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ADDENDUM NO. 3/  
CORRIGENDUM NO. 2  
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## INTERNATIONAL CIVIL AVIATION ORGANIZATION

# TECHNICAL INSTRUCTIONS FOR THE SAFE TRANSPORT OF DANGEROUS GOODS BY AIR

2011-2012 EDITION

## ADDENDUM NO. 3/CORRIGENDUM NO. 2

The attached addendum/corrigendum should be incorporated into the 2011-2012 Edition of the Technical Instructions (Doc 9284).

(7 pages)



**TECHNICAL INSTRUCTIONS FOR THE SAFE TRANSPORT  
 OF DANGEROUS GOODS BY AIR**

In Part 1, Chapter 5, page 1-5-2, Table 1-6, first column, *remove* the "+" signs.

In Part 4, Chapter 1, page 4-1-4, paragraph 1.1.13, *amend* "the 'Package orientation' label shown in 5;3.2.11 b)" to read "the 'Package orientation' label described in 5;3.2.12 b)".

In Part 4, Chapter 6, page 4-6-9, Packing Instruction 454, *replace* the text under "OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)" to read:

<i>Boxes</i>	<i>Drums</i>	<i>Jerricans</i>
Aluminium (4B)	Aluminium (1B2)	Aluminium (3B2)
Fibreboard (4G)*	Fibre (1G)*	Plastics (3H2)*
Natural wood (4C1, 4C2)	Other metal (1N2)	Steel (3A2)
Plastics (4H1, 4H2)*	Plastics (1H2)*	
Plywood (4D)	Plywood (1D)	
Reconstituted wood (4F)	Steel (1A2)	
Steel (4A)		

\* These packagings are permitted only for a maximum of 600 m of film.

In Part 4, Chapter 6, page 4-6-10, Packing Instruction Y454, *replace* the COMBINATION PACKAGINGS table with the following:

<b>COMBINATION PACKAGINGS</b>				<b>SINGLE PACKAGINGS</b>
<i>UN number and proper shipping name</i>	<i>Total quantity of film per inner packaging</i>	<i>Total quantity per package</i>	<i>Total gross mass per package</i>	
UN 1324 Films, nitrocellulose base	1 kg	10 kg	30 kg	No

In Part 4, Chapter 6, page 4-6-10, Packing Instruction Y454, *replace* the text under "OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6;3.1)" to read:

<i>Boxes</i>	<i>Drums</i>	<i>Jerricans</i>
Aluminium	Aluminium	Aluminium
Fibreboard*	Fibre*	Plastics*
Natural wood	Other metal	Steel
Solid plastic*	Plastics*	
Plywood	Steel	
Reconstituted wood		
Steel		

\* These packagings are permitted only for a maximum of 600 m or 1 kg (whichever is more restrictive) of film in one outer packaging.

In Part 4, Chapter 6, page 4-6-17, Packing Instruction 459, under COMBINATION PACKAGINGS, *amend* the entries under "Solids" to read:

<b>Solids</b>						
UN 3224	<b>Self-reactive solid type C</b>	Plastics	0.5 kg	5 kg	1.0 kg	10 kg
		Plastic bag	0.5 kg	5 kg	1.0 kg	10 kg
UN 3226	<b>Self-reactive solid type D</b>	Plastics	0.5 kg	5 kg	1.0 kg	10 kg
		Plastic bag	0.5 kg	5 kg	1.0 kg	10 kg
UN 3228	<b>Self-reactive solid type E</b>	Plastics	1.0 kg	10 kg	2.5 kg	25 kg
		Plastic bag	1.0 kg	10 kg	2.5 kg	25 kg

UN 3230	<b>Self-reactive solid type F</b>	Plastics	1.0 kg	10 kg	2.5 kg	25 kg	
		Plastic bag	1.0 kg	10 kg	2.5 kg	25 kg	

In Part 4, Chapter 6, page 4-6-30, Packing Instruction 487 – 491, SINGLE PACKAGINGS FOR PACKING GROUP I, under "Drums", *amend* to read:

*Drums*

Aluminium (1B1, 1B2)  
 Other metal (1N1, 1N2)  
 Plastics (1H1, 1H2)  
 Steel (1A1, 1A2)

In Part 4, Chapter 6, page 4-6-30, Packing Instruction 487 – 491, SINGLE PACKAGINGS FOR PACKING GROUP I, under "Jerricans", *amend* to read:

*Jerricans*

Aluminium (3B1, 3B2)  
 Plastics (3H1, 3H2)  
 Steel (3A1, 3A2)

In Part 4, Chapter 11, page 4-11-10, Packing Instruction Y956, *amend* third line of heading to read "Passenger and cargo aircraft for UN 3077 and UN 3335 only".

In Part 4, Chapter 11, page 4-11-15, Packing Instruction 960, in the table *insert* "/\*" after the column heading "Maximum quantity of dangerous goods per kit".

In Part 4, Chapter 11, page 4-11-15, Packing Instruction 960, in the table *insert* "/\*The total quantity of dangerous goods in any one kit must not exceed 1 L or 1 kg" below "/\*Containing dangerous goods.".

In Part 4, Chapter 11, page 4-11-22, Packing Instruction Y964, *amend* third line of heading to read "Passenger and cargo aircraft for UN 1941, UN 1990, UN 3082 and UN 3334 only".

In Part 5, Chapter 4, page 5-4-6, paragraph 4.4, *amend* subparagraph numbers to read "4.4.1" and "4.4.2" respectively.

In Part 7, Chapter 2, page 7-2-5, Table 7-3, *amend* the end of the note to read "see Table 7-4".

In Part 7, Chapter 2, page 7-2-6, Table 7-4, *amend* the end of the first sentence in the note to read "see Table 7-3".

In Part 7, Chapter 3, page 7-3-1, paragraph 3.2.4, *replace* "or which shows a radiation level in excess of 5 mSv/h at the surface" with "or which shows a radiation level in excess of 5 µSv/h at the surface".

In Part 8, Chapter 1, page 8-1-1, paragraph 1.1.2, *add* "or 7;4.5, as applicable" after "except for the incident reporting provisions of 7;4.4".

In Attachment 3, Chapter 1, page A3-1-1, paragraph 1.6, *add* "Romania — RO" under "Poland — PL".

In Attachment 3, Chapter 1, Table A-1 — State variations, page A3-1-22, *add* the following new variations:

- + **RO — ROMANIA**
  - RO 1 In order to perform flights with civil aircraft registered in another State for the carriage of dangerous goods, an authorization is required. This authorization may be given either by the Ministry of Transport and Infrastructure, or by the Romanian Civil Aeronautical Authority (RCAA), as the case may be, upon receipt of the advice of the Romanian Ministry of Defence. 1;1.2  
Part 2
 

The application to obtain the flight authorization and advice provided for must be submitted to the RCAA at least ten (10) working days before the date of flight and it must contain all relevant information and documents mentioned in the form shown in the Romanian AIP page GEN 1.2-12.

Upon request, a copy of the certificate issued by the appropriate authority of the State of Registry of the air operator proving that it is entitled to carry dangerous goods must also be attached to the application.

RO 2	<p>Provided the period of submission of an application in accordance with RO 1 above is met, the passenger and/or cargo scheduled air operators may be granted, upon request, a flight authorization (including Ministry of Defence advice) for the carriage of dangerous goods included in Class 2, 3 (except liquid desensitized explosives, UN Nos.1204, 2059, 3064, 3343, 3357 and 3379), 4, 5, 6 (except infectious substances, Division 6.2, compatibility group A, UN No. 2814, 2900), 8 or 9. The flight authorization/advice must be valid for limited periods of time and/or the schedule of operation, provided the following requirements are met:</p> <ul style="list-style-type: none"> <li>a) submission by the air operator, before starting the respective schedule of operation, of the following documents edited either in the English language or in the Romanian language:                     <ul style="list-style-type: none"> <li>— copy of the AOC and its operating specifications;</li> <li>— copy of the certificate issued by the competent authority of the State of Registry of the air operator proving that it is entitled to carry dangerous goods;</li> <li>— copy of Chapter 9 — “Dangerous goods” of the Operations Manual, Part A;</li> <li>— copy of the training programme for dangerous goods in the Operations Manual, Part D, or any other similar document referring to training, as approved by the aeronautical authority of the State of Registry of the air operator.</li> </ul> </li> <li>b) submission to RCAA of a notification twelve (12) hours before departure of aircraft of the details about the dangerous goods to be carried: class or division, UN number, proper shipping name, applicable packing instructions, type of package, weight of package, number of packages.</li> </ul>	1;1.2 Part 2
RO 3	<p>Civil aircraft involved in the carriage of dangerous goods that are forbidden for air transport under normal circumstances, in accordance with the ICAO documents, are not allowed to perform flights within the Romanian air space.</p> <p>Waivers from the provisions may be granted by the Romanian Civil Aeronautical Authority only if the respective transport is justified by a major public interest. Such a waiver must be granted with the approval of the Ministry of Transport and Infrastructure.</p>	1;1.3 Table 3-1
RO 4	<p>In case the consignment contains radioactive materials, the air operator must provide to the Romanian Civil Aeronautical Authority a copy of the authorization issued by the National Commission for Nuclear Activities Control (CNCAN).</p> <p>The contact information of the National Commission for Nuclear Activities Control is as follows :</p> <p>B-dul. Libertatii, Nr. 14, Sector 5          Bucuresti, Romania          Tel. : + 40 21 316 05 72          Fax : + 40 21 317 38 87</p>	1;1.2 2;7 5;1.2

In Attachment 3, Chapter 2, page A3-2-1, paragraph 2.5, *delete* “Continental Micronesia — CS”.

In Attachment 3, Chapter 2, page A3-2-2, paragraph 2.5, *add* “TAROM Airlines — TO” under “Thai Airways International — TG”.

In Attachment 3, Chapter 2, Table A-2 — Operator variations, the following amendments should be made:

Page A3-2-10, *replace* CI-01 with the following:

CI-01	<p>The following dangerous goods, as listed in subsection 4.2 of the IATA Dangerous Goods Regulations, will not be accepted for carriage by China Airlines passenger flights:</p> <ul style="list-style-type: none"> <li>— Classes 1 to 8;</li> <li>— fully regulated lithium ion batteries (Class 9) as per Section I of Packing Instructions 965-967;</li> <li>— fully regulated lithium metal batteries (Class 9) as per Section I of Packing Instructions 968-970.</li> </ul>	Table 3-1
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*Note.— The above prohibitions do not apply to CI company material.*

Page A3-2-11, *replace* the variations for CO — CONTINENTAL AIRLINES with the following:

**CO — CONTINENTAL AIRLINES**

- |   |       |  |            |
|---|-------|--|------------|
| ≠ | CO-01 | All liquid dangerous goods, in all classes and divisions, must be packed in combination packagings. Single packagings are not allowed. An overpack, by definition, is not a combination packaging. (See definitions in 1;3.) (See 5.0.2.14 of the IATA Dangerous Goods Regulations.)   | 1;3<br>4;1 |
| ≠ | CO-02 | All international and domestic shipments of dangerous goods requiring a DGD, including interline shipments, dangerous goods in excepted quantities and COMAT parts and supplies, as defined by the IATA Dangerous Goods Regulations, must be booked. United States and Canadian locations must contact the Continental Airlines Customer Service Center for reservations (281-553-5050 or 1-800-421-2456) (SITA address: IAHFCCO). Asia/Pacific locations must be booked via the Asia/Pacific Customer Service Center (SITA address: GUMFSCO, GUMFXCO and GUMFFCO) (671-645-8570) (see 1.3.2 of the IATA Dangerous Goods Regulations). International locations must call the local cargo station. (See 1.3.2 and 9.1.2 of the IATA Dangerous Goods Regulations.) | 5;1<br>5;4 |
| ≠ | CO-03 | The carriage of UN 1845 — Carbon dioxide, solid (dry ice) will be limited to the following established limits:<br><br>Continental Express and Continental Connections will be limited to:<br><br>2.5 kg net weight per package<br>35 kg net weight per aircraft<br><br>(The above limits only apply to those carriers that accept UN 1845 as cargo and QUICKPAK.)<br><br><i>Note.— All shipments containing UN 1845 — Carbon dioxide, solid (dry ice) must have a Class 9 label affixed to each package (see figure 7.3.18 of the IATA Dangerous Goods Regulations).</i>   |            |
| ≠ | CO-04 | Not used.  |            |
| ≠ | CO-05 | Not used.  |            |
| ≠ | CO-06 | Not used.  |            |
| ≠ | CO-07 | Not used.  |            |
| ≠ | CO-08 | Not used.  |            |
| ≠ | CO-09 | Not used.  |            |
| ≠ | CO-10 | Not used.  |            |
| ≠ | CO-11 | Not used.  |            |

Page A3-2-12, *delete* the variations for CS — CONTINENTAL MICRONESIA.

Page A3-2-31, *replace* KZ-03 with the following:

- |   |       |  |         |
|---|-------|--|---------|
| ≠ | KZ-03 | For packagings containing liquid dangerous goods, sufficient ullage must be left in the packaging as described in 5.0.2.8 of the IATA Dangerous Goods Regulations. | 4;1.1.5 |
|---|-------|--|---------|

Page A3-2-31, *add* the following new paragraph to KZ-07:

Those packagings must be overpacked to protect the top and bottom of the packaging.

5;1.1 e)
5;1.1 f)
5;2.4.10
5;3.3

Page A3-2-44, NH-04, *amend* to read "Not used."

Page A3-2-51, add the following new variations before SJ — SOUTHERN AIR TRANSPORT:

+ **RO — TAROM AIRLINES**

RO-01 Class 7 — Radioactive material of any kind will not be accepted for carriage.

Page A3-2-58, replace US-01 with the following:

≠ US-01 Shipments which contain articles and substances listed in these Instructions and/or the IATA Dangerous Goods Regulations and/or DOT Hazardous Materials Regulations and revisions thereto will not be accepted for carriage, except for the following on mainline aircraft:

2;6  
Table 3-1

- articles and substances listed as not restricted or non-regulated in said Instructions/Regulations;
- carbon dioxide, solid (dry ice) in individual packages cooling non-restricted contents;
- envirotainer — unit load device equipment with dry ice cooling non-restricted contents;
- Class 9 dangerous goods, with the exception of the following which will not be accepted for transportation:
  - UN 2807 — Magnetized material;
  - UN 2211 — Polymeric beads, expandable;
  - UN 3082 — Environmentally hazardous substance, liquid, n.o.s.\*;
  - UN 3077 — Environmentally hazardous substance, solid, n.o.s.\*;
  - UN 3480 — Lithium ion batteries;
  - UN 3481 — Lithium ion batteries contained in equipment;
  - UN 3481 — Lithium ion batteries packed with equipment;
  - UN 3090 — Lithium metal batteries;
  - UN 3091 — Lithium metal batteries contained in equipment;
  - UN 3091 — Lithium metal batteries packed with equipment;
- UN 3373 — Biological substance, Category B;
- US Airways company material transported as aircraft replacement items.

Page A3-2-58, add the following new variation to US — US AIRWAYS:

+ US-02 Dangerous goods will not be accepted for carriage on US Airways Express.

Page A3-2-61, add the following to the list of prohibited classes in 5X-02:

- Class 9:
  - Shipments of UN 2807, Magnetized material, which conform to Packing Instruction 953 can be shipped only to, from, and within the countries identified on the following link:

<http://www.ups.com/content/us/en/resources/ship/idg/information/acl.html>

Additionally, such shipments must be labeled in accordance with Packing Instruction 953 and documented in one of two ways:

- 1) identified as "Magnetized material" in a package reference field on the UPS shipping label; or
- 2) accompanied by a written document, affixed to the outside of the package, identifying the contents as "Magnetized material".

Page A3-2-62, 5X-06, first line, delete "the editorial note in".

Page A3-2-62, *replace* 5X-07 with the following:

- |  |   |             |
|--|---|-------------|
| +      5X-07   | The following limitations apply to the commodities identified here: | 2;9<br>4;11 |
| <ul style="list-style-type: none"><li>— shipments of UN 3077, Environmentally hazardous substance, solid, n.o.s., will not be accepted when contained in intermediate bulk containers (IBCs) in any UPS air services (including UPS small package, UPS freight air services or UPS air cargo services);</li><li>— shipments of UN 2807, Magnetized material, for which the magnetic field strength exceeds 0.00525 gauss when measured at 4.6 metres from any surface of the package are not accepted in UPS services (including UPS small package, UPS freight air services or UPS air cargo services);</li><li>— shipments of refurbished lithium batteries, or refurbished lithium batteries packed with or contained in equipment are not accepted unless specifically approved by the UPS Air Dangerous Goods Department (SDF);</li><li>— shipments of UN 3245, Genetically modified organisms or Genetically modified micro-organisms, with an origin and/or destination outside the United States will be considered on a case-by-case basis, subject to the requirements of the UPS international special commodity programme.</li></ul> |   |             |

— END —