



# WEIGHT AND BALANCE REPORT

FORM LAA/WB (METRIC)  
Date: April 2009

Aircraft Type JODEL D120 Serial No. 462 Reg G-AYGT

Datum LEADING EDGE OF WING Levelling Reference BAGGAGE COMPARTMENT

CofG: Fwd Limit 290 mm. Aft Limit: 580 mm. \* ~~Fwd~~ Aft of Datum  
(Delete as required)

MTOW 650 kgs Max Empty Weight N/A kgs (Microlights Only)

Cockpit Placards regarding load limitations \_\_\_\_\_

**EMPTY WEIGHT CALCULATIONS**

ITEM	SCALE READING (kgs)	CORRECTIONS (kgs)	NET WEIGHT (kgs)	ARM (mm)	MOMENT (kg.mm)
LEFT WHEEL	188.2	0	188.2	54	10162.8
RIGHT WHEEL	183.9	0	183.9	54	9930.6
NOSE/TAIL WHEEL	23.2	0	23.2	4654	107972.8
USEABLE FUEL			0		0
EMPTY WEIGHT			395.3	TOTAL MOMENT	128066.2

EMPTY CofG =  $\frac{\text{TOTAL MOMENT}}{\text{EMPTY WEIGHT}}$  =  $\frac{128066.2}{395.3}$  = 323.97 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, Sandwiches etc.)

ITEM	TYPE	WEIGHT	ARM	MOMENT
FIRE EXTINGUISHER	HALON	2	83	166
				0
				0
				0
				0
				0

Aircraft Weighed By: James Bentley Scales Calibration Date: 10/09/2015

Supervising LAA Inspector: Michael Bentine Signature: \_\_\_\_\_  
Or Licenced Engineer

LAA Inspector Number: 46735 Date Of Weighing: 13/05/2016  
Or CAA Approval No.

Next Weighing Due: 13/05/2026

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 RECOVERING OR PAINTING AND AT INTERVALS TO MONITOR WEIGHT GROWTH.



## VARIABLE LOAD ITEMS

ITEM	QTY	WEIGHT (kgs)	ARM (mm)	MOMENT (kg.mm)
PILOT	1		540	0
PASSENGER			540	0
PASSENGER (Rear)				0
MAXIMUM FUEL - MAIN TANK LITRES	115	82.8	1000	82800
MAXIMUM FUEL - AUX. TANK(S) LITRES		0		0
MAXIMUM ALLOWED BAGGAGE			1180	0
OTHER				0

WEIGHT AND BALANCE CHANGES IN SERVICE	WEIGHT (kgs)	CG/ARM (mm)	MOMENT (kg.mm)
DATA FROM LAST WEIGHING =	395.3	323.97	128066.2
CHANGE DUE TO:	+ - wt change 0	item CG position X 0	= 0
CHANGE DUE TO:	+ - wt change 0	X 0	= 0
CHANGE DUE TO:	+ - wt change 0	X 0	= 0
REVISED EMPTY WEIGHT =	395.3	REVISED TOTAL MOMENT =	128066.2

REVISED EMPTY CofG =  $\frac{\text{TOTAL MOMENT}}{\text{EMPTY WEIGHT}} = \frac{128066.2}{395.3} = 323.97 \text{ mm}$  \* 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 hours fuel. See Guidance on Weight and Balance and example sheets.

MOST FORWARD CofG LOADING			
ITEM	WEIGHT (kgs)	ARM (mm)	MOMENT (kg.mm)
A/C EMPTY WEIGHT	395.3	323.97	128066.2
PILOT	55	540	29700
PASSENGER			0
BAGGAGE			0
OTHER			0
ZERO FUEL TOTALS	450.3	<del>                    </del>	157766.2
ZERO FUEL CG =	$\frac{\text{MOMENT}}{\text{WEIGHT}} =$		350.36 mm
FUEL (TO GROSS WEIGHT MAX)	82.8	1000	82800
TOTALS	533.1	<del>                    </del>	240566.2
ZERO FUEL CG =	$\frac{\text{MOMENT}}{\text{WEIGHT}} =$		451.26

MOST REARWARD CofG LOADING		
WEIGHT (kgs)	ARM (mm)	MOMENT (kg.mm)
395.3	323.97	128066.2
86	540	46440
86	540	46440
1	1180	1180
		0
568.3	<del>                    </del>	222126.2
$\frac{\text{MOMENT}}{\text{WEIGHT}} =$		390.86 mm
82.8	1000	82800
651.1	<del>                    </del>	304926.2
$\frac{\text{MOMENT}}{\text{WEIGHT}} =$		468.32

SIGNATURE:  
DATE: 13th May 2016