



Syllabus — Course 402

Length: 1.5 days

Target: Persons responsible for, or involved in, the preparation of and actual shipping of radioactive materials packaging and transportation by air. This includes, but is not limited to, shippers, materials handlers, technicians (operators, health physicists, analysts, etc.), QA/QC personnel, safety engineers, front-line management, and shippers.

Prerequisite: RRI's DOT Hazardous Materials & Radioactive Materials Transport Workshops (Courses 201 & 203) or equivalent.

Intensity: Mild Medium Challenging Extreme

Materials: RRI provides all training materials including the latest edition of the Air International Regulations (A.I.R.). Testing and course completion certificate are also provided.

Course Objective

Upon completion of this course, and given the reference materials, the participant will be able to prepare and inspect a compliant radioactive material shipment using the applicable ICAO Dangerous Goods Regulations and U.S. DOT Hazardous Materials Regulations.

Objectives & Topics:

Module 1: Introduction to the Radioactive Materials Transport Regulations

1. State the scope of the Class 7 transport regulations.
2. Recognize the structure of the air transport regulatory bodies.
3. State the general requirements for shippers.

Module 2: Limitations

1. Locate the DOT interface requirements for the use of ICAO.
2. Explain the U.S. Variations as presented in the ICAO DGR.
3. Locate operator variations as presented in the ICAO DGR.
4. State the scope of the DGR to radioactive materials.

Module 3: Terminology and Definitions

1. Locate the definition of terms in the ICAO DGR.
2. Define terms associated with Class 7 packaging and transport.
3. Define Class 7 radioactive material.



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Module 4: Activity Limits and Material Restrictions

1. State the three core philosophies behind the Class 7 transport regulations.
2. Recognize the value of the Q-System in determining activity limits.
3. Categorize, by activity limits and definitions, Class 7 materials prepared under ICAO.
4. Select the primary hazard for multiple/mixed Class 7 and dangerous goods materials.
5. Determine if a given Class 7 material meets the definition of a hazardous substance.

Module 5: Packaging and Packages

1. Appreciate the graded requirements prescribed for packages intended for transporting Class 7 materials.
2. Locate the general packaging requirements for Class 7 material packages.
3. Identify the appropriate packaging for a given radioactive material shipment.
4. State packaging concerns associated with Class 7 material.

Module 6: Requirements for Transport

1. Decipher and apply information located in the List of Dangerous Goods.
2. Select the most appropriate proper shipping name for a given radioactive material.
3. Mark a Class 7 material package for shipment under ICAO.
4. Determine the appropriate label(s) for a given Class 7 radioactive material package.
5. Proper label a Class 7 radioactive materials package.
6. Prepare the transport documentation for a Class 7 radioactive material.
7. Apply a given ICAO exception to a shipment of an excepted package of Class 7 radioactive material.

Module 7: Controls for Transport and other Responsibilities

1. Identify the maximum dose rates authorized for a Class 7 package.
2. Identify the maximum contamination limits for a Class 7 package.
3. State the separation and segregation requirements for a Class 7 package.
4. Explain the importance of Quality Assurance.
5. Identify the user requirements for use of a Class 7 package.
6. Determine what notifications to Competent Authority are required for the use of a given package.
7. Recognize the security requirements imposed on shippers and operators.
8. Explain the training requirements for hazmat employees.