



## uAvionix QI skyBeacon Installation Training Guide

### 1. Getting Ready... before you start the installation:

*Download, study and print as necessary...*

- FAR 91.225, 91.227 and Part 43 as applicable to avionics installations/modifications
- skyBeacon Installation Manuals and other data (available on uAvionix website)
  - TSO
  - STC
  - AML
  - skyBeacon Installation Template
  - Documents required for FAA and Aircraft records
- skyBeacon FMS (multiple copies required as must be present in each aircraft with the POM)
- Sample 337 to be used for reference to complete each installation 337
- ADSB Rule airspace definitions (critical for rebate flights and flight certification)
- PAPR Users Guide
- Understanding PAPR failures

### 2. Required Tools for Installation:

- Mobile device with WI-FI (Android or Apple)
- skyBeacon application downloaded from appropriate “App Store” to mobile device
- Voltmeter
- Heat gun
- Appropriate wire stripping tool
- Standard hand tool assortment

### 3. Performing the Installation:

- Validate skyBeacon applicability to aircraft via AML and physical characteristics of wingtip and existing position light assembly
- Validate the transponder and encoder are operational

**NOTE: skyBeacon will not operate correctly without a 100% functional mode C or S transponder and altitude encoder**

- IFR Certification Test report or ATC validation really helps
- Access FAA registry website and obtain N number specific 6-character (hex) ICAO (Mode S) code and record

**NOTE: Aircraft Registration does not contain the 6-character hex ICAO code**



- Remove existing wingtip position light assembly
- Install skyBeacon unit as per the TSO and STC manuals as well as Part 43

**NOTE: Validate aircraft wiring prior to connecting the skyBeacon to the aircraft wiring**

- Apply power to skyBeacon
  - Verify LED illumination on skyBeacon unit as per installation manuals
  - Validate Position light (always on with unit powered) and strobe function as applicable
  - Using Mobile device, connect to skyBeacon Wi-Fi using password provided with unit
  - Configure skyBeacon using application running on mobile device as per the installation manuals using parameters obtained from POM, FAA Registry and aircraft specific data as required
  - Ensure the aircraft is outside, and verify LED sequences as per Operations Manual (Validates GPS functionality)

#### **4. Complete Installation Documentation:**

- Position light placard must be placed on instrument panel
- Complete Log Book entries

**NOTE: Compliance entry cannot be completed until certification process (below) is accomplished:**

- 337
- FMS in aircraft with POM

#### **5. Test to comply with ADSB Certification-Part 91.227:**

- Two methods to test and validate installation
  - ADSB test set
    - Report serves Certification documentation
  - Flight Test
    - PAPR report
      - Must have radar coverage to obtain a “clean” report
      - PAPR becomes part of Certification documentation
- Complete Logbook entries as per FAR guidance after completing Certification

#### **6. Aircraft now legal for operation in “Rule Airspace”:**

- Rebate Flights
- Operations Requiring ATC Services