

Order on transport of dangerous goods by air

In pursuance of § 85 (2) of the Danish Air Navigation Act, cf. Consolidation Act No. 731 of 21 June 2007 and Order no. 1597 of 18 December 2007 on the Civil Aviation Administration - Denmark's tasks, on publication of the regulations laid down by the Administration and on the access to complain, the following is hereby stipulated:

Chapter 1

Definitions

§ 1. This Order defines the below terms as follows:

- 1) *Cargo aircraft:*
Any aircraft, other than a passenger aircraft, which is carrying goods or property.
- 2) *Chicago Convention on International Civil Aviation:*
The Convention on international civil aviation signed in Chicago on 7 December 1944 with later amendments.
- 3) *Consignment:*
One or more packages of dangerous goods accepted by an operator from one shipper at one time and at one address, receipted for in one lot and moving to one consignee at one destination.
- 4) *Crew member:*
A person assigned by an operator to duty on an aircraft during a flight duty period.
- 5) *Dangerous goods:*
Articles or substances which are capable of posing a major risk to health, safety or property when transported by aircraft.
- 6) *Dangerous goods accident:*
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:*
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, property damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods which seriously jeopardizes the aircraft or its occupants is also deemed to constitute a dangerous goods incident.
- 8) *EU OPS:*
Regulation (EC) no. 1899/2006 of the European Parliament and of the Council of 12 December 2006 amending Council Regulation (EEC) no. 3922/91 on the harmonisation of technical requirements and administrative procedures in the field of civil aviation.
- 9) *Flight crew member:*
A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.
- 10) *Freight forwarder:*
A person or organization who offers the service of arranging the transport of dangerous goods by air.
- 11) *ICAO-TI (ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air):*
The technical instructions the International Civil Aviation Organisation for the safe transport of dangerous goods, Document 9284-AN/905, latest edition.¹⁾
- 12) *Operator:*
A person, organisation or enterprise engaged in or offering to engage in an aircraft operation.
- 13) *Overpack:*
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.
- 14) *Package:*
The complete product of the packing operation consisting of the packaging and its contents prepared for transport.
- 15) *Packaging:*
Receptacles and any other components or materials necessary for the receptacle to perform its containment function and necessary for ensuring the fulfilment of the requirements to packing laid down in this Order.
- 16) *Packing:*
The method and process by which articles or substances are packed and/or prepacked or secured in any other way.
- 17) *Passenger aircraft:*
An aircraft that carries any person other than a crew member, an operator's employee in an official capacity, an authorised representative of an appropriate national authority or a person accompanying a consignment or other cargo.
- 18) *Pilot-in-command:*
The pilot who is charged with the safe conduct of a flight during a flight time period.
- 19) *Proper shipping name:*
The name to be used to describe a certain article or a certain substance.
- 20) *Serious injury:*
An injury which is sustained by a person in an accident and which:
 - a) requires hospitalisation 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 5 per cent of the body surface; or
 - f) involves verified exposure to infectious substances or injurious radiation.
- 21) *Shipper:*
A person or a company delivering dangerous goods for the purpose of full or partial aircraft transport to a freight forwarder, a freight handler or directly to an airline.
- 22) *State of Origin:*
The State in the territory of which the cargo was first loaded on an aircraft.

- 23) *UN number:*
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.
- 24) *Unit load device:*
Any type of freight container, aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo. An overpack is not included in this definition.

Chapter 2

Applicability

§ 2. This Order applies to transport of dangerous goods by aircraft within Danish territory and for transport of dangerous goods by Danish aircraft outside Danish territory.

(2) An aircraft is regarded as Danish when it is registered in Denmark or is used for commercial air transport in accordance with a Danish operational permit, cf. § 4 (2) the Danish Air Navigation Act.

(3) Chapters 3-12 in this Order do not apply to operators holding a permission to transport dangerous goods in accordance with their Air Operators Certificate, cf. the provisions in "EU OPS".

§ 3. This Order applies to all articles and substances classified as dangerous goods, cf. Chapter 5, except from the explosives and ammunition of war covered by order no. 527 of 23 June 1995 on transport of explosives, munitions and ammunition of war etc. by civil aircraft.

(2) This Order does not, however, apply for articles and substances classified as dangerous goods, but which are required to be aboard the aircraft to meet airworthiness requirements and operating regulations or for those purposes stated in ICAO-TI.

(3) Where articles or substances intended as replacement for the articles or substances mentioned in 4.2 are carried on an aircraft, they shall be transported in accordance with the provisions of this Order. This does not, however, apply if transport of the mentioned articles or substances is permitted under the provisions of ICAO-TI.

(4) Articles and substances intended for the personal use of the passengers or crew members are not covered by this Order to the extent provisions have been laid down on the subject in ICAO-TI.

Chapter 3

Permission

§ 4. Transport of dangerous goods to be carried out by an operator not covered by the provisions in "EU OPS" or domiciled in a State that has not acceded to the Chicago Convention requires prior obtained permission from the Civil Aviation Administration - Denmark. The same applies to non-commercial flying activities carried out by a person, a company or other enterprise domiciled in Denmark or in a State that has not acceded to the Chicago Convention.

(2) The application shall have been received by the Civil Aviation Administration - Denmark not later than 5 days before flight departure. The application shall be accompanied by satisfactory information on classification and packing as well as on the way in which the transport is intended to be completed.

- (3) Transport by air of
1. fissile radioactive material covered by special additional provisions on packing etc. due to the fissile characteristics, cf. ICAO-TI, and
 2. radioactive substances
 - a) in a type B(U) package the contents of which exceed 3000 A₁ or 3000 A₂ or 1000 TB_q; or
 - b) in a type B(M) package; or
 - c) as carrying through a special arrangement in the sense of the transport provisions,
- require in all cases a prior permission obtained from the Civil Aviation Administration - Denmark. The application shall be submitted to the National Institute of Radiation Hygiene.

Chapter 4

Classification

§ 5. An article or a substance shall be classified in accordance with the provisions of ICAO-TI.

Chapter 5

Dangerous goods forbidden for transport by air

§ 6. Articles and substances that are specifically identified by name or generic description in ICAO-TI as being forbidden for transport by air under any circumstances shall not be carried on any aircraft.

§ 7. Articles and substances that are identified in ICAO-TI as being forbidden for transport by air under normal circumstances, and infected live animals must not be transported by aircraft. This shall, however, not apply if the provisions of ICAO-TI indicate they may be transported under an approval issued by the State of Origin.

Chapter 76

Packing

§ 8. Dangerous goods shall be packed in accordance with the provisions of this chapter and of ICAO-TI.

(2) 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 with might be caused in normal conditions of the transport, by changes in temperature, humidity or pressure, or by vibration.

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

(4) Packagings shall meet the material and construction specifications in ICAO-TI.

§ 9. Packagings shall be tested in accordance with the provisions of ICAO-TI.

(2) Packagings intended for transport by air of dangerous goods shall be type approved by the Danish Technological Institute, Packaging and Transport, unless they are type approved by the competent authority in another country. This does, however, not apply if the packagings are covered by the transitional provisions of ICAO-TI.

(3) Packagings for which retention of a liquid is a basic function, shall be capable of withstanding, without leaking, the pressure stated in ICAO-TI.

(4) Inner packagings shall be so packed, secured or cushioned as to prevent their breakage or leakage and to control their movement within the outer packaging(s) during normal conditions of air transport. Cushioning and absorbent materials shall not react dangerously with the contents of the packagings.

(5) No packaging shall be re-used until it has been inspected and found free from corrosion or other damage. Where a packaging is re-used, all necessary measures shall be taken to prevent contamination of subsequent contents.

(6) If, because of the nature of their former contents, uncleaned empty packagings may present a hazard, they shall be tightly closed and treated according to the hazard they constitute.

§ 10. No harmful quantity of a dangerous substance shall adhere to the outside of packages.

Chapter 7

Marking

§ 11. Each package of dangerous goods shall be labelled with the correct dangerous goods label as provisioned in ICAO-TI.

§ 12. Each package of dangerous goods shall be marked with the correct technical specification of the contents, including UN number if such a one exists, and such other markings as may be specified in ICAO-TI.

§ 13. Packagings produced in accordance with one of the specifications provisioned in ICAO-TI shall be so marked. No packaging may be marked with a packaging specification marking unless it meets the appropriate packaging specification contained in ICAO-TI.

§ 14. Marking of dangerous goods shall be in English.

Chapter 8

Shipper's responsibilities

§ 15. Before a shipper offers any package or overpack of dangerous goods for transport by air, that shipper shall ensure

- 1) that the dangerous goods are not forbidden for transport by air; and
- 2) that the goods are properly classified, packed, marked, labelled, and accompanied by a properly executed dangerous goods transport document, as specified in §§ 16 and 17 and ICAO-TI.

§ 16. Unless otherwise provided for in ICAO-TI, the shipper of dangerous goods shall complete, sign and provide to the operator a dangerous goods transport document which shall contain the information required by ICAO-TI.

(2) The transport document shall bear a declaration signed by the shipper of the dangerous goods indicating

- 1) that the dangerous goods are fully and accurately described by their proper shipping names, and

- 2) that they are classified, packed, marked, labelled, and in proper condition for transport by air in accordance with the relevant regulations.

§ 17. Dangerous goods transport documents shall be in English.

Chapter 9

Operator's responsibilities

§ 18. An operator shall not accept dangerous goods for transport by air

- 1) unless the dangerous goods are accompanied by a completed dangerous goods transport document, except where ICAO-TI indicates that such a document is not required; and
- 2) until the package, overpack or freight container containing the dangerous goods has been inspected in accordance with the acceptance procedures contained in ICAO-TI.

§ 19. The operator shall develop and use a dangerous goods acceptance checklist in compliance with the provisions of § 18.

§ 20. 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. Leaking or damaged packages, overpacks or freight containers shall not be loaded on an aircraft.

(2) A unit load device containing dangerous goods 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.

(3) 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. The operator shall thereafter ensure that the remainder of the consignment is in a proper condition for transport by air and that no other package has been contaminated.

§ 21. 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.

(2) 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.

§ 22. Dangerous goods shall not be carried in an aircraft cabin occupied by passengers or on the flight deck of an aircraft, except in circumstances permitted by the provisions of ICAO-TI.

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

(2) 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 ICAO-TI.

§ 24. Packages containing dangerous goods which might react dangerously one with another or with packages containing other goods shall be stowed on an aircraft so that the packages, in the event of leakage, cannot cause any dangerous reaction one with another.

§ 25. Packages of toxic and infectious substances shall be stowed on an aircraft in accordance with the provisions of ICAO-TI.

§ 26. 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 provisions of ICAO-TI.

§ 27. When dangerous goods are loaded in an aircraft, the operator shall protect the dangerous goods from being damaged. The operator shall stow the goods in the aircraft in such a manner that will prevent the packages from tipping over or shifting. Packages containing radioactive material shall be stowed in accordance with the provisions of § 26.

§ 28. Packages of dangerous goods that according to the marking must not be transported in any other way than by cargo aircraft 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, unless otherwise provided in ICAO-TI.

Chapter 10

Freight forwarder's responsibilities

§ 29. A freight forwarder taking on classification, packing and marking of a consignment on behalf of a shipper shall ensure that the provisions on classification, packaging and marking in this order and in ICAO-TI are met even though the shipper signs the transport document mentioned in § 16.

Chapter 11

Information duty

§ 30. Operators, shippers and any other persons engaged in transport of dangerous goods by air shall provide their personnel with such information as will enable the personnel to carry out its responsibilities with regard to the transport of dangerous goods. Furthermore he shall provide the personnel with instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.

(2) The operator shall list the information regarding flight crew members mentioned in 30.1, 1st sentence, in the Operations Manual.

(3) "Emergency Response Guidance for Aircraft Incidents involving Dangerous Goods", ICAO Document 9481-AN/928 shall be appended to the Operations Manual mentioned in (2)².

§ 31. If an aircraft is to carry dangerous goods, the operator shall provide the pilot-in-command as early as practicable before departure of the aircraft with written information as specified in ICAO-TI.

§ 32. When transporting passengers the operator shall inform the passengers of the types of goods which the passengers are prohibited from carrying on board an aircraft, neither as hand baggage nor as registered baggage.

§ 33. If an in-flight emergency occurs, the pilot-in-command shall inform the appropriate air traffic services unit of any dangerous goods on board the aircraft. If the situation permits, the information should contain correct proper shipping name, classification, secondary risks that have required marking, compatibility group in class 1, quantity and location on board the aircraft.

§ 34. In the event of an aircraft accident, the operator of an aircraft carrying dangerous goods as cargo shall inform, without delay, the state in which the accident occurred that the aircraft carried dangerous goods, and shall provide information regarding correct shipping name, classification, secondary risks that have required marking, quantity and location on board the aircraft.

§ 35. If an aircraft carrying dangerous goods is involved in an aircraft incident, the operator shall, upon request from the authorities in the state where the incident occurred, provide these with the information required to limit, to the greatest possible extent, the risks any damage to the dangerous goods on board the aircraft may cause.

§ 36. In the event of an accident or incident involving dangerous goods, the operator shall inform the appropriate authorities in the state where the accident or incident occurred in accordance with these authorities' requirements.

(2) If the accident or incident involving dangerous goods occurs within Danish territory, the Civil Aviation Administration - Denmark shall be notified.

(3) Danish operators shall also inform the Civil Aviation Administration - Denmark about accidents and incidents involving dangerous goods and occurring outside Danish territory.

§ 37. Operators, shippers, freight forwarders and others engaged in air transport of dangerous goods, shall, in case of undeclared or wrongly declared dangerous goods, inform the Civil Aviation Administration - Denmark about this in accordance with the provisions in ICAO-TI.

Chapter 12

Training

§ 38. Operators, shippers, freight forwarders and others engaged in air transport of dangerous goods shall establish and maintain training programmes as required by ICAO-TI. The programmes shall be approved by the Civil Aviation Administration - Denmark.

§ 39. Operators, shippers, freight forwarders and others not holding a permanent approval to carry dangerous goods shall ensure that

1) staff who are engaged in cargo and baggage handling have received the necessary training to carry out their duties in respect of dangerous goods. As a minimum such staff must have received the training stated in column 1 of table 1 on the appendix to this order, and

2) crew members and passenger handling staff have, as a minimum, received the training stated in column 2 of table 1 of the appendix to this order.

(2) The training shall be to a depth sufficient to ensure that an awareness is gained of the hazards associated with transport of dangerous goods by air.

§ 40. Operators, shippers, freight forwarders and others holding a permanent approval to carry dangerous goods shall ensure that

- 1) staff who are engaged in the acceptance of dangerous goods have received the necessary training and are qualified to carry out their duties related to dangerous goods. As a minimum such staff shall have received the training stated in column 1 of table 2 of the appendix to this order, and the training must be of a depth sufficient to ensure that the staff can take decisions on the acceptance or refusal of dangerous goods offered for carriage by air,
- 2) staff who are engaged in ground handling, storage and loading of dangerous goods in aircraft have received the necessary training. As a minimum such staff shall have received the training stated in column 2 of table 2 of the appendix to this order,
- 3) staff who are engaged in general cargo and baggage handling have received the necessary training to enable them to carry out their duties in respect of dangerous goods. As a minimum such staff shall have received the training stated in column 3 of table 2 of the appendix to this order,
- 4) as a minimum, flight crew members have received training stated in column 4 of table 2 of the appendix to this order, and
- 5) as a minimum, passenger handling staff and other crew members have received training stated in column 5 of table 2 of the appendix to this order.

(2) The training must be to a depth sufficient to ensure that an awareness is gained of the hazards associated with transport of dangerous goods by air.

§ 41. Operators, shippers, freight forwarders and others engaged in air transport shall ensure that, having received the training mentioned in §§ 39 and 40, the staff takes a test that clarifies whether the persons in question have understood the contents of the training.

(2) The training must be documented in accordance with ICAO-IT.

§ 42. Operators, shippers, freight forwarders and others engaged in air transport shall ensure that the staff receives recurrent training with intervals of not more than 24 months.

Chapter 13

Exemption

§ 43. The Civil Aviation Administration - Denmark may in particularly exceptional cases grant exemption from the provisions in this Order, however not from § 76

(2) Exemption to transport of the articles and substances mentioned in § 7 can only be granted for each individual transport.

Chapter 14

Punishment and implementation etc.

§ 44. Violation of the provisions in § 3 (3), § 4 (1) and (3) and chapters 4-12 is punishable under § 149 (8) of the Danish Air Navigation Act by fine, simple detention or imprisonment for up to 2 years.

§ 45. For a violation committed by companies (legal persons), penalty of fine may be imposed under the provisions of the 5th chapter of the Penal Code, cf. § 149 (14) of the Danish Air Navigation Act.

§ 46. This Order comes into force on 16 July 2008. At the same time order no.737 of 17 November 1989 on transport of dangerous goods by air is repealed.

Civil Aviation Administration - Denmark, 11 July 2008

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/ Niels Remmer

¹⁾The document can be found on the Civil Aviation Administration - Denmark's homepage www.slv.dk and can also be bought on application to the Civil Aviation Administration - Denmark.

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Training

Table 1

Areas of training	1	2
General philosophy	X	X
Limitations on dangerous goods in air transport		X
Marking of dangerous goods	X	X
Dangerous goods in passengers' baggage	X	X
Emergency procedures	X	X
"X" indicates an area to be covered		

Table 2

Areas of training	1	2	3	4	5
General philosophy	X	X	X	X	X
Limitations on dangerous goods in air transport	X	X		X	X
Classification of dangerous goods	X				
List of dangerous goods	X	X		X	
Packing requirements and packing instructions	X				
Packaging specifications and markings	X				
Package marking and labelling	X	X	X	X	X
Documentation from the shipper	X				
Acceptance of dangerous goods, use of checklist	X				
Storage and loading procedures	X	X	X	X	
Inspection of damaged goods	X	X			
Provision on information to the pilot-in-command	X	X		X	
Dangerous goods in passengers' baggage	X	X	X	X	X
Emergency procedures	X	X	X	X	X
"X" indicates an area to be covered					