

**EASTERN AIR EXECUTIVE LTD.**

**EAE/FORM/20**

**MASS AND CENTRE OF GRAVITY SCHEDULE**

A/C DESIGNATION: PA28-151 (Modified)      A/C REGISTRATION: G-BSCY

CONSTRUCTOR: Piper Aircraft Corp.      SERIAL No.: 28-7515046

MAXIMUM AUTHORISED WEIGHT: 1055 kg (2325 lbs)

CENTRE OF GRAVITY LIMITS: As defined in the Flight Manual/Pilot's Operating Handbook

**PART A: BASIC WEIGHT**

THE BASIC WEIGHT OF THE AIRCRAFT AS CALCULATED FROM WEIGHING  
REPORT REFERENCE: EAE/WR/SCY/10688 DATED: 11<sup>th</sup> September 2006 IS: 1495.44 lbs.

THE CENTRE OF GRAVITY OF THE AIRCRAFT IN THE SAME CONDITION AT  
THIS WEIGHT AND WITH THE LANDING GEAR EXTENDED IS: 85.10 inches aft of the datum.

THE TOTAL MOMENT ABOUT THE DATUM IN THIS CONDITION IS: 127256.44 lbs. ins.

**NOTE:** THE DATUM IS: 78.4 inches ahead of the wing leading edge at the intersection of the tapered  
Section THIS IS DEFINED IN THE FLIGHT MANUAL. ALL LEVER ARMS ARE  
DISTANCES IN INCHES AFT OF THE DATUM.

THE BASIC WEIGHT INCLUDES THE WEIGHT OF THE UNUSABLE FUEL WHICH IS: 12 lbs  
IT ALSO INCLUDES FULL ENGINE OIL AND THE WEIGHT OF THE FOLLOWING:

**PART B: VARIABLE LOAD**

THE WEIGHT AND LEVER ARMS OF THE VARIABLE LOAD ARE SHOWN BELOW.  
THE VARIABLE LOAD DEPENDS UPON THE EQUIPMENT CARRIED FOR THE PARTICULAR ROLE:

<u>ITEM</u>	<u>WEIGHT (LBS)</u>	<u>LEVER ARM (INS)</u>	<u>MOMENT (LB.INS)</u>
PILOT	USE ACTUAL	80.5	

**NOTE:** THE ACTUAL WEIGHT OF THE PILOT MUST BE USED FOR AIRCRAFT NOT EXCEEDING  
12,500 LBS MTWA, WITH LESS THAN 12 PERSONS SEATING CAPACITY.

**EAE LTD. MASS AND CENTRE OF GRAVITY SCHEDULE FOR: G - BSCY**

Contd.

**PART C: LOADING INFORMATION (DISPOSABLE LOAD)**

**NOTE:** THE TOTAL MOMENT CHANGE WHEN THE LANDING GEAR IS RETRACTED, IN LB.INS, IS: N/A

THE APPROPRIATE LEVER ARMS ARE:

<b><u>ITEM:</u></b>	<b><u>WEIGHT (LBS)</u></b>	<b><u>LEVER ARM (INS)</u></b>	<b><u>MOMENT (LB.INS)</u></b>
FUEL IN TANKS (MAX 288 lbs)		95.00	
PAX ROW 1 SEATS		80.50	
PAX ROW 2 SEATS		118.10	
REAR BAGGAGE		142.80	

**NOTE:** FUEL DENSITY IS 7.2 LBS/IMP GAL. ENGINE OIL DENSITY IS 9.0 LBS/IMP GAL.

TO OBTAIN THE TOTAL WEIGHT OF THE AIRCRAFT, ADD TO THE BASIC WEIGHT, THE WEIGHTS OF THE VARIABLE AND DISPOSABLE LOAD ITEMS TO BE CARRIED FOR THE PARTICULAR ROLE.

THIS SCHEDULE WAS PREPARED ON 11<sup>th</sup> September 2006 AND SUPERCEDES ALL PREVIOUS ISSUES

SIGNED:



NAME: M. FRANKLAND

AUTHORITY:



ON BEHALF OF:

**EASTERN AIR EXECUTIVE LTD.,**

STURGATE AERODROME, UPTON,  
GAINSBOROUGH DN21 5PA.

CAA APPROVAL REF.: CAA.00154.

TEL./FAX 01427-839057.

**NOTE:** THE COMMANDER OF AN AIRCRAFT REGISTERED IN THE UNITED KINGDOM SHALL SATISFY HIMSELF BEFORE THE AIRCRAFT TAKES OFF THAT THE LOAD CARRIED BY THE AIRCRAFT IS OF SUCH A WEIGHT, AND IS SO DISTRIBUTED AND SECURED THAT IT MAY SAFELY BE CARRIED ON THE INTENDED FLIGHT. (ANO 2000 ART. 43(d).)

AIRCRAFT WEIGHING REPORT

Aircraft type: PA28-151

Registration: G-BSCY

Con. No.: 28-7515

Report Ref.: EAE/WR/SCY/10688 Date: 11<sup>th</sup> September 2006 Location: Sturgate

Aircraft weighing Datum: **78.4 Inches ahead of the wing leading edge at the intersection of the tapered section.**

The above aircraft was weighed using platform scales at the following points:

NOSE WHEEL & MAIN WHEEL's the following net weight reactions were observed:

	WEIGHT (lbs)	ARM (ins)	MOMENT (lb.in)
Left main wheel	509.26	109.6	55814.90
Right main wheel	515.88	109.6	56540.45
<b>SUBTOTAL</b>	1025.14	----- -	112355.35
Nose wheel	458.56	29.8	13665.09
<b>TOTALS AS WEIGHED</b>	1483.70	----- -	126020.44

$$\frac{\text{Total Moment}}{\text{Total Weight}} = \frac{126020.44}{1483.70} = 84.94 \text{ (Ins) aft of datum.}$$

SUBTRACTION S Items weighed but not part of basic weight	Weight Lbs	Arm Ins	Moment Lb.in	ADDITIONS Items not in aircraft when weighed	Weight Lbs	Arm Ins	Moment Lb.in
-----	-----	-----	-----	Unusable fuel	12	103.00	1236
<b>TOTAL</b>	-----	-----	-----		12	103.00	1236

With the above corrections applied, the final aircraft weight and C.G. are as follows:

Aircraft Basic Weight is: 1495.44 lbs  
Aircraft Centre of Gravity is: 85.10 ins. Aft of the reference datum  
Total moment about the datum is: 127256.44 lb.in

Certified that the above aircraft has been weighed in accordance with CAP 562 Leaflet 1-4:

Signed..... Authority..... for Eastern Air Executive Ltd.  
CAA00154

