

SAMPLE LOADING PROBLEM					
ITEM	ARM (in)	SAMPLE AIRPLANE		YOUR AIRPLANE	
		WEIGHT (lbs)	MOMENT (in-lbs)	WEIGHT (lbs)	MOMENT (in-lbs)
1) Licensed Empty Weight	12.2	1153	14067	1167.20	
Oil-8 qts @ 7.5 lbs/gals *TECA--6 qts	-36.0	+15	-540	+15 (+11*)	-540 (-396*)
2) Licensed Empty Weight & Moment With Oil		1168	13527	1182.2	
3) Pilot	11.5	190	2185	240	
Rear Passenger	42.0	190	7980	160	
Wing Fuel - 35 Gals Max @ 6 lbs/gal	24.5	102	2499	156 (9g burned on previous flight)	
Baggage-100 lbs Max (Normal Category Only)	69.0	-0-	-0-	~26g on T/O on accident flight	
4) Gross Take-Off Weight & Moment		1650	26191	1738.2	

NOTE: 1) * TECA only - 6 qts oil.
 2) To determine Take-Off Center of Gravity (inches aft of datum) divide the Gross Take-Off Moment by the Gross Take-Off Weight. Center of Gravity Limits are listed in Section I.
 3) The above sample problem is loaded for aerobatic flight conditions and assumes a 170 pound pilot and passenger with parachutes.

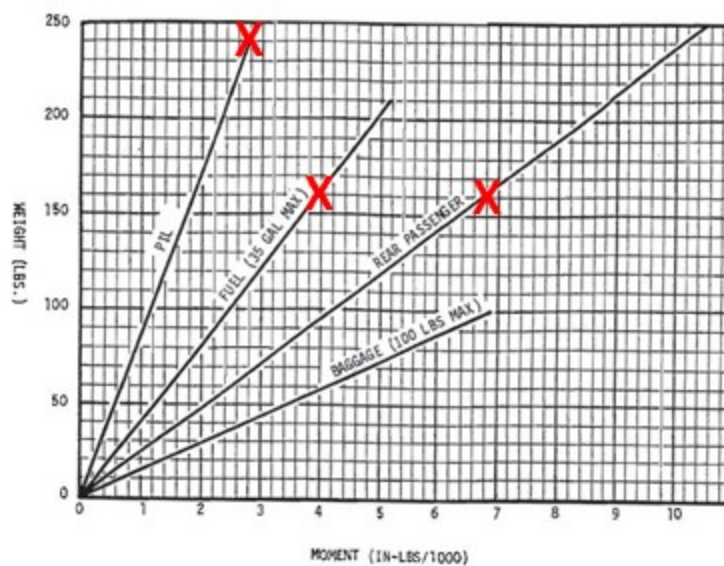
FIGURE 5-1 SAMPLE LOADING PROBLEM

S-4

<u>Weight</u>	<u>Moment</u>
160	6,800
156	3,900
<u>240</u>	<u>2,800</u>
456	13,500

Criteria

FIGURE S-2 LOADING GRAPH (ALL MODELS)



	Weight	Moment
Pilot/Receiving Inst	240lb	2,800
Flight Instructor	160lb	6,800
Fuel	<u>156lb</u>	<u>3,900</u>
	=556lb	=13,500
Latest W&B	<u>+1,167lb</u>	<u>+12,967</u>
	1,723lb	26,467
Gross Weight	1,650lb	
Weight at T/O	<u>1,723 (73lbs over)</u>	

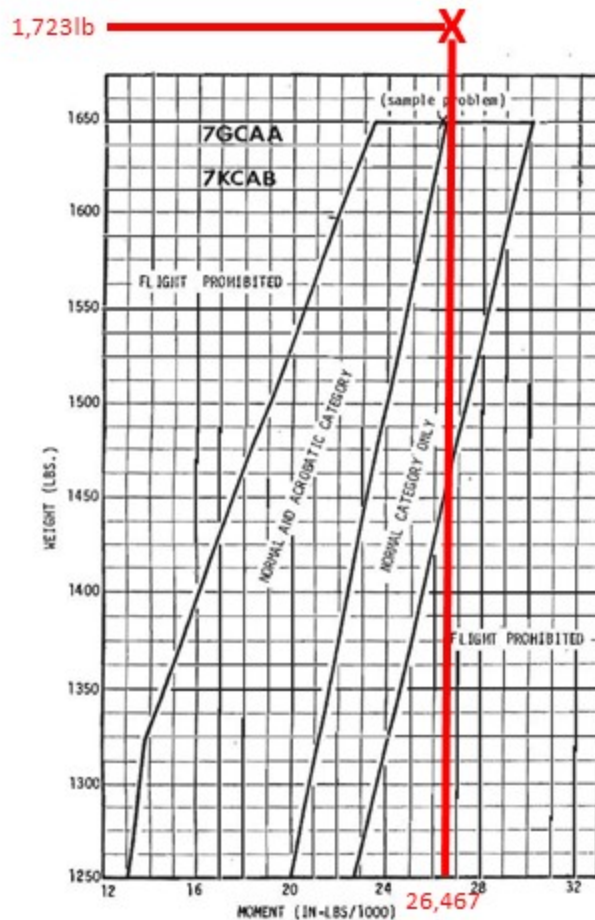


FIGURE 5-4 FLIGHT ENVELOPE - 7GCAA, 7KCAB ONLY