

OPS 1.1.044	 CAAI	Inspector Handbook
Certification of an operators' Dangerous Goods Program		Revision 2
		19 MAR 2019

1. Objective

1.1. This directive details the CAAI's Air Operator Dangerous Goods Certification program - by referral to existing certification Directives – through the following actions -

1.1.1. Evaluation and approval of an operator's dangerous goods training program;

1.1.2. Evaluation and approval of an operator's Dangerous Goods manual or the DG section of the Operations manual.

Note: This directive lists the content requirements of the operator's DG manual and training program. For instructions regarding the general process of reviewing and approving manuals and training programs, refer to CAAI directives OPS 1.1.004 Manuals, Procedures and Checklists and OPS 1.1.005 Training Program Approval Process.

1.2. The Certification process detailed in this directive will be used

1.2.1. Whenever an Operator applies to add the authorization to transport of Dangerous goods to its Operations Specifications.

1.2.2. Whenever an Operator requests an amendment to its Dangerous Goods procedures and training programs;

1.2.3. When certifying or re-certifying an operator not authorized to carry dangerous goods.

2. General

2.1. **Regulatory requirements:**

2.1.1. According to Article 74 of Air Navigation law, 2011 –

2.1.1.1 Dangerous Goods must be transferred by air only by the holder of an Air Operator Certificate with the appropriate authorization (hereinafter - **DG AOC**)

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holder)

- 2.1.1.2 The consignor of the DG is responsible to ensure that the Dangerous goods shall only be given for transport by air after they have been classified, packed, marked and labeled, and information has been provided in regard thereto to the DG AOC holder. The DG AOC holder may not accept dangerous goods for transport in an aircraft operated by him, unless such dangerous goods comply with all the conditions listed above.
- 2.1.2. Chapter 8 of Air Navigation Regulations (Transportation of Dangerous Goods), 1983; (Hereinafter – ANR.DG) lists the operator's roles and responsibilities in the transport of Dangerous Goods by air.
- 2.1.3. Regulations 241(b)(14), 325, 433 and 451 and section (2)(38) of the fifth appendix of Air Navigation Regulations (Operation of aircraft and Rules of the Air), 1981 (hereinafter – ANR.OPS) require that an operator authorized to carry Dangerous Goods -
- 2.1.3.1 provide procedures and instructions related to dangerous goods transportation in its operations manual, as will enable flight crew and other employees to carry out their responsibilities with regard to the transport of dangerous goods. The DG manual / DG section of the operations manual must be approved by the POI.
- 2.1.3.2 establish and maintain initial and recurrent dangerous goods training programs in accordance with the Technical Instructions.
(Part 1;4.1.2 of the Technical Instructions provides that operator's dangerous goods training programs

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be reviewed and approved by the appropriate authority of the State of the Operator, which is the CAAI).

2.1.4. According to the following regulations, An operator NOT authorized to carry Dangerous Goods must nevertheless¹

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2.1.4.1 provide procedures and instructions related to dangerous goods transportation in its operations manual to cover at least the topics listed in section (2)(38) – paragraphs (1)(c-e) of the fifth appendix of Air Navigation Regulations (Operation of aircraft and rules of Flight), 1981. The DG manual / DG section of the operations manual must be approved by the POI, to ensure that it contains information regarding the operator's policy with regard to dangerous goods, and instructions about the carriage of passengers with dangerous goods.

2.1.4.2 establish and maintain initial and recurrent dangerous goods training programs in accordance with the Technical Instructions with the appropriate scope for operators who do not carry dangerous goods – in accordance with regulations 330 and 451 of ANR.OPS.

(Part 1;4.1.2 of the Technical Instructions provides that operator's dangerous goods training programs be reviewed and approved by the appropriate authority of the State of the Operator, which is the

¹ Chapter 12 Air Operators are not yet required to comply with the requirements of Appendix 5 of ANR.OPS regarding Operations Manual content, but rather are required to comply with the content requirements of regulation 241 of ANR.OPS.

Regulation 241(18) allows the Director General to require "additional procedures...as required for flight safety" – which provides the legal basis for CAAI requiring the above content in the OPS manual even before regulation 241 is amended. CAAI is acting to amend the regulations to explicitly reflect the changing requirements for Chapter 12 Operators.

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CAAI).

2.2. General Information –

- 2.2.1. CAAI (Flight Standards Division) has oversight responsibility for an air carrier's DG program. An operator's DG program is contained in its Operations Manual and includes DG training. Flight Standards Division must evaluate all DG programs.
- 2.2.2. CAAI certification of an Air operator's dangerous goods program consists of the Flight Standards Division evaluation and approval of the operator's dangerous goods training programs and manuals to ensure compliance with the regulations and the Technical Instructions, and inspection of the Air operator's demonstration of the application of the DG manual and training program for compliance with dangerous goods transport regulations.
- 2.2.3. General Certification procedures are included in the following directives:
- 2.2.3.1 AW/OPS 1.1.004 Manuals, Checklists and procedures
 - 2.2.3.2 AW/OPS 1.1.005 Training Program Approval Process
- 2.2.4. Guidelines specific for certification of an operator's DG program may be found in this directive.

ICAO requirements

- 2.2.5. Annex 18 to the Chicago Convention (*The Safe Transport of Dangerous Goods by Air*) requires that the CAAI, inter alia, establish inspection procedures with a view to achieving compliance with its dangerous goods regulations. ICAO DOC SU-9284 (Supplement to the

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technical Instructions for the safe Transport of Dangerous Goods – **hereinafter: TI Supplement**) specifies the following fields to be inspected:

- 2.2.5.1 Organization and Procedures;
 - 2.2.5.2 Consignment Inspection;
 - 2.2.5.3 Operations Manual and other staff instructions;
 - 2.2.5.4 Staff Training;
 - 2.2.5.5 Training Programs;
 - 2.2.5.6 Passenger Warning Notices.
- 2.2.6. The TI require notices warning passengers of the prohibition of DG in baggage to be prominently and in sufficient number so that passengers see them during their normal progression through departure procedures. Additional required inspection provisions regarding passengers and crew are detailed in chapter 5 of the TI Supplement.
- 2.2.7. Dangerous Goods Approvals and Exemptions:
- 2.2.7.1 Where specifically provided for in the Technical Instructions, the CAAI 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.
 - 2.2.7.2 In instances of extreme urgency, or when other forms of transport are inappropriate, or when full compliance with the Technical Instructions requirements is contrary to public interest – the CAAI may grant an exemption from the provisions of the instructions provided that in such instances every effort is made to achieve an overall level of

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safety in transport which is at least equivalent to the level of safety provided for in the Technical Instructions.

2.2.7.3 The process and procedures for granting Approvals and Exemptions are detailed in directive OPS 4.4.007.

3. Reference Material & Forms

3.1. Reference Material:

- 3.1.1. Israel Air Navigation Law, 2011 – article 74;
- 3.1.2. Air Navigation Regulations (Transportation of Dangerous Goods), 1983;
- 3.1.3. Air Navigation regulations (Operation of Aircraft and rules of Flight), 1981:
 - 3.1.3.1 Chapter 12: Regulations 241(b)(14), 325;
 - 3.1.3.2 Chapter 13: Regulations 433 and 451 and section (2)(38) of the fifth appendix;
- 3.1.4. The Safe Transport of Dangerous Goods by Air (Annex 18 to the Convention on International Civil Aviation), Latest Edition;
- 3.1.5. Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Doc. 9284), Latest Edition;
- 3.1.6. Technical Instructions for the Safe Transport of Dangerous Goods by Air – Supplement (ICAO Doc. 9284 Supplement), Latest Edition;
- 3.1.7. AW/OPS 1.1.004 Manuals, Checklists and procedures
- 3.1.8. AW/OPS 1.1.005 Training Program Approval Process
- 3.1.9. OPS 4.0.007 – Dangerous Goods Approval/Exemption

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Procedure.

3.2. Forms:

3.2.1. OPSF 1.1.044-1 Dangerous Goods Manual Approval Checklist.

3.2.2. OPSF 1.1.044-2 Dangerous Goods Training Program Approval Checklist.

4. Method

4.1. Review Operator's Dangerous Goods Training Program

4.1.1. Operators should be made aware that their compliance with the dangerous goods training requirements contained in the Technical Instructions in addition to the Israeli Air Navigation Regulations is mandatory. This process should be completed prior to issuing operations specifications permitting the carriage of dangerous goods.

4.1.2. Operators that choose not to carry dangerous goods as cargo must have a dangerous goods recognition program, and maintain a dangerous goods training program as well.

4.1.3. When a POI receives a proposed or updated dangerous goods training program from an operator, the POI shall evaluate the contents of the training program. The operator will coordinate with the POI, as necessary, to formulate a satisfactory dangerous goods training program. Once the POI determines the training to be adequate, he may approve the dangerous goods training program for operator implementation.

4.1.4. In approving a dangerous goods training program syllabus, the POI shall use the checklist specified in OPSF AWF 1.1.044-2 Dangerous Goods Training Program Approval Checklist.

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4.1.5. The POI shall also review the training program for the following topics:

4.1.5.1 Review system for maintaining Instructor qualifications and ensure that it is adequate:

4.1.5.1.1. Instructors of initial and recurrent dangerous goods training programs must have adequate instructional skills and have successfully completed a dangerous goods training program in the applicable category, or category 6, prior to delivering such a dangerous goods training program.

4.1.5.1.2. Instructors delivering initial and recurrent dangerous goods training programs must at least every 24 months deliver such courses, or in the absence of this attend recurrent training.

4.1.5.2 Review Operator's system to ensure that all employees and non-employed personnel acting on the operator's behalf in handling cargo and passengers (in accordance with TI part 1, chapter 4, article 4.1.1) receive initial and recurrent training commensurate to their duties.

4.1.5.3 Use of CBT (Computer based Training) –
Where the applicable regulations specify that Recurrent DG training may be conducted using Computer based Training, the POI shall approve the use CBT by reviewing and confirming the following topics:

4.1.5.3.1. Review and confirm that the CBT covers all required topics;

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4.1.5.3.2. Review Operator's provisions for regular updates of the CBT, in accordance with changes in the Technical Instructions;

4.1.5.3.3. Confirm that the Operator's provisions for support of the CBT by a DG Subject matter expert of adequate qualifications;

4.2. **Review Operator's Dangerous Goods Procedures in the Operations Manual**

4.2.1. Consistent with the regulations, the dangerous goods manual is required to be submitted to the POI by the operator. The POI will evaluate and approve or recommend changes to ensure compliance with the regulations and the Technical Instructions. The operator should coordinate with the POI, as necessary, to formulate a satisfactory dangerous goods manual. Once approved by the POI, the operator may implement the approved operational procedures.

4.2.2. In approving a dangerous goods manual, the POI shall use the checklist specified in OPSF AWF 1.1.044-1 Dangerous Goods Operations Manual Approval Checklist.

4.2.3. Additionally, all operators must develop and implement a system that will allow the operator to remain current with regulatory changes and updates involving Dangerous Goods.

4.2.4. **Dangerous Goods information requirements for operators not accepting dangerous goods²**

² Chapter 12 Air Operators are not yet required to comply with the requirements of Appendix 5 of ANR.OPS regarding Operations Manual content, but rather are required to comply with the content requirements of regulation 241 of ANR.OPS.

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Operators who do not accept, handle, or store dangerous goods must provide procedures and instructions in the operator's manual as follows:

- Procedures and instructions so that all personnel responsible for accepting and handling any cargo or packaged materials receive adequate training on the recognition of items classified as dangerous goods ("adequate" is defined in an operational sense to mean the demonstrated ability of required personnel to identify such items);
- Procedures and instructions so that no packages are accepted by the operator that contain dangerous goods;
- Procedures and instructions for reporting damaged packages found to contain, or that are suspected of containing, dangerous goods in compliance with the Technical Instructions and regulation 33A of ANR.DG;
- Procedures and instructions to ensure that all spares and/or company material (COMAT) classified as dangerous goods are offered for transport by a different mode of transport (e.g. ground) and/or an operator that is authorized to transport dangerous goods; and
- Procedures and instructions to ensure that any employee, agent, or contract employee of the operator who prepares and/or offers COMAT classified as dangerous goods for shipment via any mode is fully trained as a dangerous goods shipper in accordance

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with ANR.DG.

4.2.5. **Dangerous Goods information requirements for operators accepting dangerous goods**

Operators who accept, handle and transport dangerous goods must provide instructions and procedures on the following subjects:

4.2.5.1 Procedures and instructions on acceptance of dangerous goods for air shipment.

The operator's instructions should contain the following information:

- The material must be properly packaged in accordance with the packaging rules and it must be properly marked, labelled, and documented. The total quantity must be within the quantity limitations and the shipment must be accompanied by the proper shipping papers, State exemptions / approvals, or competent authority certificates, as determined by the inspection requirement in the Technical Instructions, Part 7, for accepting shipments.
- The package may not leak or be damaged, and must be an authorized package in accordance with the applicable regulations.
- The package must either be authorized for carriage in passenger-carrying aircraft, or labelled for cargo-only aircraft if it is not acceptable for passenger-carrying aircraft.
- The material must be identified by the proper shipping name, hazard class or division, identification number, and packing group (when

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required) in accordance with the Technical Instructions.

- The package must be properly marked and labelled in accordance with the Technical Instructions.
- Transport documents must be reviewed to ensure that all necessary information is entered, including any additional information that may be required because of the commodity shipped, or because of requirements specific to the air mode.

4.2.5.2 Storage of dangerous goods

Operators should provide specific guidance on the storage of dangerous goods. This guidance should include instructions for Class 8 (corrosive), Class 7 (radioactive), and Class 6, Division 6.1 (toxic) materials as described below:

- The storage of Class 8 (corrosive) materials next to, or in contact with, Class 4, Division 4.2 or 4.3 (flammable) solids or Class 5, Division 5.1 (oxidizing) materials must be prevented. The segregation prescribed in the Technical Instructions must be maintained for all packages containing dangerous goods that might react dangerously when stored in a position that causes or contributes to leakage.
- The storage of Class 7 (radioactive) materials labelled yellow II and/or yellow III will not exceed a transport index (TI) of 50 in a single storage location. These materials are stored in an area that is isolated from people and does

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not permit pedestrian traffic or loitering. The minimum separation distances prescribed in the Technical Instructions should be maintained between radioactive materials labelled yellow II and yellow III and packages of undeveloped film.

- Packages bearing a Class 6, Division 6.1 toxic label will not be stored in the same location as foodstuffs, feeds, or any edible materials intended for consumption by either humans or animals.
- Loading of dangerous goods. The operator should provide specific guidance for loading dangerous goods. This guidance should include:
 1. Loading of dangerous goods in aircraft in accordance with the Technical Instructions;
 2. Loading of radioactive materials in aircraft to ensure that limitations are in accordance with the provisions of the Technical Instructions;
 3. Loading of dangerous goods in cargo compartments or freight containers within cargo compartments in accordance with the Technical Instructions; and
 4. A prohibition against loading packages bearing a toxic label in the same compartment that holds foodstuffs, feeds, or any edible materials intended

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for consumption by humans or animals, unless both commodities are in separate, closed-unit load devices known as freight containers.

4.2.5.3 Written notification to pilot-in-command

Operators must establish procedures for notifying the pilot-in-command when dangerous goods are carried on board the aircraft in accordance with the Technical Instructions.

4.2.5.4 Reporting dangerous goods accidents and incidents

The dangerous goods information must include company procedures for reporting dangerous goods accidents and incidents, in compliance with the Technical Instructions, Part 7.

4.2.5.5 Damage to dangerous goods packages

The operator must develop procedures for handling damaged packages, radioactive contamination and substances in Class 6, Division 6.2 (infectious substances), in accordance with the Technical Instructions. The information should include a list of telephone numbers and addresses of organizations that can provide technical advice on clean-up techniques and precautions to minimize the possibility of injury to employees and the general public.

4.2.5.6 Spares and/or company materials

POIs (with possible assistance from PMIs) should ensure that operators that use aircraft components or consumable materials (e.g. aircraft spares) classified as dangerous goods include in their

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manuals and provide responsible personnel training on the following information:

- Procedures and information to assist personnel (particularly maintenance, shipping, and storage personnel) to identify or recognize aircraft components and consumable materials that contain dangerous goods;
- Procedures and information on how these aircraft components or consumable materials are to be moved, stored, or handled within the facilities of the operator, or other air agency with whom they contract services to or for;
- Procedures and information for determining the proper packaging, marking, labelling, and materials compatibility, including instructions for the safe movement, storage, and handling of aircraft components and consumable materials classified as dangerous goods while they are within their facilities (including such materials as chemical oxygen generators);
- Information, guidance, and precautions on the specific hazards associated with aircraft components and consumable materials classified as dangerous goods that are to be moved, stored, or handled within their facilities.

4.3. Demonstration phase

4.3.1. Demonstration of DG transportation process

- 4.3.1.1 The SME shall provide an example(s) of DG consignment scenarios for demonstration purposes. These scenarios shall ideally –

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- 4.3.1.1.1. be representative of the kinds of DG expected to be carried by the Air operator;
- 4.3.1.1.2. Include DG with special provisions / packing instructions;
- 4.3.1.1.3. At the SME's discretion, use the approval requesting process.
- 4.3.1.2 The Air operator shall demonstrate to the POI, together with the DG SME if needed, the use of the operator's procedures in the process of -
 - 4.3.1.2.1. Using the Acceptance checklist;
 - 4.3.1.2.2. Loading and stowage in accordance with provisions of the TI;
 - 4.3.1.2.3. Securing and Separation of DG consignments;
 - 4.3.1.2.4. Marking and Labelling of ULDs;
 - 4.3.1.2.5. Provision of information to PIC;
 - 4.3.1.2.6. Air Crew actions in case of DG-related emergency – during demonstration of flight operations under OPS 1.1.015;
- 4.3.2. Demonstration of provision of information to passengers system –
 - 4.3.2.1 The POI, together with the SME if required, shall inspect the operator's system to ensure that passengers are made aware of the types of DG not allowed for transport, which may include -
 - 4.3.2.1.1. Information on Tickets / boarding passes;

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4.3.2.1.2. Air operator ticket-sales website;

4.3.2.1.3. Notices at Check-in stands, baggage acceptance points, and gates;

4.3.3. Demonstration of Training program – in accordance with CAAI procedure OPS 1.1.005 Training program approval process.

5. Task Outcomes

5.1. The following activities should be performed as detailed in the general procedures for approving manuals, training programs, and conducting demonstrations:

5.1.1. File results;

5.1.2. Notify Applicant of results & findings, and request corrective action;

5.1.3. Follow up on Applicant's corrective action;

5.1.4. Schedule followup inspection / demonstration, if needed.