

The Aircraft (Carriage of Dangerous Goods) Rules, 2003

1. Short title, extent and application - (1) These rules may be called the Aircraft (Carriage of Dangerous Goods) Rules, 2003.

(2) They extend to whole of India and apply also –

(a) to aircraft registered in India or aircraft operated by an operator who has his principal place of business or permanent place of residence in India, wherever they may be;

(b) to all aircraft for the time being in or over India; and

(c) to persons operating air transport services to, from, within and over India, shippers of dangerous goods or their agents.

(3) They shall come into force on the date of their final publication in the Official Gazette.

2. Definitions and interpretation - In these rules, unless there is anything repugnant in the subject or context -

(1) "aerodrome" means any definite or limited ground or water area intended to be used, either wholly or in part, for the landing or departure of aircraft, and includes all buildings, sheds, vessels, piers and other structures thereon or appertaining thereto;

(2) "aircraft" means any machine which can derive support in the atmosphere from reactions of the air other than reactions of the air against the earth's surface and includes balloons whether fixed or free, airships, kites, gliders and flying machines;

(3) "cargo aircraft" means any aircraft, other than a passenger aircraft, which is carrying goods or property;

(4) "crew member" means a person assigned by an operator to duty on an aircraft during a flight duty period;

(5) "dangerous goods" means articles or substances which are capable of posing a risk to health, safety, property or the environment and which are listed as such in the Technical Instructions or which are classified according to the Technical Instructions;

(6) "dangerous goods accident" means an occurrence associated with and related to the transport of dangerous goods by air which results in fatal or serious injury to a person or major property damage;

(7) "dangerous goods incident" means an occurrence, other than a dangerous goods accident, associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, damage to property, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained and also includes any occurrence relating to the transport of dangerous goods which seriously jeopardizes the aircraft or its occupants;

(8) "Director-General" means Director General of Civil Aviation;

(9) "flight crew member" means a licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period;

(10) "operator" means a person, organisation or enterprise engaged in or offering to engage in an aircraft operation;

(11) "overpack" means an enclosure used by a single shipper to contain one or more packages and to form one handling unit for convenience of handling and stowage;

(12) "package" means the complete product of the packing operation consisting of the packaging and its contents prepared for transport;

(13) "packaging" means receptacles and any other components or materials necessary for the receptacle to perform its containment function;

(14) "passenger aircraft" means an aircraft that carries any person other than a crew member, an operator's employee in an official capacity, an authorized representative of an appropriate national authority or a person accompanying a consignment or other cargo;

(15) "pilot-in-command" means the pilot designated by the operator, or in the case of general aviation by the owner, as being in command and charged with the safe conduct of a flight;

(16) "serious injury" means an injury which is sustained by a person in an accident and which:

(a) requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or

(b) results in a fracture of any bone (except simple fractures of fingers, toes or nose); or

(c) involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or

(d) involves injury to any internal organ; or

(e) involves second or third degree burns, or any burns affecting more than five per cent of the body surface; or

(f) involves verified exposure to infectious substances or injurious radiation;

(16A) "State of origin" means the State in the territory of which the dangerous goods were first loaded on an aircraft.

(17) "State of the operator" means the State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent place of residence;

(18) "Technical Instructions" means the Technical Instructions for the Safe Transport of Dangerous Goods by Air issued by the International Civil Aviation Organisation;

(19) "UN number" means the four-digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods to identify a substance or a particular group of substances;

(20) "Unit load device" means any type of freight container, aircraft container or aircraft pallet with a net, but excluding an overpack, designed for loading on an aircraft.

3. Carriage of dangerous goods by air. – (1) No operator shall engage in the carriage of dangerous goods unless it has been certified by the aeronautical authority of the State of the operator to carry the dangerous goods.

(2) No operator shall carry and no person shall cause or permit to be carried in any aircraft to, from, within or over India or deliver or cause to be delivered for loading on such aircraft any dangerous goods, except in accordance with and subject to the requirements specified in the Technical Instructions:

Provided that where dangerous goods classified as radioactive material are to be carried in any aircraft to, from or within India, the operator shall ensure that the consignor or the consignee, as the case may be, has written consent of the Central Government to carry such goods under section 16 of the Atomic Energy Act, 1962 (33 of 1962).

Provided further that where there is extreme emergency such as national or international crisis or natural calamities or otherwise necessitating

transportation by air of such goods and full compliance with the requirements specified in the Technical Instructions may adversely affect the public interest, the Director-General or any other officer authorised in this behalf by the Central Government may, by general or special order in writing, grant exemption from complying with these requirements provided that he is satisfied that every effort has been made to achieve an overall level of safety in the transportation of such goods which is equivalent to the level of safety specified in the Technical Instructions.

(3) Notwithstanding anything contained in sub-rule (2), the articles and substances that are specifically identified by name or by generic description in the Technical Instructions as being forbidden for transport by air under any circumstances, shall not be carried on any aircraft.

(4) The provisions of sub-rules (1) and (2) shall not apply to-

- (a) the articles and substances classified as dangerous goods but otherwise required to be on board the aircraft in accordance with the pertinent airworthiness requirements and the operating regulations, or for such specialised purposes as are identified in the Technical Instructions.
- (b) specific articles and substances carried by passengers or crew members to the extent specified in the Technical Instructions.

(5) Where dangerous goods are carried under sub-rule (2), it shall be the duty of the shipper, the operator and every person concerned with packing, marking, labelling, acceptance, handling, loading, unloading, storage, transportation or any other process connected directly or indirectly with carriage of such dangerous goods, to take all precautions to avoid danger to the aircraft or to the persons on board or to any other person or property.

4. Custody of unauthorised Dangerous Goods - Where any officer authorised in this behalf by the Central Government has reason to believe that the provisions of this rule are, or are about to be, contravened, he may cause the dangerous goods in question to be placed under his custody pending detailed examination of the nature of the goods or pending a decision regarding the action, if any, to be taken in the matter.

4A. Classification of Dangerous goods – The dangerous goods shall be classified in accordance with the provisions of the Technical Instructions.

5. Packing - (1) Dangerous goods shall be packed in accordance with the requirements specified in the Technical Instructions in addition to the provisions of this rule.

(2) It shall be ensured that no harmful quantity of a dangerous substance adheres to the outside of the packagings used for the transport of the dangerous goods.

(3) Packagings used for the transport of dangerous goods by air shall be of good quality and shall be constructed and securely closed so as to prevent leakage which might be caused in normal conditions of transport by changes in temperature, humidity or pressure, or by vibration.

(4) The packagings shall be suitable for the contents and the packagings in direct contact with dangerous goods shall be resistant to any chemical or other action of such goods.

(4A) Packagings shall meet the material and construction specifications contained in the Technical Instructions.

(4B) Packagings shall be tested in accordance with the provisions of the Technical Instructions.

(4C) Packagings for which retention of a liquid is a basic function, shall be capable of withstanding, without leaking, the pressure specified in the Technical Instructions.

(5) Inner packagings used for the transport of the dangerous goods shall be packed, secured or cushioned in such a manner that no breakage or leakage shall be caused and these shall also control the movement of the dangerous goods within the outer packaging(s) during normal conditions of air transport and also the cushioning and absorbent materials shall not react dangerously with the contents of the receptacles.

(6) No packaging used for the transport of the dangerous goods shall be re-used unless, --

(a) it has been inspected and found free from corrosion or other damage; and

(b) all necessary precautions have been taken to prevent contamination of subsequent contents:

Provided that where it is not possible to properly clean a packaging already used for the transport of dangerous goods, then such an uncleaned empty packaging shall be transported by air following the same procedure as laid down for the transport of the dangerous goods for which such packagings has been used earlier.

6. Labeling - Unless otherwise provided in the Technical Instructions, each package of dangerous goods shall be labeled in accordance with the requirements specified in the Technical Instructions.

7. Marking - (1) Save as otherwise provided in the Technical Instructions, each package of dangerous goods shall be marked with the proper shipping name of its contents and, when assigned, the UN number and such other markings as may be specified in those Instructions.

(2) Save as otherwise provided in the Technical Instructions, each packaging manufactured to the specifications of the Technical Instructions shall be marked in accordance with the provisions of the Technical Instructions and no other packagings shall be so marked.

(3) In addition to the languages required by the State of origin, English shall also be used for the markings related to dangerous goods.

8. Shipper's responsibilities - (1) No shipper or his agent shall offer any package or overpack of dangerous goods for transport by air unless he has ensured that such dangerous goods are not forbidden for transport by air and are properly classified, packed, marked and labeled in accordance with the requirements specified in the Technical Instructions.

(2) Unless otherwise provided in these rules, no shipper or his agent shall offer dangerous goods for transport by air unless he has completed, signed and provided to the operator a dangerous goods transport document, as specified in the Technical Instructions.

(3) The dangerous goods transport document shall bear a declaration signed by the shipper or his agent indicating that the dangerous goods are fully and accurately described by their proper shipping names and that they are classified, packed, marked, labeled and in proper condition for transport by air as per requirements of the Technical Instructions.

(4) In addition to the languages required by the State of origin, English shall also be used in the dangerous goods transport document.

9. Operator's Responsibilities - (1) No operator shall accept dangerous goods for transport by air unless, --

(a) the dangerous goods are accompanied by a completed dangerous goods transport document, except where the Technical Instructions specify that such a document is not required; and

(b) the package, overpack or freight container containing the dangerous goods has been inspected in accordance with the acceptance procedures specified in the Technical Instructions.

(2) The operator shall ensure that an acceptance check-list as required by the Technical Instructions has been developed and is being used by his acceptance staff.

(3) Packages and overpacks containing dangerous goods and freight containers containing radioactive materials shall be inspected for evidence of leakage or damage before loading on an aircraft or into a unit load device and such packages, overpacks or freight containers shall be loaded and stowed on an aircraft in accordance with the requirements specified in the Technical Instructions.

(4) The operator shall ensure that no leaking or damaged packages, overpacks or freight containers containing dangerous goods shall be loaded on an aircraft.

(5) A unit load device shall not be loaded aboard an aircraft unless the device has been inspected and found free from any evidence of leakage from, or damage to, any dangerous goods contained therein.

(6) Where any package of dangerous goods loaded on an aircraft appears to be damaged or leaking, the operator shall remove such package from the aircraft, or arrange for its removal by an appropriate authority or organisation, as the case may be, and thereafter shall ensure that the remainder of the consignment is in a proper condition for transport by air and that no other package has been contaminated.

(7) Packages or overpacks containing dangerous goods and freight containers containing radioactive materials shall be inspected for signs of damage or leakage upon unloading from the aircraft or unit load device and if evidence of damage or leakage is found, the area where the dangerous goods or unit load device were stowed on the aircraft shall be inspected for damage or contamination.

(8) No dangerous goods shall be carried in an aircraft cabin occupied by passengers or on the flight deck of an aircraft, except those specified in sub-rule (2) of rule 3.

(9) Any hazardous contamination found on an aircraft as a result of leakage or damage to dangerous goods shall be removed without delay.

(10) An aircraft which has been contaminated by radioactive materials shall immediately be taken out of service and not returned to service until the radiation

level at any accessible surface and the non-fixed contamination are not more than the values specified in the Technical Instructions.

(11) Packages containing dangerous goods which might react dangerously with one another shall not be stowed on an aircraft next to each other or in a position that would allow interaction between them in the event of leakage.

(12) Packages of toxic and infectious substances shall be stowed on an aircraft in accordance with the requirements specified in the Technical Instructions.

(13) Packages of radioactive materials shall be stowed on an aircraft so that they are separated from persons, live animals and undeveloped film, in accordance with the requirements specified in the Technical Instructions.

(14) Subject to the provisions of these rules, when dangerous goods are loaded in an aircraft, the operator shall protect the dangerous goods from being damaged, and shall secure such goods in the aircraft in such a manner that will prevent any movement in flight which would change the orientation of the packages. For packages containing radioactive materials, the securing shall be adequate to ensure that the separation requirements of sub-rule (13) are met at all times.

(15) Except as otherwise provided in the Technical Instructions, packages of dangerous goods bearing the "Cargo aircraft only" label shall be loaded in such a manner that a crew member or other authorised person can see, handle and, where size and weight permit, separate such packages from other cargo in flight.

10. Provision of Information - (1) The operator of the aircraft in which dangerous goods are to be carried shall provide information in writing to the pilot-in-command as early as practicable before departure of the aircraft as required by the Technical Instructions.

(2) The operator shall provide such information in the Operations Manual so as to enable the flight crew member to carry out their responsibilities with regard to the transport of dangerous goods and shall also provide instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.

(3) Operators shall ensure that information is promulgated in such a manner that passengers are warned as to the types of goods which they are forbidden from transporting aboard an aircraft as provided in the Technical Instructions.

(4) Operators, shippers or other organisations involved in the transport of dangerous goods by air shall provide such information to their personnel so as to enable them to carry out their responsibilities with regard to the transport of dangerous goods and shall also provide instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.

(5) If an in-flight emergency occurs, the pilot-in-command shall, as soon as the situation permits, inform the appropriate air traffic services unit, for the information of aerodrome authorities, of any dangerous goods on board the aircraft, as provided in the Technical Instructions.

(6) In the event of an aircraft accident or a serious incident where dangerous goods carried as cargo are involved, the operator of the aircraft shall provide information, without delay, to the emergency services responding to the accident or serious incident, and, as soon as possible, to the appropriate authorities of the State of the operator and the State in which the accident or serious incident occurred, about the dangerous goods on board, as shown on the written information to the pilot-in-command.

(7) In the event of an aircraft incident, the operator of an aircraft carrying dangerous goods as cargo shall, upon request, provide information, without delay, to the emergency services responding to the incident and also to the appropriate authority of the State in which the incident occurred, about the dangerous goods on board, as shown on the written information to the pilot-in-command.

10A. Inspection. – (1) The Director-General or any other officer authorised in this behalf by the Central Government by general or special order in writing, may, at any reasonable time, enter any place to which access is necessary and inspect any services, equipment, documents and records.

(2) The operator, shipper, training establishment and every other person concerned with carriage of dangerous goods shall allow the person so authorised, access to any part of the aircraft, building or any facility including equipment, records, documents and personnel, and shall co-operate in exercising his powers or carrying out his duties under these rules.

11. Dangerous Goods Accidents and Incidents - (1) In the event of a dangerous goods accident or dangerous goods incident, as the case may be, the pilot-in-command of the aircraft and the operator of the aircraft or of the aerodrome, as the case may be, shall submit a report in writing to the Director-General on such accident or incident.

(2) The report under sub-rule (1) shall, in addition to any other relevant information, contain the following information, namely: -

- (a) the type, nationality and registration marks of aircraft;
- (b) the name of the owner, operator and hirer of the aircraft;
- (c) the name of the pilot-in-command of the aircraft;
- (d) the nature and purpose of the flight;
- (e) the date and time of the dangerous goods accident or incident;

- (f) the place where the accident occurred;
- (g) the last point of departure and the next point of intended landing of the aircraft;
- (h) the details of the dangerous goods on board the aircraft viz. their proper shipping name, UN number, quantity etc.
- (I) the known cause of the dangerous goods accident or incident;
- (J) details of other cargo on board the aircraft;
- (k) the extent of known damage to the aircraft, other property and persons on board the aircraft;
- (l) any other information required to be included by the Director-General.

(3) On receipt of the report under sub-rule (1), the Director-General may, if considered necessary, order an investigation to determine the causes of such accident or incident and take preventive measures to avoid re-occurrence of such accident or incident.

12. Establishment of Training Programmes - (1) No person shall engage himself in any manner in the transport of dangerous goods unless he has undergone proper training in accordance with the Technical Instructions.

(2) Initial and recurrent dangerous goods training programmes shall be established and maintained by or on behalf of -

- (a) shippers of dangerous goods including packers and persons or organizations undertaking the responsibilities of the shipper;
- (b) operators;
- (c) ground handling agencies which perform, on behalf of the operator, the act of accepting, handling, loading, unloading, transferring or other processing of cargo;
- (d) ground handling agencies located at an airport which perform, on behalf of the operator, the act of processing passengers;
- (e) agencies, not located at an airport, which perform, on behalf of the operator, the act of checking in passengers;
- (f) freight forwarders; and
- (g) agencies engaged in the security screening of passengers and their baggage, and cargo.

(3) Training shall be provided in the requirements commensurate with the responsibilities of the personnel being trained and such training shall include -

(a) general familiarization training aimed at providing familiarity with the general provisions;

(b) function-specific training providing detailed training in the requirements applicable to the function for which that person is responsible; and

(c) safety training covering the hazards presented by dangerous goods, safe handling and emergency response procedures.

(4) Training shall be provided or verified upon the employment of a person in a position involving the transport of dangerous goods by air and recurrent training shall take place within twenty-four months of previous training to ensure knowledge is current.

(5) The training programmes established and maintained by or on behalf of operators shall be subjected to review and approval by the State of the operator and the training programmes established and maintained by or on behalf of agencies other than operators shall be subjected to review and approval by the Director-General.

13. Directions by Director-General - The Director General may, through Aeronautical Information Circulars (AICs) and publication entitled Civil Aviation Requirements (CARs), issue special directions, not inconsistent with the provisions of the Aircraft Act, 1934 (22 of 1934), the Aircraft Rules, 1937 or these rules, relating to packing, marking, labelling, acceptance, handling, loading, unloading, storage, training and any other process or procedure connected directly or indirectly with the carriage of dangerous goods by air.

14. General Power to exempt - The Central Government may, by general or special order in writing, exempt any aircraft or class of aircraft or any person or class of persons from the operation of these rules, either wholly or partially, subject to such conditions, if any, as may be specified in that order.

15. Cancellation or suspension of licence, certificate and approval – Where the Director-General, after giving an opportunity of being heard, is satisfied that any person has contravened or failed to comply with the provisions of these rules, he may, for reasons to be recorded in writing, cancel or suspend any licence, certificate or approval issued under these rules or under the Aircraft Rules, 1937.

[Principal Rule published vide GSR 206(E) dated 5.3.2003

Amended by – (i) GSR No. 795(E) dated 6.10.2003,

(ii) GSR No. 796(E) dated 6.10.2003

(iii) GSR 600(E) dated 27.9.2006]