

DPE ORAL-EXAM SUPPLEMENT (ACS-Aligned)

Evaluating Expectation Drift Awareness in Practical Tests

Purpose

Provide Designated Pilot Examiners with targeted oral-exam prompts and evaluation cues that align directly with the **FAA Airman Certification Standards (ACS)**. The goal is to assess a pilot's ability to recognize, challenge, and interrupt expectation-driven errors within the ACS framework — without turning the exam into a communications lecture.

1. ACS AREAS OF OPERATION THIS TOPIC TOUCHES

Expectation drift is not explicitly named in the ACS, but it is embedded in multiple required competencies:

Private Pilot ACS (FAA-S-ACS-6B)

- **I. Preflight Preparation**
 - *Task F: Cross-Country Planning* — mental model accuracy, anticipating changes
- **II. Preflight Procedures**
 - *Task A: Preflight Assessment* — situational awareness
- **III. Airport Operations**
 - *Task B: Traffic Patterns* — visual identification, sequencing
- **IV. Communications & Light Signals**
 - *Task A: Radio Communications* — correct interpretation, readback accuracy
- **VI. Navigation**
 - *Task A: Pilotage & Dead Reckoning* — updating mental model
- **VII. Emergency Operations**
 - *Task A: Emergency Approach & Landing* — interruption of incorrect assumptions

Commercial Pilot ACS (FAA-S-ACS-7B)

- **I. Preflight Preparation**
 - *Task E: Human Factors* — cognitive bias, expectation effects

- **III. Airport Operations**
 - *Task B: Traffic Patterns* — sequencing, visual assumptions
- **IV. Communications**
 - *Task A: Radio Communications* — verification under workload

Instrument Rating ACS (FAA-S-ACS-8B)

- **I. Preflight Preparation**
 - *Task E: Human Factors* — expectation bias under workload
- **III. ATC Clearances & Procedures**
 - *Task A: Compliance with Clearances* — verifying identity and content
- **VI. Emergency Operations**
 - *Task A: Loss of Comms* — preventing assumption-driven errors

2. CORE COMPETENCIES TO PROBE (ACS-Linked)

A. Mental Model Accuracy

ACS Link: *Private I.F, Commercial I.E, Instrument I.E*

- Ability to detect mismatches early
- Ability to articulate when expectation becomes assumption

B. Clearance Interpretation & Verification

ACS Link: *Private IV.A, Commercial IV.A, Instrument III.A*

- Verifying identity before content
- Recognizing when a clearance does not fit the situation

C. Visual Identification & Sequencing

ACS Link: *Private III.B, Commercial III.B*

- Avoiding visual target substitution
- Confirming traffic identity, not just presence

D. Workload Management & Cognitive Bias

ACS Link: *Private I.A, Commercial I.E, Instrument I.E*

- Avoiding prediction-driven shortcuts
- Recognizing when workload reduces verification

E. Scenario-Based Decision Making

ACS Link: *Private VII.A, Commercial VII.A, Instrument VI.A*

- Interrupting the chain early
- Updating the mental model under changing conditions

3. RECOMMENDED ORAL-EXAM QUESTIONS (ACS-Referenced)

A. Mental Model Awareness

(ACS: Private I.F, Commercial I.E, Instrument I.E)

- “Describe a situation where your expectation of a clearance could differ from what ATC actually said.”
- “How do you detect when your mental picture is starting to diverge from reality?”
- “What cues tell you that your expectation has become an assumption?”

B. Clearance Verification

(ACS: Private IV.A, Commercial IV.A, Instrument III.A)

- “If you hear a clearance that doesn’t fit the pattern you were expecting, what do you do?”
- “How do you verify that a clearance was intended for you when call signs are similar?”
- “Explain how you use readbacks as *mutual* verification rather than ritual.”

C. Visual Identification

(ACS: Private III.B, Commercial III.B)

- “ATC says ‘follow the Cessna on base.’ You see a Cessna. What steps ensure it’s the correct one?”
- “How do you prevent visual target substitution during busy pattern work?”

D. Workload & Frequency Congestion

(ACS: Private I.A, Commercial I.E, Instrument I.E)

- “How does workload affect your willingness to verify?”
- “What do you do when you only hear part of a transmission?”
- “How do you avoid filling in missing information with expectation?”

E. Scenario-Based Mismatch Challenges

(ACS: Private VII.A, Commercial VII.A, Instrument VI.A) Use these to evaluate real-time reasoning:

- Unexpected runway change
- Unexpected altitude assignment
- Traffic not where expected
- Similar call signs on frequency
- ATC issues a vector that doesn’t match the flow

Ask: “What is the earliest point in this scenario where you would interrupt the chain?”

4. WHAT GOOD ANSWERS SOUND LIKE (ACS-Aligned)

Strong Applicant

- Identifies mismatch early
- Describes verification steps clearly
- Avoids blaming ATC
- Avoids relying solely on prediction
- Emphasizes identity confirmation
- Shows willingness to interrupt early
- Demonstrates ADM consistent with ACS risk-management elements

Weak Applicant

- Focuses only on phraseology
- Assumes ATC is always correct
- Assumes their expectation is always correct
- Relies on pattern recognition without challenge

- Treats readbacks as ritual rather than verification
- Shows limited awareness of ACS human-factors elements

5. Examiner Notes (ACS Context)

- Expectation drift is a **human-factors competency**, not a communications skill.
- It fits naturally under ACS risk management, human factors, and clearance compliance.
- Evaluate **challenge behavior**, not just procedural compliance.
- Use mismatches deliberately to reveal cognitive habits.
- Reinforce that early interruption is a sign of good judgment, not uncertainty.

6. Closing Line for the Practical Test

“Expectation drift is subtle, normal, and part of real flying. What matters is whether you recognize the mismatch early enough to keep the situation inside your control — exactly what the ACS requires.”