

UNITED STATES OF AMERICA  
CIVIL AERONAUTICS BOARD  
WASHINGTON, D. C.

Civil Air Regulations Amendment 49-1

Effective: December 8, 1954

Adopted: November 3, 1954

TRANSPORTATION OF EXPLOSIVES AND OTHER DANGEROUS ARTICLES

DEVIATION FROM THE LIMITATIONS OF PART 49 FOR ATOMIC  
ENERGY COMMISSION SHIPMENTS OF RADIOACTIVE MATERIALS

Currently effective Part 49 of the Civil Air Regulations provides for the transportation by air of certain articles commonly classified as explosives or dangerous articles. The program of the Atomic Energy Commission requires the use of civil aircraft to transport radioactive materials, the movement of which is subject to the requirements and limitations as set forth in this part. The Civil Air Regulations applicable to radioactive materials are identical in substance with the ICC Regulations.

Generally, the United States Atomic Energy Commission finds no difficulty in complying with the regulations of Part 49 for air shipments. In certain instances, however, because of the chemical nature of a particular material, the quantity needed to be transported which is required for laboratory or medical use exceeds the 2,000 millicurie limitation prescribed by Part 49. The useful life span of certain materials also becomes an important factor in that it is of such short duration that the fastest means of transportation is needed to provide sufficient time for the efficient use of such materials.

In order to facilitate the movement of these materials in surface transportation, a simplified system has been approved by ICC for rail express shipments which provides for the use of deviation authority directly by the Atomic Energy Commission with respect to the quantity of radioactive material that can be carried in one package. This system provides that the Atomic Energy Commission may utilize a special permit by virtue of which it can ship greater quantities of radioactive materials in a package in rail express transportation provided that, in addition to making notification and using approved containers, the outside radiation of the package does not exceed the present limit. This has replaced the procedure which required an individual authorization from ICC for each shipment. The Civil Air Regulations presently require that deviation authority for each individual shipment shall be obtained from the Administrator, and in some instances this procedure could cause delay in the transportation of materials where time is a most important factor. This amendment will, therefore, vest deviation authority in the Atomic Energy Commission similar to that granted by the ICC rules.

From a safety standpoint, since the surface radiation of the package containing the additional units must not exceed 10 milliroentgens in 24 hours, which is the normal rate prescribed by Part 49, there will be adequate provision for the safety of those handling the package and those who occupy positions of close proximity to the package. The packaging will be secure in strength and will be fire-resistant inasmuch as the lead shield required to control radiation is also required to be enclosed in a steel container so that it will not flow away in case of fire. A means must be provided for applying an outside seal so that the container cannot be opened without destroying the seal. Each such shipment must be accompanied by a permit issued by the Atomic Energy Commission.

The Atomic Energy Commission must certify that the package offered for shipment by air meets all the requirements prescribed by Part 49 except the maximum quantity limitations, in which case the quantity shall be stated on the permit unless the package is personally escorted by Atomic Energy Commission personnel. Notification prior to each shipment must be given by the Atomic Energy Commission to the Civil Aeronautics Administration in the form and manner prescribed by the Administrator.

In §49.18 the present references to the ICC Regulations are no longer correct. They have accordingly been changed and the new numbers substituted.

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

In consideration of the foregoing, the Civil Aeronautics Board hereby amends Part 49 of the Civil Air Regulations, effective December 8, 1954:

✓ 1. By amending §49.71 to read as follows:

49.71 Special authority. In emergency situations or where other forms of transportation are impracticable:

(a) Deviations from any of the provisions of this part for a particular flight may be authorized by the Administrator where he finds that the conditions under which the articles are to be carried are such as to permit the safe carriage of persons and cargo.

(b) Deviations from the 2,000 millicurie quantity limitation prescribed for radioactive materials by §49.18 may be taken by the Atomic Energy Commission for Atomic Energy Commission shipments, provided that such shipments are made in accordance with the requirements approved by the Interstate Commerce Commission for shipment by rail express and

prior notification of each shipment is given by the Atomic Energy Commission in the form and manner prescribed by the Administrator.

2. By deleting from §49.18 the reference "§§73.368 through 73.369" and inserting in lieu thereof "§§73.391 through 73.394".

(Sec. 205(a); 52 Stat. 984; 49 U.S.C. 425(a). Interpret or apply §§601, 902; 52 Stat. 1007, 1015, as amended; 49 U.S.C. 551, 622)

By the Civil Aeronautics Board:

/s/ M. C. Mulligan

M. C. Mulligan  
Secretary

(SEAL)