VLAA

Datum FRONT OF NOSE BOWL Levelling Reference SEAT RAIL

CofG: Fwd Limit 2847 mm. Aft Limit. 3007 mm. *Fwd/Aft of datum
(Delete as required)

MTOW 650 kgs Max Empty Weight _____ kgs (Microlights only)

Cockpit placards regarding loading limitations SOLO, FRONT SEAT ONLY
MAX BAGGAGE 30 KGS

EMPTY WEIGHT CALCULATIONS

ITEM	SCALE READING (kgs)	CORRECTION (kgs)	NET WEIGHT (kgs)	ARM (mm)	MOMENT (kg.mm)
LEFT WHEEL	<u>183.5</u>	<u>+2</u>	<u>185.5</u>	<u>3327</u>	<u>617158.5</u>
RIGHT WHEEL	<u>185.0</u>	<u>+1</u>	<u>186.0</u>	<u>3327</u>	<u>618822.0</u>
NOSE/TAILWHEEL	<u>20.0</u>	<u>0</u>	<u>20.0</u>	<u>660</u>	<u>13200.0</u>
LESS USABLE FUEL	-	-	-	-	-
			EMPTY WEIGHT	391.0	TOTAL MOMENT
					1249180.5

EMPTY CofG = $\frac{\text{TOTAL MOMENT}}{\text{EMPTY WEIGHT}} = \frac{1249180.5}{391.5} = \underline{3190.8}$ mm *Fwd/Aft of Datum
(Delete as required)

BALLAST AND OPTIONAL EQUIPMENT INSTALLED AT TIME OF WEIGHING

(For example: Fixed ballast, Ballistic parachute, Fire Extinguisher, First Aid Kit etc.)

ITEM	TYPE	WEIGHT	ARM	MOMENT
<u>FIRE EXTINGUISHER</u>	<u>HALIDE</u>	<u>2.7</u>	<u>1200</u>	<u>3240</u>
<u>FIRST AID KIT</u>		<u>1.1</u>	<u>2700</u>	<u>2970</u>
<u>EMERGENCY</u>				
<u>ESCAPE AXE</u>	<u>FOLDING</u>	<u>1.0</u>	<u>1710</u>	<u>1710</u>
<u>BRS</u>	<u>LAST CHANZ</u>	<u>4.8</u>	<u>3000</u>	<u>14400</u>

Aircraft Weighed By: J ANYBODY

Scales Calibration Date: 4th JUNE 2008

Supervising LAA Inspector: P.SOMEONE
or Licensed Engineer

Signature: P Someone

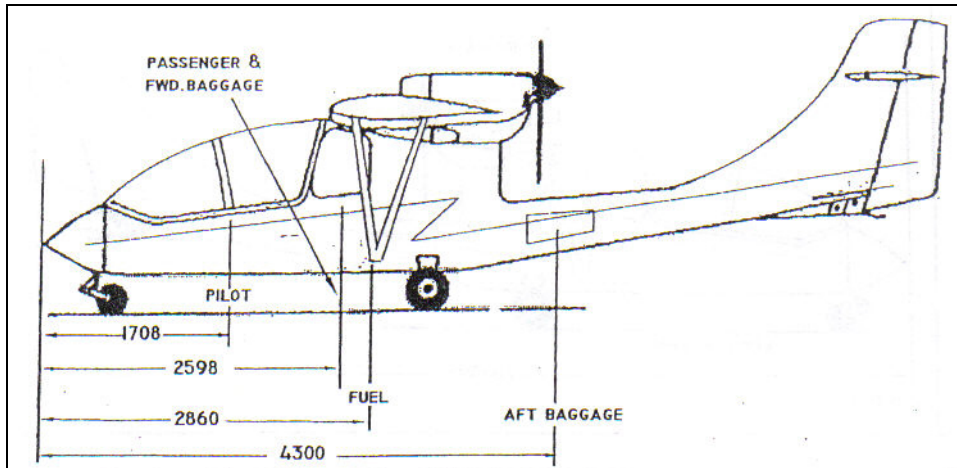
LAA Inspectors Number: LAA 123
or CAA Approval No.

Date of Weighing: 10th JANUARY 2009

Next Weighing due: DECEMBER 2018

IT IS MANDATORY THAT MICROLIGHTS ARE RE-WEIGHED AT INTERVALS NOT EXCEEDING 5 YEARS.
IT IS RECOMMENDED THAT GROUP "A" AIRCRAFT ARE RE-WEIGHED AT INTERVALS NOT EXCEEDING 10 YEARS.
AIRCRAFT MUST BE RE-WEIGHED AND A NEW WEIGHT AND BALANCE SHEET SHOULD BE CREATED AFTER SIGNIFICANT MODIFICATION OR AFTER RE-COVERING OR PAINTING AND AT INTERVALS TO MONITOR WEIGHT GROWTH.

SAMPLE LOADING EXAMPLES (METRIC)



VARIABLE LOAD ITEMS

ITEM	QTY	WEIGHT (kgs)	ARM (mm)	MOMENT (kg.mm)
PILOT	1	USE ACTUAL	1708	-
PASSENGER	1	USE ACTUAL	2598	-
PASSENGER	-	USE ACTUAL	-	-
MAXIMUM FUEL - MAIN TANK	50 LITRES	36	2860	5148000
MAXIMUM FUEL - Aux. TANK(S)	LITRES	-	-	-
MAXIMUM ALLOWED BAGGAGE	1	30	2598	77940
MAXIMUM ALLOWED BAGGAGE	-	-	-	-
OTHER	-	-	-	-

WEIGHT AND BALANCE CHANGES IN SERVICE	WEIGHT (kgs)	CG/ARM (mm)	MOMENT (kg.mm)
DATA FROM LAST WEIGHING =	391.5	3190.8	1249180.5
CHANGE DUE TO: CHANGE OF PROPELLER	(± wt change) + 4.0	(item CG position) X 4254	= 17016
CHANGE DUE TO: REMOVE BATTERY FROM AFT POSITION	(± wt change) - 6.0	(item CG position) X 4000	= - 24000
CHANGE DUE TO: ADD HEAVIER BATTERY TO FWD POSITION	(± wt change) + 9.0	(item CG position) X 2500	= 22500
REVISED EMPTY WEIGHT =	398.5	REVISED TOTAL MOMENT =	1264696.5

REVISED EMPTY CofG = $\frac{\text{TOTAL MOMENT}}{\text{EMPTY WEIGHT}} = \frac{1264696.5}{398.5} = 3173.6$ mm *Fwd/Aft of Datum (Delete as required)

LOADING EXAMPLES

NOTE: For loading examples to show compliance with CS-VLA or BCAR Section S a pilot weight of between 55kgs and 86kgs, and a passenger weight of 0 to 86kgs must be able to be accommodated with a minimum of 1 hour's fuel. See Guidance on Weight and Balance and example sheets.

ITEM	MOST FORWARD CofG LOADING			MOST REARWARD CofG LOADING		
	WEIGHT (kgs)	ARM (mm)	MOMENT (kg.mm)	WEIGHT (kgs)	ARM (mm)	MOMENT (kg.mm)
A/C EMPTY WEIGHT	398.5	3173.6	1264696.5	398.5	3173.6	1264696.5
PILOT	86	1708	146888	55	1708	93940
PASSENGER	86	2598	223428	-	-	-
BAGGAGE	30	2598	77940	-	-	-
OTHER	-	-	-	-	-	-
ZERO FUEL TOTALS	600.5		1712952.5	453.5		1358636.5
ZERO FUEL CG =	$\frac{\text{MOMENT}}{\text{WEIGHT}} =$	2852.5		$\frac{\text{MOMENT}}{\text{WEIGHT}} =$	2995.9	
FUEL (TO GROSS WEIGHT MAX)	36	2860	102960	36	2860	102960
TOTALS	636.5		1815912.5	489.5		1461596.5
LOADED CofG =	$\frac{\text{MOMENT}}{\text{WEIGHT}} =$	2853		$\frac{\text{MOMENT}}{\text{WEIGHT}} =$	2985.9	

SIGNATURE *J Anybody*
DATE *11th January 2009*