

STAGE CHECK 2

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 to ensure safe and successful solo flights. Come prepared with everything you would review and do as a solo pilot, and be ready to act as Pilot-in-Command while we shadow your first solo flight 😊

Grading

Ground: Your ground score must be 40/50 points (80%) or higher to pass this stage check.

Flight:

Each flight task is worth 1 point for a total of 75 points. This score includes four mandatory flight tasks, each worth 5 points, that must receive a perfect score of 20 points (100%).

- Mandatory Tasks: Normal Takeoffs & Climbs, Normal Approaches & Landings, Traffic Pattern, and Go-Around
- If your flight score is 64 points (85%) or higher and your mandatory task score is 20 points, 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 to solo.

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 3 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
- 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)

GROUND

Pilot

Pilot Qualifications - Student demonstrates understanding of:

- Documents & endorsements required to exercise privileges
- Pilot in Command responsibilities
- Student Pilot privileges and limitations
- AeroDynamic's solo policies
- CFI limitations and student's personal minimums
- Pilot self-assessment

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

- Fatigue
- Stress
- Middle ear and sinus problems
- Medications, alcohol and associated FARs

Aircraft

Airworthiness Requirements - Student demonstrates knowledge of:

- Airworthiness checklist
- Location and verification of certificates and maintenance inspections
- Pilot-performed preventative maintenance
- Equipment requirements for Day VFR flight
- Inoperative equipment and procedure for resolving discrepancies

Performance and Limitations - Student:

- Completes a dispatch sheet with weight & balance given by Evaluator
- Calculates performance based on dispatch sheet and weather data
- Recognizes CG location determined by dispatch sheet and how it affects performance, stability, and stall characteristics
- Explains the use of charts, tables, and data to determine performance
- Understands factors affecting performance including atmospheric conditions, pilot technique, configuration, and weight & balance

Systems - Student can describe each system and identify malfunction/failure of:

- Fuel system including proper use, fuel requirements, and pilot errors
- Electrical system and associated items
- Vacuum system and associated instruments
- Pitot-static system and associated instruments
- POH and/or checklist usage in a system malfunction/failure scenario

Aircraft (continued)

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

EnVironment

Weather Information - Student:

- Retrieves and briefs current and forecast weather using acceptable weather products for departure, enroute, and arrival phases of flight
- Demonstrates understanding of meteorology with regards to:
- Wind (headwind, crosswind, tailwind, windshear, winds aloft) and temperature
 - Clouds, fog/mist, moisture, and precipitation
 - Obstructions to visibility (smoke, haze, rain, etc.)
 - Turbulence, frost, icing, thunderstorms and other hazardous weather

Airport Operations and Airspace - Student demonstrates understanding of:

- Types of airspace/airspace classes, required equipment, and student limitations
- Requirements to takeoff, landing, and operate VFR in each airspace
- Special use airspace (SUA)
- Temporary flight restrictions (TFR)
- Parachute jump areas (PJA), local zones, and safe operating procedures
- Chart supplement data
- Noise abatement procedures
- ATC instructions and compliance scenarios
- Lost communication procedures
- NTSB incident/accident reporting

External Pressures

Preflight Assessment - Student:

- Recognizes their own hazardous attitudes and antidotes
- Understands, recognizes, and manages external pressures
- Understands what would necessitate a diversion, options for alternate airports, and procedure for entering the traffic pattern and operating at a nearby airport
- Performs a preflight inspection of the airplane and determines airworthiness
- Makes a competent final "Go" or "No-Go" decision for today's flight

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.)
- Programs transponder & navigation equipment correctly

Engine Starting - Student demonstrates:

- Use of the Starting Engine checklist
- 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 the After Start checklist

Taxiing - Student demonstrates proper:

- 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
- Windssock awareness and proper position of flight controls during taxi
- Proper radio communication and follows ATC instructions

Before Takeoff Check - Student:

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

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

- Clears the area and performs appropriate checks (CHAPS)
- Configures the airplane for landing while maintaining 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 Stall and Recovery (turning) - 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

Traffic Patterns - Student:

- Selects appropriate runway for current conditions and traffic considerations
- Complies with appropriate traffic pattern procedures and corrects for wind drift
- Identifies collision hazards to include aircraft, terrain, obstacles and wires
- Demonstrates proper radio communications
- 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 Takeoffs and Climbs - 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 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.

Normal Approaches and Landings - 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 when 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

System or Equipment 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

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:

- 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