

Area of Operation **III** - Task **C**

Instrument Flight Deck Check

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Key References:

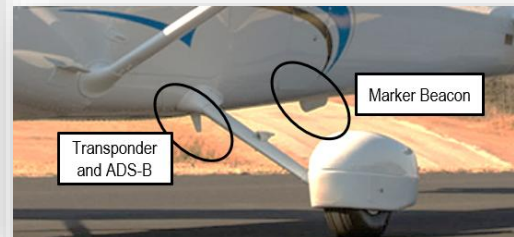
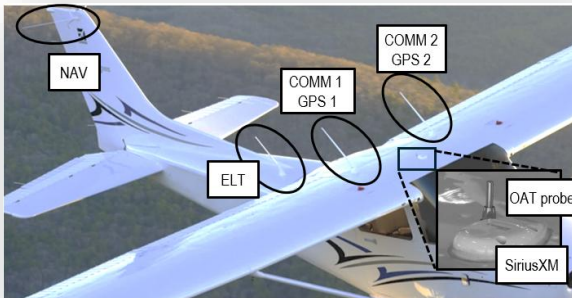
- Instrument Flying Handbook
- AIM

1. Introduction

- **What:** Check equipment critical for IFR before getting airborne
- **Why:** The VFR pilot might not be used to checking some instruments, which now for an IFR flight becomes critical for safety. This lesson summarizes the checks that needs to be done

- **Before we Start**

- Make sure the proper airworthiness inspections for IFR are done:
 - ✓ *VOR check in the past 30 days [91.171]*
 - ✓ *Altimeter and pitot static (every 24 cal mo) [91.411]*
- Additional equipment for loss of communication (e.g. handheld radio, cell phone)
- Condition of antennas, static port, pitot+heat, etc



2. Equipment Check

- **Communication Equipment**
- **Navigation Equipment**
 - Verify Self-test and database expiration
- **Traffic & Terrain Awareness**
 - Verify functioning and “On”
- **FMS/Autopilot**
 - Functioning Properly
- **Avionics/LRUs (line replaceable units)**
 - ① Verify sensors and components green
- **RAIM & SBAS**
 - ② SBAS active, RAIM available, verify both GPSs
 - Verify satellites (Green = in use; “D” used for differential)
- **Outside Air Temperature**
- **Clock**

AUX – System Status



AUX – GPS Status



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3. Instruments Check

- **Magnetic Compass & Heading Indicator**

- Compass full fluid and $\pm 10^\circ$ alignment with the HSI
- HSI & Compass moves freely, heading aligned to known heading

- **Turn Coordinator**

- Ball moves opposite to turn while taxiing
- Straight: no turns | Turning: Rate of turn alive same side

- **Attitude Indicator**

- 5min for Gyro spin up (round dial)
- Blue over Brown, $\leq 5^\circ$ pitch/bank

- **Altimeter**

- Altitude within 75' of airport elevation ([AIM 7-2-3](#))

- **Vertical Speed Indicator**

- Shows zero (or “note zero”)

- **Airspeed Indicator**

- Zero when stopped, alive when taking off



4. Final Checks

- **Flight Plan loaded**
- **Departure Procedure Loaded**
- **ATC Frequencies**
- **Transponder**
- **Altitude & Heading bugged**
- **CDI/OBS set**
- **PFD/MFD**
 - MFD: Track up or North up, Zoom, Details, etc
 - PFD: CDI & OBS, Bearing pointers, Wind, Insets
 - No “X”s or abnormal cautions/warnings



Questions?

