

Phase 5 Progress Check Standards Rev 8.0

Part 61 & 141 Private Pilot Certification Courses

Purpose:

The purpose of this document is to create common expectations among students, instructors, and check instructors as to the standards of knowledge, single-pilot resource management, and skill required for the various elements outlined in the Phase 5 Progress Check. This document augments the reference document “CPPTCS: Phase 5 Progress Check Checklist” by providing additional detail intended to reduce ambiguity and to focus scope of the progress check.

Time Expectations: 4.5 hours + up to 1 hour report preparation

Pre/Post-Flight Briefings: 0.5 hours

Oral: 1.5 hours

Observed Preflight Inspection: 0.5 hours

Flight Time: 2.0 hours

Mixture Control:

Mixture will be leaned in accordance with *TWA engine management procedures* document (latest revision).

Check Instructor Responsibilities and Expectations:

The full list of responsibilities and expectations for check instructors are outlined in the *TWA check instructor expectations* document (latest revision).

Approved Check Instructors

The full list of check instructors available to conduct this check are outlined in the *CFI Fleet Qualifications and Stage Check Pilots* document (latest revision).

Definitions:

Describe: The candidate will be able to describe the physical characteristics of the task at a **rote level**.

Explain: The candidate will be able to describe the task and **display an understanding** of the concept, principles, & procedures.

Practice: coaching, instruction, and/or **assistance from the check instructor** will be required to meet the task standards.

Perform: **no intervention** from the check instructor is required and the **successful completion** of the activity in **not in doubt**.

Manage/Decide: **no intervention** from the check instructor is required for the candidate to **gather** the most important **data** available within and outside the cockpit, **identify** possible **courses of action**, **evaluate** the **risk** inherent in each course of action, and **make** the appropriate **decision**.

References:

1. Cessna Private Pilot Training Course Syllabus: Phase 5 Progress Check Checklists (latest revision)
2. Pilot’s Operating Handbook, Cessna C172S

Phase 5 Progress Check

5A. Oral <i>Note: the check instructor will develop a scenario to help assess the candidate's knowledge. He or she shall select at least the minimum number of knowledge elements listed in the applicable knowledge header</i> <i>Desired outcome for all oral tasks of the Progress Check is "Explain"</i>	Describe	Explain
5A1. Regulations applicable to student pilots (at least 6 elements)		
a. 61.53 Prohibited operations with a medical deficiency		
b. 91.3 PIC authority/responsibility		
c. 91.7 Civil aircraft airworthiness <i>Responsibility of PIC to determine airworthiness</i> <i>Responsibility of PIC to discontinue flight</i>		
d. 91.13 Careless/Reckless		
e. 91.17 Alcohol or drugs		
f. 91.103 Preflight action		
g. 91.113 Right-of-way Rules		
h. 91.119 Minimum safe altitudes: General		
i. 91.121 Altimeter settings		
j. 91.123 Compliance with ATC clearances and instructions		
k. 91.125 ATC light signals		
l. 91.126 Operations on or in the vicinity of a Class G airport		
m. 91.127 Operations on or in the vicinity of a Class E airport		
n. 91.129 Operations in Class D airspace		
o. 91.130 Operations in Class C airspace		
p. 91.151 Fuel requirements for flight in VFR conditions		
q. 91.155 Basic VFR weather minimums (specifically G, E < 10k, D, & C)		
r. 91.159 VFR cruising altitudes		
s. 91.203 Civil aircraft: Certifications required (i.e., airworthiness certificate and registration)		
t. 91.205 Instrument and equipment requirements		
5A2. Appropriate Logbook Endorsements (all elements)		
a. 61.87(n) & (p)		
b. 61.93(b)		
INTENTIONALLY LEFT BLANK		

Phase 5 Progress Check

5A. Oral	Describe	Explain
5A3. Student pilot limitations (at least 5 elements)		
a. 61.89 General Limitations: may not act as PIC...		
1. Carrying passengers		
2. Carrying property for compensation or hire		
3. Compensation or hire		
4. In the furtherance of a business		
5. On international flights		
6. Flight or surface visibility < 3 SM (Day)		
7. Without visual reference to the surface		
8. Contrary to limitations in pilot's logbook		
b. Per Trade Winds Aviation policies & Part 141 regulations		
1. 141.79(b) Dispatch by certificated flight instructor		
2. 5,000' cig, 10 SM vis, 10 kt total wind, 5 kt XW / no-touch and go's		
3. Arrive 30 minutes before sunset		
4. No night flight		
5. During normal business hours or CFI present		
5A4. Certificates and documents (all elements)		
a. Pilot certificate		
b. Medical certificate / Basic Med (if applicable)		
c. Government-issued photo ID / Driver's License (Basic Med)		
d. Logbook with endorsements (for all cross-country flights, e.g. RHV to E16)		
5A5. Systems: Explain how to address a malfunction or abnormality using proper procedure and good ADM/RM. (at least 1 scenario for 3 systems)		
a. Electrical <i>Low volts in taxi / inflight</i> <i>Overcharging condition</i>		
b. Fuel <i>Inoperative fuel gauge</i> <i>Loss of engine power restored by electrical fuel pump</i>		
c. Oil <i>Low oil pressure & rising oil temperature</i> <i>Low oil pressure & steady oil temperature</i>		
d. Brakes <i>Fluid on the inside of the wheel pant found during preflight</i> <i>Strong yaw while applying brakes on landing roll</i>		
INTENTIONALLY LEFT BLANK		

Phase 5 Progress Check

5A. Oral	Describe	Explain
e. Pitot-static <i>No airspeed indication in the traffic pattern</i> <i>Airspeed does not change after power reduction in traffic pattern.</i> <i>Altimeter freezes and then makes quick increases in altitude during climb out.</i>		
f. Engine <i>RPM drop of > 150 during magneto check</i> <i>No magneto drop when individual magneto selected</i> <i>Normal oil pressure, high oil temperature, loss of power</i>		
5A6. Airworthiness: Explain... (at least elements a. & c.)		
a. AROW: including proper location and duration of validity		
b. Required aircraft inspection intervals		
1. Annual		
2. 100-hour		
3. Altimeter / Static System		
4. Transponder		
5. ELT operational test		
6. ELT battery		
7. Airworthiness Directives		
c. Required/Inoperative Equipment (<i>use scenario</i>) <i>Able to identify components that are required. Able to determine that an inoperative component has been properly address in accordance with 91.213(d)</i>		
5A7. Weight and Balance		
a. Computes and explains a weight and balance for the aircraft		
5A8. Performance and Limitations: (at least elements a. & b.)		
a. Calculates takeoff and landing distance (rounded up) <i>Expect scenario with crosswind. Be prepared to compute headwind and crosswind values</i>		
b. Identifies V-speeds on airspeed indicator and understands associated limits (e.g., V_{S0} , V_{S1} , V_a , V_x , V_y , V_{fe} , etc.)		
c. Determines conservative V_A for loaded weights less than max gross weight		
5A9. Wind shear awareness and recovery procedures (at least elements c. & d.)		
a. Defines wind shear		
b. Describes conditions in which wind shear is likely <i>Thunderstorms, Frontal systems, Low-level temperature inversions, Obstructions</i>		
c. Describes how to recognize a wind shear encounter <i>PIREPs / ATIS broadcast, Mismatched wind indicators or rapidly varying indicators, Gains/losses of airspeed and/or altitude</i>		
d. Recites the procedure for escape/recovery from a wind shear <i>Loss of airspeed & altitude: pitch to horizon, full pwr, go-around</i> <i>Gain of airspeed and altitude: reduce pitch, reduce power...be prepared to go-around.</i>		
INTENTIONALLY LEFT BLANK		

Phase 5 Progress Check

5A. Oral	Describe	Explain
5A10. Wake turbulence avoidance (specific to aircraft operations at RHV) (at least one scenario)		
a. Scenarios per AIM <i>Takeoff behind a heavy airplane departing / landing</i> <i>Landing behind a heavy airplane departing / landing</i> <i>Landing behind a heavy airplane that conducted a go-around</i>		
5A11. Obtaining Weather Information (at least elements a. & c.)		
a. Obtains a preflight weather briefing from one of the following sources: <i>1800wxbrief.com / Foreflight (Leidos)</i> <i>FLTPLAN.com, or</i> <i>Telephone briefing</i>		
b. Reads and interprets most NOTAMs, for departure and arrival airports, without instructor assistance (applicable to digital briefing only)		
c. Explains decision-making based on briefing received (i.e., would you be able to make this flight based on the weather conditions / NOTAMs?)		
5A12. Spin Awareness and Recovery (orally evaluated flight task) (all knowledge elements)		
a. Can identify scenarios in which stall/spins more likely (e.g., takeoff, landing, go-arounds)		
b. Knows procedures for avoidance of unintentional spins <i>Trim to hands-free; apply smooth elevator input</i> <i>Limit bank to 30 degrees in traffic pattern</i> <i>Maintain coordinated turns</i> <i>Monitor airspeed</i>		
c. Knows and understands PARE procedure		

*****END of ORAL*****

Phase 5 Progress Check

5B. Flight

Note: the check instructor shall evaluate **every** flight skill through direct observation of the task or oral evaluation if conditions do not permit direct observation of the task. SRM tasks will be evaluated throughout the entire duration of the flight.

Desired outcome for all flight tasks of the Progress Check is "Perform" or "Manage/Decide"

Single-Pilot Resource Management

To evaluate the candidate's single-pilot resource management skills, the check instructor will not provide guidance on where or how tasks will be completed. Should a safety of flight issue arise, the check instructor will intervene, as necessary. Intervention by the check instructor indicates unsatisfactory performance of the phase check task thus requiring a recheck on that task.

	Practice	Perform	Manage / Decide
5B1. Single-pilot resource management (SRM) <i>as appropriate to a student pilot</i>			
Utilizes all resources available to ensure the successful completion of the flight (e.g., SRM skills, ATC, wx briefing, charts and publications [paper or electronic], checklists, etc.)			
5B2. Task management			
Prioritizes and selects the most appropriate tasks in accordance with Aviate-Navigate-Communicate			
5B3. Risk management			
Identifies, analyzes, and mitigates risks			
5B4. Situational awareness			
Maintains an accurate perception and understanding of surrounding factors and flight conditions (i.e., an awareness of the pilot, aircraft, environment, and external pressures associated with a typical solo flight.)			

Pre-Flight Procedures

5B5. Preflight inspection (observed by check instructor)			
a. Performs a safe preflight inspection without assistance <i>Within 30 minutes</i>			
5B6: Checklist usage (Ground Operations)			
a. Uses checklists as a habit			
5B7. Radio Communications (Ground Operations)			
a. Performs effective radio communications without assistance			
5B8. Crosswind Taxi			
a. Applies runway incursion avoidance SOPs			
b. Applies appropriate aileron and elevator deflections <i>(actual or simulated conditions)</i>			
c. Maintains a safe taxi speed, not to exceed 10 knots			
d. Reasonable holding of centerline			
e. Flight instrument checks during taxi turns			

In-Flight

5B9: Checklist usage (Flight Operations)			
a. Uses checklists as a habit			
5B10. Radio Communications (Flight Operations)			
a. Performs effective radio communications without assistance			

INTENTIONALLY LEFT BLANK

Phase 5 Progress Check

5B. Flight	Practice	Perform	Manage / Decide
5B11. Normal/crosswind takeoff and climb			
a. Consistently and safely controls the airplane using proper wind correction techniques <i>Applies proper crosswind correction through take off and climb Maintains alignment with centerline Holds throttle forward until reaching 1,000 AGL</i>			
b. V_Y until 1,000 AGL or safe altitude; cruise climb speed thereafter (+10/-5 KIAS)			
c. Abides by applicable noise abatement procedures			
5B12. Use of trim			
a. Trims the aircraft after setting pitch and power to a hands-off condition (± 10 KIAS)			
5B13. Collision Avoidance			
a. Maintains awareness of traffic in the area <i>(scan, TIS-B, etc.)</i>			
b. Lifts wing and looks before turning			
c. Clearing during V_Y climb: <i>lower nose every 500 ft of altitude, or conduct shallow s-turns</i>			
d. Conducts clearing turns prior to all maneuvers			
5B14. Maneuvering in Slow Flight			
a. altitude (± 150 feet)			
b. heading ($\pm 10^\circ$)			
c. airspeed (+10/-0 knots) [stall horn not on]			
d. bank ($\pm 10^\circ$)			
5B15. Full Stall (Pwr-off or Pwr On, straight ahead)			
a. Maintains heading, $\pm 10^\circ$			
b. Recognizes and recovers promptly at either wing drop or nose drop by simultaneous reduction of AOA and increase of power			
c. Uses reductions of AOA and rudder to stop wing drop, not aileron input			
d. No secondary stall			
5B16. Basic Instrument Maneuvers (IR) <i>(alt ± 200 ft, hdg $\pm 15^\circ$, airspeed ± 10 kts)</i>			
a. Straight-and-level			
b. Constant airspeed climbs and descents			
c. Turns to headings <i>including 180° turn (escape IMC)</i>			
d. Recovery from unusual flight attitudes			
5B17. GPS (Direct-To/Nearest airport functions) (IR) <i>(alt ± 200 ft, hdg $\pm 15^\circ$, airspeed ± 10 kts)</i>			
a. Operates the GPS without assistance			

Phase 5 Progress Check

5B. Flight	Practice	Perform	Manage / Decide
5B18. Emergency operations <i>(select engine failure & one more emergency listed below)</i>			
a. Engine failure <i>Applies memory items, uses written checklist, & mitigates risk</i>			
b. Display/instrument failure, radio failure, alternator failure <i>Uses written checklist & mitigates risk</i>			
5B19. Ground Reference Maneuver <i>(Turns Around a Point or S-turns)</i>			
a. Altitude ± 150 ft			
b. Airspeed ± 10 KIAS			
5B20. Traffic Patterns			
a. Enters on 45 (non-twr airport) in level flight, or as specified by ATC			
b. TPA ± 150 ft			
c. Airspeed ± 10 KIAS, final approach $+10/-5$ KIAS			
5B21. Go Around/Rejected Landing			
a. Executes POH's balked landing procedure			
b. $V_Y + 10/-5$ KIAS until TPA or 1,000 AGL			
5B22. Normal/crosswind approach and landing <i>(2 landings minimum)</i>			
a. Consistently and safely controls the airplane using proper wind correction techniques <i>Centerline ± 10 ft; Longitudinal axis of the aircraft parallel to the runway centerline Touches down on main gears in the first 1/3 of the runway; aft elevator until taxi speed</i>			
Postflight Procedures			
5B23. After landing			
a. No in-cockpit tasks while moving or holding between runways			
b. Taxi fully clear of the runway safety lines before stopping			
5B24. Taxiing, Parking, and Securing <i>(Taxi, parks, and secures the airplane without assistance)</i>			
a. Applies runway incursion avoidance SOPs			
b. Applies appropriate aileron and elevator deflections <i>(actual or simulated conditions)</i>			
c. Maintains a safe taxi speed, not to exceed 10 knots			
d. Reasonable holding of centerline			

*****END of FLIGHT*****