DANGEROUS GOODS PANEL (DGP)

TWENTY-THIRD MEETING

Montréal, 11 to 21 October 2011

Agenda Item 3: Development of recommendations for amendments to the Supplement to the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284SU) for incorporation in the 2013-2014 Edition

OPERATOR APPROVAL TO CARRY DANGEROUS GOODS

(Presented by J. McLaughlin)

SUMMARY

This paper proposes the addition of new guidance material to the Supplement to the Technical Instructions for States on implementing Standards related to the review and approval of dangerous goods operational specifications. As efforts to better relate Annex 6 and Annex 18 regulatory text addressing the issuance of dangerous goods operations specifications continue, there is a concurrent need for this guidance.

Action by the DGP: The DGP is invited to consider what types of information related to dangerous goods certification and oversight would be useful for incorporation as guidance material in the Supplement to the Technical Instructions. The material presented in the appendices to this working paper is provided as a basis for this material.

1. **INTRODUCTION**

Dangerous goods operational specifications (OpSpecs) require the interaction and expertise of State officials proficient in both Annex 6 — Operation of Aircraft and Annex 18 — The Safe Transport of Dangerous Goods by Air. As the DGP Secretary has noted, safety oversight audits have revealed deficiencies in many States in the application of their oversight responsibility. To clarify and highlight the relevance of operational and dangerous goods Standards, the DGP has cited the need for cross referencing relevant provisions in Annex 6 and Annex 18. The DGP Secretary has been in communication with the Operations Panel (OPSP) on this issue in order to start discussions on how best to cross-reference each panel's regulatory Standards. She has since informed the DGP that the OPSP would consider adding this issue to their work programme, pending the Air Navigation Commission's (ANC) approval.

- As a result of discussions at the DGP Working Group of the Whole Meeting in Atlantic City (DGP-WG/11, 4 to 8 April 2011) on approvals for air operators to carry dangerous goods (see DGP/23-WP/3, paragraph 3.3.5) and at the DGP Working Group of the Whole Meeting in Abu Dhabi (7 to 11 November 2010) on Annex 6, Part I requirements for dangerous goods information on the operations specification (see DGP/23-WP/2, paragraph 3.6.1) and the Secretary's recommendation, there also appears to be a need for State guidance and clarification on dangerous goods OpSpecs beyond cross-referencing regulatory text. Such an effort is particularly critical as States implement a safety management system (SMS) approach to oversight and as well as require operators to have their own SMS. How one system interacts with other systems needs to be understood and coordinated effectively. For all of these reasons, it was suggested that DGP members consult with their State's OPSP counterparts.
- 1.3 The Federal Aviation Administration (FAA) has an established policy that governs the approval and oversight of dangerous goods OpSpecs. This policy defines operator responsibilities as well as the responsibilities within FAA's inspector workforce (Annex 6 and Annex 18 provisions). As the DGP considers which types of policies and procedures a State should incorporate into their programmes, the material in the appendices to this working paper represent FAA tools and policies that have been adapted to ICAO references.
- The proposed guidance in the appendices to this working paper addresses two types of OpSpecs issued under Annex 6, Appendix 6. These include OpSpecs for the authorization to carry dangerous goods and OpSpecs prohibiting the transport of dangerous goods. Operators are therefore referred to as "Will Carry" or "Will Not Carry" operators respectively. Prior to State approval, the following processes occur:
 - a) An operator submits a dangerous goods manual and training programme to the operations inspector (or responsible party) for their operating certificate. Coordination with their dangerous goods counterpart is initiated;
 - b) Dangerous goods personnel review and evaluate operations manuals and training programmes for compliance with State operating regulations, the Technical Instructions and national policies. Concurrence, non-concurrence, and/or recommended amendments, if any, are made to the operations inspector.
 - c) The operations inspector responsible for the certificate, on behalf of the CAA, approves the manual and training programme. OpSpecs are then issued.
- 1.5 The material presented in the appendices is intended to provide a baseline for discussion as the DGP develops guidance for the Supplement to the Technical Instructions. Additional text or amended language to this proposal is welcomed.

- Appendix A to this working paper contains proposed guidance material on State's responsibilities related to dangerous goods certification and oversight for inclusion in a new chapter to Part S-7 of the Supplement. Examples of the OpSpecs process for dangerous goods are presented in Attachments 1, 2 and 3 to the new chapter. These attachments are also proposed for inclusion in the Supplement and illustrate to the DGP what tools States may consider developing after reviewing the proposed text. The three attachments are:
 - a) Attachment 1 to Chapter 7 Dangerous goods certification process: This document outlines the process for the review and approval of dangerous goods manuals and training programmes submitted by the operator to the proper State authority for dangerous good oversight.
 - b) Attachment II to Chapter 7 Review and Approval Checklists: This document provides detailed checklists utilized by State inspectors to assist in the review and approval process for dangerous goods manuals and training programmes.
 - c) Attachment III to Chapter 7 Operations Specifications: This document provides detailed information on issuing operations specifications for dangerous goods operations to operators requesting authorization to transport dangerous goods and for operators declaring their decision to not transport dangerous goods.
- Information was presented at DGP-WG/11 in support of developing guidance to States to 1.7 aid in the review and approval of dangerous goods manuals and training programmes and the issuing of operations specifications. This information provides detailed guidance which may be of interest to States found public website be on the **DGP** http://www.icao.int/anb/fls/dangerousgoods/dgp/WorkingGroups/WG11/IPs. The information is contained in:
 - a) DGP-WG/11-IP/5: Dangerous Goods Transported In External Loads:
 - 1) Appendix A: Provides the basis for States to adopt an internal policy when conducting review and oversight of external load operations involving dangerous goods
 - 2) Appendix B: Offers an example of how external load operators can submit training and operations procedures when seeking an exemption to transport dangerous goods
 - 3) Appendix C: Mitigation plan for external load operators.
 - 4) Appendix D: Provides a sample exemption allowing dangerous goods to be transported in external load operations
 - b) DGP-WG/11-IP/7: Approval to Carry Dangerous Goods Air Operators:
 - 1) Appendix A: Outlines the process the review and approval of dangerous goods manuals and training programmes submitted by the operator to the proper State authority for dangerous good oversight

- 2) Appendix B: Provides detailed checklists utilized by State inspectors to assist in the review and approval process for dangerous goods manuals and training programmes
- 3) Appendix C: Example of Will Carry Dangerous Goods Programme
- 4) Appendix D: Example Will Not Carry Dangerous Good Programme
- 5) Appendix E: Operations Specifications Provides detailed information on issuing operations specifications for dangerous goods operations

APPENDIX

PROPOSED GUIDANCE MATERIAL ON DANGEROUS GOODS CERTIFICATION AND OVERSIGHT FOR INCLUSION IN THE SUPPLEMENT TO THE TECHNICAL INSTRUCTIONS

Part S-7

STATE'S RESPONSIBILITIES

| •• | |
|----|---------------------------------|
| | Insert new Chapter 7 as follows |
| • | |

Chapter 7

ANNEX 6 INFORMATION RELEVANT TO STATE'S DANGEROUS GOODS RESPONSIBILITIES

7.1 APPROVAL TO CARRY DANGEROUS GOODS — AIR OPERATORS

- 7.1.1 Annex 6 Operation of Aircraft, Part I International Commercial Air Transport Aeroplanes, provides that operational manuals be reviewed and approved before issuing of operations specifications by the appropriate authority of the State of the Operator.
- 7.1.2 Part 1;4.1.2 of the Technical Instructions provides that dangerous goods training programmes be reviewed and approved by the appropriate authority of the State of the Operator.
- 7.1.3 Part 7;4.2 of the Technical Instructions states that an operator must provide information in the operations manual and/or other appropriate manuals as will enable flight crews and other employees to carry out their responsibilities with regard to the transport of dangerous goods.
- 7.1.4 Forms suitable for the review and approval of dangerous goods manuals and training programmes and for issuing operations specification are at Appendices I to III to this chapter:
 - Attachment I Dangerous Goods Certification Process: This attachment outlines the process for the review and approval of dangerous goods manuals and training programmes submitted by the operator to the proper State authority for dangerous good oversight.
 - Attachment II Review and Approval Checklists: This attachment provides detailed checklists for the use of State inspectors to assist in the review and approval process for dangerous goods manuals and training programmes.
 - Attachment III Operations Specifications: This attachment provides detailed information on issuing operations specifications for dangerous goods operations to operators requesting authorization to transport dangerous goods and for operators declaring their decision to not transport dangerous goods.
- 7.1.5 State-issued guidance and forms suitable for the review and approval of dangerous goods training programmes and manuals, as well as for issuing operations specifications should contain the following information:
 - a) CAA policy addressing internal responsibilities for receiving applications for operations specifications, reviewing dangerous goods operations specifications (including coordination with dangerous goods experts), approval, and issuance of operations specifications. Policy should outline oversight, investigation, and enforcement responsibilities

- as related to operations specifications. Policy should also specifically address dangerous goods manual and training programme requirements.
- b) Enumeration of detailed requirements, addressing all applicable regulations and policies, to allow dangerous goods officials to ensure their review of training programmes and manuals are comprehensive and sufficient for approval. This information should be in conjunction with high-level guidance for approving officials, distinguished between operators transporting dangerous goods and "will-not-carry" operators.

7.2 ADDITIONAL REQUIREMENTS FOR HELICOPTER OPERATORS

- 7.2.1 Due to the differences in the type of operations carried out by helicopters compared with aeroplanes, supplemental guidance and documented procedures for carriage by helicopter are required by the State of the Operator in addition to the requirements in 7.1 as compliance with full provisions of the Technical Instructions may not be obtainable.
- 7.2.2 Helicopters are only authorized to carry dangerous goods, inside or external carriage, if granted an exemption or approval by the State of the Operator as prescribed in Part 1;1.1.3 of the Technical Instructions.
- 7.2.3 In addition to the requirements in 7.1, the appropriate authority of the State of the Operator requires the operator to submit supplemental guidance (Annex) to their State-approved rotorcraft operations manual outlining additional procedures specific to dangerous goods transport.
- 7.2.4 State-issued guidance and forms suitable for review and approval of dangerous goods training programmes and manuals, as well as issuing operations specifications should contain the following information:
 - a) CAA policy addressing internal responsibilities for receiving applications for operations specifications, reviewing dangerous goods operations specifications (including coordination with dangerous goods experts), approval, and issuance of operations specifications. Policy should outline oversight, investigation, and enforcement responsibilities as related to operations specifications. Policy should also specifically address dangerous goods manual and training programme requirements.
 - b) Enumeration of detailed requirements, addressing all applicable regulations and policies, to allow dangerous goods officials to ensure their review of training programmess and manuals are comprehensive and sufficient for approval. This information should be in conjunction with high-level guidance for approving officials, distinguished between operators transporting dangerous goods and "will-not-carry" operators.

ATTACHMENT I TO CHAPTER 7

AIR OPERATOR CERTIFICATION AND APPLICATION PROCESS— GENERAL INFORMATION FOR AIR OPERATOR CERTIFICATION OF DANGEROUS GOODS TRANSPORT OPERATIONS

1. BACKGROUND

This section provides guidance concerning State operating regulations and the Technical Instructions, on dangerous goods transport. State inspectors should ensure that air operators are aware of the Technical Instructions or other dangerous goods regulations governing dangerous goods transport by air. These regulations apply to the operator's shipping and transport operations of dangerous goods. Air operators should be made aware that their compliance with the Dangerous Goods training requirements contained in the Technical Instructions in addition to Sate operating regulations is mandatory. This process should be completed prior to issuing operations specifications permitting the carriage of Dangerous Goods. Additionally, all operators must develop and implement a system that will allow the operator to remain current with regulatory changes and updates.

Note.— Operators that choose not to carry Dangerous Goods must have a Dangerous Goods recognition programme.

2. RESPONSIBILITY FOR APPROVAL, SURVEILLANCE, AND ENFORCEMENT OF DANGEROUS GOODS PROGRAMMES

Each State has oversight responsibility for those air operators they certificate to include their Dangerous Goods programme. The State's technical experts will evaluate operator Dangerous Goods manuals and training programmes for approval to ensure compliance with State operating regulations and the Technical Instructions. States will inspect operators for compliance with dangerous goods transport regulations and enforce when appropriate alleged violations in accordance with State oversight programme requirements.

A. Procedures for Approval of Dangerous Goods Training

When an operations inspector receives proposed or updated Dangerous Goods training from an operator, the Inspector will coordinate with the appropriate Dangerous Goods office to evaluate the contents of the training programme. The operator will coordinate with the State as necessary to formulate satisfactory Dangerous Goods training programme. Once the State determines the training to be adequate, the State may approve the dangerous goods training programme for operator implementation.

Note.— The initial approval of the training is usually done at the same time as the review and acceptance of the Dangerous Goods manual.

B. Procedures for Approval of Dangerous Goods Manuals

Consistent with State operating regulations, the Dangerous Goods manual is required to be submitted to the State by the operator. The State's technical Dangerous Goods inspector will evaluate and approve or recommend changes to ensure compliance with State operating regulations

and the Technical Instructions. The operator should coordinate with the State as necessary to formulate satisfactory Dangerous Goods manual. Once approved by the State, the operator may implement the approved operational procedures. Only the State may approve Dangerous Goods manuals.

2-2 DANGEROUS GOODS INFORMATION REQUIREMENTS FOR OPERATORS NOT ACCEPTING DANGEROUS GOODS

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 a Dangerous Goods;
- Procedures and instructions for reporting that damaged packages found to contain, or that are suspected of containing, Dangerous Goods or Dangerous Goods are reported in compliance with the Technical Instructions.
- Procedures and instructions to see that all spares and/or company material (COMAT) classified as Dangerous Goods will be offered to a different mode of transportation (e.g., ground) and/or an air operator that is authorized to transport Dangerous Goods; and
- Procedures and instructions to see that any employee, agent, or contract employee of the air operator who prepares and/or offers COMAT classified as Dangerous Goods for shipment via any mode is fully trained as a Dangerous Goods shipper.

2-3 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 basic subjects. The following information is provided as background material for the aviation safety inspector and is not intended to supplant nor provide guidance for an operator's Dangerous Goods programme. Inspectors may share this information when requested.

A. Procedures and Instructions on Acceptance of Dangerous Goods for Air Shipment.

The operator's instructions should contain the following information:

- 1) The material must be properly packaged in accordance with the packaging rules and it must be properly marked, labeled, and documented. The total quantity must be within the quantity limitations and the shipment must be accompanied by the proper shipping papers, State exemptions, or competent authority certificates, as determined by the inspection requirements for accepting shipments in the Technical Instructions, Part 7.
- 2) The package may not leak or be damaged, and must be an authorized package in accordance with the applicable regulations.
- 3) The package must either be authorized for carriage in passenger-carrying aircraft or labeled for cargo-only aircraft if it is not acceptable for passenger-carrying aircraft.

- 4) The material must be identified by the proper shipping name, hazard class or division, identification number, and packing group, when required, in accordance with the Technical Instructions.
- 5) The package must be properly marked and labeled in accordance with the Technical Instructions.
- 6) 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 the method of transportation is related to air transportation.

B. 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 discussed below:

- 1) 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.
- 2) The storage of Class 7 (radioactive) materials labeled 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 not permit pedestrian traffic or loitering. The minimum separation distances prescribed in the Technical Instructions should be maintained between radioactive materials labeled yellow II and yellow III and packages of undeveloped film.
- 3) 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.
- 4) Loading of Dangerous Goods. The operator should provide specific guidance for loading Dangerous Goods. This guidance should include:
 - Loading of Dangerous Goods in aircraft in accordance with the Technical Instructions.
 - Loading of radioactive materials in aircraft in accordance to ensure that limitations are in coordance with the provision of the Technical Instructions.
 - Loading of Dangerous Goods in cargo compartments or freight containers within cargo compartments, in accordance with the Technical Instructions; and
 - A prohibition against loading packages bearing a toxic label in the same compartment that holds foodstuffs, feeds, or any edible materials intended for consumption by humans or animals unless both commodities are in separate, closed-unit load devices known as freight containers.

C. Written Notification of Pilot In Command (NOPIC).

Operators must establish procedures for notifying the PIC when Dangerous Goods are carried on board the aircraft in accordance with the Technical Instructions.

D. 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.

E. 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), as found in 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. Appropriate organizations for such advice include the following examples:

- CHEMTREC; CANUTEC
- Department of Energy;
- A State public health department;
- A State office of Dangerous Goods regulation; and
- Centers for disease control

F. Spares and/or Company Materials (COMAT).

Inspectors with certificate responsibilities for air operators that use aircraft components or consumable materials (eg. aircraft spares) classified as Dangerous Goods should ensure that air operators include in their 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 air operator, or other air agency with whom they contract services to or for;
- Procedures and information for determining the proper packaging, marking, labeling, 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.

2-4 EXEMPTIONS.

When an operator submits a request to the State for an initial exemption, renewal or modification of their existing exemption, the State inspector will review the application and will verify the competence and compliance history of the certificated operator in addition to ensuring compliance with State operating regulations and the Technical Instructions.

2-5 VIOLATIONS AND INVESTIGATIONS.

When an inspector becomes aware of a suspected Dangerous Goods violation, the inspector shall notify the appropriate authority and ensure that inspections and investigations are conducted in accordance with State oversight programmes for Dangerous Goods.

2-4 SOURCES OF INFORMATION.

The following regulations and publications pertaining to the safe transportation of Dangerous Goods are available electronically:

A. National Sources.

National sources of information pertaining to the safe transportation of Dangerous Goods are as follows:

- State operating regulations are applicable Dangerous Goods operations and define the duties and responsibilities for preparing and implementing procedural manuals and training programmes dealing with the transportation of Dangerous Goods by air.
- the Technical Instructions deal with the proper identification, classification, packaging, labeling, marking, and certification of Dangerous Goods transported in commerce.
- State Dangerous Goods Program website: www.state.xxx

B. Technical Instructions for the Safe Transport of Dangerous Goods by Air.

These Technical Instructions amplify the basic provisions of Annex 18 to the Convention on International Civil Aviation, and contain detailed instructions necessary for the safe international transport of Dangerous Goods by air. These instructions are issued in a 2-year edition on alternate Septembers, becoming effective the following January 1.

Applicable Regulatory References

| SUBJECTS | REGULATORY REFERENCES |
|---|---|
| *‡ Dangerous goods and Classifications | Technical Instructions, Part 2 |
| ‡ Transport Document and Certification Requirements | Technical Instructions, Part 5, Chapter 4 |
| *‡ Packaging, Marking, and Labeling | Technical Instructions, Part 5, Chapters 2-3 |
| * Exceptions to the Regulations | Technical Instructions, Part 1, Chapter 2 Technical Instructions, Part 8 |
| Written Notification of PIC and Emergency Response Information | Technical Instructions, Part 7, Chapter 4 |

| SUBJECTS | | | | REGULATORY REFERENCES | |
|----------|---------------------|--------------|-------|---|--|
| , | Reporting | Dangerous | goods | Technical Instructions, Part 7, Chapter 4 | |
|] | ncidents/Discrepand | eies | | | |
| | | | | | |
| | | | | | |
| 1 | Loading, Unloading, | and Handling | | Technical Instructions, Part 7, Chapter 2 | |
| | | | | _ | |

^{*} Operators that do <u>not</u> accept or transport dangerous goods or dangerous goods must provide training in these subjects.

[‡] In accordance with the Technical Instructions

ATTACHMENT II TO CHAPTER 7

DANGEROUS GOODS MANUAL AND TRAINING PROGRAMME CHECKLISTS

Dangerous Goods Operations Manuals and Training Programme Approval

Purpose:

The purpose of this document is to provide the objectives and tasks which a Dangerous Goods Inspector should conduct during the review and approval of an operator's authority to transport dangerous goods. In most cases, the operator's inspector will receive the dangerous goods manual and training programme and then coordinate with the appropriate State Aviation Dangerous Goods office for review and approval.

Scope:

A member state should inspect and monitor the dangerous goods transported by the air carriers within its governing authority. The inspection process should verify that an operator's dangerous goods transportation procedures and practices adhere to State operating regulations and the Technical instructions. This includes a method of validating an operator's authority to transport or not to transport dangerous goods as either a "Will Carry" operator or "Will Not Carry" operator.

The attached documents provide guidelines for a Dangerous Goods Inspector to reference when reviewing an operator's dangerous goods programme.

Attachment A: Dangerous Goods Manual Approval Checklist

- Describes the objectives and tasks for the Dangerous Goods Inspector.
- Provides the Dangerous Goods Inspector with a step-by-step review process

Attachment B:Dangerous Goods Training Programme Review and Approval Checklist

- Describes the objectives and tasks for the Dangerous Goods Inspector.
- Provides the Dangerous Goods Inspector with a step-by-step review process

Attachments

- A. Dangerous Goods Manual Approval Checklist
- B. Dangerous Goods Training Programme Approval Checklist

Attachment A Dangerous Goods Manual – Approval Checklist

| Name of the Air Operator | Certificate Number | er: | Operations Inspec | ctor: |
|---|-----------------------------------|-----------------------|---------------------------|---------------------------------|
| Certificate Type | □Will Carry DG □Will Not Carry DG | | □Passenger □ All Cargo | |
| Reviewed By: | Date: | Recommend Ap | proval by: | Approved □YES □NO |
| Objective: | | | | |
| This review checklist is designed t manual contains the information re | | | | |
| Tasks: | | | | |
| To meet the objective, the Danger | ous Goods Inspecto | r should accompli | ish the following tas | sks. |
| Identify the governing authority manual. | | | | |
| 2. Identify the operator's represent | tative who has overa | all responsibility fo | r the Dangerous Go | oods manual. |
| Conduct review of the Dangeron | | an reependianty re | . tilo Daligologo | oodo mandan |
| Coordinate any changes through | | nactor to the one | rotor | |
| | | | | |
| 5. If no corrections are needed, ap | pprove the dangerou | is goods programi | ne and forward to II | nspector. |
| Questions: | | | | |
| To meet the objective, the Danger | | | | luestions: |
| Does the DG manual contain proc Technical Instructions 7;1.3 | edures and informat | tion regarding acc | eptance? | ☐ Yes ☐ No, Explain |
| Does the DG manual contain p | procedures and info | ormation regardin | ng rejection? Tech | |
| Instructions 7;4.5 | | | | ☐ Yes☐ No, Explain☐ N/A |
| Does the DG manual contain procedures and information regarding handling? Technical Instructions 7;2 Yes No, Explain N/A | | | | ☐ Yes ☐ No, Explain |
| Does the DG manual contain proc Technical Instructions 7;2.9.3 | | | | ☐ Yes ☐ No, Explain ☐ N/A |
| Does the DG manual contain procedures and information regarding packaging of spares and company material classified as DG? Technical Instructions 1;4.2 | | | | Yes No, Explain N/A |
| Does the DG manual contain proc Technical Instructions 7;2.4 | edures and informa | tion regarding load | ding? | ☐ Yes ☐ No, Explain ☐ N/A |
| Does the DG manual contain protection that are marked or labeled as DG? Technical Instructions 7;4.2 | ocedures sufficient t ? | o assist persons | in identifying packa | ages Yes No, Explain N/A |

| Does the DG manual contain procedures sufficient to assist persons in identifying packages that may contain undeclared DG? Technical Instructions 7;5 | ☐ Yes ☐ No, Explain ☐ N/A |
|--|---------------------------------|
| Does the DG manual contain procedures sufficient to assist persons in rejecting DG that do not conform to DG regulations? Technical Instructions 7;1 | ☐ Yes ☐ No, Explain ☐ N/A |
| Does the DG manual contain procedures sufficient to assist persons complying with accident and incident reporting requirements? Technical Instructions 7;4.6 | ☐ Yes ☐ No, Explain ☐ N/A |
| Does the DG manual contain procedures sufficient to assist persons complying with undeclared or misdeclared reporting requirements? Technical Instructions 7;4.4 Technical Instructions 7;4.5 | ☐ Yes ☐ No, Explain ☐ N/A |
| Does the DG manual identify if the air carrier is permitted by the governing state to carry DG. | ☐ Yes ☐ No, Explain ☐ N/A |
| If the operators operations specifications permit the transport of DG, does the DG manual contain procedures for determining if packages containing dangerous goods are properly offered and accepted? Technical Instructions 7;1 | ☐ Yes ☐ No, Explain ☐ N/A |
| If the operators operations specifications permit the transport of DG, does the DG manual contain procedures for determining if packages containing dangerous goods are properly handled, stored packaged, loaded and carried onboard an aircraft? Technical Instructions 7;2 | ☐ Yes ☐ No, Explain ☐ N/A |
| If the operators operations specifications permit the transport of DG, does the DG manual contain requirements for Notice to the Pilot in Command? Technical Instructions 7;4.1 | ☐ Yes ☐ No, Explain ☐ N/A |
| Does the operators holders DG manual contain other information or instructions relating to | |
| safety. Technical Instructions 1;4.2.1(c) | ☐ Yes ☐ No, Explain ☐ N/A |
| Additional Information: | |
| Does the operator conduct any special aircraft operations? Technical Instructions 1;1.1.3.1 | ☐ Yes, Explain ☐ No |
| Does the operator have any State approved exemptions? Technical Instructions A3;2.1 | ☐ Yes, Explain ☐ No |
| Does the operator have any State approved Competent Authority (CA)? Technical Instructions 4;2.8 | ☐ Yes, Explain ☐ No |
| Does the operator have a Competent Authority (CA) to ship Chemical Oxygen Generators? Technical Instructions 4;2.8 | ☐ Yes, Explain ☐ No |
| Is the operator required to have a Security Plan? Technical Instructions1;5.1.3 | ☐ Yes, Explain ☐ No |

Attachment B Dangerous Goods Training Programme — Approval Checklist

| Name of the Air Carrier | Cert. Number: | | Operations Inspector: | | | |
|---|---|----------------------|----------------------------|--------------------|---------|------------|
| Certificate Type: | ☐Will Carry | | | □Passenger | | |
| | ☐ Will Not Carry | | | All Cargo | | |
| Reviewed By: | Date: | Approved E | By: | | Approve | d |
| | | | | ☐YÉS ☐NO | | NO |
| Objective: | and the December Of the | la la caracter de la | | | | |
| This review checklist is designed to dangerous goods defined in the Tech | | is inspector in de | etermining it air carriers | s training progra | mme co | ntains the |
| Tasks: | | | | | | |
| To meet the objective a Dangerous G | Goods Inspector should acco | mplish the follow | ing tasks: | | | |
| Identify governing agency represer | | | | cate. | | |
| 2. Identify the operator's contact that | | | | | | |
| Review the content of the dangero | | | oodo traninig programm | | | |
| Coordinate any dangerous goods in the state of the s | | | ne responsible inspecto | r to the air opera | itor. | |
| 5. If no corrections are needed, appro | | | | - 10 органа | | |
| Questions: | ove and admigorate group pro | <u> </u> | | | | |
| To meet the objective, the Dangerou | us Goods Inspector should | determine wheth | er the operators dange | erous goods trai | nina co | ntains the |
| following elements: | | | pg- | good man | 9 | |
| General Philosophy | | Applicable Cit | ations | Yes | No | NA |
| Purpose of DG Training Programm | ne | ICAO 1;4.1 | | 100 | | 1.07. |
| Applicable Regulatory Materials | | | ICAO 1;1 ICAO 1;2 | | | |
| Use of ICAO Technical Instructions | S | ICAO 1;1.1 | 10/10 1,1 10/10 1,2 | | | |
| 6. Definitions used in air transportation | | ICAO 1;3.1 | | | | |
| 7. General Transportation Requirement | | ICAO 1;2 | | | | |
| 8. Transport by Aircraft | , , , , , , , , , , , , , , , , , , , | ICAO 1;1.1.1 | | | | |
| Training Requirements and Record | d Keening | ICAO 1;4 | | | | |
| Dangerous Goods Security | a recepting | ICAO 1;5.1 | | | | |
| Limitations | | | ations | Yes | No | N/A |
| Dangerous goods Forbidden on Ai | rcraft | Applicable Cit | allong | 103 | 110 | 11// |
| Exempt Dangerous goods | Torait | | AO 1;2.4 ICAO 4;4.3.5 | | | |
| 3. Hidden Dangerous goods | | ICAO 7;6.1 | 10 1,2.4 10/10 4,4.0.0 | | | |
| Dangerous Goods carried by passes | engers and crewmembers | ICAO 8;1.1 | | | | |
| General Requirements For Shipper | re | Applicable Cit | ations | Yes | No | N/A |
| Shippers Specific Responsibility | | | AO1;1.2 ICAO 5;1.4 | 100 | 110 | 14/74 |
| Regulations | iles and compilation to | 10/10 1,11110/ | 101,1.2 10/10 0,1.4 | | | |
| Identify and Recognize DG COMA | AT . | ICAO 1;4.2 | | | | |
| Specific DG COMAT Exceptions | | ICAO 1;2.2 | | | | |
| | | · | | | | |
| List of Dangerous goods | | Applicable Cit | ations | Yes | No | N/A |
| Purpose and Use of the Dangerou | s Goods Table | ICAO 3;2 | | | | |
| 2. Proper Shipping Names | | ICAO 2;0.3 3; | 1.2 | | | |
| 3. Hazard Class (definition) | | ICAO 2;0.1 | | | | |
| 4. UN/ID Numbers | | ICAO 2;0.3 | | | | |
| 5. Packing Group | | ICAO 2;0.2.4 | | | | |
| General Packing Requirements | | Applicable Cit | ations | Yes | No | N/A |
| Shippers Responsibilities | | ICAO 5;1.4 | | | | |
| General Packing Requirements | | ICAO 5;1.1 | | | | |
| 3. Packing Instructions and Assignment | ents | ICAO 4;2 | | | | |
| 4.Excepted Quantity Exceptions | ICAO 3;5.1 | | | | | |
| 5. Limited Quantity Exceptions | | ICAO 5;4.1 | | | | |
| Labeling and Marking | | | ations | Yes | No | N/A |
| 1. Markings Required on Package | es Containing Dangerous | ICAO 5;2 | | | | |
| Goods | | ICAO 5;3 | | | | |
| 2. Label Required on Packages Cont | Label Required on Packages Containing Dangerous Goods | | | | | |

| Applicable Citations | Yes | No | N/A |
|----------------------------------|---|---|--|
| ICAO 5;4.1.6 | | | |
| ICAO 5:4 ICAO 7;4.10 | | | |
| ICAO 5;4.1.4 ICAO 5;4.2 | | | |
| ICAO 7;4 | | | |
| Applicable Citations | Yes | No | N/A |
| ICAO 7;1 | | | |
| ICAO 7;4.7 ICAO 7;5.1 | | | |
| ICAO 7;1.3 ICAO 7;1.4 ICAO 7;3.1 | | | |
| Applicable Citations | Yes | No | N / A |
| ICAO 7;6.1 | | | |
| ICAO 7;6.1, ICAO 7;5.2.2 | | | |
| ICAO 7;4.4 ICAO 7;4.5 ICAO 7;4.6 | | | |
| Applicable Citations | Yes | No | N/A |
| ICAO 7;2.7 ICAO 7;3.1.2 | | | |
| ICAO 7;2.2 | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Yes | No | N/A |
| | | | |
| | | | |
| | Yes | No | N/A |
| | | | |
| | Yes | No | N/A |
| ICAO 7;4.8 | | | |
| | | | |
| | | | _ |
| | | | |
| | | | |
| | ICAO 5;4.1.6 ICAO 5;4.1.6 ICAO 5;4.1.4 ICAO 7;4.10 ICAO 7;4 Applicable Citations ICAO 7;1 ICAO 7;1.3 ICAO 7;5.1 ICAO 7;1.3 ICAO 7;1.4 ICAO 7;3.1 Applicable Citations ICAO ICAO 7;6.1 ICAO 7;6.1 ICAO 7;6.1, ICAO 7;5.2.2 ICAO 7;4.4 ICAO 7;4.5 ICAO 7;4.6 Applicable Citations ICAO 7;2.7 ICAO 7;3.1.2 | ICAO 5;4.1.6 ICAO 5;4.1.0 ICAO 5;4.1.4 ICAO 5;4.2 ICAO 7;4. ICAO 7;4. ICAO 7;4. ICAO 7;4. ICAO 7;4. ICAO 7;1. ICAO 7;1. ICAO 7;1.3 ICAO 7;1.4 ICAO 7;3.1 ICAO 7;6.1 ICAO 7;6.1 ICAO 7;4.4 ICAO 7;4.5 ICAO 7;4.6 ICAO 7;2.7 ICAO 7;3.1.2 ICAO 7;2.2 ICAO 7;2.3 ICAO 7;3.1.2 ICAO 7;2.4 ICAO 7;4.1 ICAO 7;4.2 ICAO 7;4.2 ICAO 7;4.2 ICAO 7;4.2 ICAO 7;4.3 ICAO 7;4.2 ICAO 7;4.2 ICAO 7;4.3 ICAO 7;4.2 ICAO 0 8.1.1 ICAO 1;2.5 ICAO 8.1.1 ICAO 1;2.5 ICAO 8.1.1 ICAD ICAD ICAO ICAO ICAD ICAO ICAO ICAD ICAO ICAO ICAO ICAD ICAO ICAO ICAO ICAO ICAO ICAO ICAO ICAO | ICAO 5;4.1.6 ICAO 7;4.10 ICAO 5;4.1.4 ICAO 5;4.2 ICAO 7;4 Applicable Citations Yes No ICAO 7;1 ICAO 7;1.3 ICAO 7;5.1 ICAO 7;1.3 ICAO 7;1.4 ICAO 7;3.1 Applicable Citations Yes No ICAO 7;6.1 ICAO 7;6.1 ICAO 7;6.1 ICAO 7;4.4 ICAO 7;4.5 ICAO 7;4.6 ICAO 7;2.7 ICAO 7;3.1.2 ICAO 7;2.7 ICAO 7;3.1.2 ICAO 7;2.4.2 ICAO 7;2.4.1 ICAO 7;2.4.1 ICAO 7;2.4.1 ICAO 7;3.3 Applicable Citations Yes No ICAO 7;4.1 ICAO 7;4.1 ICAO 7;4.2 ICAO 7;4.2 ICAO 7;4.2 ICAO 7;4.3 Applicable Citations Yes No ICAO 7;4.2 ICAO 7;4.2 ICAO 7;4.3 Applicable Citations Yes No ICAO 1;2.5 ICAO 8.1.1 Applicable Citations Yes No ICAO 1;2.5 ICAO 1;4.5 ICAO 1;4.5 |

ATTACHMENT III TO CHAPTER 7

OPERATIONS SPECIFICATIONS

OPSPEC #xxxx - TRANSPORT OF DANGEROUS GOODS

- A. Authorization. Operations specification (OpSpec) XXXX is an optional authorization applicable to operators conducting operations under State operating regulations that choose to comply with the applicable regulations to carry Dangerous Goods.
- B. Regulatory Requirements. State operating regulations require the following:
 - All Operators conducting operations under State operating regulations, must indicate in their operations specification that they "will-carry" (are permitted to carry) or "will-not-carry" (are prohibited from carrying) Dangerous Goods. OpSpec XXXX is issued for those that "will-carry" Dangerous Goods. OpSpec XXXX must contain a statement that the operator "will-not-carry" Dangerous Goods.
 - 2) Operators must comply with the manual requirements outlined in State operating regulations and with the Dangerous Goods training programme requirements in the Technical Instructions.
- C. Operators That Choose to Carry Dangerous Goods (Will-Carry).
 - 1) An operator conducting operations under State operating regulations that chooses to carry Dangerous Goods (including spares and/or company materials (COMAT) classified as Dangerous Goods) must provide to its principal inspector (PI) a general outline of the aspects of the proposed training programme as presented in Table 1-4 of the Technical Instructions. Operations manuals with the procedures and information to be used to assist personnel in the acceptance, handling, loading and transport of Dangerous Goods must also be submitted. The POI will forward this material to the appropriate State Dangerous Goods office for review and approval.
 - 2) Provided the following conditions are met, the operator may be authorized to accept, handle, and transport Dangerous Goods.
 - a) Packages containing Dangerous Goods are properly offered and accepted in compliance with the Technical Instructions, Part 7, Chapter 1;
 - b) Packages containing Dangerous Goods are properly handled, stored, packaged, loaded, and carried onboard the operator's aircraft in compliance with the Technical Instructions, Part 7, Chapter 2;
 - The requirements for the notification to the PIC are as required in the Technical Instructions, Part 7, Chapter 4; and
 - d) Aircraft replacement parts, spares, consumable materials or other items regulated by the Technical Instructions are properly handled, packaged, and transported.
 - 3) Additionally, for each crewmember and person performing or directly supervising Dangerous Goods function involving items for transport on an aircraft, the operator's manual required by State operating regulations shall contain those procedures and information necessary to assist the crewmember or other person in identifying packages marked or labeled as containing Dangerous Goods or show signs of containing undeclared Dangerous Goods.marked or labeled as containing Dangerous Goods or that show signs of containing undeclared Dangerous Goods.
 - 4) The manual required by State operating regulations, shall contain the operator's procedures for rejecting packages that do not conform to the Dangerous Goods Regulations in the Technical Instructions, or that appear to contain undeclared Dangerous Goods.
 - 5) The manual required by State operating regulations, shall contain the operator's procedures for complying with the Dangerous Goods accident and incident reporting requirements The Technical Instructions and the reporting of undeclared and misdeclared Dangerous Goods.

- 6) The operator is responsible for maintaining the records in initial and recurrent Dangerous Goods training within the three preceding years of all direct employees, contractors, and subcontractors directly supervising or performing an applicable Dangerous Goods function as described in the Technical Instructions. The training records may be electronic or paper and must be made available to the State upon request at the location the trained person performs or directly supervises the covered Dangerous Goods function.
- 7) Dangerous Goods training records must contain the following:
 - Individual's name.
 - Most recent training completion date.
 - A description, copy, or reference to training material.
 - Name and address of organization providing training.
 - Evidence that a test was satisfactorily completed.
- D. Operators that Choose Not to Carry Dangerous Goods (Will-Not-Carry).
 - 1) OpSpec XXXX will state that the operator conducting operations under State operating regulations is not authorized and shall not carry Dangerous Goods, satisfying the OpSpec regulatory requirement for a "will-not-carry" operator. The operator is prohibited from accepting, handling, or transporting Dangerous Goods to include spares and/or COMAT. Will Not Carry operators must provide to its PI a general outline of the aspects of the proposed training programme as presented in Table 1-5 of the Technical Instructions.
 - 2) Consistent with this prohibition, for each crewmember and person performing or directly supervising the acceptance, handling, or loading of items for transport on an aircraft, the operator's manual required by State operating regulations shall contain those procedures and information necessary to assist the crewmember or other person in identifying packages that are marked or labeled as containing Dangerous Goods or that show signs of containing undeclared Dangerous Goods.
 - 3) Dangerous Goods training records must contain the following:
 - Individual's name.
 - Most recent training completion date.
 - A description, copy, or reference to training material.
 - Name and address of organization providing training.
 - Evidence that a test was satisfactorily completed.
 - 4) The manual required by State operating regulations, shall contain the operator's procedures for rejecting packages offered for transport that contain Dangerous Goods or that appear to contain undeclared Dangerous Goods.
- F. Issuing Operations Specifications
 - 1) Upon approval of operations manuals and training programmes, the POI will issue the appropriate operations specifications to carry Dangerous Goods (Will Carry) or to prohibit carriage of Dangerous Goods (Will Not Carry) in accordance with State operating regulations. Maybe this is a good place to refer to the template in Annex 6 with a copy. Also are there any correlating Annex 6 references for any of this stuff?

OPERATIONS SPECIFICATIONS

APPENDIX 6. AIR OPERATOR CERTIFICATE (AOC)

(Note. — See Chapter 4, 4.2.1.5 and 4.2.1.6)

Purpose and scope

- 1.1 The AOC and its associated model-specific operations specifications shall contain the minimum information required in paragraphs 2 and 3 respectively, in a standardized format.
- 1.2 The air operator certificate and its associated operations specifications shall define the operations for which an operator is authorized.

Note.— Attachment F, paragraph 3.2.2, contains additional information that may be listed in the operations specifications associated with the air operator certificate.

2. AOC template

Note.— Chapter 6, 6.1.2, requires a certified true copy of the AOC to be carried aboard.

| AIR OPERATOR CERTIFICATE | | | | | |
|--|---|---|--|--|--|
| 1 | STATE OF THE OPERATOR ² | 1 | | | |
| | ISSUING AUTHORITY ³ | | | | |
| AOC # ⁴ : Expiry date ⁵ : | OPERATOR NAME ⁶ Disa trading name ⁷ : Operator address ⁸ : Telephone ⁹ : Fax: E-mail: | OPERATIONAL POINTS OF CONTACT ¹⁰ Contact details, at which operational management can be contacted without undue delay, are listed in11. | | | |
| This certificate certifies that | | | | | |
| Date of issue ¹⁴ : | Name and signature ¹⁵ : Title: | | | | |

Notes.—

- For use of the State of the Operator.
- 2. Replace by the name of the State of the Operator.
- 3. Replace by the identification of the issuing authority of the State of the Operator.
- Unique AOC number, as issued by the State of the Operator.
- Date after which the AOC ceases to be valid (dd-mm-yyyy).
- 6. Replace by the operator's registered name.
- 7. Operator's trading name, if different. Insert "dba" before the trading name (for "doing business as").
- Operator's principal place of business address.
- 9. Operator's principal place of business telephone and fax details, including the country code. E-mail to be provided if available.
- 10. The contact details include the telephone and fax numbers, including the country code, and the e-mail address (if available) at which operational management can be contacted without undue delay for issues related to flight operations, airworthiness, flight and cabin crew competency, dangerous goods and other matters as appropriate.
- 11. Insert the controlled document, carried on board, in which the contact details are listed, with the appropriate paragraph or page reference, e.g.: "Contact details are listed in the operations manual, Gen/Basic, Chapter 1, 1.1" or "... are listed in the operations specifications, page 1" or "... are listed in an attachment to this document".
- 12. Operator's registered name.
- 13. Insertion of reference to the appropriate civil aviation regulations.
- 14. Issuance date of the AOC (dd-mm-yyyy).
- 15. Title, name and signature of the authority representative. In addition, an official stamp may be applied on the AOC.

3. Operations specifications for each aircraft model

Note.— Chapter 6, 6.1.2, requires a copy of the operations specifications of this section to be carried aboard.

3.1 For each aircraft model in the operator's fleet, identified by aircraft make, model and series, the following list of authorizations, conditions and limitations shall be included: issuing authority contact details, operator name and AOC number, date of issue and signature of the authority

representative, aircraft model, types and area of operations, special limitations and authorizations.

Note.— If authorizations and limitations are identical for two or more models, these models may be grouped in a single list.

3.2 The operations specifications layout referred to in Chapter 4, 4.2.1.6, shall be as follows:

Note.— The MEL constitutes an integral part of the operations manual.

| OPERATIONS SPECIFICATIONS (subject to the approved conditions in the operations manual) | | | | | |
|---|-------------|--------------------|--|----------------------|--|
| | | ISS | JING AUTHORITY CONTACT DETAILS ¹ | | |
| Telephone: | | | Fax: E-ma | il: | |
| AOC#2:Op | erator na | ame ³ : | Date ⁴ : | Signature: | |
| Dt | a trading | name: _ | | | |
| Aircraft model ⁵ : | | | | | |
| Types of operation: Commercia | l air trans | sportation | n □ Passengers □ Cargo □ (| Other ⁶ : | |
| Area(s) of operation ⁷ : | | | | | |
| Special limitations ⁸ : | | | | | |
| SPECIAL AUTHORIZATIONS | YES | NO | SPECIFIC APPROVALS ⁹ | REMARKS | |
| Dangerous goods | | | | | |
| Low visibility operations | | | | | |
| Approach and landing | | | CAT ¹⁰ : ft | | |
| Take-off | | | RVR ¹¹ : m | | |
| RVSM ¹² □ N/A | | | | | |
| ETOPS ¹³ □ N/A | | | Maximum diversion time ¹⁴ : minutes | | |
| Navigation specifications for PBN operations ¹⁵ | | | | 16 | |
| Continuing airworthiness | X | X | 17 | | |
| Other ¹⁸ | | | | | |

Notes.—

- 1. Telephone and fax contact details of the authority, including the country code. E-mail to be provided if available.
- Insert the associated AOC number:
- 3. Insert the operator's registered name and the operator's trading name, if different. Insert "dba" before the trading name (for "doing business as").
- 4. Issuance date of the operations specifications (dd-mm-yyyy) and signature of the authority representative.
- Insert the Commercial Aviation Safety Team (CAST)/ICAO designation of the aircraft make, model and series, or master series, if a series has been designated (e.g. Boeing-737-3K2 or Boeing-777-232). The CAST/ICAO taxonomy is available at: http://www.intlaviationstandards.org/.
- 6. Other type of transportation to be specified (e.g. emergency medical service).
- List the geographical area(s) of authorized operation (by geographical coordinates or specific routes, flight information region or national or regional boundaries).
- 8. List the applicable special limitations (e.g. VFR only, day only).
- 9. List in this column the most permissive criteria for each approval or the approval type (with appropriate criteria).
- Insert the applicable precision approach category (CAT I, II, IIIA, IIIB or IIIC). Insert the minimum RVR in metres and decision height in feet. One
 line is used per listed approach category.
- 11. Insert the approved minimum take-off RVR in metres. One line per approval may be used if different approvals are granted.
- 12. "Not applicable (N/A)" box may be checked only if the aircraft maximum ceiling is below FL 290.
- 13. Extended range operations (ETOPS) currently applies only to twin-engined aircraft. Therefore the "Not applicable (N/A)" box may be checked if the aircraft model has more than 2 engines. Should the concept be extended to 3 or 4-engined aircraft in the future, the "Yes" or "No" checkbox will be required to be checked.
- 14. The threshold distance may also be listed (in NM), as well as the engine type.
- 15. Performance-based navigation (PBN): one line is used for each PBN specification authorization (e.g. RNAV 10, RNAV 1, RNP 4), with appropriate limitations or conditions listed in the "Specific Approvals" and/or "Remarks" columns.
- 16. Limitations, conditions and regulatory basis for operational approval associated with the performance-based navigation specifications (e.g. GNSS, DME/DME/IRU). Information on performance-based navigation, and guidance concerning the implementation and operational approval process, are contained in the Performance-based Navigation Manual (Doc 9613).
- 17. Insert the name of the person/organization responsible for ensuring that the continuing airworthiness of the aircraft is maintained and the regulation that requires the work, i.e. within the AOC regulation or a specific approval (e.g. EC2042/2003, Part M, Subpart G).
- Other authorizations or data can be entered here, using one line (or one multi-line block) per authorization (e.g. special approach authorization, MNPS, approved navigation performance).

— END —