

Weight / Balance & Equipment List Revision

FLITE ELECTRONICS, INC. - DG2R767K
 4786 AIRPORT PARKWAY ADDISON TX 75001-3363
 972-239-3791

A/C Tail # : N165PS
Register Name : JOHN PHINIZY
Name 2 :
Address 1 : PHINDOGAIR LLC
Address 2 : 2004 CREOLE DR
City, State, PC : AUSTIN, TX 78727-3420

A/C Make : DIAMOND
A/C Model : DA-40
A/C Serial # : 40.523
WO Ref # : 12672
WB Date : Jul-10-2006
WB ID # : 419

Previous data taken from document dated May-17-2005 Previous useful load = 826.00

Model / Part #	Description	(LB / IN)	Weight	CG/Arm	Moment
		Previous data ->	1709.00	96.48	164889.33
NO ITEMS REMOVED					
*INSTALLED					
GDL-69A	XM WEATHER/RADIO DATALINK (p/n 011-00987-00)		2.80	163.40	457.52
GA-55	XM ANTENNA p/n 011-01033-00		0.40	204.00	81.60
INSTALLED	2 Items @		3.20	168.48	539.12
NEW DATA >>	NEW USEFUL LOAD = 822.80		1712.20	96.62	165428.45

This weight and balance document modifies past existing weight and balance data contained in the aircraft records. This facility cannot verify that the existing weight and balance data contained in the aircraft records reflect the correct weight and balance of this aircraft. Any inaccuracies in past data will be mathematically carried forward with this document. This facility cannot verify the accuracy of past data and is not responsible for any past weight and balance data or computations. It is the responsibility of the airplane owner and/or pilot to ensure that the aircraft is loaded properly for flight.

GROSS WEIGHT 2535.00 LBS

Mark Pledger

7-10-06

Authorized Individual : DG2R767K MARK PLEDGER for Flite Electronics

Model: DA40



Aircraft Serial No.:	40.523
Registration:	N165PS
Issue Date:	17.05.05

Original

Aircraft Specific Weighting Report

Data with reference to the Type Certificate Data Sheet and the Flight Manual

Reference Plane: Vertical plane 2194 mm(86.38 in) in front of wing leading edge at root rib.
 Horizontal reference line: Wedge 600:31 (2.96°), 2910mm (114.57 in) aft of step in the cockpit rim.
 Equipment List dated: 17.05.05
 Cause for Weighing: Original

ORIGINAL

Weight and Balance Calculations

Weight Condition:

Include brake fluid, engine oil and unusable fuel (2 liters/0.5 US gal on each side).

Empty Weight:

Finding Arm: (Measured)

Support	Gross		Tare		Net Weight	
	kg	lbs	kg	lbs	kg	lbs
Front, G ₂	128.4	283.0	0	0	128.4	283.0
Main, G _{1LH}	313.0	690.0	0	0	313.0	690.0
Main, G _{1RH}	333.8	736.0	0	0	333.8	736.0
EMPTY WEIGHT, G					775.2	1709.0

	Lever Arm	
	mm	in.
X ₂	960	37.80
X _{1LH}	2746.5	108.13
X _{1RH}	2746.5	108.13

Empty Weight Centre of Gravity, X_{CG}:

Empty Weight CG Formula

$$X_{CG} = \frac{((G_{1LH} + G_{1RH}) * X_1) + (G_2 * X_2)}{G_2 + G_{1LH} + G_{1RH}} = \begin{matrix} 2.451 \text{ m} \\ 96.483 \text{ in.} \end{matrix}$$

Empty Weight Moment, M:

Empty Weight Moment Formula

$$M = G \times X_{CG} = \begin{matrix} 1899.73 \text{ kg}\cdot\text{m} \\ 164889.33 \text{ in}\cdot\text{lbs} \end{matrix}$$

Maximum Permitted Useful Load:

Maximum Ramp Weight	1150.0 kg	2535 lbs
Empty Weight	775.2 kg	1709.0 lbs
Maximum Useful Load	374.8 kg	826.0 lbs

Data to be entered into the Flight Manual:

Empty Weight, G:	Empty Weight Moment, M:
775.2 kg	1899.73 kg·m
1709.0 lbs	164889.33 in·lbs

Place: D.A.I.C. - CYXU
 Date: 17.05.05

Authorizing Stamp

WEIGHT & BALANCE

Authorizing Signature

SUPERCEDED

DATE 7-10-06