

## Introduction

This short syllabus will focus on improving the skills required to perform successful and safe approaches and landings. This training is considered 'no jeopardy', meaning it is not pass or fail but an opportunity to develop and hone landing skills. An estimated 1.0 – 1.5 flight hours will be required for completion of this syllabus.

Reference the Flight Operations Manual for guidance on maneuver setup and execution.

Cirrus instructors are encouraged to provide real life distractions during this flight. Non flight related banter while operating in the airport environment or opening or leaving a door open for takeoff and are two examples of how to create meaningful distractions. Flight safety is of utmost concern, discontinue the distraction or take control of the aircraft if safety of flight is in jeopardy.

The goal of this training is to help improve the pilot's proficiency in the following areas:

- Airspeed Control
- Touchdown Accuracy
- Approach Stability
- Go-around and Decision to Execute
- Power-off Landings
- Traffic Pattern Operations
- Touchdown Attitude

## Task List

The chart below includes a list of tasks that are suggested to be covered for the landing standardization training. Each task includes a description of the completion standards required for each task. The boxes represent the minimum number of repetitions suggested for each task. More repetitions may be required based upon performance or request.

Task	Repetitions
<b>Slow Flight</b> <ul style="list-style-type: none"> <li>➤ Selects an entry altitude that will allow the task to be completed no lower than 1,500 ft AGL</li> <li>➤ Establishes and maintains an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in an immediate stall</li> <li>➤ Accomplishes coordinated straight and level flight, turns, climbs, and descents with a specified flap configuration</li> <li>➤ Maintains the specified altitude +/- 100ft, specified heading +/- 10 degrees, airspeed +10/-0 KIAS and specified angle of bank +/-10 degrees</li> </ul>	□
<b>Power-Off Stalls-straight level, turning</b> <ul style="list-style-type: none"> <li>➤ Selects an entry altitude that will allow the task to be completed no lower than 1,500 ft AGL</li> <li>➤ Establishes a stabilized descent in the approach or landing configuration as specified</li> <li>➤ Maintains a specified heading +/-10 degrees in straight flight maintains a specified angle of bank not to exceed 20 degrees +/- 10 degrees while in turning flight while inducing the stall</li> <li>➤ Recognizes and recovers promptly after the stall occurs by simultaneously reducing the angle of attack, increasing power to maximum allowable, and leveling the wings to return to a straight and level flight attitude with a minimum loss of altitude</li> <li>➤ Retracts flaps from full to 50% immediately</li> </ul>	□ □

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- Retracts flaps fully once a positive rate of climb is established

#### Power-On Stalls

- Selects an entry altitude that will allow the task to be completed no lower than 1,500 ft AGL
- Establishes the takeoff or departure configuration. Sets power to no less than 65% available power
- Maintains a specified heading +/-10 degrees in straight flight maintains a specified angle of bank not to exceed 20 degrees +/- 10 degrees while in turning flight while inducing the stall
- Recognizes and recovers promptly after the stall occurs by simultaneously reducing the angle of attack, increasing power to maximum allowable, and leveling the wings to return to a straight and level flight attitude with a minimum loss of altitude
- Retracts flaps fully once a positive rate of climb is established and accelerating to Vx or Vy as appropriate



#### Traffic Pattern

- Maintained the appropriate altitude and airspeed during traffic pattern operations.
- Configured aircraft correctly for the landing being conducted.
- Maintained a bank angle less than 30 degrees during turns.



#### Normal Landing

- Conducted a stabilized approach by 500 ft AGL (VFR) which included:
  - Proper airspeed: ±5 knots on short final
  - Correct flight path: Aligned with centerline
  - Correct landing configuration: Flaps as required
  - Power setting appropriate: Slight changes as necessary
  - Sink rate not abnormal: Vertical guidance stable
- Made smooth, timely, and correct control application during round out and touchdown.
- Touched down on main gear and transitioned to nose gear smoothly.
- Touched down +400ft / - 0ft of specified point, within 1<sup>st</sup> 1/3 of runway.
- Maintained centerline throughout touchdown and deceleration (main gear constantly either side of centerline).
- Executed a go-around if unstable by 500 ft. AGL.



#### Crosswind Landing

- Conducted a stabilized approach by 500 ft AGL (VFR) which include:
  - Proper airspeed: ±5 knots on short final
  - Correct flight path: Aligned with centerline, taking wind and drift into account.
  - Correct landing configuration: Flaps as required
  - Power setting appropriate: Slight changes as necessary
  - Sink rate not abnormal: Vertical guidance stable
- Applied correct rudder input to keep aircraft aligned with centerline.
- Applied correct aileron input regarding directional control and proper crosswind landing technique.
- Maintained touchdown standards consistent with normal landings.



#### Short-field Landing

- Conducted a stabilized approach by 500 ft AGL (VFR)
  - Proper airspeed: ±5 knots on short final
  - Correct flight path: Aligned with centerline
  - Correct landing configuration: Flaps 100%
  - Power setting appropriate: Slight changes as necessary
  - Sink rate not abnormal: Vertical guidance stable
- Made smooth, timely, and correct control application during round out and touchdown.
- Touched down on main gear and transitioned to nose gear smoothly and in a manner consistent with maximum safe deceleration.
- Touched down +200ft / - 0ft of specified point, within 1<sup>st</sup> 1/3 of runway.
- Maintained centerline throughout touchdown and deceleration (main gear constantly either side of centerline).
- Executed a go-around if unstable by 500 ft. AGL.



#### Reduced Flap Landing – 50%

- Conducted a stabilized approach by 500 ft AGL (VFR) which included:



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- Proper airspeed:  $\pm 5$  knots on short final
  - Correct flight path: Aligned with centerline
  - Correct landing configuration: Flaps 50%
  - Power setting appropriate: Slight changes as necessary
  - Sink rate not abnormal: Vertical guidance stable
  - Made smooth, timely, and correct control application during round out and touchdown.
  - Maintained centerline throughout touchdown and deceleration (main gear constantly either side of centerline).
  - Applied coordinated braking in conjunction with a higher than normal touchdown speed.
  - Touched down +400ft / - 0ft of specified point, within 1<sup>st</sup> 1/3 of runway.
  - Executed a go-around if unstable by 500 ft. AGL.

#### Reduced Flap Landing – 0%

- Conducted a stabilized approach by 500 ft AGL (VFR)
  - Proper airspeed: +5 / -0 knots on short final
  - Correct flight path: Aligned with centerline
  - Correct landing configuration: Flaps 0%
  - Power setting appropriate: Slight changes as necessary
  - Sink rate not abnormal: Vertical guidance stable
- Made smooth, timely, and correct control application during round out and touchdown.
- Maintained centerline throughout touchdown and deceleration (main gear constantly either side of centerline).
- Increased elevator pressure was kept to a minimum at touchdown to prevent tail strike.
- Touched down on main gear and transitioned to nose gear smoothly.
- Touched down +400ft / - 0ft of specified point, within 1<sup>st</sup> 1/3 of runway.
- Applied coordinated braking in conjunction with a higher than normal touchdown speed.
- Executed a go-around if unstable by 500 ft. AGL.

#### Power-off Landing

- Conducted a stabilized approach by 500 ft AGL (VFR)
  - Proper airspeed:  $\pm 5$  knots on short final
  - Correct flight path: Aligned with centerline
  - Correct landing configuration: Flaps 50% or 100%
  - Power setting appropriate: Slight changes as necessary
  - Sink rate not abnormal: Vertical guidance stable
- Avoided excessive descent rate in conjunction with timely application of flaps.
- Kept bank angle less than 30° when making turns onto base and final.
- Made smooth, timely, and correct control application during round out and touchdown.
- Touched down on main gear and transitioned to nose gear smoothly.
- Touched within 1<sup>st</sup> 1/3 of runway.
- Maintained centerline throughout touchdown and deceleration (main gear constantly either side of centerline).
- Executed a go-around if unstable by 500 ft. AGL.

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#### Go-Around

- Applied power smoothly and assertively
  - Rudder input was coordinated to compensate for left turning tendencies.
  - Retracted the flaps once achieved:
    - Positive rate of climb
    - Airspeed greater than 80 knots (SR22/T), 85 knots (SR20)
    - Clear of obstructions
  - Maintained directional control during the go-around.
  - Extended centerline was maintained until a turn was necessary
  - Completed the appropriate checklist.
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