



香港特別行政區政府

民航處

Civil Aviation Department

The Government of the Hong Kong Special Administrative Region

Regulatory Update – Major Changes in the 2015-2016 Edition of the ICAO Technical Instructions (TI)

Background

The 2015-2016 edition of the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284), upon which the Dangerous Goods (Consignment by Air) (Safety) Ordinance (CAP. 384) and Air Navigation (Dangerous Goods) Regulations (Schedule 16 to CAP. 448C) are based, has come into effect on 1 January 2015.

Disclaimer

The major changes below have been produced to facilitate the industry to comply with the new international requirements for the safe air transport of dangerous goods. **THE CHANGES BELOW ARE NOT EXHAUSTIVE.** For compliance with statutory requirements, it is the responsibility of the industries and the parties concerned to refer to the current edition of the Technical Instructions.

Prepared by

Dangerous Goods Office
Civil Aviation Department Hong Kong

Major changes to Technical Instructions (TI) with effect from 1 January 2015

TI Reference	Detail	Concerned Party
1;1.1.5.1c)	Addition of new exceptions related to dropping in connection with ice jam control and landslide clearance.	Shipper, Freight Forwarder.
1;2.6 3;3	Addition of new exceptions for lamps containing no more than 1g of dangerous goods and consequential revisions to Special Provision A69.	
1;3	Addition of new definitions for Large salvage packagings, Management system for the transport of radioactive material, Neutron radiation detector, and Radiation detection system.	
1;3	Revision of definition for net quantity.	
2; Introductory Chapter, 2.4	Clarification that the requirement for a specific packaging performance level for articles that are not assigned to packing groups is set out in the applicable packing instructions.	
2;5.2	Addition of alternative classification criteria for Division 5.1 Oxidizing Solids.	
2;6.3.2.3.7	Addition of new exception for samples drawn in connection with tissue or organ transplantation.	
2;6.3.2.3.8 e)	Addition of packing requirements for refrigerated or frozen specimens.	
2;6.3.2.3.9.1	Revision to the packing requirement of the excepted medical devices or equipment.	
3; Table 3-1	Addition of new entries in Table 3-1 Dangerous Goods List including: <ul style="list-style-type: none"> — Refrigerant gas R 1113 (UN 1082); — Hay, Straw or Bhusa (UN 1327); — Fibres, animal or vegetable (UN 1372); — Fish scrap, unstabilized or Fish meal, unstabilized (UN 1374); — Wool waste, wet (UN 1387); — Rags, oily (UN 1856); — Textile waste, wet (UN 1857); — Fish meal, stabilized or Fish scrap, stabilized (UN 2216); — Fumigated cargo transport unit (UN 3359); — Fibres, vegetable, dry (UN 3360); — Batteries, nickel-metal hydride (UN 3496); — Krill meal (UN 3497); — Uranium hexafluoride, radioactive material, excepted 	

<i>TI Reference</i>	<i>Detail</i>	<i>Concerned Party</i>
	<p>package (UN 3507)</p> <ul style="list-style-type: none"> — Capacitor, asymmetric (UN 3508); — Packagings discarded, empty, uncleaned (UN 3509). 	<p>Shipper, Freight Forwarder.</p>
<p>3; Table 3-1</p>	<p>Revisions to proper shipping names including:</p> <ul style="list-style-type: none"> — replacement of Air bag inflators, Air bag modules and Seat- belt pretensioners with Safety devices, pyrotechnic (UN 0503) — replacement of Air bag inflators, Air bag modules and Seat- belt pretensioners with Safety devices (UN 3268) — replacement of Blue asbestos and Brown asbestos with Asbestos, amphibole (UN 2212) — replacement of White asbestos with Asbestos, chrysotile (UN 2590). 	
<p>3;3</p>	<p>Revisions to the following Special Provisions including:</p> <ul style="list-style-type: none"> — Special Provisions A4 and A5 - the new requirement for special provision code to be noted on dangerous goods transport document; — Special Provision A18 - removal of exception for mercurous chloride; — Special Provision A19 - new requirement for fire extinguishers and new provisions for large fire extinguishers; — Special Provision A28: revision to exception criteria for Dichloroisocyanuric acid, dry (UN 2465) and Dichloroisocyanuric acid salts (UN 2465); — Special Provisions A32, A56 and A115: alignment with new proper shipping names for Safety devices, pyrotechnic (UN 0503) and Safety devices (UN 3268); — Special Provision A64: clarification that this Special Provision only applies to substances that are too insensitive for acceptance into Class 1 dangerous goods when tested in accordance with UN test series 2; — Special Provision A75: new exception from pressure differential test and venting prohibition for articles such as sterilization devices; — Special Provision A186: new transitional provisions for marking of energy storage capacity requirement on electric double layer capacitors; — Special Provision A187: clarification that chemicals under pressure containing components forbidden for transport by air must not be transported by air; — Special Provision A190: revision to provisions for neutron radiation detectors containing non-pressurized boron trifluoride. 	
<p>3;3</p>	<p>Addition of the following new Special Provisions:</p> <ul style="list-style-type: none"> — Special Provision A192: use of paint related material or printing ink related material as a proper shipping name; — Special Provision A195: articles containing a small pressure receptacle with a release device; — Special Provision A196: new UN No. 3508, Capacitor, asymmetric; — Special Provision A197: exceptions for small quantities of environmentally hazardous substances; — Special Provision A198: exceptions for UN 1327, Hay or Straw or Bhusa when not wet, damp or contaminated; — Special Provision A199: exceptions for UN 3496, Batteries, nickel-metal hydride; 	

TI Reference	Detail	Concerned Party
	<ul style="list-style-type: none"> — Special Provision A200: prohibition on the transport by air of UN 3509, Packagings discarded, empty, uncleaned; — Special Provision A201: provision for the transport of a consignment of UN 3090 — Lithium metal batteries on passenger aircraft (see revisions to lithium battery provisions listed below). 	Shipper, Freight Forwarder.
3;4, 3;5, Packing Instructions 650 and 959, 5;2, 5;3, 6;2	Clarification of the minimum dimensions and format of dangerous goods marks and labels for dangerous goods packed in limited quantities and excepted quantities, and for the applicable Packing Instructions for infectious substances, genetically modified mirco-organisms and genetically modified mirco-organisms.	
5;1.5 and 5;2.4.10	Addition of minimum height requirement of salvage packaging and overpack marking. The lettering of the “Salvage” and “Overpack” markings must be at least 12mm high. (This requirement applies as from 1 January 2016.)	
4;1.1.10.2	Addition of provisions allowing for the use of supplemental packaging within an outer packaging in addition to what is required by the packing instructions to provide additional protection.	
4;4	Clarification of testing requirements for outer packagings for Aerosols provided in Packing Instructions 203 and Y203.	
4;4	New provisions for large fire extinguishers to be transported unpackaged in Packing Instruction 213.	
4;7	Addition of provisions to allow for limited venting of oxygen in the case of specialized peroxyacetic acid packagings in Packing Instruction 570.	
4;11	Addition of references to the general provisions in Packing Instructions 950, 951 and 952 for the applicable engines and vehicles if lithium batteries are installed therein.	
4;11	Addition of requirements for life-saving appliances containing batteries in Packing Instruction 955.	
4;11	Clarification of criteria for passing the drop test in Packing Instruction Y963.	
4;11	Addition of new UN 3508, Capacitor, asymmetric to Packing Instruction 971.	
5;1.1 e)	Removal of provisions for overpacks containing dangerous goods permitted on cargo aircraft only.	
6;2.1.1	Addition of provisions for the marking on UN tested packaging types of 1H1 (plastic drum with non-removable head), 1H2 (plastic drum with removable head), 3H1 (plastic jerrican with non-removable head) and 3H2 (plastic jerrican with removable head) to allow greater flexibility on how the last two digits of the year of manufacture must be displayed.	

<i>TI Reference</i>	<i>Detail</i>	<i>Concerned Party</i>
6;5	Addition of transition provisions for ISO Standards for the construction and testing of UN cylinders and closed cryogenic receptacles.	Shipper, Freight Forwarder.
6;5.4	Addition of hot water bath test alternatives for small receptacles containing gas and fuel cell cartridges.	
2;2.1.2 e), 3;2, 4;4, 6;5.2.1.7	Addition of new provisions for adsorbed gases including: — new definition; — new entries (UN Nos. 3510-3526) in Dangerous Goods list; — new Packing Instruction 219; — new design, construction, inspection and testing requirements for UN cylinders;	
2; Introductory Chapter, 2;4.2, 2;7, Table 3-1, Special Provisions A193 and A194 in 3;2 , Packing Instruction 877	New provisions for uranium hexafluoride, radioactive material, excepted package (UN 3507) and the associating Special Provisions A193 and A194.	
2;7	New requirements on the classification and transport criteria for fissile material.	
2;7.1.3, 1;3.1.1	Revision to the definitions for design, exclusive use and freight container for radioactive materials.	
2;7.2.2	Revisions to the provisions for determination of activity level for radioactive materials.	
2;7.2.3.3.6	Revisions to exceptions for specimens of special form radiation that comprise or simulate radioactive material enclosed in a sealed capsule.	
2;7.2.4	Revisions to criteria for classifying radioactive excepted packages.	
2;7.2.4.1.1.3	Addition of new exception from "RADIOACTIVE" marking for UN 2911 — Radioactive material, excepted package — instruments.	
2;7.2.4.1.1.7, 5;2.4.5.4 and 5;4.1.5.7	Clarification of provisions for the transport of empty radioactive Type B(U) or Type B(M) packages.	
3;2	Revisions to documentation and package marking requirements in Special Provision A78 for radioactive materials.	
4;9	Revisions to radioactive materials packing requirements.	
5;1.2.2	New requirements related to certificates issued by the competent authority for the design of packages for certain radioactive materials.	
6;7	Revisions to package testing requirements for radioactive materials.	

TI Reference	Detail	Concerned Party
Table 3-1, Special Provision A201, Packing Instruction 968	Prohibition on transport of lithium metal batteries as cargo on passenger aircraft.	Shipper, Freight Forwarder, Operator.
2;9.3	Clarification of testing requirements for lithium batteries is made by making reference to the test requirements to subsection 38.3 of the UN Manual of Tests and Criteria, Revision 3, Amendment 1 or any subsequent revision and amendment.	
Packing Instructions 965 and 968	Addition of requirement for a transport document in Section IB of Packing Instructions 965 and 968 for lithium ion batteries and lithium metal batteries.	
4;11, Packing Instructions 965 and 968	Replacement of references to gross quantity limits with net quantity limits in Section IB of Packing Instructions 965 and 968 for lithium ion batteries and lithium metal batteries.	
4;11, Packing Instructions 966 and 969	Clarification of the limit on the number of lithium ion batteries and lithium metal batteries permitted in a package when packed with equipment must not exceed the appropriate number for the equipment's operation, plus two spares.	
4;11, Packing Instructions 967 and 970	New requirement prohibiting sound or light alarms from devices during air transport.	
Tables 1-4 and 1-5 in 1;4	Addition of flight operations officer and flight dispatcher to the categories of staff for dangerous goods training.	Operator
7;1.1.2	Addition of guidance for operator acceptance staff in recognizing the pictograms by Globally Harmonized System of Classification and Labelling of Chemicals (GHS) to identify potentially undeclared dangerous goods.	
7;1.3.1	Removal of provisions for overpacks containing dangerous goods permitted on cargo aircraft only during operator's acceptance check.	
7;1.3	Revision to the requirement on the timing for conducting acceptance check on dangerous goods by the operator when the dangerous goods are first accepted for carriage by air.	
7;2.8	Addition of requirement for information on unit load device identification tags to be legible and visible.	
7;2.9	Removal of segregation requirements for toxic and infectious substances for stowage on an aircraft.	

TI Reference	Detail	Concerned Party
7;4.1.1	Removal of requirement to show the technical name of dangerous goods on the information provided to the pilot-in-command.	Operator
7;5.1	Clarification of requirements for presenting information to passengers on dangerous goods which are forbidden for carriage by passengers.	
7;6	Update the indicative list of items with potential to include dangerous goods and to aid recognition of undeclared dangerous goods.	
8;1 , Table 8-1	New exception for medical devices other than radioisotopic cardiac pacemakers.	Passenger
	Relaxing the provision on portable medical electronic devices containing lithium batteries.	
	Expansion of provision for small cartridges fitted into a self-inflating life-jacket to include other types of self-inflating personal safety devices.	
	Clarification to distinguish between portable electronic devices containing batteries and spare batteries.	