Preparing for the CFI Practical Test

Getting Organized

The CFI oral will test your knowledge of all subject areas required of private, commercial, instrument, and CFI candidates.  This will include knowledge of the relevant FAR’s, aerodynamics, fundamentals of flight, navigation, weather, performance and ground reference maneuvers, approaches and landings, instrument maneuvers, slow flight stalls, spins, instructor responsibilities and limitations, emergency procedures, and fundamentals of instruction.

That’s quite a list, but even more is expected of a CFI candidate.  The candidate must convince the examiner that they are able to apply and teach the above subject matter in a way that effectively teaches these concepts to a student, taking into consideration the learning principles found in the Fundamentals of Instruction.  Especially important is the principle of correlation, a level of learning that relates new concepts to those already known to the student.  Finding ways or using examples to teach concepts based upon knowledge previously learned in life or specifically in aviation will help you demonstrate your ability to include the highest learning level of correlation into your teaching.

For the oral portion of the practical test, it is highly recommended that the CFI candidate have up to date FAA Handbooks, Advisory Circulars, PTS Standards, FAR/AIM, Relevant Sectional & Terminal Charts, AFD, POH, Airframe, Engine/Propeller Logbooks, and AD Compliance Sheet.  It is also recommended that the CFI candidate have brief lesson plans prepared with key speaking points in order to reference it to teach the required lesson during the oral. A four part format is recommended for teaching both flight and ground lessons as follows:

1. Why – what is the reason why we are learning this? Use a scenario to make this point or if a scenario is not applicable, state the reason why this lesson or skill is useful. This uses the retention principle of association in the Fundamentals of Instruction. For example, a meaningful scenario when teaching a lesson on Rectangular Course would be to relate it to flying a traffic pattern when landing.
2. What – what is the maneuver or principle of the lesson? Describe it in detail as well as how it would be performed. For example, when teaching the lesson on Chandelles, it would be described as a climbing 180° turn that is comprised of two sections – the first 90° performed at a constant 30°bank and increasing pitch with the second 90°performed at a constant pitch and decreasing bank.
3. Common Errors – what are the most common errors as described in the relevant FAA Handbook. If you don’t do the maneuver perfectly when demonstrating it, you can use your own errors as examples.
4. PTS Standards – how will this task be evaluated? For example in teaching a lesson on Steep Turns, Private PTS standards would be described as a 45° bank +/-10°, altitude maintained +/- 100’, and airspeed maintained +/- 10 kts, and rollout on initial heading +/- 10°.

By formatting your lessons plans and teaching the flight lesson in this way you will achieve a consistent approach and one that will lend itself to teaching whether in flight or in a ground lesson. Lesson plans should be no more than 1 or 2 pages in bullet point format.

It is helpful but not essential to also have a syllabus which organizes the sequence of lesson plans for teaching Private, Commercial, Sport, and Recreational. You can develop these yourself or use established syllabi available from a variety of providers such as Cessna, Jeppesen, etc.

Lesson Plan Preparation

For the Flight Instructor Airplane Single Engine Land practical test, a total of 73 lesson plans will need to be prepared. The best resource I have found to help you structure your binder, organize your lesson plans and decide what is important to include, is a book by James Kelly titled Certificated Flight Instructor Preparation Guide. Unfortunately this book is out of print and apparently not being re-printed. However I bought several copies directly from Jim Kelly and I can sell one to you for my cost of $25 as long as they last.

A useful guide for discussion and review of subject areas is the Flight Instructor, Oral Test Guide written by Michael Hayes, and published by ASA.  This guide has been written after a comprehensive be-brief with CFI candidates following their checkrides, so therefore provides a list of the most commonly asked questions.  This guide follows exactly the order of the Areas of Operations in the CFI Practical Test Standards.

The resources contained in the following list (also listed in the PTS) should be read and available for reference during the oral as well as all relevant PTS handbooks. It is also useful to have read FAA Order 8900 and 49 CFR 1553 for current TSA requirements for training U.S. and foreign students. Finally, read in detail the CFI PTS for airplane SEL.

14 CFR Part 1 Definitions & Abbreviations

14 CFR Part 23 Airworthiness Standards

14 CFR Part 39 Airworthiness Directives

14 CFR Part 43 Maintenance, Preventive Maintenance

14 CFR Part 61 Certification of Pilots & Flight Instructors

14 CFR Part 67 Medical Standards & Certification

14 CFR Part 91 General Operating & Flight Rules

NTSB Part 830 Notification & Reporting of Aircraft Accidents & Incidents

AC 00-6 Aviation Weather

AC 00-45 Aviation Weather Services

AC 60-22 Aeronautical Decision Making

AC 60-28 English Language Skills

AC 61-65 Certification of Pilots and Flight Instructors

AC 61-67 Stall and Spin Awareness Training

AC 61-84 Role of Pre-Flight Preparation

AC 61-107 Operations of Aircraft at Altitude Above 25,000 Feet MSL and/or Mach Greater Than .75

AC 90-42 Traffic Advisory Practices at Uncontrolled Airports

AC 90-48 Pilot’s Role in Collision Avoidance

AC 90-66 Recommended Traffic Patterns at Uncontrolled Airports

AC 91-13 Cold Weather Operation of Aircraft

AC 91-55 Reduction of Electrical Failures Following Aircraft Starting

AC 91.73 Parts 91 & 135 Single Pilot Procedures During Taxi Operations

AC 150/5340-1 Standards for Airport Markings

AC150/5340-18 Standards for Airport Sign Systems

AC 150/5340-30 Design and Installation Details for Airport Visual Aids

FAA-H-8083-1 Aircraft Weight & Balance Handbook

FAA-H-8083-2 Risk Management Handbook

FAA-H-8083-3 Airplane Flying Handbook

FAA-H-8083-9 Aviation Instructor’s Handbook

FAA-S-8081-12 Commercial Pilot Practical Test Standards

FAA-S-8081-14 Private Pilot Practical Test Standards

FAA-H-8083-15 Instrument Flying Handbook

FAA-H-8083-25 Pilot’s Handbook of Aeronautical Knowledge

FAA-S-8081-6 Flight Instructor Practical Test Standards

Order 8080.6 Conduct of Airmen Knowledge Tests

AIM Aeronautical Information Manual

A/FD Airport Facility Directory

NOTAMS Notices to Airmen

POH/AFM Pilot Operating Handbooks and FAA Approved Airplane Flight Manuals

USCG Coast Guard Commandant Instruction, Navigation Rule: International-Inland

5 Day CFI Program Daily Schedule

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| Ground | **I FOI**  A Human Behavior  B Learning Process  C Teaching Process  D Assessment & Critique  E Instructor Responsibilities  F Techniques of Flight Inst  G Risk Management | **II TECHNICAL AREAS**  A Aeromedical Factors  B Runway Incursion Avoidance  C Visual Scanning  D Principles of Flight  E Flight Controls  F Weight & Balance | G Nav & Flight Planning  H Night Operations  I High Altitude Operations  J 14 CFR & Publications  K National Airspace System  L Navigation Systems | M Logbook Entries & Certificate Endorsement  **VI AIRPORT OPERATIONS**  A Radio Com/Light Sig  B Traffic Patterns  C Airport/Runway Taxiway Signs, Markings, Lighting  **III PREFLIGHT PREPARATION**  A Certificates & Docs  B Weather Information | C Operation of Systems  D Performance & Limitations  E Airworthiness Requirements  **IV PREFLIGHT LESSON**  Present ground lessons Select One Private & One Commercial Lesson |
| Flight | **V PREFLIGHT PROCEDURES**  A Preflight Inspection  B Cockpit Management  C Engine Starting  D Taxiing  G Before Takeoff Check  **VIII FUNDAMENTALS OF FLIGHT**  A Straight & Level  B Level Turns  C Climbs/ Climbing Turns  D Descents/Descend Turns  **X GROUND REFERENCE MANEUVERS**  A Rectangular Course  B S-Turns  C Turns Around a Point  D Eights on Pylons  **XIV POSTFLIGHT PROCEDURES**  A Postflight Procedures | **XI SLOW FLIGHT STALLS, & SPINS**  A Slow Flight  B Power On Stalls  C Power Off Stalls  D X-Control Stalls  E Elevator Trim Stalls  F Secondary Stalls  G Spins (if necessary)  H Accelerated Stalls | **XII BASIC INSTRUMENT MANEUVERS**  A Straight & Level Flight  B Constant A/S Climbs  C Constant A/S Descents  D Turns to Headings  E Unusual Attitude Recovery  **IX PERFORMANCE MANEUVERS**  A Steep Turns  B Steep Spirals  C Chandelles  D Lazy Eights | **XIII EMERGENCY OPERATIONS**  A Emerg App & Landing  B Systems & Equip Mal  C Emerg Equip & Gear  D Emergency Descent  **VII TAKEOFFS, LANDINGS & GO-AROUNDS**  A Normal & X-W T.O.  B Short Field T.O.  C Soft Field T.O.  F Normal & X-W Landing  G Slips to Landing  H Go-Around  I Short Field Landing  J Soft Field Landing  K Power Off 180 | Teach the Selected Flight Lessons  Practice Any Maneuvers Not to PTS Standard |