

Handout for the Audience

“Cognitive Decision-Making in Action: Case Study and Revised DECIDE Checklist”

- Scenario Narrative

You're on a routine flight in a Cessna 172SP on a daytime approach to non-towered KXYZ under Part 91. Mid-approach, you suddenly encounter unexpected crosswinds combined with rapidly developing weather conditions. Shortly after, one of your key instruments begins exhibiting inconsistent readings. You have partial information—with conflicting cues from the weather reports and your instruments—and must decide whether to continue the approach or execute a go-around. The situation is tense, and time is limited. Reflect on how your initial reactions, reliance on habits, and potential biases (such as anchoring on initial instrument readings) might impact your decision-making.

- Work Group Discussion Questions to Guide Your Reflection

1. Detection

- Which early warning signs or cues did you notice?
- Did you recognize any potential cognitive biases (e.g., anchoring or overconfidence) based on your initial reaction?

2. Evaluation

- How would you assess the conflicting information provided by the weather and instrument data?
- What factors (weather, workload, previous experience) would you weigh most heavily?

3. Decision Points

- What steps would you take to either commit to the current approach or to execute a go-around?
- Which external aids (such as checklists, peer communication, or automation support) would help you during this process?

4. Reflection (Metacognitive):

- After the event, what self-reflective questions would you ask to improve your future performance?
- How might an after-action review enhance your understanding of your decision-making process?