

**Kingdom of Saudi Arabia
General Authority of Civil Aviation**

GACA REGULATION

Section 18

**The Safe Transport of
Dangerous Goods by Air**

Edition 3.0

FOREWORD

The following Regulations governing The Safe Transportation of Dangerous Goods by Air are based on Articles 1, 2, 3, 4, 5, 12, 16 17, 19, 22, 31, 45, 89, 132, 133, 134, 163, 166, 170 and 173 of the Civil Aviation Act, that has been approved by the Council of Ministers' Resolution No. 185, dated 17/07/1426H and issued by Royal Decree No. M/44, dated 18/07/1426H. (23/08/2005G), and are in accordance with ICAO Annex 18, The Safe Transportation of Dangerous Goods by Air and its related documents.

The promulgation of this regulation is based on the authority granted in Article 179 of the Civil Aviation Act, and is issued under the authority of the President, General Authority of Civil Aviation, as a duly delegated representative of the GACA Board of Directors, in accordance with Order No.T-41, dated 30/12/1429H (28/12/2008G).

The General Authority of Civil Aviation is responsible for the preparation and distribution of all regulations in sufficient quantities so that all service providers and aircraft operators based in the Kingdom of Saudi Arabia are able to obtain an authentic copy prior to the effective date of the Regulation.

APPROVED:

Original Signed

Fahad Bin Abdullah Al-Saud
President, General Authority of Civil Aviation

Effective Date: 14 November 2013

CONTENT RULES

1) Organization Structure:

- a) The Safety and Economic Regulation Sector (S&ER) of the General Authority of civil Aviation (GACA) is the Designated Authority in the Kingdom of Saudi Arabia for the Safe Transportation of Dangerous Goods by Air with the following responsibilities:
 - 1) carry out the function of safety regulation of the Safe Transportation of Dangerous Goods by Air. This includes promulgation of specific requirements, operating regulations and implementation policies, which are periodically reviewed to ensure they remain relevant and appropriate to the safe transportation of dangerous goods by air,
 - 2) ensure and enforce compliance with the applicable regulations and procedures of GACAR Section 18 including the identification of conditions and circumstances under which Air Operator or Ground Handling Agent, Shipper and Freight Forwarder are allowed to deal with, and resolve, events involving certain deviations within the context of the GACAR Section 18,
 - 3) perform safety oversight functions include audits, inspections, investigations and data analysis; and
 - 4) Conduct on site facilities audits based on pre-established annual audit program and frequent inspections of areas of greater safety concern or need, as identified by the analysis of Data, or as instructed by Senior Management.
 - 5) Ensure the capture and storage of data on safety risks and deviations,
 - 6) Perform analysis of the stored data and actively exchange safety information with the concerned departments within GACA;
 - 7) Organize internal training, communication and dissemination of Safety information;
- b) The intent of GACAR section 18 is to regulate the Safe Transportation of Dangerous Goods by Air only and it is not intended to regulate the process of import or export of dangerous goods into and out of the Kingdom of Saudi Arabia which are regulated by other government entities of KSA.
- c) Under current arrangements, the process for issuance, renewal, change of the Certificate of Approval for the Safe Transportation of Dangerous Goods by Air for air operators, ground handling agencies, shipper, and freight forwarder is delegated the Department of Economic Regulation of S&ER of GACA.
- d) Under current arrangements, prior approval for the facilitation movement of dangerous goods by air within, or over – flaying the KSA territory which are consigned from another Contracting State in accordance with ICAO Technical Instructions or IATA DG Regulations is delegated to the Department of Agreements and Authorization of S&ER of GACA.
- e) Under current arrangements, the Safety Department of GACA S&ER shall conduct investigation of violations, accidents and or incidents involving the transportation of dangerous goods by air.
- f) The Department of Economic Regulation of S&ER of GACA, the Central Department of Aviation Security of the Corporate Core Sector of GACA, and the Aerodromes Safety and Quality Assurance Departments shall conduct on site facilities audits based on pre-established annual audit program and frequent inspections of areas of greater safety concern or need as identified by the analysis of Data, or as instructed by Senior Management. Copies of audit/inspection reports shall be forwarded to Safety Department of GACA S&ER.

2) Rules of Constructions:

- a) To avoid any misunderstanding within this regulation, certain words are to be interpreted as having specific meanings when they are used, unless the context requires otherwise:
 - (1) Words importing the singular include the plural;
 - (2) Words importing the plural include the singular; and
 - (3) Words importing the masculine gender include the feminine.
- b) In this regulation, the following protocol is used:
 - (1) The words "**Shall**" and "**must**" indicate that compliance is compulsory.
 - (2) The word "**should**" indicates a recommendation. It does not mean that compliance is optional but rather that, where insurmountable difficulties exist, the GACA- SER may accept an alternative means of compliance, provided that an acceptable safety assurance from the Air Navigation Services shows that the safety requirements will not be reduced below that intended by the requirement.
 - (3) The word "**Can**" or "**May**" is used in a permissive sense to state authority or permission to do the act prescribed, and the words "no person may * * *" or "a person may not * * *" mean that no person is required, authorized, or permitted to do the act prescribed;
 - (4) The word "**will**" is used to express the future; and
 - (5) The word "**Includes**" means "**includes but is not limited to**".

AMENDMENT PROCEDURE

The existing General Authority of Civil Aviation Regulations (GACAR) will be periodically reviewed to reflect the latest updates of International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs); it will be also amended to reflect the latest aviation safety provisions issued by Regional and International Civil Aviation Organizations. A complete revised edition incorporating all amendments will be published every three years from the original effective date of this regulation. The amendment procedure shall be as follows;

1. When the General Authority of Civil Aviation (GACA) receives an amendment to any of the current ICAO Annexes that can affect the provisions of this regulation, it will be forwarded by the Vice President of International Organization Affairs to the Vice President, Safety and Economic Regulation (S&ER) who in turn will provide a copy of this amendment to the concerned department for study and comments taking into account the ICAO deadline for the reply.
2. When any GACA department or stakeholder proposes an amendment to this regulation, it will send a letter with the proposed amendment including a clear justification and argument for such amendment. Following the receipt of an amendment proposal, the S&ER will analyze this proposal and forward its comments and any proposed decision action to the S&ER Vice President.
3. An accepted amendment proposal will be prepared as draft amendment to the GACAR-Section 18 and forwarded to the originator of the amendment proposal and concerned GACA department (s) for further review and comment within a specified timeline.
4. All accepted amendments will be drafted in the form of Notices of Proposed Amendments (NPA) and forwarded to all concerned parties including stakeholders for comment within a two-month reply period. The NPA shall indicate the proposed Amendment's effective date.
5. Following the receipt of NPA replies, the S&ER will analyze the comments received and produce a new draft in consultation with the concerned GACA department. The final draft will be submitted to President of the General Authority of Civil Aviation for formal approval prior to publication.
6. The Amendment's effective date will take into account the comments of all the concerned parties and stakeholders.
7. Any differences between the GACAR Section 18 new amendment and ICAO Annexes Standards and Recommended Practices will be forwarded to ICAO as a Difference and published as it is in the Aeronautical Information Publication (AIP).
8. All concerned parties and stakeholders will be provided a copy of the new amendment and will be requested to update their copy of the GACAR Section 18 accordingly.
9. It is the responsibility of all concerned parties to keep their copy of GACAR-Section 18 and other GACA regulation publication up to date.

SUPPLEMENTARY REGULATIONS

From time to time it will be necessary to issue regulations which supplement or augment the GACAR Regulations. The following procedures will apply:

1. Supplementary regulations will be issued in the form of a GACA Regulation Circular (RC).
2. The GACA Regulation Circular will be approved by the President.
3. The process for preparation and publishing of the GACA Regulation Circular will be addressed in the GACA Quality System Manual.

LIST OF CURRENT DIFFERENCES TO ICAO SARPS

GACA Regulation Section 18 is based on ICAO Annex 18. The following is a list of differences between the GACA Regulation and the ICAO Standards and Recommended Practices (SARPS). Differences have been notified to ICAO and are also published in the KSA Aeronautical Information Publication (AIP-GEN 1.7).

ICAO Annex 18 - THE SAFE TRANSPORTATION OF DANGEROUS GOODS BY AIR- Amendment 11

SARP Identifier	Regulation Reference	Difference
		No Differences

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CHAPTER 1. DEFINITIONS

When the following terms are used in this Annex, they have the following meanings:

Approval. An authorization granted by an appropriate national authority for:

- a) the transport of dangerous goods forbidden on passenger and/or cargo aircraft where the Technical Instructions state that such goods may be carried with an approval; or
- b) other purposes as provided for in the Technical Instructions.

Note.— In the absence of a specific reference in the Technical Instructions allowing the granting of an approval, an exemption may be sought.

Cargo aircraft. Any aircraft, other than a passenger aircraft, which is carrying goods or property.

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 address.

Crew member. A person assigned by an operator to duty on an aircraft during a flight duty period.

Dangerous goods. Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions.

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 or environmental damage.

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 or environmental 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.

Exception. A provision in this Annex which excludes a specific item of dangerous goods from the requirements normally applicable to that item.

Exemption. An authorization, other than an approval, granted by an appropriate national authority providing relief from the provisions of the Technical Instructions.

Flight crew member. A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

Operator. A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

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.

Note.— A unit load device is not included in this definition.

Package. The complete product of the packing operation consisting of the packaging and its contents prepared for transport.

Packaging. Receptacles and any other components or materials necessary for the receptacle to perform its containment function.

Note.— For radioactive material, see Part 2, paragraph 7.2 of the Technical Instructions.

Passenger aircraft. 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.

Pilot-in-command. The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

Serious injury. 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 hemorrhage, 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.

State of Destination. The State in the territory of which the consignment is finally to be unloaded from an aircraft.

State of Origin. The State in the territory of which the consignment is first to be loaded on an aircraft.

State of the Operator. 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 residence.

CHAPTER 1. DEFINITIONS

Technical Instructions. The *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284), approved and issued periodically in accordance with the procedure established by the ICAO Council.

UN number. The four-digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals to identify an article or substance or a particular group of articles or substances.

Unit load device. Any type of freight container, aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo.

Note.— An overpack is not included in this definition.

CHAPTER 2. APPLICABILITY

2.1 General applicability

2.1.1 The Standards and Recommended Practices of this Annex shall be applicable to all international operations of civil aircraft.

2.1.2 Where specifically provided for in the Technical Instructions, the States concerned may grant an approval provided that in such instances an overall level of safety in transport which is equivalent to the level of safety provided for in the Technical Instructions is achieved.

2.1.3 In instances:

- a) of extreme urgency; or
- b) When other forms of transport are inappropriate; or
- c) When full compliance with the prescribed requirements is contrary to the public interest, the States concerned may grant an exemption from the provisions of the Technical Instructions provided that in such instances every effort shall be made to achieve an overall level of safety in transport which is equivalent to the level of safety provided for in the Technical Instructions.

2.1.4 For the State of Over flight, if none of the criteria for granting an exemption are relevant, an exemption may be granted based solely on whether it is believed that an equivalent level of safety in air transport has been achieved.

Note 1.— For the purpose of approvals, “States concerned” are the States of Origin and the Operator, unless otherwise specified in the Technical Instructions.

Note 2.— For the purpose of exemptions, “States concerned” are the States of Origin, Operator, Transit, Overflight and Destination.

Note 3.— Guidance for the processing of exemptions, including examples of extreme urgency, may be found in the Supplement to the Technical Instructions (Part S-1, Chapter 1, 1.2 and 1.3).

Note 4.— Refer to 4.3 for dangerous goods forbidden for transport by air under any circumstances.

Note 5.— It is not intended that this Annex be interpreted as requiring an operator to transport a particular article or substance or as preventing an operator from adopting

special requirements on the transport of a particular article or substance.

2.2 Dangerous Goods Technical Instructions

2.2.1 Each Contracting State shall take the necessary measures to achieve compliance with the detailed provisions contained in the Technical Instructions. Each Contracting State shall also take the necessary measures to achieve compliance with any amendment to the Technical Instructions which may be published during the specified period of applicability of an edition of the Technical Instructions.

2.2.2 Each Contracting State should inform ICAO of difficulties encountered in the application of the Technical Instructions and of any amendments which it would be desirable to make to them.

2.2.3 Although an amendment to the Technical Instructions with an immediate applicability for reasons of safety may not yet have been implemented in a Contracting State, such State should, nevertheless, facilitate the movement of dangerous goods in its territory which are consigned from another Contracting State in accordance with that amendment, providing the goods comply in total with the revised requirements.

2.3 Domestic civil aircraft operations

In the interests of safety and of minimizing interruptions to the international transport of dangerous goods, Contracting States should also take the necessary measures to achieve compliance with the Annex and the Technical Instructions for domestic civil aircraft operations.

2.4 Exceptions

2.4.1 Articles and substances which would otherwise be classed as dangerous goods but which are required to be aboard the aircraft in accordance with the pertinent airworthiness requirements and operating regulations, or for those specialized purposes identified in the Technical Instructions, shall be excepted from the provisions of this Annex.

2.4.2 Where articles and substances intended as replacements for those described in 2.4.1 or which have been removed for replacement are carried on an aircraft, they shall be transported in accordance with the provisions of this Annex except as permitted in the Technical Instructions.

CHAPTER 2. APPLICABILITY

2.4.3 Specific articles and substances carried by passengers or crew members shall be excepted from the provisions of this Annex to the extent specified in the Technical Instructions.

2.5 Notification of variations from the Technical Instructions

2.5.1 Where a Contracting State adopts different provisions from those specified in the Technical Instructions, it shall notify ICAO promptly of such State variations for publication in the Technical Instructions.

Note.— Contracting States are expected to notify a difference to the provisions of 2.2.1 under Article 38 of the Convention only if they are unable to accept the binding nature of the Technical Instructions. Where States have adopted different provisions from those specified in the Technical Instructions, they are expected to be reported only under the provisions of 2.5.

2.5.2 The State of the Operator should take the necessary measures to ensure that when an operator adopts more restrictive requirements than those specified in the Technical Instructions, the notification of such operator variations is made to ICAO for publication in the Technical Instructions.

2.6 Surface transport

States should make provisions to enable dangerous goods intended for air transport and prepared in accordance with the ICAO Technical Instructions to be accepted for surface transport to or from aerodromes.

2.7 National authority

Each Contracting State shall designate and specify to ICAO an appropriate authority within its administration to be responsible for ensuring compliance with this Annex.

CHAPTER 3. CLASSIFICATION

The classification of an article or substance shall be in accordance with the provisions of the Technical Instructions.

Note.— The detailed definitions of the classes of dangerous goods are contained in the Technical Instructions. These classes identify the potential risks

associated with the transport of dangerous goods by air and are those recommended by the United Nations Committee of Experts on the Transport of Dangerous Goods.

CHAPTER 4. LIMITATION ON THE TRANSPORT OF DANGEROUS GOODS BY AIR

4.1 Dangerous goods permitted for transport by air

The transport of dangerous goods by air shall be forbidden except as established in this Annex and the detailed specifications and procedures provided in the Technical Instructions.

4.2 Dangerous goods forbidden for transport by air unless exempted.

The dangerous goods described hereunder shall be forbidden on aircraft unless exempted by the States concerned under the provisions of 2.1 or unless the provisions of the Technical Instructions indicate they may be transported under an approval granted by the State of Origin:

- Dangerous goods that are identified in the Technical Instructions as being forbidden for transport in normal circumstances; and
- Infected live animals.

4.3 Dangerous goods forbidden for transport by air under any circumstances

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.

CHAPTER 5. PACKING

5.1 General requirements

Dangerous goods shall be packed in accordance with the provisions of this chapter and as provided for in the Technical Instructions.

5.2 Packagings

5.2.1 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.

5.2.2 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.

5.2.3 Packagings shall meet the material and construction specifications in the Technical Instructions.

5.2.4 Packagings shall be tested in accordance with the provisions of the Technical Instructions.

5.2.5 Packagings for which retention of a liquid is a basic function, shall be capable of withstanding, without leaking, the pressure stated in the Technical Instructions.

5.2.6 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.

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

5.2.8 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.

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

CHAPTER 6. LABELLING AND MARKING

6.1 Labels

Unless otherwise provided for in the Technical Instructions, each package of dangerous goods shall be labelled with the appropriate labels and in accordance with the provisions set forth in those Instructions.

6.2 Markings

6.2.1 Unless otherwise provided for 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.

6.2.2 Specification markings on packagings. Unless otherwise provided for in the Technical Instructions, each packaging manufactured to a specification contained in those Instructions shall be so marked in accordance with the appropriate provisions of those Instructions and no packaging shall be marked with a packaging specification marking unless it meets the appropriate packaging specification contained in those Instructions.

6.3 Languages to be used for markings

Recommendation.— In addition to the languages required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the markings related to dangerous goods.

CHAPTER 7. SHIPPER'S RESPONSIBILITIES

7.1 General requirements

Before a person offers any package or overpack of dangerous goods for transport by air, that person shall ensure that the dangerous goods are not forbidden for transport by air and are properly classified, packed, marked, labelled and accompanied by a properly executed dangerous goods transport document, as specified in this Annex and the Technical Instructions.

7.2 Dangerous goods transport document

7.2.1 Unless otherwise provided for in the Technical Instructions, the person who offers dangerous goods for transport by air shall complete, sign and provide to the operator a dangerous goods transport document, which shall contain the information required by those Instructions.

7.2.2 The transport document shall bear a declaration signed by the person who offers dangerous goods for transport indicating that the dangerous goods are fully and accurately described by their proper shipping names and that they are classified, packed, marked, labelled, and in proper condition for transport by air in accordance with the relevant regulations.

7.3 Languages to be used

In addition to the languages which may be required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the dangerous goods transport document.

CHAPTER 8. OPERATOR'S RESPONSIBILITIES

8.1 Acceptance for transport

An operator shall not accept dangerous goods for transport by air:

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

Note 1.— See Chapter 12 concerning the reporting of dangerous goods accidents and incidents.

Note 2.— Special provisions relating to the acceptance of overpacks are contained in the Technical Instructions.

8.2 Acceptance checklist

An operator shall develop and use an acceptance checklist as an aid to compliance with the provisions of 8.1.

8.3 Loading and stowage

Packages and overpacks containing dangerous goods and freight containers containing radioactive materials shall be loaded and stowed on an aircraft in accordance with the provisions of the Technical Instructions

8.4 Inspection for damage or leakage

8.4.1 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.

8.4.2 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.

8.4.3 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, or arrange for its removal by an appropriate authority or

organization, 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.

8.4.4 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. 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.

8.5 Loading restrictions in passenger cabin or on flight deck

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 the Technical Instructions.

8.6 Removal of contamination

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

8.6.2 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 the Technical Instructions.

8.7 Separation and segregation

8.7.1 Packages containing dangerous goods which might react dangerously one with 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.

8.7.2 Packages of toxic and infectious substances shall be stowed on an aircraft in accordance with the provisions of the Technical Instructions.

8.7.3 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 in the Technical Instructions.

8.8 Securing of dangerous goods cargo loads

When dangerous goods subject to the provisions contained herein 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 8.7.3 are met at all times.

8.9 Loading on cargo aircraft

Packages of dangerous goods bearing the "Cargo aircraft only" label shall be loaded in accordance with the provisions in the Technical Instructions.

CHAPTER 9. PROVISION OF INFORMATION

9.1 Information to pilot-in-command

The operator of an aircraft in which dangerous goods are to be carried shall provide the pilot-in-command as early as practicable before departure of the aircraft with written information as specified in the Technical Instructions.

9.2 Information and instructions to flight crew members

The operator shall provide such information in the Operations Manual as will enable the flight crew to carry out its responsibilities with regard to the transport of dangerous goods and shall provide instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.

9.3 Information to passengers

Each Contracting State shall ensure that information is promulgated in such a manner that passengers are warned as to the types of dangerous goods which they are forbidden from transporting aboard an aircraft as provided for in the Technical Instructions.

9.4 Information to other persons

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

9.5 Information from pilot-in-command to aerodrome authorities

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 for in the Technical Instructions.

9.6 Information in the event of an aircraft accident or incident

9.6.1 In the event of:

- an aircraft accident; or
- a serious incident where dangerous goods carried as cargo may be involved,

the operator of the aircraft carrying dangerous goods as cargo shall provide information, without delay, to emergency services responding to the accident or serious incident about the dangerous goods on board, as shown on the written information to the pilot-in-command. As soon as possible, the operator shall also provide this information to the appropriate authorities of the State of the Operator and the State in which the accident or serious incident occurred.

9.6.2 In the event of an aircraft incident, the operator of an aircraft carrying dangerous goods as cargo shall, if requested to do so, provide information without delay to emergency services responding to the incident and 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.

Note.— The terms “accident”, “serious incident” and “incident” are as defined in Annex 13.

CHAPTER 10. ESTABLISHMENT OF TRAINING PROGRAMMES

Dangerous goods training programme shall be established and updated as provided for in the Technical Instructions.

CHAPTER 11. COMPLIANCE

11.1 Inspection systems

Each Contracting State shall establish inspection, surveillance and enforcement procedures for all entities performing any function prescribed in its regulations for air transport of dangerous goods with a view to achieving compliance with those regulations.

Note 1.— It is envisaged that these procedures would include provisions for:

- inspecting dangerous goods consignments prepared, offered, accepted or transported by the entities referred to in 11.1;
- inspecting the practices of the entities referred to in 11.1; and
- investigating alleged violations (see 11.3).

Note 2.— Guidance on dangerous goods inspections and enforcement may be found in the Supplement to the Technical Instructions (Part S-5, Chapter 1 and Part S-7, Chapters 5 and 6).

11.2 Cooperation between States

Each Contracting State should participate in cooperative efforts with other States concerning violations of dangerous goods regulations, with the aim of eliminating such violations. Cooperative efforts could include coordination of investigations and enforcement actions; exchanging information on a regulated party's compliance history; joint inspections and other technical liaisons, exchange of technical staff, and joint meetings and conferences. Appropriate information that could be exchanged include safety alerts, bulletins or dangerous goods advisories; proposed and completed regulatory actions; incident reports; documentary and other evidence developed in the investigation of incidents;

proposed and final enforcement actions; and educational/outreach materials suitable for public dissemination.

11.3 Penalties

11.3.1 Each Contracting State shall take such measures as it may deem appropriate to achieve compliance with its dangerous goods regulations including the prescription of appropriate penalties for violations.

11.3.2 Recommendation.— Each Contracting State should take appropriate action to achieve compliance with its dangerous goods regulations, including the prescription of appropriate penalties for violations, when information about a violation is received from another Contracting State, such as when a consignment of dangerous goods is found not to comply with the requirements of the Technical Instructions on arrival in a Contracting State and that State reports the matter to the State of Origin.

11.4 Dangerous goods by mail

Each Contracting State should establish procedures with a view to controlling the introduction of dangerous goods into air transport through its postal services.

Note.— International procedures for controlling the introduction of dangerous goods into air transport through the postal services have been established by the Universal Postal Union.

CHAPTER 12. DANGEROUS GOODS ACCIDENT AND INCIDENT REPORTING

12.1 With the aim of preventing the recurrence of dangerous goods accidents and incidents, each Contracting State shall establish procedures for investigating and compiling information concerning such accidents and incidents which occur in its territory and which involve the transport of dangerous goods originating in or destined for another State. Reports on such accidents and incidents shall be made in accordance with the detailed provisions of the Technical Instructions.

12.2 Recommendation.—With the aim of preventing the recurrence of dangerous goods accidents and incidents, each Contracting State should establish procedures for investigating and compiling information concerning such accidents and incidents which occur in its territory other than those described in 12.1. Reports on such accidents and incidents should be made in accordance with the detailed provisions of the Technical Instructions.

12.3 With the aim of preventing the recurrence of instances of undeclared or misdeclared dangerous goods

in cargo, each Contracting State shall establish procedures for investigating and compiling information concerning such occurrences which occur in its territory and which involve the transport of dangerous goods originating in or destined for another State. Reports on such instances shall be made in accordance with the detailed provisions of the Technical Instructions.

12.4 Recommendation.—With the aim of preventing the recurrence of instances of undeclared or misdeclared dangerous goods in cargo, each Contracting State should establish procedures for investigating and compiling information concerning such occurrences which occur in its territory other than those described in 12.3. Reports on such instances should be made in accordance with the detailed provisions of the Technical Instructions.

CHAPTER 13. DANGEROUS GOODS SECURITY PROVISIONS

Each Contracting State shall establish dangerous goods security measures, applicable to shippers, operators and other individuals engaged in the transport of dangerous goods by air, to be taken to minimize theft or misuse of

dangerous goods that may endanger persons, property or the environment. These measures should be commensurate with security provisions specified in other Annexes and the Technical Instructions.