## **ADVISORY CIRCULAR**

No. : AC-28-01-009 Date : 1 March 2016

## A. <u>SUBJECT.</u>

**Dangerous Goods Transport by Air Approval** 

## B. PURPOSE.

This Advisory Circular (AC) provides guidance for Air Operator Certificate (AOC) applicant/holder to obtain dangerous goods transport by air approval.

## C. STATUS.

This is the third edition of AC - 28 - 01 - 009, dated 1 March 2016, and it will remain current until withdrawn or superseded.

## D. <u>CONTENTS.</u>

- 1.0 General.
- 2.0 Dangerous goods approval.
- 3.0 Dangerous goods training program.
- 4.0 Dangerous goods approval application.
- 5.0 Dangerous goods information and documentation.
- 6.0 Dangerous goods records.
- Appendix A. Dangerous goods training program for operators with dangerous goods approval.

# E. <u>REFERENCES.</u>

The following documents were used as reference material:

- JCAR OPS 1.
- ICAO Doc. 9284-AN/905 Technical Instructions for the Safe Transport of Dangerous Goods by Air.
- IATA Dangerous Goods Regulations.

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### **Dangerous Goods Approval**

### 1.0 General.

- 1.1 ICAO Annex 18, The Safe Transport of Dangerous Goods by Air deals with all aspects of the subject. In general, it sets down the broad general principles which determine whether items are acceptable for carriage by air. One of the applicable Standards requires that Dangerous Goods are carried only in accordance with ICAO Doc 9284, 'Technical Instructions for the Safe Transport of Dangerous Goods by Air' which is generally referred to as the "Technical Instructions". The Technical Instructions amplify the basic provisions of Annex 18 and contain all the detailed instructions necessary for the safe international transport of dangerous goods by air.
- 1.2 AOC applicant/holder is required to obtain dangerous goods approval for the air transportation of Dangerous Goods forbidden on passenger and/or cargo aircraft where the technical instruction state that such goods may be carried with an approval.
- 1.3 CARC is required under Annex 18 to have inspection and enforcement procedures in place which will ensure that all Dangerous Goods are only carried in full compliance with the stated requirements and ensures governmental control over the carriage of dangerous goods by air and provides for a world-wide harmonization of safety standards.
- **2.0 Dangerous Goods Approval.** To obtain such approval, the operator shall in accordance with the Technical Instructions:
- 2.1 Meets the requirements of regulated agent approval for cargo operations.
- 2.2 Establish and maintain dangerous goods and handling personnel training programs for all personnel involved and demonstrate to CARC that adequate training has been given to all personnel.
- 2.3 Establish operating procedures to ensure the safe handling of dangerous goods at all stages of air transportation containing information and instructions on:
  - a. The operator's policy to transport dangerous goods.
  - b. The requirements for acceptance, handling, loading, stowage and segregation of dangerous goods.
  - c. The information in the event of an aircraft accident or incident when dangerous goods are being carried.

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- d. The response to emergency situations involving dangerous goods.
- e. The removal of any possible contamination.
- f. The duties of all personnel involved, especially with relevance to ground handling and aircraft handling.
- g. Inspection for damage, leakage or contamination; and
- h. Dangerous goods accident and incident reporting.

# 3.0 Dangerous Goods Training Program.

### 3.1 General.

- a. The operator shall indicate for the approval of the training program how the training will be carried out. For formal training courses, the course objectives, the training program syllabus/curricula and examples of the written examination to be undertaken shall be included.
- b. Training intended to give general information and guidance may be by any means including handouts, leaflets, circulars, slide presentations, videos, computer based training, etc., and may take place on-the-job or off-the-job. The person being trained should receive an overall awareness of the subject. This training should include a written, oral or computer based examination covering all areas of the training program, showing that a required minimum level of knowledge has been acquired.
- c. Training intended to give an in-depth and detailed appreciation of the whole subject or particular aspects of it shall be by formal training courses, which shall include a written examination, the successful passing of which will result in the issue of the proof of qualification. The course may be by means of tuition or as a self-study program or a mixture of both. The person being trained should gain knowledge so as to be able to apply the detailed requirements of the Technical Instructions.
- **3.2 Initial and Recurrent Dangerous Goods Training Programs**. The training program must 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.

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c. Ground handling agencies which perform, on behalf of the operator, the act of accepting, handling, loading, unloading, transferring or other processing of cargo, mail or storage.

- d. Ground handling agencies located at an airport which performs, on behalf of the operator, the act of processing passengers.
- e. Agencies, not located at an airport, which performs, on behalf of the operator, the act of checking in passengers.
- f. Freight forwarders.
- g. Agencies engaged in the security screening of passengers and their baggage and/or cargo, mail or storage.
- h. Designated postal operators.
- **3.3 Training Curricula.** Personnel must receive training in the requirements to commensurate with their responsibilities. Such training must include:
  - a. Familiarization training. This must be aimed at providing familiarity with the general provisions.
  - b. Function-specific training. This must provide detailed training in the requirements applicable to the function for which that person is responsible.
  - c. Safety training. This must cover the hazards, presented by dangerous goods, safe handling and emergency response procedures.

# 3.4 Training in Emergency Procedures Shall Include as a Minimum:

- a. For personnel other than crew members:
  - (1) Dealing with damaged or leaking packages; and
  - (2) Other actions in the event of ground emergencies arising from dangerous goods.
- b. For flight crew members:
  - (1) Actions in the event of emergencies in flight occurring in the passenger cabin or in the cargo compartments; and
  - (2) The notification to ATS should an in-flight emergency occur.

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- c. For crew members other than flight crew members:
  - (1) Dealing with incidents arising from dangerous goods carried by passengers; or

(2) Dealing with damaged or leaking packages in flight.

# 3.5 General Training Requirements.

- a. All air Operators are required to provide dangerous goods training to their staff, whether or not the Operator holds approval to carry Dangerous Goods.
- b. Operators are also required to ensure that all relevant staff of handling agents acting on their behalf has received the appropriate dangerous goods training.
- c. Whether the operator holds an approval to carry dangerous goods or not the training given to its personnel is required to be approved by CARC.
- d. Recurrent training must take place within 24 months of previous training to ensure knowledge is current.
- e. The requirements for dangerous goods training are generally reflected in Subpart R of JCAR OPS 1, and specified in the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air as well as in the IATA Dangerous Goods Regulations (See appendix A dangerous goods training program for operators with dangerous goods approval).
- f. A test to verify understanding must be undertaken following training. Confirmation that the test has been completed satisfactorily is required.
- g. Instructors of initial and recurrent dangerous goods training programs must approved by CARC.
- h. Instructors delivering initial and recurrent dangerous goods training programs must at least deliver such courses every 24 months, or in the absence of this attend recurrent training.

# **4.0 Dangerous Goods Approval Application.**

4.1 For such an approval to be granted the Operator must submit dangerous good transport by air approval application along with, the following manuals, containing all pertinent information in relation to the safe transportation of Dangerous Goods:

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- a. Operations Manual Part A.
- b. Operations Manual Part D.
- c. Ground Operations Procedures Manual.
- d. Dangerous Goods Manual.
- e. Dangerous goods acceptance check list(s)
- 4.2 The Operator must submit for approval, the dangerous goods acceptance check list(s), used for checking:
  - a. The external appearance of packages of dangerous goods, and
  - b. Their associated documents, in order to ensure that all appropriate requirements have been met.
  - c. The acceptance check list must also be included in the procedures for storage and loading Dangerous Goods, that the operator must provide its handling agent. Moreover, the Operator must submit a contract with the handling agent concerning the handling of dangerous goods.
- 4.3 No approval will be granted, unless the assigned inspectors have been fully satisfied that:
  - a. The ground, flight and all other personnel involved have been adequately trained, as provided for in the latest edition of ICAO Technical Instructions (Doc 9284–AN/905).
  - b. The relevant documents submitted (e.g. for ground handling, operations manual), contain sufficient information and clear instructions on dangerous goods, and
  - c. That there are procedures in place to ensure the safe handling of dangerous goods at all stages of air transport, as provided for in the relevant legislation and ICAO Technical Instructions.

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## **5.0** Dangerous Goods Information and Documentation.

- 5.1 The operator shall, in accordance with the Technical Instructions:
  - a. Provide written information to the pilot-in-command/commander:
    - (1) About dangerous goods to be carried on the aircraft.
    - (2) For use in responding to in-flight emergencies.
  - b. Use an acceptance checklist.
- 5.2 The operator shall ensure that dangerous goods are accompanied by the required dangerous goods transport document(s), as completed by the person offering dangerous goods for air transport, except when the information applicable to the dangerous goods is provided in electronic form.
- 5.3 The operator shall ensure that where a dangerous goods transport document is provided in written form, a copy of the document is retained on the ground where it will be possible to obtain access to it within a reasonable period until the goods have reached their final destination.
- 5.4 The operator shall ensure that a copy of the information to the pilot-in-command/commander is retained on the ground.
- 6.0 Dangerous Goods Records.
- **6.1 Dangerous Goods Training Record.** Dangerous goods training record must be maintained which must include:
  - a. The individual's name.
  - b. The most recent training completion date.
  - c. A description, copy or reference to training materials used to meet the training requirements.
  - d. The name and address of the organization providing the training; and
  - e. Evidence which shows that a test has been completed satisfactorily.

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## **6.2** Dangerous Goods Document Storage Periods.

a. The following dangerous goods documents training records must be retained by the operators as detailed below:

- (1) Notification of special loads including written information to the commander about dangerous goods 3 months.
- (2) Occurrence report(s) for recording details of any occurrence, as prescribed in OPS 1.420, or any event which the commander deems necessary to report/record 3 months.
- (3) Dangerous goods training records 3 years.
- (4) Dangerous goods transport document 3 months after completion of the flight.
- (5) Dangerous goods acceptance checklist 3 months after completion of the flight.
- b. The above dangerous goods documents and training records must be made available upon request to CARC.

**Eng. Ahmad Azzam Acting Chief Commissioner** 

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### Appendix A

# Dangerous Goods Training Program for Operators with Dangerous Goods Approval

**1.0 Requirements.** Applicable for operator personnel with dangerous goods approval.

# 2.0 Training Categories.

**2.1** Category 6. Applicable for operator and ground handling agents' staff accepting dangerous goods.

### a. Course Duration.

- (1) Initial Training. At least 5 days / 30 programmed hours.
- (2) Recurrent Training. At least 2 days / 12 programmed hours.

## b. Course Subjects.

- (1) General philosophy.
- (2) Limitations.
- (3) General requirements for shippers.
- (4) Classification.
- (5) List of dangerous goods.
- (6) Packing requirements.
- (7) Labeling and marking.
- (8) Dangerous goods transport documents and other relevant documentation.
- (9) Acceptance procedures.
- (10) Recognition of undeclared dangerous goods.
- (11) Storage and loading procedures.
- (12) Pilots' notification.
- (13) Provisions for passengers and crew.
- (14) Emergency procedures.
- **2.2** Category 7. Applicable for operator and ground handling agents staff accepting cargo or mail (other than dangerous goods).

### a. Course Duration.

- (1) Initial Training. At least 2 days / 12 programmed hours.
- (2) Recurrent Training. At least .5 day / 3 programmed hours.

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## b. Course Subjects.

- (1) General philosophy.
- (2) Limitations.
- (3) Labeling and marking.
- (4) Dangerous goods transport documents and other relevant documentation.
- (5) Recognition of undeclared dangerous goods.
- (6) Provisions for passengers and crew.
- (7) Emergency procedures.
- **2.3** Category 8. Applicable for operator and ground handling agent's staff involved in the handling, storage and loading of cargo, mail and baggage.

#### a. Course Duration.

- (1) Initial Training. At least 3 days / 18 programmed hours.
- (2) Recurrent Training. At least 1 day / 6 programmed hours.

# b. Course Subjects.

- (1) General philosophy.
- (2) Limitations.
- (3) Labeling and marking.
- (4) Recognition of undeclared dangerous goods.
- (5) Storage and loading procedures.
- (6) Pilots' notification.
- (7) Provisions for passengers and crew.
- (8) Emergency procedures.
- **2.4** Category 9. Applicable for passenger Handling Staff.

### a. Course Duration.

- (1) Initial Training. At least 2 days / 12 programmed hours.
- (2) Recurrent Training. At least .5 day / 3 programmed hours.

# b. Course Subjects.

- (1) General philosophy.
- (2) Limitations.
- (3) Labeling and marking.
- (4) Recognition of undeclared dangerous goods.
- (5) Provisions for passengers and crew.
- (6) Emergency procedures.

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**2.5** Category 10. Applicable for flight crew members, load masters, load planners and flight dispatchers.

### a. Course Duration.

- (1) Initial Training. At least 3 days / 18 programmed hours.
- (2) Recurrent Training. At least 1 day / 6 programmed hours.

## b. Course Subjects.

- (1) General philosophy.
- (2) Limitations.
- (3) List of dangerous goods.
- (4) Labeling and marking.
- (5) Recognition of undeclared dangerous goods.
- (6) Storage and loading procedures.
- (7) Pilots' notification.
- (8) Provisions for passengers and crew.
- (9) Emergency procedures.
- **2.6** Category 11. Applicable for crew members other than flight crew member.

### a. Course Duration.

- (1) Initial Training. At least 2 days / 12 programmed hours.
- (2) Recurrent Training. At least .5 day / 3 programmed hours.

# b. Course Subjects.

- (1) General philosophy.
- (2) Limitations.
- (3) Labeling and marking.
- (4) Recognition of undeclared dangerous goods.
- (5) Provisions for passengers and crew.
- (6) Emergency procedures.