

*See correction*

## Title 14—AERONAUTICS AND SPACE

### Chapter I—Federal Aviation Administration, Department of Transportation

[Docket No. 10054, Amdt. 49-14]

#### PART 43—MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION

##### Appliance Major Repairs

The purpose of this amendment to Appendix A of Part 43 of the Federal Aviation Regulations is to classify the calibration and repair of instruments and the calibration of radio equipment as major appliance repairs.

This amendment was proposed in Notice 70-2, published on January 10, 1970 (35 F.R. 386). The majority of the comments received in response to Notice 70-2 favored the adoption of the proposal. However, a number of comments were received that exceeded the scope of the notice and therefore, are not considered in connection with this amendment. Nevertheless, these comments are appreciated and they will be considered in connection with future rule making actions. Finally, several commentators objected to certain aspects of the proposed rule. These comments are discussed below.

A number of the comments indicated a difference of opinion as to the work functions that constitute calibration. Calibration involves the airworthiness of an instrument or item of radio equipment and includes those work functions which cause the instrument or radio equipment to perform within specified tolerances. It requires special skills and knowledge and the use of test equipment. Calibration procedures normally require the instrument or radio case to be opened for internal calibration or repair. It does not include those adjustments of

instruments and equipment which are accomplished using readily accessible and simple adjusting means, including the adjustments that are normally accomplished during cockpit checklist procedures, the adjusting of the zero setting of meter scales, and simple testing to determine error in instrument performance or operation. These work functions do not have an appreciable effect on the airworthiness of the instrument or equipment and do not require special skill and knowledge and the use of test equipment.

Contrary to the belief of one commentator, the proposal does not prevent an operator from adjusting or "swinging" magnetic compasses. The ground swinging of compasses to determine and record magnetic deviation does not involve those work functions which constitute calibration. However, if a magnetic compass needs additional fluid to perform properly, it is defective and the necessary opening of the case, replenishing of the fluid, and testing of the compass is calibration since it has an appreciable effect on the airworthiness of the compasses and requires special skills, knowledge and test equipment. These work functions constitute a major appliance repair under both the present regulations and the proposal.

One comment suggested that the calibration and repair of nonessential instruments should not be classified as major repairs. Another comment recommended that only the calibration of primary flight and primary engine instruments be classified as major repairs. The FAA does not agree with these comments. Regardless of the intended use of an instrument, its calibration has long been considered a basic part of instrument repair, and the FAA believes that the calibration and repair of all instruments should be classified as appliance major repairs regardless of their intended use.

Another comment objected to the proposal on the grounds that it would place an additional recordkeeping burden on Part 121 operators and would necessitate setting up separate records to record

instrument repairs. Part 121 certificate holders are required to make a record of all maintenance performed on appliances regardless of whether that maintenance is classified as major or minor repairs. Calibration is a basic function of instrument repair procedures that have been in general use by air carriers for many years and classifying instrument calibration as a major repair should not alter an operator's recordkeeping system in any material respect.

One commentator, noting that the term "radio equipment" is not defined in the regulations, suggested that the term "communications equipment" would be more appropriate since it covers both navigation and voice communications equipment. The FAA does not agree. The term radio equipment includes navigation and communications equipment as well as weather radar and all other equipment that involve the transmission and reception of radio waves. The calibration of all radio equipment, regardless of its function, is classified as an appliance major repair under the proposal.

In consideration of the foregoing, paragraphs (b) (4) (i) and (ii) of Appendix A of Part 43 of the Federal Aviation Regulations are amended, effective August 18, 1972, to read as follows:

##### APPENDIX A—MAJOR ALTERATIONS, MAJOR REPAIRS, AND PREVENTIVE MAINTENANCE

- \* \* \* \* \*
- (b) Major repairs. \* \* \* \*
- (4) Appliance major repairs. \* \* \* \*
- (i) Calibration and repair of instruments.
- (ii) Calibration of radio equipment.
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(Secs. 313(a), 601, and 603, Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421, and 1423); sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c))

Issued in Washington, D.C., on July 11, 1972.

J. H. SHAFFER,  
Administrator.

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##### *Correction*

In F.R. Doc. 72-11016 appearing on page 14291 of the issue for Wednesday, July 19, 1972, the fourth paragraph should read:

"Contrary to the belief of one commentator, the proposal does not prevent an operator from adjusting or "swinging" magnetic compasses. The ground swinging of compasses to determine and record magnetic deviation does not involve those work functions which constitute calibration. However, if a magnetic compass needs additional fluid to perform properly it is defective and the necessary opening of the case, replenishing of the fluid, and testing of the compass will require calibration. These work functions constitute a major appliance repair under both the present regulations and the proposal."

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