



Doc 9284-AN/905  
2017-2018 Edition  
ADDENDUM/  
CORRIGENDUM NO. 1  
7/4/17

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

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

**2017-2018 EDITION**

**ADDENDUM/CORRIGENDUM NO. 1**

The attached addendum/corrigendum should be incorporated into the 2017-2018 Edition of the Technical Instructions (Doc 9284).

(7 pages)



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

In the Foreword, page (iv), first paragraph, *amend* "(TS-R-1 (ST-1, Revised))" to read ", 2012 Edition, IAEA Safety Standards Series No. SSR-6, IAEA, Vienna 2012).".

In the Foreword, page (iv), under "USE OF THE TECHNICAL INSTRUCTIONS", first paragraph, *amend* "four Attachments" to read "five Attachments".

In the Foreword, page (iv), under "USE OF THE TECHNICAL INSTRUCTIONS", fourth paragraph, *amend* "Attachment 4" to read "Attachment 5".

In Part 2, Chapter 3, page 2-3-2, Table 2-5, third column under "Jet diameter in mm", *insert* "4" in the first two rows.

*Note.— The amendment does not apply to the French, Russian, or Spanish version.*

In Part 3, Chapter 2, page 3-2-8, Aircraft engines (including turbines)†, see **Engines, internal combustion** (UN No. 3166), *replace* "**Engines, internal combustion** (UN No. 3166)" with "**Engine, internal combustion** (UN No. 3530)".

In Part 3, Chapter 2, page 3-2-88, **Engine, internal combustion, flammable liquid powered**, UN 3528, column 7, *amend* "67" to read "A67".

In Part 3, Chapter 2, page 3-2-107, Gas turbine engines†, see **Engines, internal combustion** (UN No. 3166), *amend* "**Engines, internal combustion** (UN No. 3166)" to read "**Engine, internal combustion** (UN No. 3530)".

In Part 3, Chapter 2, page 3-2-115, "**Hydrofluoric acid**, with more than 60% strength", UN 1790, *amend* to read "**Hydrofluoric acid**, with more than 60% hydrogen fluoride".

In Part 3, Chapter 2, page 3-2-115, "**Hydrofluoric acid**, with not more than 60% strength", UN 1790, *amend* to read "**Hydrofluoric acid**, with not more than 60% hydrogen fluoride".

In Part 3, Chapter 2, page 3-2-179, "**Polyester resin kit**, solid base material", UN 3527, *insert* "†" after "material".

In Part 3, Chapter 3, page 3-3-13, Special Provision A139, *amend* "6;7.10.2" to read "2;7.2.3.5".

In Part 3, Chapter 3, page 3-3-26, Special Provision A212, subparagraph e), *amend* "212" to read "A212".

In Part 4, Chapter 2, page 4-2-2, sub paragraph 2.8 b), *amend* "particular packaging instruction" to read "particular packing instruction".

In Part 4, Chapter 11, page 4-11-27, Packing Instruction 965, Section II, first paragraph, *insert* the following under the second bullet:

- Part 5;2.4.16 (Shipper's responsibilities — Special marking requirements for lithium batteries);

In Part 4, Chapter 11, page 4-11-31, Packing Instruction 966, Section II, first paragraph, *insert* the following under the first bullet:

- Part 5;2.4.16 (Shipper's responsibilities — Special marking requirements for lithium batteries);

In Part 4, Chapter 11, page 4-11-33, Packing Instruction 967, Section I.3, *amend* to read:

**I.3 Outer packagings**

*Boxes*

Aluminium  
Fibreboard  
Natural wood  
Other metal  
Plastics  
Plywood  
Reconstituted wood  
Steel

*Drums*

Aluminium  
Fibre  
Other metal  
Plastics  
Plywood  
Steel

*Jerricans*

Aluminium  
Plastics  
Steel

In Part 4, Chapter 11, page 4-11-34, Packing Instruction 967, Section II, first paragraph, *insert* the following under the first bullet:

- Part 5;2.4.16 (Shipper's responsibilities — Special marking requirements for lithium batteries);

In Part 4, Chapter 11, page 4-11-38, Packing Instruction 968, Section II, first paragraph, *insert* the following under the second bullet:

- Part 5;2.4.16 (Shipper's responsibilities — Special marking requirements for lithium batteries);

In Part 4, Chapter 11, page 4-11-41, Packing Instruction 969, Section II, first paragraph, *insert* the following under the first bullet:

- Part 5;2.4.16 (Shipper's responsibilities — Special marking requirements for lithium batteries);

In Part 4, Chapter 11, page 4-11-44, Packing Instruction 970, Section II, first paragraph, *amend* "contained with equipment" to read "contained in equipment".

In Part 4, Chapter 11, page 4-11-44, Packing Instruction 970, Section II, first paragraph, *insert* the following under the first bullet:

- Part 5;2.4.16 (Shipper's responsibilities — Special marking requirements for lithium batteries);

In Part 4, Chapter 11, page 4-11-46, Packing Instruction 971, second paragraph under "General requirements", *amend* "this packaging instruction" to read "this packing instruction".

In Part 5, Chapter 3, page 5-3-17, Figure 5-26, *replace* hazard label with the following:



In Part 6, Chapter 1, page 6-1-3, Table 6-2, Paper bags, last column under "Maximum net mass (kg)", *insert* "50" for 5M1.

*Note.— The amendment does not apply to the French or Spanish version.*

In Part 6, Chapter 4, page 6-4-3, *move* table before paragraph 4.3.2.

In Part 6, Chapter 7, page 6-7-14, paragraph 7.24.1.1 a), *amend* "7.24.4" to read "6.4.24.4 of the UN Model Regulations".

In Part 7, Chapter 2, page 7-2-3, paragraph 2.4.1.2, *amend* "2.4.1.1" to read "2.4.1.1 a), b or c)".

In Part 7, Chapter 5, page 7-5-1, paragraph 5.1.1, *replace* the third and fourth sentences with the following "If the ticket purchase and/or boarding pass issuance can be completed by a passenger without the involvement of another person, the notification system must include an acknowledgement by the passenger that he or she has been presented with the information."

In Attachment 2, page A2-6, **GALLIUM**, first column, first line, *amend* "0EC" to read "0°C".

In Attachment 2, page A2-8, **POLYESTER RESIN KIT**, first column, last line, *amend* "29EC to 32EC" to read "29°C to 32°C".

In Attachment 2, page A2-8, **POLYESTER RESIN KIT**, second column, *insert* ", 3527" after "3269".

In Attachment 2, page A2-10, **TURPENTINE SUBSTITUTE**, first column, second line, *amend* "40EC" to read "40°C".

In Attachment 3, Chapter 1, Table A-1 — State variations, make the following amendments:

Page A3-1-4, AU 3, *amend* the website link to read "<http://www.agriculture.gov.au/import/goods/biological>".

Page A3-1-4, BE 1, second column, *amend* to read:

Definition of "explosive substance": According to the Belgian regulations (the law of 28 May 1956, amended, on explosive substances and mixtures and substances and mixtures likely to deflagrate, as well as devices loaded with such substances and mixtures), any substance likely to be used for its explosive, deflagrating or pyrotechnic properties is considered as an explosive substance.

Page A3-1-4, BE 2, second column, *amend* to read:

Prior authorization of:

FPS Economy, S.M.E.s, Self-employed and Energy  
Directorate General Quality and Safety  
Safety Regulations Unit

North Gate  
Boulevard du Roi Albert II, 16  
1000 Brussels

Phone: +32 (0)2 277 77 12  
Fax: +32 (0)2 277 54 14  
E-mail: [explo@economie.fgov.be](mailto:explo@economie.fgov.be)

is required for transport from, to, or in transit through Belgium of any explosive substance.

Applications may be made only by persons or corporations having a residence or an office in Belgium. When this is not the case, the applicant must have a responsible representative residing in Belgium and approved by Ministerial Decree.

The Safety Regulations Unit may grant exemptions to the methods of packaging. These various provisions are defined in the Royal Decree of 23 September 1958, amended, laying down general rules on the manufacture, storage, possession, sales, transport and use of explosives.

When transport (import, export or transit) is authorized on a case-by-case basis and is done partially over land, the application must specify the complete itinerary, including the land portion.

Page A3-1-5, BE 3, second column, *amend* to read:

Those substances listed in Table 3-1 with “BE 3” shown in column 6 are defined as “explosive substances” and are subject to the conditions of BE 2.

Page A3-1-5, BE 4, second column, *amend* to read:

Prior authorization of the:

Federal Agency for Nuclear Control  
Ravensteinstraat 36  
1000 Brussels  
Telephone: +32 (0)2 289 21 11  
Facsimile: +32 (0)2 289 21 12  
E-mail: [transport@fanc.fgov.be](mailto:transport@fanc.fgov.be)

is required for transport from, to or in transit through Belgium of radioactive substances and fissile substances of which the quantities exceed the limits of activity defined in Royal Decree of 20 July 2001, amended, laying down the General Regulations for the Protection of the Population, Workers and Environment against the Dangers of Ionizing Radiation.

Page A3-1-5, BE 5, *amend* to read: Not used.

Page A3-1-11, DE 4, *amend* the address to read:

Luftfahrt-Bundesamt  
Außenstelle Frankfurt  
Sachgebiet Gefahrgut  
Kelstarbacher Str. 23  
65479 Raunheim

Telephone: +49 531 2355 3302  
Facsimile: +49 531 2355 3398

Page A3-1-19, IT 5, second column, *amend* to read:

Authorizations for transport of weapons, ammunitions and explosives to/from/through Italian territory must be requested as described in the GEN Section of AIP Italia.

When the Technical Instructions require that a prior approval or authorization or exemption must be granted by Italy for the safe transport of dangerous goods by air, including for weapons, ammunitions and explosives, it must be requested to ENAC — Ente Nazionale per L’Aviazione Civile (Italian Civil Aviation Authority). See the ICAO public website for current contact information ([www.icao.int/safety/DangerousGoods/Pages/Dangerous-Goods-National-Authority.aspx](http://www.icao.int/safety/DangerousGoods/Pages/Dangerous-Goods-National-Authority.aspx)).

In Attachment 3, Chapter 2, paragraph 2.5, *insert* “Air Europa Express — X5” after “Air Europa — UX”.

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

Page A3-2-6, AM-12, *amend* to read:

- ≠ AM-12 Requests for authorization to transport dangerous goods which are not listed and those which require prior authorization must be made in advance via email to the following addresses:

Fernando Rubio Martínez [frubio@aeromexico.com](mailto:frubio@aeromexico.com)  
F. Javier Hernández M.: [fhernandez@aeromexico.com](mailto:fhernandez@aeromexico.com)

Page A3-2-52, *add* the following new variation for LX — Swiss International:

- + LX-07 UN 3171 — Battery-powered vehicles are not accepted as cargo. This prohibition does not apply to UN 3171 — Battery-powered equipment. Table 3-1

Page A3-2-82, SN-02, *amend* to read:

- ≠ SN-02 Not used.

Page A3-2-82, *add* the following new variation for SN — Brussels Airlines:

- |   |       |   |     |
|---|-------|---|-----|
| + | SN-04 | Small lithium battery powered vehicles are prohibited as carry-on or checked in baggage. This prohibition applies but is not limited to air wheels, solo wheels, balance wheels and hover boards.                         | 8;1 |
|   |       | Passengers with reduced mobility travelling with these devices on SN are requested to contact <a href="mailto:dgdepartment@brusselsairlines.com">dgdepartment@brusselsairlines.com</a> before the start of their journey. |     |

Page A3-2-105, *add* the following new variations for X5 — Air Europa Express:

- |   |                                |   |                  |
|---|--------------------------------|---|------------------|
| + | <b>X5 — Air Europa Express</b> |   |                  |
|   | X5-01                          | Dangerous goods in excepted quantities will not be accepted for carriage.   | Table 3-1<br>3;5 |
|   | X5-02                          | Dangerous goods in limited quantities (“Y” packing Instructions) will not be accepted for carriage, except for: “ID 8000—Consumer commodity”, aircraft parts and supplies COMAT, AOG).  | Table 3-1<br>3;4 |
|   | X5-03                          | Dangerous goods in consolidations will not be accepted for carriage except for consolidations containing UN 1845, Carbon dioxide, solid (dry ice) when used as a refrigerant for non dangerous goods.   | Table 3-1        |
|   | X5-04                          | Division 6.1—Toxic substances—Dangerous goods in which the primary or secondary hazard belongs to Division 6.1 (except for COMAT, AOG, aircraft parts and supplies), will not be accepted for carriage.   | 2;6              |
|   | X5-05                          | Dangerous goods of which the primary hazard is Class 4 (Division 4.1, 4.2 or 4.3), except for COMAT, AOG, aircraft parts and supplies) will not be accepted for carriage.   | 2;4              |
|   | X5-06                          | Dangerous goods of which the primary hazard belongs to Division 5.2 will not be accepted for carriage.  | 2;5              |
|   | X5-07                          | The following dangerous goods will not be accepted for carriage:<br><br>UN 1787 — Hydriodic acid<br>UN 2803 — Gallium   | Table 3-1<br>3;4 |
|   | X5-08                          | Hazardous waste in any form, as defined by any regulation, will not be accepted for carriage.   |                  |
|   | X5-09                          | Salvage packagings will not be accepted for carriage.   | 4;1              |
|   | X5-10                          | Class 7—Radioactive materials will not be accepted for carriage.  | 2;7              |
|   | X5-11                          | Lithium Batteries:<br><br>UN 3091—Lithium metal batteries and cells contained in equipment or packed with equipment are prohibited from carriage as cargo.<br><br>This prohibition does not apply to:<br><br>— Lithium batteries covered by the provisions for dangerous goods carried by passengers or crew (see Table 8-1);<br><br>UN 3481—The number of packages marked with the lithium battery handling label in compliance with the section II of Packing Instructions 966 and 967 must be added, for each packing instruction concerned, in the “Nature and Quantity of goods” box of the air waybill. | Table 3-1<br>8;1 |

In Attachment 4, Chapter 2, page A4-2-1, paragraph 2.1, second sentence, *amend* “Contracting States” to read “Member States”.

In Attachment 5, page A5-14, *amend* “Table 6-6” to read “Table 6-7” and “6-7-8” to read “6-7-11”.

In Attachment 5, page A5-14, list of tables, *insert* the following after entry for "Table 6-6":

Table 6-6 Values of Z for calculation of criticality safety index in accordance with 7.10.2.....6-7-8

In Attachment 5, page A5-15, list of figures, *amend* "Figure 6-1" to read "Figure 6-2" and page "6-2-4" to read "6-8-1".

In Attachment 5, page A5-15, list of figures, *amend* "Figure 6-2" to read "Figure 6-3" and page "6-2-4" to read "6-8-1".

In Attachment 5, page A5-15, list of figures, *amend* "Figure 6-3" to read "Figure 6-1".

— END —