

**A BRIEF GUIDE TO PREPARING FOR THE
KNOWLEDGE COMPONENT OF YOUR INITIAL OR
RECURRENT PART 135 IFR-PIC CHECKRIDE
(INCLUDING COMPLETE SUBJECT AREA CHECKLIST)**

The FAA's Part 135 knowledge testing requirements – §135.293(a) and §135.297(c) – are shown below:

Subpart G – Crewmember Testing Requirements

Section 135.293 -- Initial and recurrent pilot testing requirements.

(a) No certificate holder may use a pilot, nor may any person serve as a pilot, unless, since the beginning of the 12th calendar month before that service, that pilot has passed a **written or oral test**, given by the Administrator or an authorized check pilot, on that pilot's knowledge in the following areas –

- (1) The appropriate provisions of Parts 61, 91, and 135 of this chapter and the Operations Specifications and the manual of the certificate holder;
- (2) For each type of aircraft to be flown by the pilot, the aircraft powerplant, major components and systems, major appliances, performance and operating limitations, standard and emergency operating procedures, and the contents of the approved Aircraft Flight Manual or equivalent, as applicable;
- (3) For each type of aircraft to be flown by the pilot, the method of determining compliance with weight and balance limitations for takeoff, landing and en route operations;
- (4) Navigation and use of air navigation aids appropriate to the operation or pilot authorization, including, when applicable, instrument approach facilities and procedures;
- (5) Air traffic control procedures, including IFR procedures when applicable;
- (6) Meteorology in general, including the principles of frontal systems, icing, fog, thunderstorms, and windshear, and, if appropriate for the operation of the certificate holder, high altitude weather;
- (7) Procedures for –
 - (i) Recognizing and avoiding severe weather situations;
 - (ii) Escaping from severe weather situations, in case of inadvertent encounters, including low-altitude windshear (except that rotorcraft pilots are not required to be tested on escaping from low-altitude windshear); and
 - (iii) Operating in or near thunderstorms (including best penetrating altitudes), turbulent air (including clear air turbulence), icing, hail, and other potentially hazardous meteorological conditions; and
- (8) New equipment, procedures, or techniques, as appropriate.

Section 135.297 -- Pilot in command: Instrument proficiency check requirements.

(c) The instrument proficiency check required by paragraph (a) of this section consists of an **oral or written equipment test** and a flight check under simulated or actual IFR conditions. The equipment test includes questions on emergency procedures, engine operation, fuel and lubrication systems, power settings, stall speeds, best engine-out speed, propeller and supercharger operations, and hydraulic, mechanical, and electrical systems, as appropriate.

These are the knowledge subject areas that an FAA aviation safety inspector (ASI) or company Check Airman is **REQUIRED** to test you on during your initial and recurrent checkride, either orally or in writing! This is not optional; all knowledge subject areas must be covered. Moreover, your knowledge of each area must be adequate.

Or, to express it as a conventional checklist:

- ❑ The appropriate provisions of Part 61
- ❑ The appropriate provisions of Part 91
- ❑ The appropriate provisions of Part 135
- ❑ Our company Operations Specifications
- ❑ Our company General Operations Manual
- ❑ The aircraft powerplant (for the appropriate aircraft)
- ❑ Major components and systems (for the appropriate aircraft)
- ❑ Major appliances, performance and operating limitations (for the appropriate aircraft)
- ❑ Standard and emergency operating procedures (for the appropriate aircraft)
- ❑ The method of determining compliance with weight and balance limitations for takeoff, landing and en route operations (for the appropriate aircraft)
- ❑ Engine operation (for the appropriate aircraft)
- ❑ Fuel and lubrication systems (for the appropriate aircraft)
- ❑ Company speeds, configurations and power settings (for the appropriate aircraft)
- ❑ Stall speeds (for the appropriate aircraft)
- ❑ Best engine-out speed (for the appropriate aircraft)
- ❑ Propeller operations (for the appropriate aircraft)
- ❑ Hydraulic, mechanical, and electrical systems (for the appropriate aircraft)
- ❑ Principles and theory of navigation
- ❑ The use of air navigation aids appropriate to Flight Express (I.e., VORs and NDBs)
- ❑ Applicable terminal instrument approach facilities, charts and procedures
- ❑ Air traffic control procedures, including IFR procedures (SIDs, ODPs, clearances, etc.)
- ❑ Concepts of meteorology in general
- ❑ Principles and theory of frontal systems
- ❑ Principles and theory of icing

- ❑ Principles and theory of fog
- ❑ Principles and theory of thunderstorms
- ❑ Principles and theory of windshear
- ❑ Procedures for recognizing and avoiding severe weather situations
- ❑ Procedures for escaping from severe weather situations, in case of inadvertent encounters, including low-altitude windshear
- ❑ Operating in or near thunderstorms (including best penetrating altitudes)
- ❑ Operating in or near turbulent air (including clear air turbulence)
- ❑ Operating in or near icing conditions
- ❑ Operating in or near hail and other potentially hazardous meteorological conditions

You are VERY STRONGLY ENCOURAGED to use this checklist to evaluate your own readiness for the checkride. **IF YOUR KNOWLEDGE OF THESE AREAS IS STRONG, YOU WILL ACE THE TEST.**

If it isn't on the list above, it will not be on the test.

If it *is* on the list above, it *will* be on the test.

Use the FAA's own primary source material! For example . . .

- **To study for “the use of air navigation aids appropriate to the operation and pilot authorization,” read Chapter 1 of the Aeronautical Information Manual, “Air Navigation.”**
- **To study for “principles and theory of frontal systems,” study Chapter 8 of the FAA advisory circular *Aviation Weather*, “Air Masses and Fronts.”**
- **To study for “the appropriate provisions of Part 91,” review General Operating and Flight Rules from the FARs.**

We will be asking STANDARD FAA QUESTIONS and looking for STANDARD FAA ANSWERS!