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TITLE 14 - AERONAUTICS AND SPACE

CHAPTER I - FEDERAL AVIATION AGENCY

[Regulatory Docket No. 1049; Amendment 49-37]

PART 49 - TRANSPORTATION OF EXPLOSIVES AND OTHER DANGEROUS MATERIALS

Transportation of Magnetized Materials

A notice of proposed rule making was published in the Federal Register on February 6, 1962 (27 F.R. 1073), and circulated as Draft Release No. 62-3 dated January 29, 1962, which proposed to amend Part 49 of the Civil Air Regulations to provide for the transportation of magnetic materials.

The comments received were generally in favor of requiring that certain safeguards be taken in the shipment of magnets or magnetic material by air and reflected endorsement of the principles of the proposal. However, there was some concern noted relative to the possible obscuration of warning markers on the packages of magnetized material which might occur during the loading of this cargo. The comments also reflected concern over requiring that keeper bars only be installed on magnets "where possible," and indicated the need to have keepers bars installed on magnets at all times or a need for other means of protection to be provided to prevent the magnetic field from adversely affecting the magnetic compass.

In proposing this amendment, the Agency considered that explosives and other dangerous articles as defined by Part 49 of the Civil Air Regulations do not include magnetic materials. Air shipments of magnets

and magnetic devices can adversely influence the accuracy of magnetic compasses unless they are properly packed and kept at a safe distance from the aircraft's compass. In order to safeguard the navigation of the aircraft, it is necessary to require the shippers of magnetic materials to mark clearly any packages containing magnetized materials and to install keeper bars on permanent magnets at all times or provide other protection to prevent the magnetic field from adversely affecting the magnetic compass.

There are a number of magnetic shield materials available which are being used as dust covers on some airborne weather radar units. These dust covers are sufficiently effective as magnetic shielding devices so that compass external compensating magnets are not required.

Interested persons have been afforded an opportunity to participate in the making of this regulation, and due consideration has been given to all relevant matter presented.

In consideration of the foregoing, Part 49 of the Civil Air Regulations (14 CFR Part 49, as amended) is hereby amended as follows, effective July 9, 1962 :

1. By amending § 49.1(a) by adding between the words "articles" and "shall" the phrase ", or any other articles specifically regulated by the rules of this part,".

2. By adding a new § 49.16 to read as follows:

49.16 Packing and marking requirements for magnetized materials.

No shipper shall offer magnetized materials for shipment by air unless:

(a) The outside of the package has been plainly marked "Magnetized Materials";

(b) Magnets or magnetized devices such as magnetrons and light meters have been packed so that the polarities of the individual units oppose one another; and

(c) Permanent magnets have keeper bars installed, or are shielded so as to prevent the magnetic field from affecting the magnetic compass.

3. By amending § 49.21 by adding a new paragraph (d) to read as follows:

49.21 Cargo location.

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(d) Magnetized materials shall not be loaded on the aircraft in the vicinity of the magnetic compassess or compass master units which are a part of the instrument equipment of the aircraft so as to affect their operation. If it is not possible to meet this requirement, a special aircraft swing and compass calibration shall be made. Care shall be taken so that warning markers are not obscured upon cargo loading.

NOTE: Magnetized material as used herein is that material which is magnetized to the extent that it might affect the magnetic compass and produce an erroneous compass reading.

(Secs. 313(a), 601, 604, 902; 72 Stat. 752, 775, 778, 784; 49 U.S.C. 1354, 1421, 1424, 1472)



Administrator

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