

Chapter 8

Aircraft Performance

For all of these questions, plan to fly to Blue Canyon, CA (BLU) with the following METAR:

KBLU 151652Z AUTO 17010G16KT 10SM CLR 19/M02 A3018 RMK A02 SLP149 T01891022

Use the Figure 8-7, 8-8, 8-11, 8-12, 8-14, and 8-20 to compute the center of gravity, take-off, and landing distances. You will be landing with just you and 30 gallons of fuel. However, you are picking up three passengers and 50 lbs of baggage. The passenger weights are 200, 170, and 130 lbs.

1. Are you within the center of gravity moment envelope for the plane (see Figure 8-7).

2. What is the pressure and density altitudes?

3. Which runway will you use? What are the headwinds and crosswinds?

4. What is your total landing distance (see Figure 8-20)?

5. What is your total take-off distance (see Figure 8-12)?
