

Chapter 1

General Questions and Answers

**Name four
precautionary
measures to
reduce the
hazards of wake
turbulence when
operating on the
same runway as
a larger aircraft?**

- If departing behind a larger aircraft,
 - √ Rotate prior to its rotation point
 - √ Stay above its flight path and upwind if possible
- If landing behind a larger aircraft,
 - √ Stay above its glide path
 - √ Land beyond its touchdown point
- If landing just after a larger aircraft departed,
 - √ Land prior to its rotation point
- If you are taking off or landing after a larger aircraft has executed a missed approach (larger than usual vortices),
 - √ Delay takeoff or landing for 2 minutes



**Winds for
landing are
reported at 16
gusting to 30**

**How should you
adjust your
landing speed
under these
conditions?**

- Increase your landing speed by ~7 knots

√ The rule is add about one-half the gust factor ($30 - 16 = 14$ knots in this case) to your normal landing speed



**Your field
elevation
is 1500 MSL and
the temperature
is 10°C**

**At what altitude
might you first
expect icing
conditions?**

- Temperature decreases 2°C per 1000 feet of altitude
- Thus, you need to climb 5000 feet to achieve 0°C , the freezing temperature
- Since the airport elevation is 1500 MSL, freezing level will be at 6500 MSL



Describe the meanings of the following on your airspeed indicator

- **Bottom of green arc**
- **Bottom of white arc**
- **Top of white arc**
- **Top of green arc**

- Bottom of green arc
= V_s = stall speed in clean configuration
- Bottom of white arc
= V_{so} = stall speed in landing configuration (flaps down)
- Top of white arc
= V_{fe} = maximum speed with flaps extended
- Top of green arc
= V_{no} = maximum structural cruising speed (can withstand gusts at this speed, but not beyond)

Note: The green arc is normal operating range, while the white arc is with flaps down

