

STAGE CHECK 2

Schedule: 2 hours ground & 2 hours flight

Objective

This stage check is designed to verify you have command of the airplane throughout various flight maneuvers and pattern work to ensure safe and successful solo flights. To pass this stage check, you must demonstrate the following 26 tasks to the standards listed below each task. In addition, four of the tasks are “mandatory tasks” that you must score 5/5 points on.

Grading

Each of the 26 tasks listed below is worth a total of 5 points (1 point per item under each task). 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 97 points or greater and your mandatory tasks score totals 20, 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 will be endorsed for solo flight.

If your total score is less than 97 points (75%), or if you do not receive 5 points for each of the mandatory tasks, 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 that task.

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 75% (<97/130) **or** any mandatory task below 5 points

Satisfactory = total score of 75% (97+/130 points) and mandatory tasks all 5 points

Outstanding = total score of 90% (117+/130 points) and mandatory tasks all 5 points

Mandatory Tasks

- Normal Takeoffs & Climbs
- 2 Normal Approaches & Landings
- Traffic patterns
- Go-Around

Documentation

Please bring the following documents to your stage check:

- Passport or photo ID
- Student pilot certificate
- Medical certificate (if applicable)
- Renter’s Insurance
- Renter’s Agreement
- Pre-Solo Exam signed by CFI
- Airplane Checkout Sheet signed by CFI
- TSA approval for foreign students
- Logbook with training entries on items listed in FAR §61.87(d)

Pilot Qualifications - Student demonstrates understanding of:

- Student Pilot privileges & limitations
- Documents & endorsements required to exercise privileges
- AeroDynamic's solo policies & CFI limitations
- Pilot in Command responsibilities
- Application of knowledge in a scenario given by the Evaluator

Airworthiness Requirements - Student demonstrates understanding of:

- Airworthiness requirements including certificates and maintenance inspections
- Pilot-performed preventative maintenance
- Equipment requirements for Day VFR
- Inoperative equipment
- Application of knowledge in a scenario given by the Evaluator

Weather Information - Student demonstrates understanding of:

- Acceptable weather products and resources required for preflight planning, current and forecast weather for departure, en route, and arrival phases of flight.
- Meteorology to include decision making with regards to:
 - Wind (headwind, crosswind, tailwind, windshear, winds aloft)
 - Temperature
 - Clouds, fog/mist, moisture, precipitation
 - Frost & icing
 - Turbulence
 - Thunderstorms and other hazardous weather
 - Obstructions to visibility (smoke, haze, rain, etc.)
- Personal, CFI and FAR minimums
- Diversions due to weather
- Application of knowledge in a scenario given by the Evaluator

National Airspace System - Student demonstrates understanding of:

- Types of airspace/airspace classes and associated requirements and limitations
- Charting symbology
- Special use airspace (SUA) and temporary flight restrictions (TFR)
- Limitations on student pilots
- Application of knowledge in a scenario given by the Evaluator

Performance and Limitations - Student:

- Understands of elements related to performance and limitations by explaining the use of charts, tables, and data to determine performance
- Understands factors affecting performance including atmospheric conditions, pilot technique, configuration, and weight & balance
- Calculates weight & balance in a scenario given by Evaluator
- Calculates performance in a scenario given by the Evaluator
- Corrects an out of CG condition in a scenario given by the Evaluator

Systems - Student demonstrates understanding of operation and malfunctions of:

- Powerplant and propeller
- Electrical system
- Pitot-static and vacuum systems and their associated instruments
- Primary and secondary flight controls
- Application of knowledge and checklist usage in a system failure scenario

Human Factors - Student demonstrates understanding of the effects on flying of:

- Fatigue
- Stress
- Middle ear and sinus problems
- Medication, drugs, and alcohol restrictions and effect
- Application of knowledge in a scenario given by the Evaluator

Spin Awareness - Student demonstrates understanding of:

- What causes a spin
- The phases of a spin
- Spin recovery procedure per POH/AFM
- Situations that could lead to inadvertent spin and loss of control
- Aerodynamics associated with spins including AoA, load factor, and yaw effects

Preflight Assessment - Student:

- Completes a pilot self-assessment
- Reviews and applies FAR 91.103 requirements
- Performs a preflight inspection of the airplane
- Determines airworthiness
- Applies the use of PAVE and/or other risk management tools

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:

- Use of airport diagrams for briefing taxi instructions and hot spots
- Safe practices for using checklists, sterile cockpit, and clearing
- Brake check and appropriate use of the brakes during taxi
- Radio communication and following ATC instructions
- Proper position of flight controls during taxi

Before Takeoff Check - Student:

- Completes and can explain items on 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 an abnormality or emergency

Communications and Light Signals - Student demonstrates:

- How to obtain proper radio frequencies
- Proper radio communication procedures and ATC phraseology
- Appropriate use of transponder
- Lost communication procedures
- Knowledge of NTSB accident/incident reporting

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

**Note: Student must score at least 5 points on this item to pass the stage check.
Student will demonstrate all takeoffs to these standards.**

Power-off Stall and Recovery - Student:

- Clears the area and performs appropriate checks (CHAPS)
- Configures the airplane for landing and maintains coordinated flight
- Maintains heading +/- 10 degrees while inducing the stall
- Acknowledges cues of stall and recovers promptly after full stall per POH/AFM
- Accelerates to V_X or V_Y , resumes assigned altitude and performs Cruise checklist

Power-on Turning Stall and Recovery - Student:

- Clears the area and performs appropriate checks (CHAPS)
- Establishes a full-power takeoff configuration and maintains coordinated flight
- Maintains specified angle of bank not to exceed 20° , +/- 10° while inducing the stall
- Acknowledges cues of stall and recovers promptly after full stall per POH/AFM
- Accelerates to V_X or V_Y , resumes assigned altitude and performs Cruise checklist

Maneuver of Evaluator's Choice (slow flight, steep turns, ground reference):

- Clears the area and performs appropriate checks (CHAPS)
- Selects appropriate location and altitude for maneuvering
- Maintains coordination, orientation, and control throughout maneuver
- Maintains entry altitude +/- 100 ft, airspeed +/-10 kts, heading +/- 10°, bank +/-5°
- Resumes cruise configuration and completes Cruise checklist

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

Traffic Patterns - Student:

- Demonstrates understanding of towered and nontowered airport operations
- Selects appropriate runway for current conditions and traffic considerations
- Complies with recommended traffic pattern procedures and corrects for wind drift
- Identifies collision hazards to include aircraft, terrain, obstacles and wires
- Maintains TPA +/- 150 feet and appropriate airspeed +/- 10 knots

Note: Student must score at least 5 points on this item to pass the stage check.

Normal Approach and Landing - Student:

- Demonstrates correct selection of runway, approach path, and touchdown area
- Demonstrates decision making for traffic considerations and/or go-around
- Establishes the recommended configuration for wind or runway conditions and maintains approach speed +10/-5 knots
- Maintains directional control and crosswind correction throughout approach & landing
- Touches down at proper attitude within 600 feet of specified point with no side drift and with the airplane's longitudinal axis aligned with and over the centerline

Note: Student must score at least 5 points on this item to pass the stage check.

Student will demonstrate all (at least 2) normal landings to these standards.

Go-Around/Rejected Landing - Student:

- Makes a timely decision to discontinue the approach to landing
- Applies takeoff power immediately and transitions to V_X or $V_Y +10/-5$ knots
- Configures the airplane after positive rate of climb has been verified
- Maintains $V_Y +10/-5$ knots, directional control and proper wind drift correction
- Makes radio calls as appropriate

Note: Student must score at least 5 points on this item to pass the stage check.

No-flap Approach and Landing (For Tailwheel: Wheel Landing) - Student:

- Demonstrates correct selection of runway, approach path, and touchdown area
- Establishes the recommended approach speed +10/-5 knots
- Maintains directional control and crosswind correction throughout approach & landing
- Utilizes a forward slip to a landing, if appropriate
- Touches down at proper attitude within first third of the runway with no side drift

Forward Slip to a Landing - Student:

- Demonstrates understanding of when and why a forward slip is used during approach
- Demonstrates understanding of concepts of energy management during a forward slip
- Configures the airplane appropriately with consideration for tail stalls with flaps
- Follows a flightpath to the landing area considering altitude, wind, terrain & obstructions
- Maintains a ground track aligned with the runway centerline

Emergency Approach and Landing - Student:

- Immediately pitches for best glide and maintains airspeed +/-10 knots
- Plans and follows a flightpath to selected landing area considering altitude, wind & terrain
- Completes the appropriate checklist while maintaining situational awareness
- Configures the airplane in accordance with POH/ AFM and existing conditions
- Touches down within half of runway length (or within safe distance)

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

OVERVIEW AND RECOMMENDATIONS