5.5 FLIGHT PLANNING EXAMPLE

(a) Aircraft Loading

The first step in planning a flight is to calculate the airplane weight and center of gravity by utilizing the information provided by Section 6 (Weight and Balance) of this handbook.

The basic empty weight for the airplane as licensed at the factory has been entered in Figure 6-5. If any alterations to the airplane have been made affecting weight and balance, reference to the aircraft logbook and Weight and Balance Record (Figure 6-7) should be made to determine the current basic empty weight of the airplane.

Make use of the Weight and Balance Loading Form (Figure 6-11) and the C.G. Range and Weight graph (Figure 6-15) to determine the total weight of the airplane and the center of gravity position.

After proper utilization of the information provided, the following weights apply to the flight planning example.

The landing weight cannot be determined until the weight of the fuel to be used has been established [refer to item (g)(1)].

(1)	Basic Empty Weight	1391 lbs.
(2)	Occupants (4 x 170 lbs.)	680 lbs.
(3)	Baggage and Cargo	50 lbs.
(4)	Fuel (6 lb/gal x 30)	180 lbs.
(5)	Takeoff Weight	2316 lbs.
(6)	Landing Weight (a)(5) minus (g)(1), (2316 lbs. minus 136.8 lbs.	2179.2 lbs.

The takeoff weight is below the maximum of 2440 lbs., and the weight and balance calculations have determined that the C.G. position is within the approved limits.