Aircraft Engineers Limited
U.K 145.00827
TEL 01292 479990

Weighing report number	AEL/044
Date	30/05/2020
Aircraft type	PA28R-201
Aircraft registration	G-EGPF
Aircraft serial number	28R7837213
Maximum total weight authorised (MTWA) LBS	**2750** LBS
Centre-of-gravity limits	REFER TO FLIGHT MANUAL
Produced by	A.SOOJERI

Part A basic weight

The basic weight of the aircraft as calculated from weight and balance report/weighing record Dated 30/05/202 Is	**1773.00**	**LBS**
The C.G of the aircraft (in the same condition at this weight and with the landing gear extended (if applicable)) is	**85.07 INCHES**	Aft of datum
The total moment about the datum in this condition in LBS/INS is	**150835.7**	
The datum is defined in the flight manual as	78.4 INCHES AHEAD OF WING LEADING EDGE AT THE INTERSECTION OF THE STRAIGHT TAPERED SECTION	

The basic weight includes the weight of unusable fuel and full of oil and the weight of items indicated below which comprises the list of basic equipment carried.

Basic equipment

Item	Weight	Lever arm
As listed in the equipment		
list plus fire extinguisher		
and first aid kit		

Note, for additional equipment refer to the flight manual equipment list.

Aircraft Engineers Limited
U.K 145.00827
TEL 01292 479990

Part B variable load

Date	30/05/2020	A/C reg	G-EGPF	A/C type	PA28R-201

The weight and lever arms of the variable load are shown below. The variable load depends upon the equipment carried for the particular role.

Item	Weight in LBS	Lever arm(INS)	Moment (LBS/INS)
Pilot	Use actual	80.5	calculate
Pax	Use actual	118.1	calculate
Baggage	Use actual	142.8	calculate
Cargo area	Use actual		calculate

Note, the actual weight of the pilot must be used for aircraft not exceeding 5,700kg and with less than 12 person seating capacity.

Part C loading information (disposable load)

The total moment change when landing gear is retracted is **819 IN/IBS**

Item	Weight (LBS)	Lever arm (INS)	Capacity (u.s. gal)
Fuel		95.0	
Engine oil	Included in basic weight		
Forward baggage area		N/A	
Rear baggage area		142.8	
Passengers row 1		80.5	
Passengers row 2		118.1	
Passengers row 3			
Passengers row 4			
Passengers row 5			
Passengers row 6			

Note1, fuel density is 6 lbs/us gal.
Note 2, to obtain the total loaded weight of the aircraft, add to basic weight and the weight of the variable and disposable load items to be carried for the particular role.

1 Imperial gal of avgas = 7.2lbs 1 Us gallon of avgas = 6lbs
1 k.g = 2.2046lbs 1 lbs = 0.4536 kg
1 meter = 3.2808 feet = 39.3696 inches 1 foot = 0.3048 meter
1 inch=2.54mm

This schedule was prepared on.....30/05/2020..... and supersedes all previous issues.

Signed.....

For and on behalf of Aircraft Engineers Limited approval number U.K 145.00827.

Note, the commander of the aircraft shall satisfy himself before take-off that the load carried is of such weight and is so distributed and secured that it may be safely carried on the intended flight.

Weight and centre of gravity calculation

Date	30/05/2020	A/C reg	G-EGPF	A/C type	PA28R-201

Arm for nose =centre of nose wheel to datum

Arm for L & R is from centre of main wheel to datum

Moment = weight X Arm

Arm As Weighed = $\frac{\text{Moment}}{\text{Total weigh}}$

Ref	Weight lbs	Arm (in)	Moment (lbs/in)
Nose	464	15.6	7238.4
Left Wheel LBS	663	109.7	72731.1
Right Wheel LBS	646	109.7	70866.2
As Weighed	1773		150835.7

$$\frac{150835.7}{1773} = 85.07$$

The centre of gravity is | 85.07 | Aft of datum

Remarks

SIGNATURE

DATE 30/05/2020 AUTHORISATION, CAA.00827.001