

STAGE CHECK 1

Schedule: 2 hours ground & 2 hours flight

To prepare for each stage check, please use AeroDynamic's stage check documents, reading and study assignments, and AeroDynamic's Private Pilot Maneuvers Guide (Cessna or Tailwheel version). Prior to advancing to the next phase of training, each stage check must receive a grade of satisfactory or outstanding.

Objective

This stage check is designed to verify you have command of the airplane through all flight maneuvers to ensure you are ready to enter the traffic pattern and focus on takeoffs and landing. To pass this stage check, you must demonstrate the following 18 tasks to the standards listed below each task.

Grading

Each of the 18 tasks listed below is worth a total of 5 points (1 point per item under each task) for a total of 90 points possible. In general, tasks at the beginning of the stage check will be tested during the ground portion and later items will be tested during the flight. However, some items will cross over and be tested during both ground and flight.

If your total score is 72 points or greater, you will have successfully passed this stage check. However, any tasks you scored below 4 points on must be reviewed with your CFI, and you must demonstrate them to at least a 4 before you can begin training in the traffic pattern.

If your total score is less than 72 points (80%), a repeat stage check must be completed. During the repeat stage check, any tasks you scored below 4 points on will be reviewed until you achieve a score of 4 on those tasks.

Final Score

The Stage Check CFI will be using a digital copy of this document on their tablet. Near the top of the page, the document will automatically total your points and give you a Yes or No under the Pass column. The Stage Check CFI will review their comments and recommendations with you to make sure you get the most out of this assessment. After the stage check, once they have finished all of their notes, the Stage Check CFI will email the digital copy to you and your CFI.

Unsatisfactory = total score below 80% (<72/90)

Satisfactory = total score of 80% (72+/90 points)

Outstanding = total score of 90% (81+/90 points)

Documentation

Please bring the following documents to your stage check:

- Passport or photo ID
- Student pilot certificate, if you have one
- Medical certificate, if you have one
- Renter's Agreement
- TSA approval for foreign students
- Logbook

Weather Information - Student demonstrates ability to read and/or explain:

- METAR
- TAF
- GFA
- Winds aloft
- Cloud formation

Performance and Limitations - Student:

- Calculates pressure altitude based on current conditions
- Calculates a weight & balance from current conditions
- Calculates performance based on current conditions
- Explains the importance of CG limits and what the limits are
- Understands factors affecting performance including atmospheric conditions, pilot technique, configuration, and weight & balance

Aerodynamics - Student demonstrates understanding of:

- Axes of an aircraft
- Forces of flight
- Adverse yaw
- Turning tendencies
- Aerodynamics associated with stalls including AoA and load factor

Systems - Student demonstrates understanding of:

- Primary and secondary flight controls
- Powerplant
- Ignition system and starting sequence
- Fuel system, determining fuel quantity and fuel needs
- Abnormality or emergency associated with powerplant

Local Environment - Student demonstrates understanding of:

- Taxi diagram and hotspots
- Noise abatement procedures
- Local airspace
- Proper altitude and location for practicing maneuvers
- Proper ATC communications

Preflight Assessment - Student:

- Completes a pilot self-assessment
- Reviews current conditions to make a go/no-go decision to fly
- Performs a preflight inspection of the airplane
- Determines airworthiness
- Understands AeroDynamic policies in the Renter's Agreement

Flight Deck Management - Student:

- Completes a passenger briefing
- Uses appropriate checklists
- Secures all items in the flight deck
- Conducts a pre-takeoff briefing (who is PIC, transfer of controls, etc.)
- Programs and manages navigation equipment correctly

Engine Starting - Student demonstrates:

- Correct starting procedure appropriate to conditions, such as hot or cold start
- Understanding of engine and starter limitations
- Propeller safety
- Safe practices considering nearby people, structures, and other aircraft
- Correct checklist usage

Taxiing - Student demonstrates:

- How to obtain proper radio frequencies
- Use of airport diagrams for briefing taxi instructions and hot spots
- Safe practices for using checklists and maintaining sterile cockpit
- Brake check and appropriate use of the brakes during taxi
- Proper position of flight controls during taxi

Before Takeoff Check - Student:

- Completes the Before Takeoff checklist
- Divides attention inside and outside while conducting checklists
- Positions airplane appropriately considering other aircraft and wind
- Verifies that engine parameters and airplane configuration are suitable
- Completes a Pre-Takeoff briefing for emergency or abnormality

Normal Takeoff and Climb - Student:

- Completes the appropriate checklist
- Makes radio calls as appropriate
- Clears the area, taxis into position, and aligns with runway centerline
- Establishes pitch and maintains $V_Y +10/-5$ knots to safe maneuvering altitude
- Complies with noise abatement procedure and/or ATC instructions

Steep turns - Student:

- Clears the area and performs appropriate checks (CHAPS)
- Selects appropriate location, altitude, and airspeed for the maneuver
- Maintains coordination, orientation, and control throughout maneuver
- Maintains entry altitude ± 150 ft, airspeed ± 10 kts, rolls out on heading $\pm 15^\circ$, and maintains bank angle $\pm 10^\circ$
- Returns to cruise and completes Cruise checklist

Slow flight - Student:

- Clears the area and performs appropriate checks (CHAPS)
- Selects appropriate location, altitude, and airspeed for the maneuver
- Maintains coordination, orientation, and control throughout maneuver
- Maintains altitude +/- 150 ft, airspeed +10/-0 kts, heading +/- 15°, bank +/-10°
- Recovers from slow flight and completes Cruise checklist

Power-off Stall and Recovery (Clean configuration) - Student:

- Clears the area and performs appropriate checks (CHAPS)
- Configures the airplane for glide and maintains coordinated flight
- Maintains heading +/- 15° while inducing the stall
- Acknowledges cues of stall and recovers promptly after full stall
- Accelerates to Vx or Vy, resumes assigned altitude and performs Cruise checklist

Power-on Stall and Recovery (Clean configuration) - Student:

- Clears the area and performs appropriate checks (CHAPS)
- Establishes a full-power takeoff configuration and maintains coordinated flight
- Maintains heading +/- 15° while inducing the stall
- Acknowledges cues of stall and recovers promptly after full stall
- Accelerates to Vx or Vy, resumes assigned altitude and performs Cruise checklist

Ground reference maneuver - Student:

CFI will select at least one: Rectangular course, Turns around a point, or S-turns

- Clears the area and performs appropriate checks (CHAPS)
- Selects appropriate location, altitude, and airspeed for the maneuver
- Selects appropriate entry and positions the airplane correctly
- Maintains coordination, orientation, and control throughout maneuver
- Maintains entry altitude +/- 150 ft, airspeed +/-10 kts, heading +/- 15°, bank +/-10°

System or Equipment Malfunction (Fire or Failure) - Student:

- Correctly identifies the given scenario (engine, electrical, pitot-static, vacuum)
- Completes the appropriate checklist
- Maintains positive aircraft control
- Maintains situational awareness
- Makes a timely and appropriate decision about the best course of action

After Landing, Parking and Securing - Student:

- Utilizes runway incursion avoidance procedures
- Parks in an appropriate area, considering the safety of nearby persons and property
- Completes the appropriate checklist
- Conducts a postflight inspection and documents discrepancies, if any
- Secures the airplane, tidies up, and returns items to the correct place