

# STAGE CHECK 1

Schedule: 1 hour of ground plus 3 hours of dual flight

## 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, landings, and ATC communications. To pass this stage check, you must demonstrate the following tasks to the standards listed below each task. To prepare for each stage check, please use our stage check documents, syllabus assignments, and AeroDynamic's Private Pilot Maneuvers Guide.

## Grading

Grading is separated into Ground and Flight portions, with each one requiring a score above 80% to successfully pass.

Ground: Each ground task is worth 1 point for a total of 26 points possible.

- If your ground score is 21 points or higher, you will successfully pass this stage check.
- If your ground score is less than 21 points (80%), a repeat stage check must be completed.

Flight: Each flight task is worth 1 point for a total of 57 points possible.

- If your flight score is 49 points or more, you will successfully pass this stage check.
- If your flight score is marginal (80-85%), your SC instructor will determine if a repeat stage check is warranted, taking into account your ground score and overall preparedness.
- If your flight score is unsatisfactory (below 80%), a repeat stage check must be completed.

## Results

The Stage Check CFI will be using a digital copy of this document. At the completion of the stage check they will review your results, their comments, and offer recommendations to make sure you get the most out of this assessment. At the top of each sheet you will see a numeric score titled "Ground Score" or "Flight Score." Next to that is your percentage grade, which will automatically color code for outstanding, satisfactory, marginal, or unsatisfactory results. Within a day or two, the SC CFI will email the digital copy to you, your CFI, and the office.

Any tasks that did not receive a point must be reviewed with your CFI, and you must demonstrate them to standard *before* you can begin training in Stage 2 or before scheduling your retest.

## Unsatisfactory score

If you did not pass the stage check, you will continue training with your instructor to correct the deficient areas. When you satisfactorily demonstrate all the missed tasks to standard, your instructor will schedule a repeat stage check, which will include an assessment of *all* the tasks you did not receive a point for on the previous attempt. Our goal is to bring you up to speed and make sure your training is thorough so you become a safe and knowledgeable pilot.

## 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

# GROUND

Aerodynamics - Student demonstrates understanding of:

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

Systems - Student demonstrates understanding of:

- Primary and secondary flight controls
- Powerplant, including identifying an abnormality or emergency situation
- Ignition system and starting sequence
- Fuel system, determining fuel quantity, and accurately deciding fuel needs

Local Environment - Student demonstrates understanding of:

- Taxi diagram and hotspots
- Noise abatement procedures
- Local airspace identification and requirements to operate within that airspace
- Proper altitude and location for practicing maneuvers

Weather Information - Student demonstrates ability to locate, read, and explain:

- METAR
- TAF
- Winds aloft
- AIRMETs, SIGMETs, Convective SIGMETs

Performance and Limitations – Student:

Completes a dispatch sheet based on current conditions including:

- Calculates pressure altitude
- Calculates weight & balance
- Determines CG location and verifies it is within limits
- Explains the importance of weight & CG limits and dangers of operating outside
- Calculates performance for takeoff and landing

Preflight Assessment - Student:

- Completes a pilot self-assessment
- Performs a preflight inspection of the airplane
- Determines aircraft airworthiness
- Makes a final go/no-go decision to fly

# FLIGHT

## Flight Deck Management - Student:

- Secures all items in the flight deck
- Completes the Before Starting Engine checklist
- Conducts a passenger SAFETY briefing
- Conducts a PIC briefing (who is PIC, transfer of controls, etc.)

## Engine Starting - Student demonstrates:

- Propeller safety considering nearby people, structures, and other aircraft
- Correct starting procedure appropriate to conditions, such as hot or cold start
- Understanding of engine and starter limitations
- Use of both the Starting Engine and After Start checklists

## Taxiing - Student demonstrates:

- Taxi Briefing incorporating the airport diagram, hot spots, and ATC instructions
- 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:

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

## Normal Takeoff and Climb - Student:

- Completes the Before Takeoff checklist
- Demonstrates proper radio communications
- Clears the area, taxis into position, and aligns with runway centerline
- Establishes pitch and maintains  $V_Y +10/-5$  knots to a safe 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  $\pm 150$  ft, airspeed  $\pm 10$  kts, rolls out on heading  $\pm 15^\circ$ , and maintains bank angle  $\pm 10^\circ$
- Returns to cruise and completes the Cruise checklist

## Slow flight (clean configuration) - 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/-5 kts, heading +/- 15°, bank +/-10°
- Recovers from slow flight and completes the Cruise checklist

## Power-off Stall and Recovery (clean configuration) - Student:

- Clears the area and performs appropriate checks (CHAPS)
- Configures the airplane for a glide approach while maintaining coordination
- Maintains heading +/- 15° and coordination while inducing the stall
- Acknowledges the cues of a stall and recovers promptly after full stall
- Accelerates to  $V_X$  or  $V_Y$ , 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 while maintaining coordination
- Maintains heading +/- 15° and coordination while inducing the stall
- Acknowledges cues of stall and recovers promptly after full stall
- Accelerates to  $V_X$  or  $V_Y$ , resumes assigned altitude and performs Cruise checklist

## Rectangular Course - Student:

- Clears the area and performs appropriate checks (CHAPS)
- Selects appropriate location, altitude, and airspeed for the maneuver
- Selects appropriate entry (45° to downwind) 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/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:

- Stops in an appropriate area clear of the runway
- Demonstrates proper ATC communication and follows instructions
- Completes the After Landing and Shutdown checklists when appropriate
- Conducts a postflight inspection and documents discrepancies, if any
- Secures the airplane, tidies up, and returns items to the correct place