
HANDOUT — Final Integrating Question (Modern Avionics Version)

“On your next first flight after avionics or electrical maintenance, what specific avionics or automation cue would cause you to stop the sequence, and what is your personal threshold for rejecting the aircraft when the system’s behavior does not match its expected configuration state?”

1. What You’re Looking For

Modern aircraft rarely announce configuration errors.

Instead, you get subtle avionics cues, such as:

- **Mode annunciation that doesn’t match your selection**
- **Uncommanded flight director activation**
- **Autopilot defaulting to unexpected modes (e.g., ROL instead of HDG)**
- **HSI or heading pointer drift or jumps**
- **Data that is plausible but inconsistent**
- **Automation behavior that does not match the interface**

These are logic-state cues, not mechanical ones.

2. Why These Cues Matter

After avionics maintenance:

- **Software states may not match hardware states**
- **Configuration files may be incomplete or mismatched**
- **Sensors may not agree on heading or attitude**
- **Autopilot and EFIS may not share a stable reference**
- **Hybrid systems have no central integration authority**

Ground checks often fail to reveal these issues.

3. Your Personal Threshold

Owner Threshold

“If the avionics do not behave exactly as they have historically, I stop the sequence.”

Renter Threshold

“If any avionics behavior is inconsistent with expected logic—even slightly—I stop the sequence.”

One unresolved avionics cue = reject.

4. Preferred Operational Answer

“The cue that stops the sequence is any mismatch between the avionics mode annunciation and the configuration I selected. My threshold is simple: if the system’s behavior does not match its expected logic state, I abort immediately. One unresolved avionics cue is enough.”
