

Objectives: Chandelles

- Be able to perform chandelles to the right or left.
- Continue to develop situational awareness and division of attention skills.

Equipment:

- Chalkboard or paper and pencil
- Model airplane to explain maneuvers
- Sick Sacks

Elements:

1. Ground - Pre-flight briefing
 - Present lesson objective.
 - Describe what will take place during the lesson.
 - Explain chandelles and demonstrate with model airplane.
 - Student asks questions concerning previous lessons and/or this one.
2. Flight - Chandelles
 - Go over procedures for chandelles again.
 - Select an entry altitude > 1,500 AGL.
 - Perform clearing turns prior to starting the maneuver.
 - Establish airspeed as recommended by the airplane manufacturer not to exceed VA.
 - Demo and explain the maneuver with student following on controls.
 - Establish the initial bank not to exceed 30.
 - Apply power and pitch to maintain a coordinated constant bank climbing turn to the 90 point.
 - Perform a coordinated constant rate rollout with constant pitch to the 180 point.
 - Roll out of the maneuver within +/- 10 of the desired heading (reciprocal of the entry heading) and at an airspeed of no more than 5 Knots above stall speed.
 - Reduce pitch attitude to maintain straight and level flight at the new altitude +/- 50 feet.
 - Have student perform the maneuver to both left and right.

Completion Standards:

This lesson is complete when the student is able to perform chandelles as specified in the *Elements* section.

Common Errors:

- Pitching up too much so that stall speed is reached before reaching the end of the turn.
- Improper coordination; Doing left turns may require right rudder.
- Rolling wings-level before reaching the 180 point.
- Not holding constant pitch through the second half of the maneuver.
- Fixating on the instruments.

References:

POH for the airplane used.

FTH; Pages 161 164.

COMM-ASEL PTS Area of Operation V Tasks B and C.

Jeppesen Instrument/Commercial Manual 14-14 to 14-16

Possible Review Questions:

1. VA is the airplanes _____ . What is it for this airplane? Why is it important?
2. The first 90 of the chandelle can best be characterized by _____ bank and _____ pitch.
3. The second 90 of the chandelle can best be characterized by _____ bank and _____ pitch.