

**Title 14—Aeronautics and Space**  
**CHAPTER I—FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION**

[Docket No. 14249; Amdt. No. 103-24]

**PART 103—TRANSPORTATION OF DANGEROUS ARTICLES AND MAGNETIZED MATERIALS**

**Carriage of Radioactive Materials on Passenger-Carrying Aircraft**

The purpose of this amendment to Part 103 of the Federal Aviation Regulations is to implement section 108 of the Transportation Safety Act of 1974 (Pub. L. 93-633) by limiting the carriage of radioactive materials on passenger-carrying aircraft to those intended for use in, or incident to, research, or medical diagnosis or treatment and to those that meet the requirements in 49 CFR 173.391 which exempt them from packaging, marking, and labeling requirements for shipment by rail express.

Interested persons have been afforded an opportunity to participate in the making of this amendment at public hearings conducted January 20, 1975, and February 27, 1975, and by a notice of proposed rulemaking (Notice 75-2) issued on January 29, 1975, and published in the FEDERAL REGISTER on February 4, 1975 (40 FR 5168). Due consideration has been given to all statements and comments presented at the hearings and all comments presented in response to the notice. Certain of the comments received make recommendations that are beyond the scope of the notice and cannot therefore, be considered in this proceeding.

Section 108 of the Transportation Safety Act of 1974, enacted into law on January 3, 1975, directs the Secretary of Transportation to issue regulations within 120 days after the date of enactment, in accordance with Section 108 and pursuant to Section 105 of that Act, with respect to the transportation of radioactive materials on any passenger-carrying aircraft in air commerce. The pertinent provisions of section 108 of the Act being implemented by this amendment state in part:

Sec. 108(a) General—\* \* \* Such regulations shall prohibit any transportation of radioactive materials on any such aircraft unless the radioactive materials involved are intended for use in, or incident to, research, or medical diagnosis or treatment, so long as such materials as prepared for and during transportation do not pose an unreasonable hazard to health and safety. The Secretary shall further establish effective procedures for monitoring and enforcing the provisions of such regulations.

(b) Definition—As used in this section, "radioactive materials" means any materials or combination of materials which spontaneously emit ionizing radiation. The term does not include materials in which (1) the estimated specific activity is not greater than 0.002 microcuries per gram of material; and (2) the radiation is distributed in an essentially uniform manner.

Certain of the comments received reveal that there is a difference of opinion among interested persons as to whether the term "research" used in section 108 (a) of the Act must be construed to permit the transportation on passenger-carrying aircraft of only those radioactive materials intended for use in, or incident to, "medical research", thereby excluding those materials intended for use in, or incident to, nonmedical research.

The FAA has carefully reviewed Section 108 of the Act and is of the opinion, upon consideration of the syntax and punctuation of the sentence involved and its legislative history, that the term "research" used in section 108(a) must be given a statutory meaning which encompasses radioactive materials intended for use in, or incident to, nonmedical research as well as medical research. However, the term "research" as proposed in the notice has been revised in this amendment to make it clear that research includes investigation and experimentation aimed at the discovery of new theories or laws as well as their revision.

Section 103.3(d) of the proposal has been changed in this amendment to clarify the intent to require the statement regarding a shipment of radioactive materials to be certified by the shipper or his agent in accordance with paragraph (a) of that section.

Certain other changes of an editorial nature have also been made in the proposal. These include a change in proposed § 103.1(c) (4) which, for purposes of clarification, deletes the reference to "49 CFR Parts 172 and 173" and substitutes for it a reference to "49 CFR 173.391."

This amendment is issued under the authority of sections 313(a) and 601 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a) and 1421), and sections 105, 107, and 108 of Pub. L. 93-633, as delegated to the Administrator by the Secretary of Transportation (40 F.R. 2861).

Since Pub. L. 93-633 requires this amendment to be effective no later than May 3, 1975, I find that good cause exists for making this amendment effective on less than 30 days notice.

In consideration of the foregoing, and for the reason set forth in Notice 75-2, Part 103 of the Federal Aviation Regulations is amended as follows, effective May 3, 1975:

1. By amending § 103.1(c) by revising paragraph (4) adding a new paragraph (7) and paragraph (d) to read as follows:

**§ 103.1 Applicability.**

(c) This part does not apply to—\* \* \*

(4) Prior to May 3, 1977, radioactive materials that meet those requirements in 49 CFR 173.391 in effect on May 3, 1975, that exempt them from the pack-

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aging, marking, and labeling requirements for shipment by rail express.

(7) Human beings and animals with an implanted medical device, such as a heart pacemaker, that contains radioactive material or with radio pharmaceuticals that have been injected or ingested.

(d) For the purposes of this part—

(1) Radioactive materials means any materials or combination of materials which spontaneously emit ionizing radiation. The term does not include materials in which (i) the estimated specific gravity is not greater than 0.002 microcuries per gram of material; and (ii) the radiation is distributed in an essentially uniform manner.

(2) Research means investigation or experimentation aimed at the discovery of new theories or laws, and the discovery and interpretation of facts or revision of accepted theories or laws in the light of new facts.

3. By amending § 103.3 by adding a new paragraph (e) to read as follows:

**§ 103.3 Certification requirements.**

(e) In addition to the requirements of paragraph (a) of this section, no shipper may offer, and no person operating an aircraft may knowingly accept, any radioactive material subject to the requirements of this part for shipment in a passenger-carrying aircraft unless there is accompanying the shipment a clear and visible statement, signed or stamped by the shipper or his agent as prescribed in paragraph (a), that the shipment contains radioactive materials intended for use in, or incident to, research, or medical diagnosis or treatment and meets the requirements of this part for shipment in passenger-carrying aircraft.

4. By amending § 103.7 by revising paragraph (b) (6) to read as follows:

**§ 103.7 Passenger-carrying aircraft.**

No person may carry any dangerous article in a passenger-carrying aircraft except—

(b) The following articles when packaged, marked, and labeled as specifically provided in 49 CFR Parts 171 through 173 for shipment by rail express:

(6) Subject to applicable provisions of this part, radioactive materials intended for use in, or incident to, research, or medical diagnosis or treatment and those radioactive materials that are exempted by § 103.1(c) (4) and (7) from the requirements of this part.

Issued in Washington, D.C., on April 12, 1975.

JAMES E. DOW,  
Acting Administrator.

(As published in the Federal Register [40 F.R. 17141] on April 17, 1975).