

AIRCRAFT WEIGHT AND BALANCE AND EQUIPMENT LIST REVISION

TAIL Number: N8355S					DATE: 9/26/2016	
Prepared By: Smart Avionics Inc					Work Order RS16-197	
Aircraft Make: Cessna		Model: 182H	Serial No: 18256455.00			
Registered Owner: AOPA Foundation Inc		Address: 421 Aviation Way Frederick, MD 21701				
Date of Previous Weight and Balance 1/1/2010		Max Weight 2800.00	Useful Load 1067.2	Empty Weight 1732.80	C.G. 34.59	Moment 59930.10
		Weight		Arm		Moment
GTX327 Tranponder		-2.80		10.00		-28.00
Appareo ESGi Transponder		3.29		10.00		32.90
KLR10 AOA Computer		0.80		10.00		8.00
KLR10 Indicator		0.25		13.00		3.25
KLR10 Probe		0.88		27.00		23.76
New Useful Load 1064.78		New Empty Weight 1735.22		New C.G. 34.56		Moment 59970.01
Signature:						
Certificate: ZV8R725X						

COPY *for A/C cockpit*

WEIGHT AND BALANCE.

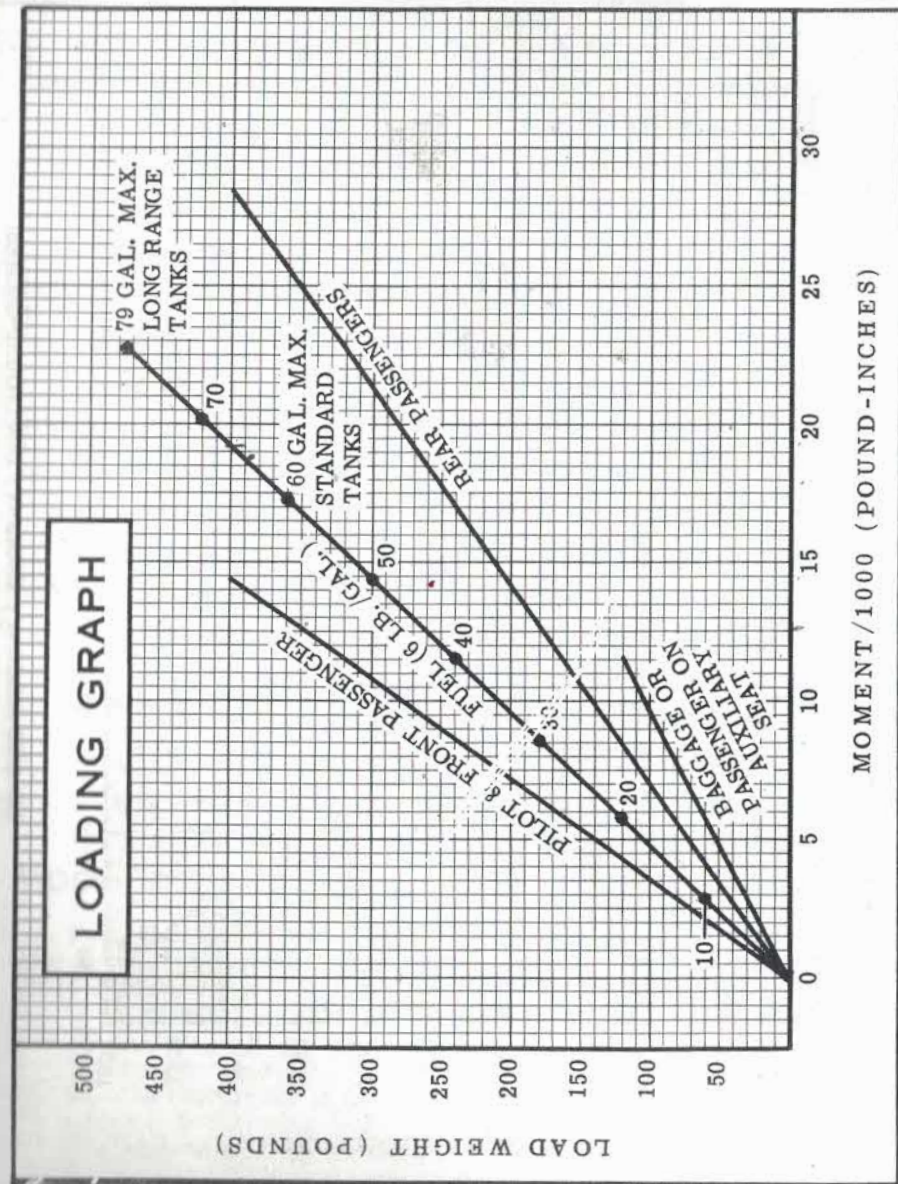
The following information will enable you to operate your Cessna within the prescribed weight and center of gravity limitations. To figure the weight and balance for your particular airplane, use the Sample Problem, Loading Graph, and Center of Gravity Moment Envelope as follows:

Take the licensed Empty Weight and Moment/1000 from the Weight and Balance Data sheet, plus any changes noted on forms FAA-337 carried in your airplane, and write them down in the proper columns. Using the Loading Graph, determine the moment/1000 of each item to be carried. Total the weights and moments/1000 and use the Center of Gravity Moment Envelope to determine whether the point falls within the envelope, and if the loading is acceptable.

SAMPLE LOADING PROBLEM		Sample Airplane		N8355S	
MOMENT		Weight (lbs)	Moment (lb - ins. /1000)	Weight	Moment
1. Licensed Empty Weight (Sample Airplane) ...		1660	57.9	1735.2	59.97
2. Oil - 12 Qts.*		22	-0.3	..22	..-0.3
3. Pilot & Front Passenger	35.88	340	12.2		
4. Fuel- (60.0 Gal at 6#/Gal)	48.06	360	17.3		
5. Rear Passengers	70.88	340	24.1		
6. Baggage (or Passenger on Auxiliary Seat) ...	97.44	78	7.6		
7. Total Aircraft Weight (Loaded)		2800	118.8		

8. Locate this point (2800 at 118.8) on the center of gravity envelope, and since this point falls within the envelope the loading is acceptable.

*Note: Normally full oil may be assumed for all flights.



LOADED AIRCRAFT WEIGHT (POUNDS)

2800
2700
2600
2500
2400
2300
2200
2100
2000
1900
1800CENTER OF GRAVITY
MOMENT ENVELOPE

60 70 80 90 100 110 120 130

LOADED AIRCRAFT MOMENT / 1000 (POUND-INCHES)

