SECTION 6

WEIGHT & BALANCE & EQUIPMENT LIST

INDEX

6.1	**INFORMATION**	**6-1**
6.2	**OPERATING WEIGHTS & LOADING**	**6-2**
6.3	**INSTALLED EQUIPMENT LIST**	**6-2**
6.4	**OPTIONAL EQUIPMENT LIST**	**6-3**
6.5	**SAMPLE LOADING PROBLEM**	**6-4**
6.6	**YOUR AIRPLANE**	**6-5**
	FLIGHT ENVELOPE – ARM	**6-6**
	FLIGHT ENVELOPE – MOMENT	**6-7**

6.1 INFORMATION

It is the pilot's responsibility to ensure that the aircraft is loaded properly and within the weight and balance limitations. All flight performance, procedures and characteristics are based on this prerequisite.

The actual licensed empty weight and CG of a specific aircraft can be found on the Weight and Balance Form which is a permanent part of the aircraft's file and onboard documentation. All additional changes to the aircraft's empty weight and CG after the time of manufacture must also be attached to or indicated. From this information and the following instructions, the pilot can easily determine the useful load and proper loading distribution for the aircraft.

For further information see RV-12iS POH Supplement Section III Pre-Flight Planning, Basics of Loading the RV-12iS.

6.2 OPERATING WEIGHTS & LOADING

Category	Max Weight	Center of Gravity Range
Light Sport	1320 lb	80.49” to 85.39” (18.4 to 27% Chord)

NOTE

All measurements are aft of the datum line which is 70 inches forward of the wing leading edge.

Baggage 75 lb maximum (dependent on the c.g. limits)

6.3 INSTALLED EQUIPMENT LIST

For Installed Equipment List see the Maintenance Manual.

6.4 OPTIONAL EQUIPMENT LIST

ITEM	WEIGHT (LB)	ARM (IN.)	INSTALLED	MOMENT (IN-LB)
TOTAL		--------		

6.5 SAMPLE LOADING PROBLEM

ITEM	ARM (IN.) (LIMITS 80.49-85.39)	SAMPLE AIRPLANE	
		WEIGHT (LB)	MOMENT (IN-LB)
EMPTY WEIGHT WITH OIL & COOLANT	81.79	785	64,197
PILOT	78.85	190	14,982
PASSENGER	78.85	190	14,982
BAGGAGE	114.42*	35	4005
FUEL (6 LB/GAL)	100.83	120	12,100
TAKEOFF WEIGHT & MOMENT	83.48**	1,320	110,194

*Center of baggage area
****CG = TOTAL MOMENT / TOTAL WEIGHT**

6.6 YOUR AIRPLANE

ITEM	ARM (IN.) (LIMITS 80.49-85.39)	WEIGHT (LB)	MOMENT (IN-LB)
EMPTY WEIGHT WITH OIL & COOLANT			
PILOT	78.85		
PASSENGER	78.85		
BAGGAGE	114.42		
FUEL (6 LB/GAL)	100.83		
TAKEOFF WEIGHT & MOMENT			

CG = TOTAL MOMENT / TOTAL WEIGHT

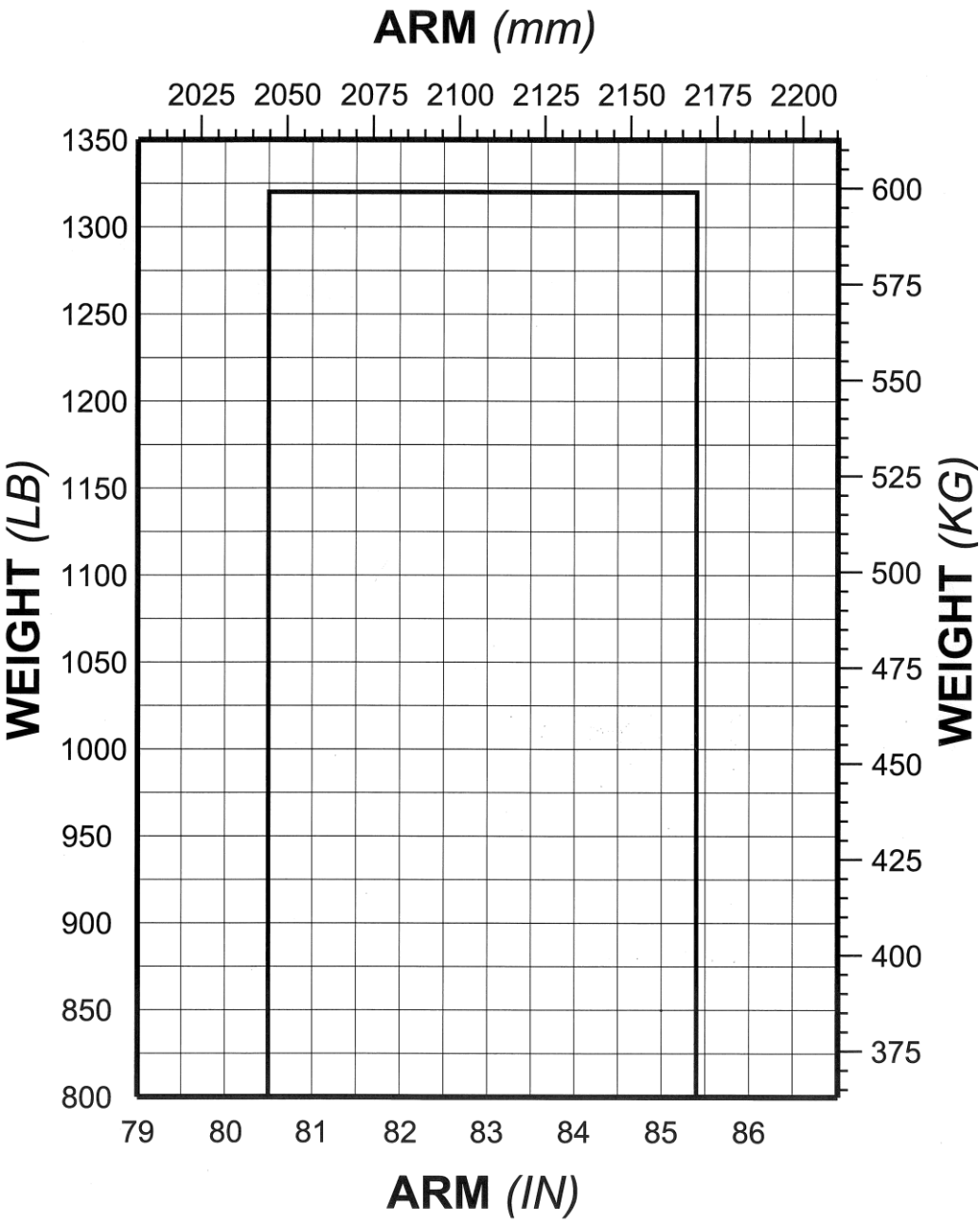


FIGURE 6-1 FLIGHT ENVELOPE - ARM
Minimum Weight varies depending on the empty weight of the aircraft

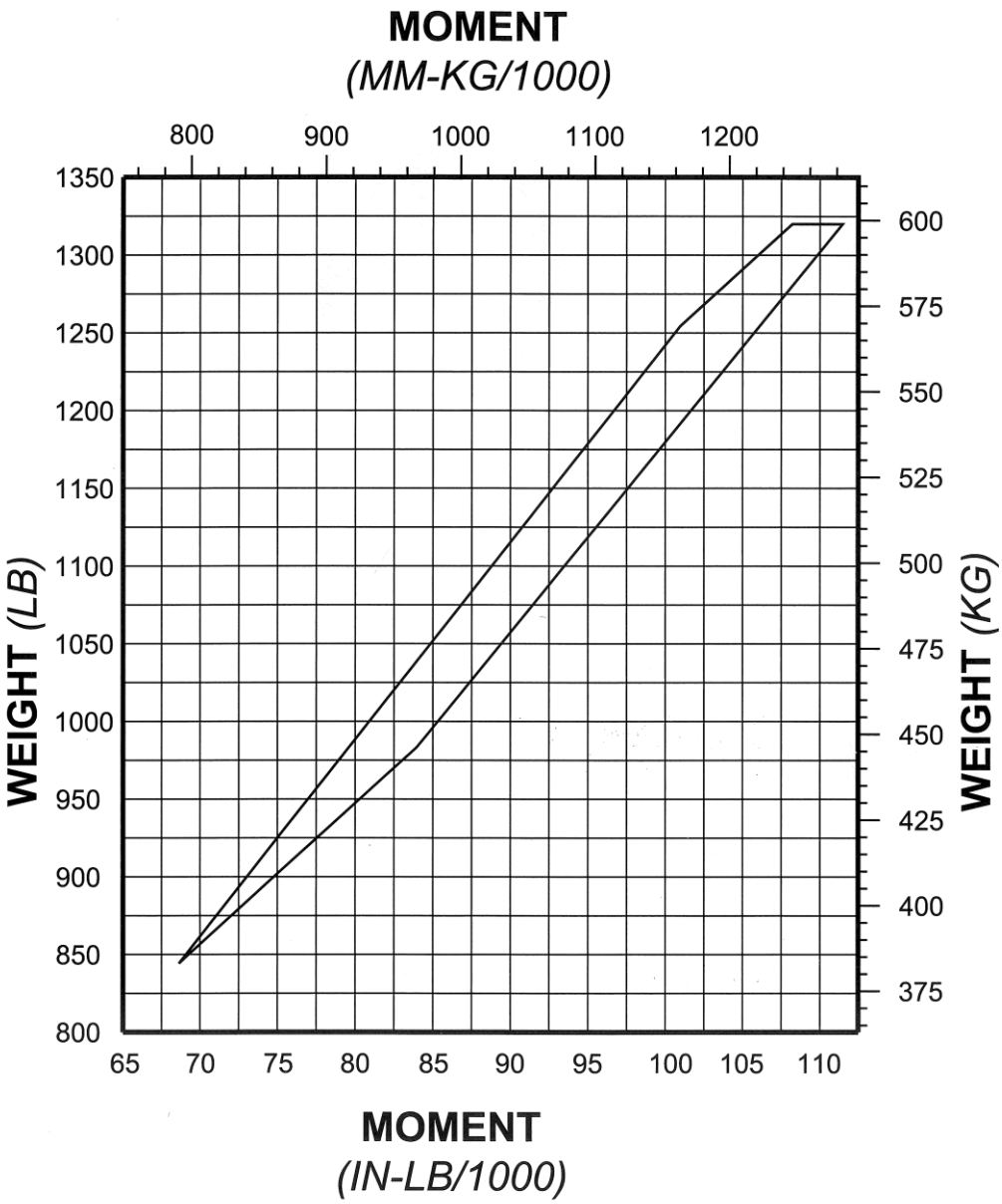


FIGURE 6-2 FLIGHT ENVELOPE - MOMENT
Minimum Weight varies depending on the empty weight of the aircraft.