



2016

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Air Transport of Radioactive Material Class 7

Radiation Safety Office
QEII Bethune Room 244
1276 South Park Street
Halifax, Nova Scotia
B3H 2Y9

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INTRODUCTION



The following information is provided to supplement Transport of Dangerous Goods Class 7 Ground Transport training for those who are required to ship by air. Preference for transporting radioactive material is by ground due to the increased requirements for air transport and the fact that some airlines will bump radioactive material, even for medical use, if using passenger planes. Requirements will vary depending on the size of the organization, the type of work being performed and airline used so it is wise to consult the latest regulatory guides.

TRAINING PROGRAM OUTLINE



The main purpose of the IATA and Transport Canada Dangerous Goods Air regulations is to provide procedures for the shipper and operator by which articles and substances with hazardous properties can be safely transported by air on all commercial air transport.

The applicable IATA Dangerous Goods regulations apply to all shippers that offer consignments of dangerous goods to operators (airlines) that are members of IATA. **SECTION 10 FOR RADIOACTIVE MATERIAL**



GROUND REQUIREMENT SIMILARITIES

- A_1 and A_2 values
- Package Type (ie Type A, Excepted)
- Class 7 Labelling requirements (White I, Yellow or Yellow III)
- Contamination Criteria
- Shipping Name and UN Numbers
- Package testing almost the same (make sure you get approved containers)
 - drop test (increased from 1.2 m to 9 m for liquids)
 - water
 - stacking
 - penetration drop ((increased from 1 m to 1.7 m for liquids)

SHIPPERS DECLARATION

The shipper's declaration is the only major change to the preparation for air transport compared to ground transport. The following are general differences in the information required on the shipper's declaration.

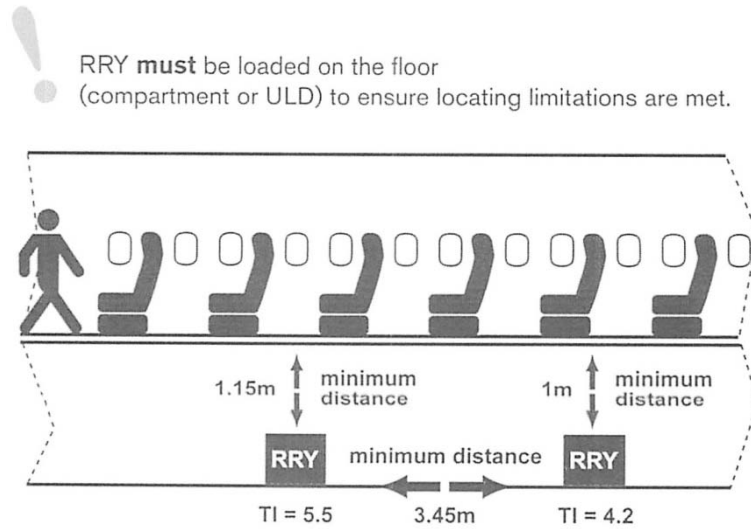
- The shipper's declaration must include red-cross hatched markings on the left and right margins.
- All information must be typed with the only exception being the signature of the shipper.
- Transport details must indicate 'passenger and cargo aircraft' or 'cargo aircraft only' with the incorrect one crossed out.
- The airport of departure must be listed. (can be amended by operator)
- The airport of destination must be listed. (can be amended by operator)
- The addition of "I declare that all of the applicable air transport requirements have been met" is added to the regular ground declaration.

SHIPPING CONSIDERATIONS

Passenger or Cargo Aircraft

- While you can ship by passenger aircraft there may be delays.
- Loading segregation factors require minimum distance so if this cannot be met the package may be bumped.
- If restrictions exist in the passenger aircraft, such as other dangerous goods, live animals, undeveloped film or hatching eggs the package may be bumped.
- Ultimately it is the decision of the airline for carrying dangerous goods on passenger aircraft.
- RRW = Class 7 White I generally has no segregation requirements.

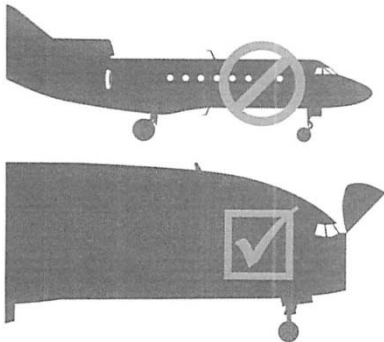
- RRY = Class 7 Yellow II or III have segregation requirements.



Cargo Aircraft Only

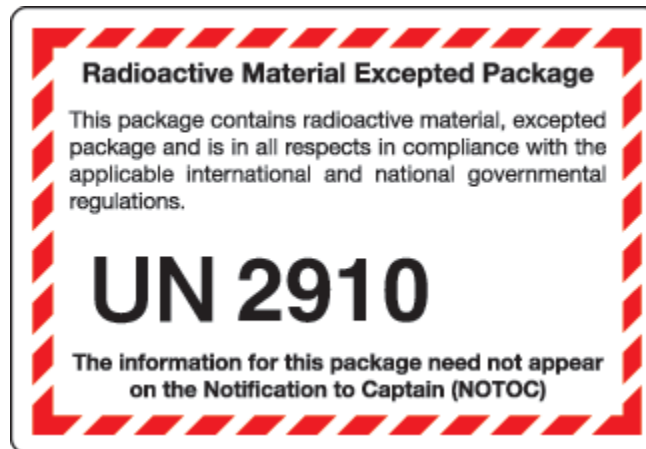
If restrictions require cargo aircraft only it must be identified on the shipping declaration as well as an appropriate sticker on the package. The loading of cargo only is the responsibility of the 'operator'. Cargo only is generally for Type B(M) packages.

! Loading Instructions
 CAO **cannot** be loaded on a passenger aircraft.



OTHER CONSIDERATIONS

- No segregation required for White I
- Liquid Type A package must contain absorbent material to contain twice the volume and in position to contact liquid in event of leak of primary container. Also secondary container designed to contain liquid contents. (IATA 10.6.2.4.3)
- Excepted package requires red hashmark label with statement *“The information for this package need not appear on the Notification to Captain (NOTOC)”*



Airline – Not the Shipper

The Airline is the Operator and has further obligations to provide technical instructions to the pilot-in-command further forms for dangerous goods (not by means of air waybills, dangerous goods transport documents, invoices, etc.)

For toxic or infectious substances obtain further advice. Also flammables or aerosols

References:

1. International Air Transport Association (IATA), Dangerous Goods Regulations
<http://www.iata.org/publications/dgr/Pages/index.aspx>
2. International Civil Aviation Organization (ICAO) through Transport Canada, Transportation of Dangerous Goods Regulations, Part 12 Air.
<http://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm>

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

Shipper QEII Health Sciences Centre Cyclotron Unit Diagnostic Imaging Department 1071-B Centennial Building Main floor Halifax, Nova Scotia, B4B 1N1 Attn: Antoun Bou Laouz (902) 473-7057	Air Waybill No. AWB 800699681758 Page 1 of 1 pages Shipper's Reference Number: 2012-08-01A (optional)
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Consignee Health Sciences Centre (Eastern Health) Nuclear Medicine Department 300 Prince Phillip Drive St. John's, NL A1B 3V6	
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Two completed and signed copies of this Declaration must be handed to the operator	WARNING
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TRANSPORT DETAILS		Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties. This Declaration must not, in any circumstances, be completed and/or signed by a consolidator, a forwarder or an IATA cargo agent.
This shipment is within the limitations prescribed for: (delete non-applicable)	Airport of Departure Halifax- YHZ	
PASSENGER AND CARGO AIRCRAFT		
Airport of Destination: St. John's - YYT	Shipment type: (delete non-applicable) <input type="checkbox"/> RADIOACTIVE	

NATURE AND QUANTITY OF DANGEROUS GOODS

Dangerous Goods Identification						
UN or ID No.	Proper Shipping Name	Class or Division (Subsidiary Risk)	Packing Group	Quantity and type of packing	Packing Inst.	Authorization
UN 2915	RADIOACTIVE MATERIAL, Type A Package Class 7 UN 2915 HAZARD GUIDE 163	7		1 PACKAGE	74 x 34 x 34 cm dimensions	

Additional Handling Information: No special Instructions ERG Code 7L	24 hr. Emergency Contact Tel. No.(Canada) Canutec 1-613-996-6666
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I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.	Name/Title of Signatory
	Place and Date (yyyy-mm-dd)
	Signature