



IATA Dangerous Goods Regulations

55th Edition (English)
Effective 1 January 2014

ADDENDUM

Posted 23 December 2013

Users of the IATA Dangerous Goods Regulations are asked to note the following amendments and corrections to the 55th Edition, effective from 1 January 2014.

Where appropriate, changes or amendments to existing text have been highlighted (in yellow - PDF or grey - hardcopy) to help identify the change or amendment.

New or Amended State Variations (Section 2.8.2)

Amend AUG (Australia)

AUG-03 Infectious substances other than human blood products, human urine and human tissue, are prohibited from entry to Australia without prior approval from Australian Health Authorities

Requests for approval should be addressed to:

Australian Quarantine and Inspection Service
Department of Agriculture, Fisheries and Forestry
Department of Agriculture
Biologicals Program
GPO Box 858
Canberra
ACT 2601
AUSTRALIA

Tel: +61 2 6272 3933 +61 2 6272 4578

Fax: +61 (2) 6272 3933 +61 2 6249 1798

Website: <http://www.aqis.gov.au> <http://www.daff.gov.au/biosecurity/import/biological>

(see 1.2.8, 3.6.2, 8.1.6.9.4, 8.3 and 9.1.2).

Amend JPG (Japan)

JPG-11 Radioactive material (Class 7), except for "Excepted radioactive material", must not be stowed in the same cargo compartment together with packages containing **Class 1, 2, 3 or 8 dangerous goods explosives (Class 1, except compatibility group S)** (see 10.9.3).

Amend USG (United States)

USG-05 An explosive article or substance may not be transported to, from, through or within the United States without prior approval by the appropriate authority of the US (see USG-01 Attention: Approvals and Permits Division_(PHH-30)). Such approval remains valid for subsequent transport of the article or substance provided there is no change in its composition, design or packaging.

Except as otherwise provided in US regulations 49 CFR 172.320, each package containing an explosive article or substance must be marked with the EX number assigned in the approval for each article, substance or device contained in the package. The EX-number may also be provided in association with the description of dangerous goods on the transport document (Shipper's Declaration) rather than marked on the package as provided in 49 CFR 172.320(d). Articles of the kind described in 49 CFR 173.56(h) **and §173.166 (c)(2)** do not require prior approval or an EX-number.

USG-13 Operators must comply with all requirements of 49 CFR, Part 175 (see USG-01). These requirements include, but are not limited to, the following:

- (a) A package prepared in accordance with these Regulations for transport to, from or within the United States must not be accepted unless the operator also ensures that the shipper has complied with all applicable United States variations indicated in these Regulations (see 9.1.2).
- (b) A copy of the transport document or an electronic image thereof, must be retained by the initial operator for not less than one year after the dangerous goods are accepted by the initial operator. Each shipping paper copy must include the date of acceptance by the initial operator. The date on the shipping paper may be the date a shipper notifies the air carrier that a shipment is ready for transportation, as indicated on the air waybill or bill of lading, as an alternative to the date the shipment is picked up or accepted by the carrier. For a hazardous waste, the transport document must be retained for three years after the waste material is accepted by the initial operator (see 9.8).
- (c) The notification to pilot-in-command must list, and provide the required information for, those additional materials considered to be dangerous goods under United States' regulations as indicated through United States variations (see 9.5.1.1).
- (d) Except for dangerous goods in Class 9, UN 0012, UN 0014 and UN 0055 also meeting the requirements of 173.63(b), dangerous goods in limited or excepted quantities, substances of Class 9, aircraft batteries transported as items of replacement (49 CFR 175.8), and those articles and substances considered to be dangerous goods under these Regulations but which are not subject to 49 CFR Parts 171–180, the following limitations apply:
1. No more than 25 kg net weight of dangerous goods, and in addition thereto, 75 kg net weight of non-flammable gas, that are permitted to be carried aboard a passenger aircraft may be loaded aboard an aircraft in an inaccessible manner;
 2. For transport by cargo aircraft the following additional substances are also excepted from the above requirement:
 - (i) Class 3 (flammable liquid), Packing Group III (unless the substance is also labelled Corrosive);
 - (ii) Division 6.1 (toxic) (unless the substance is also labelled **for any hazard class or division except FLAMMABLE LIQUID (PG II and III only)**);
 - (iii) Division 6.2 (infectious substances);
 - (iv) Class 7 (radioactive) material that does not meet the definition of another hazard class.

Notes:

1. *Accessible means, on passenger-carrying or cargo-only aircraft that each package is loaded where a crew member or other authorized person can access, handle, and, when size and weight permit, separate such packages from other cargo during flight, including a freight container in an accessible cargo compartment when packages are loaded in an accessible manner. Additionally, a package is considered accessible when transported on a cargo-only aircraft if it is:*
 - *In a cargo compartment certified by FAA as a Class C aircraft cargo compartment as defined in 14 CFR 25.857(c); or*
 - *In an FAA-certified freight container that has an approved fire or smoke detection system and fire suppression system equivalent to that required by the certification requirements for a Class C aircraft cargo compartment.*
2. *Inaccessible means all other configurations to include packages loaded where a crew member or other authorized person cannot access, handle, and, when size and weight permit, separate such packages from other cargo during flight, including a freight container in an accessible cargo compartment when packages are loaded in an inaccessible manner.*

The following table provides the limits imposed by this variation:

TABLE USG-13.A
Quantity and Loading Table

Applicability	Forbidden	Quantity limitation: 25 kg net weight of dangerous goods plus 75 kg of Div. 2.2 per cargo compartment	No limit
Passenger aircraft	Packages bearing a CAO label	Inaccessible	Accessible
Cargo aircraft – packages permitted on a passenger aircraft	Not applicable	Inaccessible (Note 1)	Accessible (Note 2)
Cargo aircraft – packages bearing a CAO label	Inaccessible (Note 1)	Not applicable	Accessible (Note 2)

Notes:

1. The following additional substances are not subject to this loading restriction:
 - (i) Class 3 (flammable liquid), Packing Group III (unless the substance is also labelled Corrosive);
 - (ii) Division 6.1 (toxic) (unless the substance is also labelled **for any hazard class or division except FLAMMABLE LIQUID (PG II and III only)**);
 - (iii) Division 6.2 (infectious substances);
 - (iv) Class 7 (radioactive) material that does not meet the definition of another hazard class;
 - (v) Class 9 and limited quantity or excepted quantity dangerous goods
 - (vi) UN 0012, UN 0014 or UN 0055 also meeting the requirements of 173.63(b).**
 2. On a cargo aircraft, packages required to be loaded in a position that is considered to be accessible include those loaded in a Class C cargo compartment
- (e) Operators must comply with the incident reporting requirements of 49 CFR 171.15, 171.16 and discrepancy reporting under 175.31.

Note:

Copies of the incident reporting form and guidance for completing it may be downloaded at: <http://www.phmsa.dot.gov/hazmat/incident-reports>

USG-16 Air bag inflators, air bag modules and seat belt pretensioners may not be transported to, from or within the United States without prior approval by the appropriate national authority of the US (see USG-01), Attention: Approvals and Permits Division (PHH-30). Such approval remains valid for subsequent transport provided there is no change in its composition, design or packaging. For domestic transport, air bag inflators, modules and pretensioners that meet the criteria for a Division 1.4G explosive must be transported using the description Articles, pyrotechnic for technical purposes UN 0431. The dangerous goods transport document (Shipper's Declaration) must contain the EX number or product code for each approved inflator, module or pretensioner in association with the basic description required in 8.1.6.9.1. If product codes are used they must be traceable to the specific EX number assigned to the inflator, module or pretensioner, as applicable, by the appropriate authority of the United States. The EX number or product code is not required to be marked on the outer package. **These requirements do not apply to air bag inflators, air bag modules and seat belt pretensioners assigned to Class 9 (UN 3268) provided that the provisions of 49 CFR 173.166 have been met.**

New or Amended Operator Variations (Section 2.8.4)

In 2.8.3.4 List add:

- After Astral Aviation: Atlasjet Airlines KK
- After Qatar Airways: Royal Brunei Airlines BI

Amend **AF (Air France)**

AF-01 ~~The following dangerous goods will not be accepted for carriage:~~

~~(a) All explosive articles classified in Division 1.1 and 1.2.~~

~~(b) Class 8, UN 1798 Nitrohydrochloric acid. Not used.~~

Amend **BA (British Airways)**

BA-01 ~~UN 1169, UN 1197, UN 3334. With the exception of composite packaging, single packaging is not acceptable for liquids of concentrates or essences with strongly, irritating or smelling properties, such as garlic, unless in sturdy, leak-proof supplementary packaging forming an overpack for each single packaging used. The overpack must meet the marking, labelling and documentary requirements for an overpack and must bear orientation labels (see Packing Instructions 364, 355, 366 and 964).~~

BA-0201 UN 3090 Lithium batteries. Primary (non-rechargeable) lithium (metal) batteries and cells are prohibited from carriage as cargo on BA passenger carrying aircraft (see Packing Instruction 968).

This prohibition does not apply to:

- UN 3091, UN 3480, UN 3481
- Lithium batteries (rechargeable and non-rechargeable) covered by the Provisions for Dangerous Goods Carried by Passengers or Crew (see Table 2.3.A).

BA-0302 Infectious substances, (UN 2814, UN 2900 and UN 3373) and biological products are not acceptable for carriage in mail (see Subsection 2.4).

BA-0403 Hazardous waste in any form, as defined by any Regulation, will not be accepted for carriage (see Packing Instruction 622 and 8.1.3.3).

BA-0504 Class 7—radioactive material of any kind will not be accepted for carriage (see 10.10.2).

~~**BA-06** UN 3164—Articles, pressurized, hydraulic or pneumatic (containing non-flammable gas). In addition to the gross weight the net weight of the gas must be annotated on the Shipper's Declaration.~~

~~**BA-07** UN 3356 Oxygen generators, chemical are forbidden from carriage on BA aircraft.~~

Add new **BI (Royal Brunei Airlines)**

BI-01 BI-01 The shipper must provide a 24-hour emergency telephone number of a person/agency, who is knowledgeable of the hazards, characteristics and actions to be taken in case of accident or incident concerning each of the dangerous goods being transported. The telephone number, including the country and area code, preceded by the words Emergency Contact or 24-Hour Number should be shown in the Additional Handling Information box of the DGD and on the package, e.g. Emergency Contact +673 212 345

67 (see 8.1.6.11 and 10.8.3.11)

BI-02 Class 7, Fissile radioactive materials will not be accepted for carriage.

BI-03 The following are prohibited from carriage as cargo on BI passenger and cargo carrying flights:

UN3480 Lithium ion batteries

UN3090 Lithium metal batteries

This prohibition however does not apply to:

- UN3481 Lithium ion batteries contained in or packed with equipment

- UN3091 Lithium metal batteries contained in or packed with equipment.
- Lithium batteries (rechargeable and non-rechargeable), covered under the Table 2.3.A, the provisions for dangerous goods carried by passenger or crew. (subsection 2.3)
- BI Company Material (COMAT) permitted for transport in passenger and cargo aircraft conforming to the current edition of IATA Dangerous Goods Regulations (IATA DGR).

UN3481 Lithium ion batteries contained in or packed with equipment, prepared for transport according to packing instructions 966 or 967 section II and UN3091 Lithium metal batteries contained in or packed with equipment, prepared for transport according to packing instructions 969 or 970 section II, are required to appear on the information to pilot-in-command (NOTOC).

Amend **CX (Cathay Pacific)**

CX-05 Liquid ~~substances dangerous goods in~~ single packagings of drums and jerricans of any material must be prepared as follows:

1. the steel drums/plastic drums/plastic jerricans must be protected by other strong outer packaging, for example fibreboard box; or
2. if prepared as an open overpack, a suitably sized plastic, foam or wooden pallet must be used to protect at least the top and bottom of the packaging.

Amend **FX (Federal Express)**

With effect 1 April 2014 the following changes will apply to FX-07:

FX-07 All lithium batteries (Section I, IA, IB and II) in all packing instructions must not be shipped in the same package as the following dangerous goods classes/divisions: 1.4, 2.1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 8 and 2.2 with a Cargo Aircraft Only label. This includes All Packed in One, Overpacks and combination All Packed in One/Overpacks.

All UN 3090 lithium metal batteries under Packing Instruction 968 (Section IA, IB and II) require pre-approval. See www.fedex.com/us; keyword lithium batteries (search field).

~~UN 3480 Lithium ion batteries and UN 3090 Lithium Metal Batteries prepared in accordance with Section IB will require a Shipper's Declaration for Dangerous Goods (DGD) with each shipment. "IB" must be indicated in the Authorization Column. Alternative documentation will not be allowed.~~

Effective 1 January 2014 FX-10 will apply as follows:

FX-10 ~~Not used.~~ ~~All US domestic shipments of Division 4.3 must be offered under a DOT special permit which allows relief for the carrier from US regulations requiring placarding for road transport. International shipments originating or terminating in the US will only be accepted when consigned at FedEx Express staffed facilities and picked up by the recipient at a FedEx facility (i.e. hold for pick-up). Shipments offered under a limited quantity "Y" packing instruction are an exception from these requirements.~~

With effect 1 May 2014 the following changes will apply to FX-12 and FX-18:

FX-12 ~~Not used.~~ ~~This variation applies only when FX-18 does not apply. Hand written Shipper's Declarations will not be accepted. The following fields on the Shipper's Declaration must be typed or computer generated:~~

~~UN or ID number including the prefix, Proper shipping name, Hazard class or division, Subsidiary risk or division(s), Packing Group, Packaging Type, Packing Instruction, Authorization, Emergency telephone number.~~

Note:

~~The technical name, when required, may be handwritten.~~

~~For radioactive shipments, in addition to the items listed above the following must also be typed or computer generated:~~

~~Radionuclide, Special Form or Physical and Chemical Form All other entries may be handwritten.~~

~~Handwritten alterations/amendments to an entry required to be typed per FX-12 are acceptable if each alteration/amendment is legible and signed with the same signature used to sign the Shipper's Declaration.~~

FX-18 Shipper's Declarations for dangerous goods for all FedEx Express® dangerous goods shipments ~~originating in the U.S.~~ must be prepared using software with dangerous goods compliance edit checks and by one of the following methods:

- Certain FedEx electronic shipping solutions;
- Recognized shipper proprietary software; or
- FedEx recognized dangerous goods vendor software.

~~FX-18 currently does not apply to:~~

- ~~• Shipments originating in non-U.S. locations (including U.S. territories overseas, such as Puerto Rico);~~
- ~~• FedEx International, FedEx International Express Freight® (IXF) and FedEx International Premium® (IP1);~~
- ~~• Shipments containing Class 7 radioactive materials.~~

Note:

A list of approved dangerous goods shipping application vendors can be reviewed at www.fedex.com/us; dangerous goods (keyword). Shipper declaration "templates" from FedEx Express will no longer be accepted.

Amend EK (Emirates)

Add new

EK-02 Emirates will not accept UN 3090, lithium metal or lithium alloy cells and batteries as cargo on Emirates passenger services. This applies to Section IA, IB and Section II of Packing Instruction 968, including those approved by an appropriate authority under special provisions A88 or A99. This prohibition does not apply to carriage on Emirates freighter services.

Amend IB (IBERIA, Líneas Aéreas de España)

IB-01 ~~Not used.~~ UN 3090 Lithium batteries. Primary (non-rechargeable) lithium (metal) batteries and cells are prohibited from carriage as cargo on BA passenger carrying aircraft (see Packing Instruction 968).

~~This prohibition does not apply to:~~

- UN 3091, UN 3480, UN 3481
- Lithium batteries (rechargeable and non-rechargeable) covered by the Provisions for Dangerous Goods Carried by Passengers or Crew (see Table 2.3.A).

IB-02 Infectious substances, (UN 2814, UN 2900 and UN 3373) and biological products are not acceptable for carriage in mail (see Subsection 2.4).

IB-03 Hazardous waste in any form, as defined by any Regulation, will not be accepted for carriage (see Packing Instruction 622 and 8.1.3.3).

IB-0204 Class 7, Fissile Radioactive Material will not be accepted for carriage on passenger aircraft (see 10.5.13 and 10.10.2).

Amend JL (Japan Airlines)

JL-09 Liquid dangerous Goods in single packagings of UN specification "1A1 steel drums (1A1 or 1A2) and "3A4 steel jerricans (3A1 or 3A2) will not be accepted unless overpacked with, for example, suitably sized wooden pallets suitable material to protect at least the top and bottom of the packaging.

Add new KK (Atlasjet Airlines)

KK-01 The shipper must provide a 24-hour emergency telephone number of a person/agency, who is knowledgeable of the hazards, characteristics and actions to be taken in case of an accident or incident

concerning each of the dangerous goods being transported. This telephone number, including the country and area code, preceded by the words “Emergency Contact” or “24-Hour Number” must be inserted on the “Handling Information” box of the DGD and also outside of the package (see 8.1.6.11 and 10.8.3.11).

A 24-hour emergency telephone number is not required for shipments that do not require a Shipper's Declaration for Dangerous Goods.

KK-02 Dangerous goods in consolidations will not be accepted for carriage except for the following shipments:

- consolidated shipments/consolidations containing Carbon dioxide, solid (dry ice) when used as a refrigerant;
- one master air waybill with one house air waybill;
- one master air waybill with more than one house air waybill from the same shipper and different consignees.

KK-03 Booking and confirmation are required for all dangerous goods shipments as defined in these regulations (see 1.3.2 and 9.1.2).

Atlasjet Cargo:

Tel: +90 212 663 20 00

Fax: +90 573 30 24

e-mail: cargo@atlasjet.com

KK-04 Material Safety Data Sheet (MSDS) must be provided for dangerous goods except for dangerous goods in Class 7, vehicles, dangerous goods in apparatus or machinery and engines, ID 8000, magnetized material, carbon dioxide, solid (dry ice) and Division 6.2. The MSDS must be written in English. The MSDS must include the UN number, proper shipping name and other relevant transport information (see 8.0.1 and 8.3).

KK-05 Explosives will not be accepted for carriage, except substances and articles of Division 1.4S (see Packing Instructions 101–143).

KK-06 Dangerous Goods in Excepted Quantities will not be accepted.

KK-07 Class 8, Corrosive materials Packing Group I & II will not be accepted for carriage (see 800 series packing instructions).

KK-08 Class 7, Radioactive materials will not be accepted for carriage

KK-09 The following items will not be accepted on Atlasjet Airlines flights:

- UN 2803—Gallium;
- UN 2809—Mercury; and
- UN 3506—Mercury contained in manufactured articles.

KK-10 UN 3090 Lithium metal batteries. Lithium metal cells and batteries are prohibited from carriage as cargo on Atlasjet aircraft. This applies to Section IA, IB and Section II of Packing Instruction 968.

This prohibition does not apply to:

- lithium metal cells and batteries packed with or contained in equipment (UN 3091) in accordance with PI 969 and PI 970 and lithium ion cells and batteries (UN 3480 and UN 3481) in accordance with PI 965 to PI 967; or
- lithium batteries (rechargeable and non-rechargeable) covered by the Provisions for Dangerous Goods Carried by Passengers or Crew (see 2.3.2 to 2.3.5 and Table 2.3.A).

KK-11 All shipments of lithium batteries contained in equipment prepared in accordance with Section II of PI 967 or PI 970 must include the mandatory wording on the air waybill as shown in Section II (“Lithium ion batteries in compliance with Section II of PI 967” or “Lithium metal batteries in compliance with Section II of

PI 970"). This applies even to shipments where no lithium battery handling label is required to be affixed to the package(s).

KK-12 Dangerous goods as defined in these Regulations will not be accepted in Air Mail (see 2.4).

Amend LD (Air Hong Kong)

LD-0807 UN 3090 Lithium metal batteries. Lithium metal cells and batteries are prohibited from carriage as cargo on Air Hong Kong aircraft. This applies to Section IA, IB and Section II of Packing Instruction 968.

This prohibition does not apply to:

- lithium metal cells and batteries packed with or contained in equipment (UN 3091) in accordance with PI 969 and PI 970 and lithium ion cells and batteries (UN 3480 and UN 3481) in accordance with PI 965 to PI 967; or
- lithium batteries (rechargeable and non-rechargeable) covered by the Provisions for Dangerous Goods Carried by Passengers or Crew (see 2.3.2 to 2.3.5 and Table 2.3.A).

LD-0708 All shipments of lithium batteries contained in equipment prepared in accordance with Section II of PI 967 or PI 970 must include the mandatory wording on the air waybill as shown in Section II ("Lithium ion batteries in compliance with Section II of PI 967" or "Lithium metal batteries in compliance with Section II of PI 970"). This applies even to shipments where no lithium battery handling label is required to be affixed to the package(s).

Amend OS (Austrian Airlines)

~~**OS-02** Wheelchairs or other battery-powered mobility devices with spillable batteries will not be accepted for carriage as checked or carry-on baggage (see 2.3.2.3 and 9.3.15). Not used.~~

Amend OU (Croatia Airlines)

~~**OU-03** Wheelchairs or other battery-powered mobility devices with spillable batteries will not be accepted for carriage (see 2.3.2.3 and 9.3.15). Camping stoves and fuel containers that have contained a flammable liquid fuel will not be accepted in passengers baggage (see 2.3.2.5).~~

Amend SQ (Singapore Airlines/Singapore Airlines Cargo)

SQ-07 UN 3090 Lithium metal batteries. Lithium metal cells and batteries are prohibited from carriage as cargo on Singapore Airlines aircraft. This applies to Section IA, IB and Section II of Packing Instruction 968. In addition lithium metal cells and batteries (UN 3091) prepared in accordance with Section I of Packing Instruction 969 and Packing Instruction 970 are prohibited for carriage as cargo on Singapore Airlines passenger aircraft.

This prohibition does not apply to:

- lithium metal cells and batteries packed with or contained in equipment (UN 3091) in accordance with Section I of PI 969 and PI 970 on passenger aircraft;
- lithium ion cells and batteries (UN 3480 and UN 3481) in accordance with PI 965 to PI 967; or
- lithium batteries (rechargeable and non-rechargeable) covered by the Provisions for Dangerous Goods Carried by Passengers or Crew (see 2.3.2 to 2.3.5 and Table 2.3.A).

Amend VO (Tyrolean Airways)

~~**VO-02** Wheelchairs or other battery-powered mobility devices with spillable batteries will not be accepted for carriage as checked or carry-on baggage (see 2.3.2.3 and 9.3.15). Not used.~~

Amend VT (Air Tahiti)

~~**VT-02** Dangerous goods with a subsidiary risk are forbidden, with the exception of UN 1072, Oxygen, compressed. Specific limitations apply to the following items carried as cargo (ask the carrier by e-mail at resp-md@airtahiti.pf):~~

~~— Class 1, Explosives;~~

- Gases of Division 2.3;
- Solids of Division 4.2 and Division 4.3;
- Radioactive materials of Category II-Yellow and III-Yellow (“RRY” code)
- UN 2211, Polymeric beads, expandable and UN 3314 Plastics moulding compound.

VT-06 Different dangerous goods packed in one outer package are not accepted, except for carbon dioxide, solid (UN 1845) used as a refrigerant **(see 5.0.2.11)**. Not used.

Section 1

Page 6 amend paragraph 1.4.3.1 as shown:

1.4.3.1 An operator must ensure that information as to the types of dangerous goods which a passenger is forbidden from transporting aboard an aircraft is provided at the point of ticket purchase. Information provided via the Internet may be in text or pictorial form but ~~should~~ **must** be such that ticket purchase cannot be completed until the passenger, or a person acting on their behalf, has indicated that they have understood the restrictions on dangerous goods in baggage.

Section 3

Page 157, amend 3.9.2.6 as follows:

3.9.2.6 Lithium Batteries

Cells and batteries, cells and batteries contained in equipment, or cells and batteries packed with equipment, containing lithium in any form must be assigned to UN 3090, UN 3091, UN 3480 or UN 3481, as appropriate. They may be transported under these entries if they meet the following provisions:

- (a) each cell or battery is of the type proved to meet the requirements of each test of the UN Manual of Tests and Criteria, Part III, subsection 38.3. ~~However, batteries and cells manufactured before 1 January 2014 conforming to a design type tested according to the requirements of the 5th revised edition of the UN Manual of Tests and Criteria, Part III, subsection 38.3 may continue to be transported; Cells and batteries manufactured according to a type meeting the requirements of subsection 38.3 of the UN Manual of Tests and Criteria, Revision 3, Amendment 1 or any subsequent revision and amendment applicable at the date of the type testing may continue to be transported, unless otherwise provided in these Regulations.~~

~~Cell and battery types only meeting the requirements of the Manual of Tests and Criteria, Revision 3, are no longer valid. However, cells and batteries manufactured in conformity with such types before 1 July 2003 may continue to be transported if all other applicable requirements are fulfilled.~~

Note:

Batteries must be of a design type proved to meet the testing requirements of the Manual of Tests and Criteria, Part III, subsection 38.3, irrespective of the whether the cells of which they are composed are of a tested design type.

- (b) each cell and battery incorporates a safety venting device or is designed to preclude a violent rupture under conditions normally incident to transport;
- (c) each cell and battery is equipped with an effective means of preventing external short circuits;
- (d) each battery containing cells or series of cells connected in parallel is equipped with effective means as necessary to prevent dangerous reverse current flow (e.g., diodes, fuses, etc.);
- (e) cells and batteries must be manufactured under a quality management program that includes:
1. a description of the organizational structure and responsibilities of personnel with regard to design and product quality;
 2. the relevant inspection and test, quality control, quality assurance, and process operation instructions that will be used;

3. process controls that should include relevant activities to prevent and detect internal short circuit failure during manufacture of cells;
4. quality records, such as inspection reports, test data, calibration data and certificates. Test data must be kept and made available to the appropriate national authority upon request;
5. management reviews to ensure the effective operation of the quality management programme;
6. a process for control of documents and their revision;
7. a means for control of cells or batteries that are not conforming to the type tested as mentioned in (a) above;
8. training programmes and qualification procedures for relevant personnel; and
9. procedures to ensure that there is no damage to the final product.

Note:

In house quality management programmes may be accepted. Third party certification is not required, but the procedures listed in 1. to 9. above must be properly recorded and traceable. A copy of the quality management programme must be made available to the appropriate national authority upon request.

Section 4

Table 4.2: Revise the entries as shown:

UN/ ID no. A	Proper Shipping Name/Description B	Class or Div. (Sub Risk) C	Hazard Label(s) D	PG E	EQ see 2.6 F	Passenger and Cargo Aircraft				Cargo Aircraft Only		S.P. see 4.4 M	ERG Code N
						Ltd Qty		Pkg Inst I	Max Net Qty/Pkg J	Pkg Inst K	Max Net Qty/Pkg L		
						Pkg Inst G	Max Net Qty/Pkg H						
1327	Bhusa	4.1				Forbidden		Forbidden		Forbidden	A807	3L	
1327	Hay	4.1				Forbidden		Forbidden		Forbidden	A807	3L	
1327	Straw	4.1				Forbidden		Forbidden		Forbidden	A807	3L	

Page 376 add new special provision A807 as shown:

A807 Hay, straw and bhusa, when not wet, damp or contaminated with oil are not subject to these Regulations.

Section 5

Page 390, amend Packing Instruction 101 as shown:

PACKING INSTRUCTION 101

Packagings as specified by the appropriate national authority.

~~Unless otherwise provided for in these Regulations, packagings must meet Packing Group II requirements.~~

The following statement must be marked on the Shipper's Declaration for Dangerous Goods: "Packaging approved by the competent authority of XXX"; where "XXX" is the International Vehicle Registration Code (VRI Code) of the country for which the authority acts.

Note:

In this instance the term "competent authority" is used for intermodal compatibility; it refers to the appropriate national authority.

...

Pages 490, amend Packing Instruction 562 as shown:

PACKING INSTRUCTION 562

...

SINGLE PACKAGINGS

Type	Drums						Jerricans			Boxes							Composites	Cylinders
Desc	Steel	Aluminium	Plywood	Fibre	Plastic	Other metal	Steel	Aluminium	Plastic	Steel	Aluminium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic	Plastic	
Spec	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	3A1 3A2	3B1 3B2	3H1 3H2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	All	As permitted in 5.0.6.6

Page 953 amend Packing Instruction 953 as shown:

PACKING INSTRUCTION 953

This instruction applies to UN 2807, Magnetized material on passenger aircraft and Cargo Aircraft Only.

...

(c) the operator must stow the packaged magnetized material in accordance with **9.3.119.3.10**; and:

...

Pages 560 & 562 amend Packing Instruction 965 as shown:

PACKING INSTRUCTION 965

OPERATOR VARIATIONS: 5X-02/04/07, AC-06/07, AM-09, AR-11, AU-11, **BI-03**, CI-01, D0-03, DL-06, EY-04, FX-07, LX-06, QK-06/07, QY-03, RV-07/07, US-01

...

Additional Requirements—Section IB

...

Each package must be marked in accordance with the requirements of **7.1.5.17.1.4.1**(a) and (b) and in addition the gross weight when required by **7.1.5.17.1.4.1** (c) must be marked on the package.

...

Pages 568 & 570, amend Packing Instruction 968 as shown:

PACKING INSTRUCTION 968

OPERATOR VARIATIONS: 4C-08, 4M-08, 5X-02/04/07, AC-06/08, AM-09, AR-11, AU-11, BA-**0201**, **BI-03**, C8-04, CV-04, CX-07, CZ-08, D0-03, DL-06, EI-04, **EK-02**, EY-04, FX-07, GF-14, HX-06, **IB-01**, JJ-08, KA-07, **KK-10**, L7-08, LA-16, LD-**0807**, LP-08, LU-08, LX-06, M3-08, M7-08, PZ-08, QK-06/08, QR-04, QY-03, RV-06/08, SK-01, SQ-07, TZ-06, UC-08, US-01, UX-07, WY-07, XL-08

...

Additional Requirements—Section IB

...

Each package must be marked in accordance with the requirements of **7.1.5.17.1.4.1**(a) and (b) and in addition the gross weight when required by **7.1.5.17.1.4.1** (c) must be marked on the package.

...

Section 7

Page 620 – Amend 7.1.5.5 as shown:

7.1.5.5 Markings of Other Regulations

Markings required by other international or national transport regulations are permitted in addition to markings required by these Regulations, provided that they cannot be confused with or conflict with any markings prescribed by these Regulations, because of their colour, design or shape.

Packages bearing the limited quantity marking for road, rail and sea transport (see Figure 7.1.D) are acceptable in air transport provided that **the dangerous goods and their packagings are in full compliance with these Regulations and the** packages also bear all of the applicable marks and labels required by these Regulations (see Figure 7.2.A for an example)

Page 631 – Amend Figure 7.3.L as shown:

7.3.12 Class 5—Oxidizing Substances (Division 5.1)

FIGURE 7.3.L
Class 5—Oxidizing Substances (Division 5.1)



Name: Oxidizer

Cargo IMP Code: ROX

Minimum dimensions: 100 x 100 mm

Symbol (flame over circle): Black

Background: Yellow (Pantone Colour No. 109U)

Note: This label may also be printed with symbol (flame), text, numbers and borderline shown in black on red background.

Page 632 – Amend Figure 7.3.M as shown:

7.3.13 Class 5—Organic Peroxides (Division 5.2)

FIGURE 7.3.M

Class 5— Organic Peroxides (Division 5.2)



Name: Organic Peroxides

Cargo IMP Code: ROP

Minimum dimensions: 100 x 100 mm

Symbol (flame): Black or White

Background: Upper half Red (Pantone Colour No. 186U), lower half Yellow (Pantone Colour No. 109U)

Note: *This label may also be printed with symbol (flame) and borderline in the top half in black on red background.*

Section 8

Page 646, amend 8.1.6.9.3, Step 8 as shown:

8.1.6.9.3 Third Sequence—Packing Instructions

Step 8. Number of Packing Instruction or Limited Quantity Packing Instruction (with its “Y” prefix) (Columns G, I or K). For lithium batteries prepared in accordance with Section IB of Packing Instruction 965 or Packing Instruction 968 the letters “IB” must be added following the packing instruction number.

Notes:

1. *To qualify as acceptable for transport aboard passenger aircraft, a passenger aircraft packing instruction number(s) must be entered, and the package must not bear the Cargo Aircraft Only label.*
2. *To qualify as acceptable for transport aboard cargo only aircraft, a cargo aircraft packing instruction number(s) must be entered, and the package must bear the Cargo Aircraft Only label; or a passenger aircraft packing instruction number must be shown and no Cargo Aircraft Only label applied. However, where the packing instruction number(s) and the permitted quantity per package are identical for passenger and cargo aircraft, the Cargo Aircraft Only label should not be used.*
3. *It is not necessary that the “IB” be located directly in the Packing Instruction column in a columnar format Shipper’s Declaration. Provided it “follows” the packing instruction reference it is equally acceptable to be located in the authorisations column instead.*

Section 10

Page 722, amend 10.7.1.3.1 and 10.7.1.3.2 as shown:

10.7.1.3.1 General

The following markings are required on all Industrial Package Types IP-1, IP-2 and IP-3, Type A, Type B(U), Type B(M) and Type C packages containing radioactive material:

- Proper Shipping Name;
- UN Number, preceded by the letters "UN";
- full name and address of the shipper and consignee; and
- permissible gross weight if this exceeds 50 kg;
- when carbon dioxide, solid (dry ice) is used as a refrigerant, the additional marking requirements of **7.1.5.17.1.4.1**(d) are required.

10.7.1.3.2 Excepted Packages

Excepted packages must be marked with:

- UN Number, preceded by the letters "UN";
- full name and address of the shipper and consignee; and
- permissible gross weight if this exceeds 50 kg;
- when carbon dioxide, solid (dry ice) is used as a refrigerant, the additional marking requirements of **7.1.5.17.1.4.1**(d) are required.