

Aircraft: _____

Equipment: _____

Instrument Installations - Adding Instruments

In order to ensure proper regulatory compliance this checklist should be completed for each radio equipment installation and submitted as an attachment to the Field Approval Package.

1. **Part 23 Aircraft**

2. § APPLICABLE FEDERAL AVIATION REGULATIONS §

- 21.305** Approval of Materials, Parts, Processes and Appliances
- 23.301** Loads

Instruments and Markings

- 23.1301** Functional and Installation Requirements - Equipment
- 23.1321** Arrangement and Visibility of Instrument Installations

Instrument Panel Vibration Characteristics

- 23.1327** Magnetic Direction Indicator
- 23.1337** Instrument Lines

Fuel Quantity Indicator and/or Cylinder Head Temperature Indicating System for Air-Cooled Engines

- 23.1543** Instrument Markings
- 23.1547** Magnetic Direction indicator
- 23.1555** Accessory and Auxiliary Controls

Added instrument installations which are the same as those made by the airframe manufacturer or other installations which are already approved, may be accepted without further investigation. On other installations, the following points should be checked to determine that the installation is satisfactory.

3. CHECKLIST

Please initial as indicated and provide requested data. You can reference information contained on other documents such as STC, Block 8 of FAA Form 337, or other attachments.

a. Approval of Materials, Parts Processes and Appliances

Are all parts, processes and/or appliances previously approved by FAA Technical Standard Order (TSO, Supplemental Type Certificate (STC) Original Type Design (TC) or Parts Manufacturing Approval (PMA)? (§21.305)

NOTE: If no previous approval exists; the parts, processes and/or appliances may not be eligible for Field Approval.

Yes _____ No _____

Explain: _____

Aircraft: _____

Equipment: _____

b. Structural Requirements:

- (1) If holes are added to instrument panel, is the structural integrity of the panel or its supporting structure impaired? (§ 23.301)

NOTE: This may normally be determined by a visual check. If the panel or its supporting structure is an integral part of the airplane structure, caution should be used in the evaluation.

Yes _____ No _____

Explain: _____

c. Hazards to the Aircraft or its Occupants

- (1) If powerplant instruments are added, are their lines, which carry inflammable fluids and gases under pressure, provided with restricted orifices or other safety devices at the source of pressure to prevent excessive escape of fluid or gas in case of line failure? (§ 23.1337)

Yes _____ No _____

Explain: _____

d. Operating Aspects

- (1) Are added flight, navigation and powerplant instruments in-stalled in such a manner that they are easily visible for use by the pilot? (§ 23.1321)

Yes _____ No _____

Explain: _____

- (2) Are added identical powerplant instruments on multiengine aircraft so located as to prevent any confusion as to the engines to which they relate? (§ 23.1321)

Yes _____ No _____

Explain: _____

- (3) Is the added magnetic compass installed ' in the aircraft so that its accuracy is not affected excessively by vibration and transient magnetic fields? (§ 23.1327)

Aircraft: _____

Equipment: _____

Yes _____ No _____

Explain: _____

(4) Is the added magnetic compass compensated for deviation error not exceeding plus or minus 10 degrees on any heading in level flight? (§ 23.1327)

Yes _____ No _____

Explain: _____

(5) If a magnetic compass is added, is a placard installed with the compass deviation error recorded? (§§ 23.1327 and 23.1547)

Yes _____ No _____

Explain: _____

e. Detail Design Standards

(1) Are the instrument panel vibration characteristics such as not to impair the accuracy of added instruments? (§ 23.1321)

Yes _____ No _____

Explain: _____

(2) Are the applicable instrument connector tubing, flexible lines, electrical conductors, and cables to the added instruments, considered satisfactory to perform their intended function and are their installations satisfactory? (§§ 23.1301, 23.1321, and 23.1337)

Yes _____ No _____

Explain: _____

(3) Are instruments properly range marked or placarded? (§§ 23.1543 and 23.1583)

Aircraft: _____

Equipment: _____

Yes _____

No _____

Explain: _____

I certify the alteration described above has been made in accordance with the requirements of the applicable regulations and that the information contained herein is true and correct to the best of my knowledge.

Date: _____

Signature: _____ Certificate# _____