

AMENDMENT No. 30

TO THE

**INTERNATIONAL STANDARDS
AND RECOMMENDED PRACTICES**

OPERATION OF AIRCRAFT

ANNEX 6

TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION

PART I

INTERNATIONAL COMMERCIAL AIR TRANSPORT — AEROPLANES

The amendment to Annex 6, Part I contained in this document was adopted by the Council of ICAO on **14 March 2006**. Such parts of this amendment as have not been disapproved by more than half of the total number of Contracting States on or before **17 July 2006** will become effective on that date and will become applicable on **23 November 2006** as specified in the Resolution of Adoption.

MARCH 2006

INTERNATIONAL CIVIL AVIATION ORGANIZATION

**AMENDMENT 30 TO THE INTERNATIONAL STANDARDS
AND RECOMMENDED PRACTICES**

**OPERATION OF AIRCRAFT — INTERNATIONAL COMMERCIAL
AIR TRANSPORT — AEROPLANES**

RESOLUTION OF ADOPTION

The Council

Acting in accordance with the Convention on International Civil Aviation, and particularly with the provisions of Articles 37, 54 and 90 thereof,

1. *Hereby adopts* on 14 March 2006 Amendment 30 to the International Standards and Recommended Practices contained in the document entitled *International Standards and Recommended Practices, Annex 6 — Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes*, which for convenience is designated Annex 6, Part I to the Convention;
2. *Prescribes* 17 July 2006 as the date upon which the said amendment shall become effective, except for any part thereof in respect of which a majority of the Contracting States have registered their disapproval with the Council before that date;
3. *Resolves* that the said amendment or such parts thereof as have become effective shall become applicable on 23 November 2006;
4. *Requests the Secretary General:*
 - a) to notify each Contracting State immediately of the above action and immediately after 17 July 2006 of those parts of the amendment which have become effective;
 - b) to request each Contracting State:
 - 1) to notify the Organization (in accordance with the obligation imposed by Article 38 of the Convention) of the differences that will exist on 23 November 2006 between its national regulations or practices and the provisions of the Standards in the Annex as hereby amended, such notification to be made before 23 October 2006, and thereafter to notify the Organization of any further differences that arise; and
 - 2) to notify the Organization before 23 October 2006 of the date or dates by which it will have complied with the provisions of the Standards in the Annex as hereby amended.
 - c) to invite each Contracting State to notify additionally any differences between its own practices and those established by the Recommended Practices, when the notification of such differences is important for the safety of air navigation, following the procedure specified in subparagraph b) above with respect to differences from Standards.

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**NOTES ON THE PRESENTATION OF THE
AMENDMENT TO ANNEX 6, PART I**

The text of the amendment is arranged to show deleted text with a line through it and new text highlighted with grey shading, as shown below:

~~Text to be deleted is shown with a line through it.~~

text to be deleted

New text to be inserted is highlighted with grey shading.

new text to be inserted

~~Text to be deleted is shown with a line through it~~
followed by the replacement text which is highlighted with grey shading.

new text to replace existing text

TEXT OF AMENDMENT 30 TO THE

INTERNATIONAL STANDARDS AND RECOMMENDED PRACTICES

OPERATION OF AIRCRAFT

ANNEX 6 TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION

PART I INTERNATIONAL COMMERCIAL AIR TRANSPORT – AEROPLANES

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CHAPTER 1. DEFINITIONS

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Flight operations officer/flight dispatcher. A person designated by the operator to engage in the control and supervision of flight operations, whether licensed or not, suitably qualified in accordance with Annex 1, who supports, briefs, and/or assists the pilot-in-command in the safe conduct of the flight.

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Safe forced landing. Unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface.

Safety programme. An integrated set of regulations and activities aimed at improving safety.

Safety management system. A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

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CHAPTER 3. GENERAL

3.1 Compliance with laws, regulations and procedures

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3.1.2 An operator shall ensure that all pilots ...

Note.— Information for pilots and flight operations personnel on flight procedure parameters and operational procedures is contained in PANS-OPS, Volume I. Criteria for the construction of visual and instrument flight procedures are contained in PANS-OPS, Volume II. Obstacle clearance criteria and procedures used in certain States may differ from PANS-OPS, and knowledge of these differences is important for safety reasons.

...

3.1.4 Responsibility for operational control shall be delegated only to the pilot-in-command and to a flight operations officer/flight dispatcher if an operator's approved method of control and supervision of flight operations requires the use of flight operations officer/flight dispatcher personnel.

Note.— Guidance on the operational control organization and the role of the flight operations officer/flight dispatcher is contained in the Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc 8335). Detailed guidance on the authorization, duties and responsibilities of the flight operations officer/flight dispatcher is contained in Preparation of an Operations Manual (Doc 9376). The requirements for age, skill, knowledge and experience for licensed flight operations officers/flight dispatchers are contained in Annex 1.

3.1.5 If an emergency situation which endangers the safety of the aeroplane or persons becomes known first to the flight operations officer/flight dispatcher, action by that person in accordance with 4.6.2 shall include, where necessary, notification to the appropriate authorities of the nature of the situation without delay, and requests for assistance if required.

Editorial Note.— Renumber subsequent paragraphs.

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3.1.68 Operators shall ensure that flight crew members demonstrate the ability to speak and understand the language used for aeronautical radiotelephony communications as specified in Annex 1.

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3.2 Accident prevention and flight safety programme Safety management

3.2.1 States ~~An operator~~ shall establish and maintain ~~an accident prevention and flight safety programme~~, in order to achieve an acceptable level of safety in the operation of aircraft.

3.2.2 The acceptable level of safety to be achieved shall be established by the State(s) concerned.

Note.— Guidance on ~~accident prevention~~ safety programmes is contained in the ~~Accident Prevention Manual (Doc 9422)~~ ICAO Safety Management Manual (Doc 9859) and the definition of acceptable levels of safety in Attachment E to Annex 11 ~~and in the Preparation of an Operations Manual (Doc 9376).~~

3.2.3 **Recommendation.**— States should require, as part of their safety programme, that an operator implements a safety management system acceptable to the State of the Operator that, as a minimum:

a) identifies safety hazards;

b) ensures that remedial action necessary to maintain an acceptable level of safety is implemented;

c) *provides for continuous monitoring and regular assessment of the safety level achieved; and*

d) *aims to make continuous improvement to the overall level of safety.*

3.2.4 From 1 January 2009, States shall require, as part of their safety programme, that an operator implements a safety management system acceptable to the State of the Operator that, as a minimum:

a) identifies safety hazards;

b) ensures that remedial action necessary to maintain an acceptable level of safety is implemented;

c) provides for continuous monitoring and regular assessment of the safety level achieved; and

d) aims to make continuous improvement to the overall level of safety.

3.2.5 A safety management system shall clearly define lines of safety accountability throughout the operator's organization, including a direct accountability for safety on the part of senior management.

Note.— Guidance on safety management systems is contained in the ICAO Safety Management Manual (Doc 9859).

3.2.2.6 **Recommendation.**— *From 1 January 2002, an operator of an aeroplane of a certificated take-off mass in excess of 20 000 kg should establish and maintain a flight data analysis programme as part of its ~~accident prevention and flight safety programme~~ safety management system.*

3.2.3.7 *From 1 January 2005, an operator of an aeroplane of a maximum certificated take-off mass in excess of 27 000 kg shall establish and maintain a flight data analysis programme as part of its ~~accident prevention and flight safety programme~~ safety management system.*

Note.— An operator may contract the operation of a flight data analysis programme to another party while retaining overall responsibility for the maintenance of such a programme.

3.2.4.8 A flight data analysis programme shall be non-punitive and contain adequate safeguards to protect the source(s) of the data.

Note 1.— Guidance on flight data analysis programmes is contained in the ~~Accident Prevention~~ ICAO Safety Management Manual (Doc ~~9422~~ 9859).

Note 2.— Legal guidance for the protection of information from safety data collection and processing systems is contained in Annex 13, Attachment E.

3.3 ~~Flight safety documents system~~

3.2.9 An operator shall establish a flight safety documents system, for the use and guidance of

operational personnel, as part of its safety management system.

Note.— Guidance on the development and organization of a flight safety documents system is provided in Attachment H.

3.43.3 Dangerous goods

Editorial Note.— Renumber subsequent paragraph.

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CHAPTER 4. FLIGHT OPERATIONS

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4.2 Operational certification and supervision

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4.2.1 The air operator certificate

4.2.1.1 An operator shall not engage in commercial air transport operations unless in possession of a valid air operator certificate ~~or equivalent document~~ issued by the State of the Operator.

4.2.1.2 The air operator certificate ~~or equivalent document~~ shall authorize the operator to conduct commercial air transport operations in accordance with such specified authorizations, conditions and limitations. ~~as may be specified.~~

Note.— Guidance on the air operator certificate and associated authorizations, conditions and limitations, which may be contained in operations specifications, is contained in the Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc 8335).

4.2.1.3 Contracting States shall recognize as valid an air operator certificate issued by another Contracting State, provided that the requirements under which the certificate was issued are at least equal to the applicable Standards specified in this Annex.

4.2.1.34 The issue of an air operator certificate ~~or equivalent document~~ by the State of the Operator shall be dependent upon the operator demonstrating an adequate organization, method of control and supervision of flight operations, training programme as well as ground handling and maintenance arrangements consistent with the nature and extent of the operations specified.

Note.— Attachment F contains guidance on the issue of an air operator certificate.

4.2.1.45 The continued validity of an air operator certificate ~~or equivalent document~~ shall depend upon the operator maintaining the requirements of 4.2.1.34 under the supervision of the State of the Operator.

4.2.1.56 The air operator certificate ~~or equivalent document~~ shall contain at least the following:

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4.2.1.67 The State of the Operator shall establish a system for both the certification and the continued surveillance of the operator in accordance with Appendix 5 to ensure that the required standards of operations established in 4.2 are maintained.

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4.6 Duties of flight operations officer/flight dispatcher

4.6.1 A flight operations officer/flight dispatcher ~~when employed~~ in conjunction with a method of flight control and supervision of flight operations in accordance with 4.2.1.4 shall:

- a) assist the pilot-in-command in flight preparation and provide the relevant information required;
- b) assist the pilot-in-command in preparing the operational and ATS flight plans, sign when applicable and file the ATS flight plan with the appropriate ATS unit; and
- c) furnish the pilot-in-command while in flight, by appropriate means, with information which may be necessary for the safe conduct of the flight.
- d) ~~in the event of an emergency, initiate such procedures as may be outlined in the operations manual.~~

4.6.2 ~~In the event of an emergency, a~~ A flight operations officer/flight dispatcher shall ~~avoid taking any action that would conflict with the procedures established by:~~

- a) ~~air traffic control;~~ initiate such procedures as outlined in the operations manual while avoiding taking any action that would conflict with ATC procedures; and
- b) ~~the meteorological service; or~~ convey safety-related information to the pilot-in-command that may be necessary for the safe conduct of the flight, including information related to any amendments to the flight plan that become necessary in the course of the flight.
- e) ~~the communications service.~~

Note.— It is equally important that the pilot-in-command also convey similar information to the flight operations officer/flight dispatcher during the course of the flight, particularly in the context of emergency situations.

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CHAPTER 6. AEROPLANE INSTRUMENTS, EQUIPMENT, AND FLIGHT DOCUMENTS

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6.1 General

6.1.1 In addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, the instruments, equipment and flight documents prescribed in the following paragraphs shall be installed or carried, as appropriate, in aeroplanes according to the aeroplane used and to the circumstances under which the flight is to be conducted. The prescribed instruments and equipment, including their installation, shall be approved or accepted by the State of Registry.

6.1.2 An aeroplane shall carry a certified true copy of the air operator certificate specified in 4.2.1, and a copy of the authorizations, conditions and limitations relevant to the aeroplane type, issued in conjunction with the certificate. When the certificate and the associated authorizations, conditions and limitations are issued by the State of the Operator in a language other than English, an English translation shall be included.

Note.— Guidance on the air operator certificate and associated authorizations, conditions and limitations, which may be contained in operations specifications, is contained in the Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc 8335).

Editorial Note.— Renumber subsequent paragraphs.

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6.15.1 All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than nine passengers shall be equipped with a ground proximity warning system.

~~6.15.2 All turbine-engined aeroplanes of a maximum certificated take off mass in excess of 15 000 kg or authorized to carry more than 30 passengers, for which the individual certificate of airworthiness is first issued on or after 1 January 2001, shall be equipped with a ground proximity warning system which has a forward looking terrain avoidance function.~~

6.15.3 ² From 1 January 2003, all turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 15 000 kg or authorized to carry more than 30 passengers shall be equipped with a ground proximity warning system which has a forward looking terrain avoidance function.

Editorial Note.— Renumber subsequent paragraphs and revise paragraph references.

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CHAPTER 8. AEROPLANE MAINTENANCE

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8.2.1 The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance control manual, acceptable to the State of Registry, in accordance with the requirements of 11.2. The design of the Manual shall observe Human Factors principles.

Note.- Guidance material on the application of Human Factors principles can be found in the Human Factors Training Manual (Doc 9683).

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8.7 Approved maintenance organization

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8.7.3 Safety management

8.7.3.1 States shall establish a safety programme, in order to achieve an acceptable level of safety in the maintenance of aircraft.

8.7.3.2 The acceptable level of safety to be achieved shall be established by the State(s) concerned.

Note.— Guidance on safety programmes and on defining acceptable levels of safety is contained in Attachment E to Annex 11 and in the ICAO Safety Management Manual (Doc 9859).

8.7.3.3 **Recommendation.**— *States should require, as part of their safety programme, that a maintenance organization implements a safety management system acceptable to the State, that as a minimum:*

- a) *identifies safety hazards;*
- b) *ensures that remedial action necessary to maintain an acceptable level of safety is implemented;*
- c) *provides for continuous monitoring and regular assessment of the safety level achieved; and*
- d) *aims to make continuous improvement to the overall level of safety.*

8.7.3.4 From 1 January 2009, States shall require, as part of their safety programme, that a maintenance organization implements a safety management system acceptable to the State that, as a minimum:

- a) identifies safety hazards;
- b) ensures that remedial action necessary to maintain an acceptable level of safety is implemented;
- c) provides for continuous monitoring and regular assessment of the safety level achieved; and
- d) aims to make continuous improvement to the overall level of safety.

8.7.3.5 A safety management system shall clearly define lines of safety accountability throughout a maintenance organization, including a direct accountability for safety on the part of senior management.

Note.— Guidance on safety management systems is contained in the ICAO Safety Management Manual (Doc 9859).

8.7.3.4 Maintenance procedures and quality assurance system

8.7.3.4.1 The maintenance organization shall establish procedures, acceptable to the State granting the approval, which ensure good maintenance practices and compliance with all relevant requirements of this chapter.

8.7.3.4.2 The maintenance organization shall ensure compliance with 8.7.3.4.1 by either establishing an independent quality assurance system to monitor compliance with and adequacy of the procedures, or by providing a system of inspection to ensure that all maintenance is properly performed.

Editorial Note.— Renumber subsequent paragraphs.

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CHAPTER 9. AEROPLANE FLIGHT CREW

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9.3.1 An operator shall establish and maintain a ground and flight training programme, approved by the State of the Operator, which ensures that all flight crew members are adequately trained to perform their assigned duties. The training programme shall:

- a) include ground and flight training facilities and properly qualified instructors as determined by the State of the Operator; ~~shall be provided.~~
- b) ~~The training programme shall~~ consist of ground and flight training in the type(s) of aeroplane on which the flight crew member serves;
- c) ~~and shall~~ include proper flight crew coordination and training in all types of emergency ~~or~~ and abnormal situations or procedures caused by power plant, airframe or systems malfunctions, fire or other abnormalities;
- d) ~~The training programme shall also~~ include training in knowledge and skills related to visual and instrument flight procedures for the intended area of operation, human performance including threat and error management and in the transport of dangerous goods;
- e) ~~The training for each flight crew member, particularly that relating to abnormal or emergency procedures, shall~~ ensure that all flight crew members know the functions for which they are responsible and the relation of these functions to the functions of other crew members; ~~particularly in regard to abnormal or emergency procedures; and~~
- f) ~~The training programme shall~~ be given on a recurrent basis, as determined by the State of the Operator and shall include an ~~examination to determine~~ assessment of competence.

Note 1.— Paragraph 4.2.4 prohibits the in-flight simulation of emergency or abnormal situations when passengers or cargo are being carried.

Note 2.— Flight training may, to the extent deemed appropriate by the State of the Operator, be given in ~~aeroplane synthetic flight trainers~~ flight simulation training devices approved by the State for that purpose.

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Note 7.— Information for pilots and flight operations personnel on flight procedure parameters and operational procedures is contained in PANS-OPS, Volume I. Criteria for the construction of visual and instrument flight procedures are contained in PANS-OPS, Volume II. Obstacle clearance criteria and procedures used in certain States may differ from PANS-OPS, and knowledge of these differences is important for safety reasons.

Note 8.— Guidance material to design flight crew training programmes can be found in the Preparation of an Operations Manual (Doc 9376).

Note 9.— Guidance material on the different means used to assess competence can be found in the Attachment to Chapter 2 of the Procedures for Air Navigation Services —Training (PANS-TRG) document (in preparation).

9.3.2 The requirement for recurrent flight training in a particular type of aeroplane shall be considered fulfilled by:

- a) the use, to the extent deemed feasible by the State of the Operator, of ~~aeroplane synthetic flight trainers~~ flight simulation training devices approved by that State for that purpose; or
- b) the completion within the appropriate period of the proficiency check required by 9.4.4 in that type of aeroplane.

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9.4 Qualifications

Note.— See the Manual of Procedures for the Establishment of a State's Personnel Licensing System (Doc 9379) for guidance of a general nature on cross-crew qualification, mixed-fleet flying and cross-credit.

9.4.1 Recent experience

9.4.1.1 An operator shall not assign a pilot-in-command or a co-pilot to operate at the flight controls of a type or variant of a type of an aeroplane during take-off and landing unless that pilot has operated the flight controls during at least three take-offs and landings within the preceding 90 days on the same type of aeroplane or in a flight simulator approved for the purpose.

9.4.1.2 When a pilot-in-command or a co-pilot is flying several variants of the same type of aeroplane or different types of aeroplane with similar characteristics in terms of operating procedures,

systems and handling, the State shall decide under which conditions the requirements of 9.4.1.1 for each variant or each type of aeroplane can be combined.

9.4.2 Recent experience — cruise relief pilot

9.4.2.1 An operator shall not assign a pilot to act in the capacity of cruise relief pilot in a type or variant of a type of an aeroplane unless, within the preceding 90 days that pilot has either:

- a) operated as a pilot-in-command, co-pilot or cruise relief pilot on the same type of aeroplane; or
- b) carried out flying skill refresher training including normal, abnormal and emergency procedures specific to cruise flight on the same type of aeroplane or in a flight simulator approved for the purpose, and has practised approach and landing procedures, where the approach and landing procedure practice may be performed as the pilot who is not flying the aeroplane.

9.4.2.2 When a cruise relief pilot is flying several variants of the same type of aeroplane or different types of aeroplane with similar characteristics in terms of operating procedures, systems and handling, the State shall decide under which conditions the requirements of 9.4.2.1 for each variant or each type of aeroplane can be combined.

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9.4.4 Pilot proficiency checks

9.4.4.1 An operator shall ensure that piloting technique and the ability to execute emergency procedures is checked in such a way as to demonstrate the pilot's competence on each type or variant of type of aeroplane. Where the operation may be conducted under instrument flight rules, an operator shall ensure that the pilot's competence to comply with such rules is demonstrated to either a check pilot of the operator or to a representative of the State of the Operator. Such checks shall be performed twice within any period of one year. Any two such checks which are similar and which occur within a period of four consecutive months shall not alone satisfy this requirement.

Note 1.— Flight ~~simulators~~ simulation training devices approved by the State of the Operator may be used for those parts of the checks for which they are specifically approved.

Note 2.— See ICAO Manual of Criteria for the Qualification of Flight Simulators (Doc 9625).

9.4.4.2 When an operator schedules flight crew on several variants of the same type of aeroplane or different types of aeroplane with similar characteristics in terms of operating procedures, systems and handling, the State shall decide under which conditions the requirements of 9.4.4.1 for each variant or each type of aeroplane can be combined.

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CHAPTER 10. FLIGHT OPERATIONS OFFICER/FLIGHT DISPATCHER

10.1 When the State of the Operator requires that a flight operations officer/flight dispatcher, ~~when~~ employed in conjunction with an approved method of control and flight supervision of flight operations be licensed, ~~requiring the services of licensed~~ that flight operations officers/flight dispatchers, shall be licensed in accordance with the provisions of Annex 1.

Note.— The above provisions do not necessarily require a flight operations officer/flight dispatcher to hold the licence specified in Annex 1. In accordance with 4.2.1 the method of flight supervision is subject to approval by the State of the Operator which may accept proof of qualifications other than the holding of the licence.

10.2 In accepting proof of qualifications other than the option of holding of a flight operations officer/flight dispatcher licence, the State of the Operator, in accordance with the approved method of control and supervision of flight operations, shall require that, as a minimum, such persons meet the requirements specified in Annex 1 for the flight operations officer/flight dispatcher licence.

Delete existing paragraph 10.2.

10.3 A flight operations officer/flight dispatcher shall not be assigned to duty unless that person has:

- a) satisfactorily completed an operator-specific training course that addresses all the specific components of its approved method of control and supervision of flight operations specified in 4.2.1.4;

Note.— Guidance on the composition of such training syllabi is provided in ICAO Doc 7192, Part D-3 — Flight Operations Officers/Flight Dispatchers.

- b) made within the preceding 12 months, at least a one-way qualification flight in the flight crew compartment of an aeroplane over any area for which that individual is authorized to exercise flight supervision. The flight should include landings at as many aerodromes as practicable;

Note.— For the purpose of the qualification flight, the flight operations officer/flight dispatcher must be able to monitor the flight crew intercommunication system and radio communications, and be able to observe the actions of the flight crew.

- c) demonstrated to the operator a knowledge of:
 - 1) the contents of the operations manual described in Appendix 2;
 - 2) the radio equipment in the aeroplanes used; and
 - 3) the navigation equipment in the aeroplanes used;
- d) demonstrated to the operator a knowledge of the following details concerning operations for which the officer is responsible and areas in which that individual is authorized to exercise flight supervision:

- 1) the seasonal meteorological conditions and the sources of meteorological information;
 - 2) the effects of meteorological conditions on radio reception in the aeroplanes used;
 - 3) the peculiarities and limitations of each navigation system which is used by the operation; and
 - 4) the aeroplane loading instructions;
- e) demonstrated to the operator knowledge and skills related to human performance relevant to dispatch duties; and
- f) demonstrated to the operator the ability to perform the duties specified in 4.6.

Editorial Note.— Renumber subsequent subparagraphs.

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APPENDIX 2. ORGANIZATION AND CONTENTS OF AN OPERATIONS MANUAL

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2. Contents

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2.1.12 Specific instructions for the computation of the quantities of fuel and oil to be carried, having regard to all circumstances of the operation including the possibility of loss of pressurization and the failure of one or more powerplants power units while en route.

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Insert new Appendix 5 as follows:

APPENDIX 5. SAFETY OVERSIGHT OF AIR OPERATORS

(Note. — See Chapter 4, 4.2.1.7)

1. Primary aviation legislation

1.1 The State of the Operator shall enact and implement laws that enable the State to regulate civil aviation through a Civil Aviation Authority or equivalent organization established for that purpose. The legislation shall empower the Authority to discharge the oversight responsibilities of the State. The legislation shall provide for the making of regulations, the certification and continued supervision of air operators, and the resolution of safety issues identified by the Authority.

Note.— The term Authority as used in Appendix 5 refers to the Civil Aviation Authority as well as equivalent organizations, including inspectors and staff.

1.2 The State of the Operator shall ensure that the laws of the State require air operators to provide the Authority with access to their personnel, aircraft, operations and facilities and associated records for the purpose of certification and continued surveillance.

Note.— Guidance on the critical elements of a system that enables a State to discharge its responsibility for inspection, certification and continued surveillance of operations is contained in the Safety Oversight Manual, Part A: The Establishment and Management of a State's Safety Oversight System (Doc 9734), the Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc 8335) and the Airworthiness Manual (Doc 9760).

2. Specific operating regulations

2.1 The State of the Operator shall adopt regulations that provide for the certification and continued surveillance of aircraft operations and the maintenance of aircraft in conformity with the Annexes to the Convention on International Civil Aviation.

2.2 The State of the Operator shall ensure that its regulations are sufficiently comprehensive, detailed, and current with respect to changes in technology and the operating environment to ensure that satisfactory compliance will result in an acceptable level of safety for the operations undertaken.

3. CAA structure and safety oversight functions

3.1 The State of the Operator shall ensure that the Authority is responsible for the safety oversight of air operators and that it has resources appropriate to the size and complexity of civil air operations under the jurisdiction of the State, to effectively discharge the responsibilities of the State.

3.2 The State of the Operator shall ensure that Authority inspectors have adequate support, credentials, and transportation to accomplish, independently, their certification and continued surveillance tasks.

4. Technical guidance

4.1 The State of the Operator shall ensure that Authority inspectors are provided with technical guidance manuals containing the policies, procedures, and standards to be used in the certification and continued surveillance of air operators.

4.2 The State of the Operator shall ensure that Authority inspectors are provided with technical guidance manuals containing the policies, procedures, and standards to be used in the resolution of safety issues, including enforcement.

4.3 The State of the Operator shall ensure that Authority inspectors are provided with technical guidance manuals that address ethics, personal conduct, and the avoidance of actual or perceived conflicts of interest in the performance of official duties.

5. Qualified technical personnel

5.1 The State of the Operator shall use a methodology to determine its inspector staffing requirements according to the size and complexity of civil air operations in that State.

5.2 **Recommendation.**— *The methodology in 5.1 should be documented.*

5.3 The State of the Operator shall establish qualification requirements to ensure that its inspector personnel have operational or technical work experience and training compatible with those activities they are required to certificate or inspect.

Note.— *Guidance on experience and training for inspectors is contained in the Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc 8335), Chapter 9, 9.4.*

5.4 The State of the Operator shall require Authority inspectors to complete initial and recurrent training in relevant technical subjects (including aircraft-specific subjects) and in skills necessary to effectively accomplish their certification and continued surveillance tasks.

5.5 **Recommendation.**— *The State of the Operator should take the necessary measures, such as remuneration and conditions of service, to ensure that qualified inspectors are recruited and retained.*

6. Licensing and certification obligations

6.1 The State of the Operator shall use a documented process for the certification of air operators that includes thorough technical evaluations that lead to approval or acceptance of procedures, documents and operations as specified in Part I.

6.2 The State of the Operator shall require, prior to commencement of new commercial air transport operations, air operators demonstrate that they can safely conduct the proposed operations.

Note.— *Attachment F contains further information in this regard.*

7. Continued surveillance obligations

7.1 The State of the Operator shall use a documented process for the continued surveillance of air operators to verify the continued validity of the air operator certificates issued by the Authority.

7.2 The State of the Operator shall use an ongoing surveillance plan to confirm that operators continue to meet the relevant requirements for initial certification and that each air operator is functioning satisfactorily.

8. Resolution of safety issues

8.1 The State of the Operator shall use a documented process to take appropriate corrective actions, up to and including enforcement measures, to resolve identified safety issues.

8.2 The State of the Operator shall ensure that identified safety issues are resolved in a timely manner through a system which monitors and records progress, including actions taken by the air operator, in resolving such issues.

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ATTACHMENT F. AIR OPERATOR CERTIFICATION OR EQUIVALENT DOCUMENT CERTIFICATION AND VALIDATION

Supplementary to Chapter 4, 4.2.1

Replace Attachment F with the following:

1. Purpose and scope

1.1 Introduction

The purpose of this Attachment is to provide guidance concerning actions required by States in connection with the operator certification requirements in Chapter 4, 4.2.1, particularly the means of accomplishing and recording those actions.

1.2 Prior certification required

In accordance with Standard 4.2.1.4, the issuance of an air operator certificate (AOC) is “dependent upon the operator demonstrating” to the State that its organization, training policy and programmes, flight operations, ground handling and maintenance arrangements are adequate considering the nature and extent of the operations to be conducted. The certification process involves the State’s evaluation of each operator and a determination that the operator is capable of conducting safe operations before initial issuance of an AOC or the addition of any subsequent authorizations to an AOC.

1.3 Standard certification practices

The State of the Operator is required by Standard 4.2.1.7 to establish a certification system to ensure compliance with the required standards for the type of operation to be conducted. Several States have developed policies and procedures to comply with this certification requirement as industry capabilities evolve. While those States did not develop their certification practices in coordination with each other, their practices are remarkably similar and consistent in their requirements. The effectiveness of their practices has been validated over many years, resulting in improved safety records of operators throughout the world. Many of these certification practices have been incorporated by reference in ICAO provisions.

2. Required technical safety evaluations

2.1 Approval and acceptance actions

2.1.1 The certification and continued surveillance of an air operator includes actions taken by a State on matters submitted for its review. The actions can be categorized as approvals or acceptances depending on the nature of the response by the State to the matter submitted for its review.

2.1.2 An approval is an active response by the State to a matter submitted for its review. An approval constitutes a finding or determination of compliance with the applicable standards. An approval will be evidenced by the signature of the approving official, the issuance of a document or certificate, or some other formal action taken by the State.

2.1.3 An acceptance does not necessarily require an active response by the State to a matter submitted for its review. A State may accept a matter submitted to it for review as being in compliance with the applicable standards if the State does not specifically reject all or a portion of the matter under review, usually after some defined period of time after submission.

2.1.4 The phrase "...approved by the State..." or similar phrases using the word "approval" are frequently used in Part I. Provisions indicating a review and implying approval or at least "acceptance" by the State occur even more frequently in Part I. In addition to these specific phrases, Part I contains numerous references to requirements which would, as a minimum, create the need for at least a technical review by the State. This Attachment groups and outlines those specific Standards and Recommended Practices for ease of use by States.

2.1.5 The State should make or arrange for a technical safety evaluation before issuing the approval or acceptance. The evaluation should be:

- a) accomplished by a person with specific qualifications to make such a technical evaluation;
- b) in accordance with written, standardized methodology; and
- c) where necessary to safety, a practical demonstration of the air operator's actual ability to conduct such an operation should be included in the evaluation process.

2.2 Demonstrations before issuance of some approvals

2.2.1 Standard 4.2.1.4 obligates the State of the Operator, prior to certification of an operator, to require sufficient demonstrations by the operator to enable the State to evaluate the adequacy of the operator's organization, method of control and supervision of flight operations, ground handling and maintenance arrangements. These demonstrations should be in addition to the review or inspections of manuals, records, facilities and equipment. Some of the approvals required by Part I, such as approval for Category III operations, have significant safety implications and should be validated by demonstration before the State approves such operations.

2.2.2 While the specific methodology and extent of the required demonstrations and evaluations varies between States, the certification processes of States whose operators have good safety records is generally consistent. In these States, technically qualified inspectors evaluate a representative sample of the

actual training, maintenance and operations prior to the issuance of an AOC or additional authorizations to the AOC.

2.3 Recording of certification actions

2.3.1 It is important that the certification, approval and acceptance actions of the State are adequately documented. The State should issue a written instrument, such as a letter or formal document, as an official record of the action. These written instruments should be retained as long as the operator continues to exercise the authorizations for which the approval or acceptance action was issued. These instruments are unambiguous evidence of the authorizations held by an operator, and provide proof in the event that the State and the operator disagree on the operations that the operator is authorized to conduct.

2.3.2 Some States collect certification records such as inspections, demonstrations, approvals and acceptance instruments into a single file which is retained as long as the operator is active. Other States retain these records in files according to the certification action performed, and revise the file as the approvals or acceptance instruments are updated. Regardless of the method used, these certification records are persuasive evidence that a State is complying with its ICAO obligations regarding operator certification.

2.4 Coordination of operations and airworthiness evaluations

Some of the references to approval or acceptance in Part I will require an operations evaluation and an airworthiness evaluation. Low minima approvals for the conduct of Category II and III ILS approaches, for example, require coordinated prior evaluation by operations and airworthiness specialists. Flight operations specialists should evaluate the operational procedures, training and qualifications. Airworthiness specialists should evaluate the aircraft, equipment reliability and maintenance procedures. These evaluations may be accomplished separately, but should be coordinated to ensure that all aspects necessary for safety have been addressed before any approval is issued.

2.5 State of the Operator and State of Registry responsibilities

2.5.1 Annex 6, Part I places the responsibility for initial certification, issuance of the AOC, and ongoing surveillance of an air operator on the State of the Operator. Annex 6, Part I also requires the State of the Operator to consider or act in accordance with various approvals and acceptances by the State of Registry. Under these provisions, the State of the Operator should ensure that its actions are consistent with the approvals and acceptances of the State of Registry and that the air operator is in compliance with State of Registry requirements.

2.5.2 It is essential that the State of the Operator is satisfied with the arrangements by which its air operators use aircraft on the register of another State, particularly for maintenance and crew training. The State of the Operator should review such arrangements in coordination with the State of Registry. Where appropriate, an agreement transferring oversight responsibilities from the State of Registry to the State of the Operator pursuant to Article 83 *bis* to the Convention on International Civil Aviation should be arranged to preclude any misunderstandings regarding which State is responsible for specific oversight responsibilities.

Note.— Guidance concerning the responsibilities of the State of the Operator and the State of Registry in connection with lease, charter and interchange operations is contained in the Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc 8335). Guidance concerning the transfer of State of Registry responsibilities to the State of the Operator in accordance with Article 83 bis

is contained in Guidance on the Implementation of Article 83 *bis* of the Convention on International Civil Aviation (ICAO Circular 295).

3. Approval actions

3.1 Approvals

The term “approval” implies a more formal action on the part of the State with respect to a certification matter than does the term “acceptance”. Some States require the Director of the CAA or a designated lower level CAA official to issue a formal written instrument for every “approval” action taken. Other States allow a variety of documents to be issued as evidence of an approval. The approval document issued and the matter addressed by the approval will depend on the delegated authority of the official. In such States, authority to sign routine approvals, such as operator Minimum Equipment Lists for specific aircraft, is delegated to technical inspectors. More complex or significant approvals are normally issued by higher level officials.

3.2 Air Operator Certificate (AOC)

3.2.1 The AOC required by Annex 6, Part I, paragraph 4.2.1 is a formal instrument which, as stated by paragraph 4.2.1.6, should include at least the following:

- a) operator’s identification (name, location);
- b) date of issue and period of validity;
- c) description of the types of operations authorized;
- d) the type(s) of aircraft authorized for use; and
- e) authorized areas of operations or routes.

3.2.2 Some States use the AOC and associated documents, such as Operations Specifications, to document other approvals required by Part I.

3.3 Provisions that require an approval

The following provisions require or encourage approval by specified States. The approval of the State of the Operator is required in all of the certification actions listed below that are not preceded by one or more asterisks. Certification actions listed below that are preceded by one or more asterisks require approval by the State of Registry (single asterisk or “*”), or by the State of Design (double asterisk or “**”). However, the State of the Operator should take the necessary steps to ensure that operators for which it is responsible comply with any applicable approvals issued by the State of Registry and/or State of Design, in addition to its own requirements.

- a) **Configuration deviation list (CDL) (Definitions)
- b) **Master minimum equipment list (MMEL) (Definitions)
- c) The method for establishing minimum flight altitudes (4.2.6.3)
- d) The method of determining aerodrome operating minima (4.2.7.1)

- e) Additional requirements for single pilot operations under the Instrument Flight Rules (IFR) at night (4.9.1)
- f) Flight time, flight duty periods and rest periods (4.2.10.2)
- g) Specific extended range operations (4.7.1)
- h) Additional requirements for operations of single-engine turbine-powered aeroplanes at night and/or in instrument meteorological conditions (IMC) (5.4.1)
- i) Aircraft-specific minimum equipment list (MEL) (6.1.2)
- j) RNP operations (7.2.2 b)
- k) MNPS operations (7.2.3 b)
- l) RVSM operations (7.2.4 b)
- m) Procedures for electronic navigation data management (7.4.1)
- n) *Aircraft-specific maintenance programme (8.3.1)
- o) *Approved maintenance organization (8.7.1.1)
- p) *Maintenance quality assurance methodology (8.7.3.1)
- q) Flight crew training programmes (9.3.1)
- r) Training in the transport of dangerous goods (9.3.1, Note 5)
- s) Aerodrome additional safety margin (9.4.3.3 a)
- t) Pilot-in-command area, route and aerodrome qualifications (9.4.3.5)
- u) Use of flight simulation training devices (9.3.1, Note 2 and 9.4.4, Note 1)
- v) Method of control and supervision of flight operations (4.2.1.4 and 10.1)
- w) **Mandatory maintenance tasks and intervals (11.3.2)
- x) Cabin attendant training programmes (12.4)

3.4 Provisions that require a technical evaluation

Other provisions in Part I require the State to have made a technical evaluation. These provisions contain the phrases “acceptable to the State”, “satisfactory to the State”, “determined by the State”, “deemed acceptable by the State”, and “prescribed by the State”. While not necessarily requiring an approval by the State, these Standards do require the State to at least accept the matter at issue after it conducts a specific review or evaluation. These provisions are:

- a) Details of the aircraft-specific checklists (Definition: Aircraft Operating Manual and 6.1.3);
- b) Details of the aircraft-specific systems (Definition: Aircraft Operating Manual and 6.1.3);
- c) Mandatory material for the Operations Manual (4.2.2.2/Appendix 2);
- d) Engine trend monitoring systems (5.4.2);
- e) Equipment for aeroplanes operated by a single pilot under the Instrument Flight Rules or at night (6.22);
- f) Requirements for approval to operate in RVSM airspace (7.2.5);
- g) Monitoring of height-keeping performance of aeroplanes approved to operate in RVSM airspace (7.2.6);
- h) Procedures for distribution and insertion of electronic navigation data in aircraft (7.4.2);
- i) *Operator's aircraft-specific maintenance responsibilities (8.1.1);
- j) *Method of maintenance and release (8.1.2);
- k) *Maintenance Control Manual (8.2.1);
- l) *Mandatory material for the Maintenance Control Manual (8.2.4);
- m) *Reporting of maintenance experience information (8.5.1);
- n) *Implementing necessary maintenance corrective actions (8.5.2);
- o) *Modification and repair requirements (8.6);

- p) *Minimum competence level of maintenance personnel (8.7.5.3);
- q) Requirement for flight navigator (9.1.4);
- r) Training facilities (9.3.1);
- s) Qualifications of instructors (9.3.1);
- t) Need for recurrent training (9.3.1);
- u) Use of correspondence courses and written examinations (9.3.1, Note 4);
- v) Use of flight simulation training devices (9.3.2);
- w) Flight crew qualification records (9.4.3.4);
- x) Designated representative of the State of the Operator (9.4.4);
- y) Pilot experience, recency and training requirements for single pilot operations under the Instrument Flight Rules (IFR) or at night (9.4.5.1 and 9.4.5.2);
- z) *Flight manual changes (11.1);
- aa) Minimum number of flight attendants assigned to a specific aircraft (12.1);
- ab) Altimetry system performance requirements for operations in RVSM airspace (Appendix 4, paragraphs 1 and 2).

Single-engine operations

- ac) Turbine engine reliability for approved operations by single-engine turbine-powered aeroplanes at night and/or in Instrument Meteorological Conditions (IMC) (Appendix 3, 1.1);
- ad) Systems and equipment (Appendix 3, paragraph 2);
- ae) Minimum equipment list (Appendix 3, paragraph 3);
- af) Flight manual information (Appendix 3, paragraph 4);
- ag) Event reporting (Appendix 3, paragraph 5);
- ah) Operator planning (Appendix 3, paragraph 6);
- ai) Flight crew experience, training and checking (Appendix 3, paragraph 7);
- aj) Route limitations over water (Appendix 3, paragraph 8); and
- ak) Operator certification or validation (Appendix 3, paragraph 9).

4. Acceptance actions

4.1 Acceptance

4.1.1 The actual extent of the State's technical evaluation of an operator's readiness to conduct certain flight operations should be much broader than just those Standards which require or imply approval. During certification, the State should ensure that an operator will be in compliance with all requirements of Part I prior to conducting international commercial air transport operations.

4.1.2 The concept of "acceptance" is used by some States as a formal method of ensuring that all critical aspects of operator certification are reviewed by the State prior to the formal issuance of the AOC. Using this concept, these States exercise their prerogative to have technical inspectors review all operators' policies and procedures impacting operational safety. The actual execution of an instrument to reflect this acceptance (assuming such a document is issued) may be delegated to the technical inspector assigned to the certification.

4.2 Conformance report

Some States use a conformance report to document the acceptances it makes with regard to a particular operator. This is a document submitted by the operator detailing how, with specific references to operations or maintenance manuals, it will comply with all applicable State regulations. This type of document is referenced in Doc 8335, sub-paragraph 3.3.2 e) and the *Airworthiness Manual* (Doc 9760), Volume I, subparagraph 6.2.1 c) 4). Such a conformance report should be actively used during the certification process and revised as necessary to reflect modifications required by the State in the operator's policies and procedures. Then a final conformance report is included in the State's certification records, along with other records of certification. The conformance report is an excellent method of demonstrating that the operator was properly certificated with respect to all applicable regulatory requirements.

4.3 Operations and maintenance manuals

4.3.1 Operations and maintenance manuals, and any subsequent amendments be submitted to the State (4.2.2.2, 8.1.1, 8.2.4, 8.3.2, 8.7.2.3). The State also establishes minimum contents for these manuals (11.2, 11.3, 11.4 and Appendix 2). The pertinent portions of an operator's manual for evaluation should be identified in the State's technical guidance, e.g. operations policy manual, operating manual, cabin crew manual, route guide, and training manual. Some States issue a formal instrument accepting each manual and any subsequent amendments.

4.3.2 The State's technical evaluation should, in addition to ensuring that all required contents are addressed, consider if the specific policies and procedures would result in the desired outcome. For example, the specifications for the operational flight plan (Appendix 2, 2.1.16) should provide the step-by-step completion guidance necessary for compliance with 4.3 concerning the content and retention of these plans.

4.3.3 Proven industry practices, such as an example of an actual completed operational flight plan for reference by the flight crew and dispatchers (although not a Standard), may also be required by a State's technical evaluator during certification. This aspect of the technical evaluation should be conducted by inspectors experienced in operator certification. A major consideration with respect to evaluating for proven industry practices that are aircraft-specific, equipment-specific or have limited applications is the employment of evaluators whom are currently qualified in the practice to be evaluated.

5. Other approval or acceptance considerations

Some States provide for approval or acceptance of certain critical documents, records or procedures specified in Part I although the relevant Annex 6 Standards do not require approval or acceptance by the State of the Operator. The following are some examples:

- a) Safety programme (3.2.1);
- b) Flight data analysis programme (3.2.3);
- c) Method for obtaining aeronautical data (4.1.1);
- d) Adequacy of the fuel and oil records (4.2.9);
- e) Adequacy of flight time, flight duty and rest period records (4.2.10.3, 9.6, 12.5);
- f) Adequacy of the aircraft maintenance logbook (4.3.1 a), b), and c);
- g) Adequacy of the load manifest (4.3.1 d), e) and f);
- h) Adequacy of the operational plan (4.3.1 g);

- i) Method for obtaining weather data (4.3.5.1 and 4.3.5.2);
- j) Method of compliance with carry-on baggage stowage (4.8);
- k) Aeroplane performance operating limitations (5.2.4);
- l) Method of obtaining and applying aerodrome obstacle data (5.3);
- m) Adequacy of passenger information cards (6.2.2 d);
- n) Procedures for long-range navigation (7.2.1 b);
- o) Contents of the journey logbook (11.4.1); and
- p) Content of the security training programme (13.4).

6. Validation of the standard of operations

Standard 4.2.1.5 requires that the validity of an AOC shall depend upon the operator maintaining the original certification standards (4.2.1.4) under the supervision of the State of the Operator. This supervision requires that a system of continued surveillance be established to ensure the required standards of operations are maintained (4.2.1.7). A good starting point in the development of such a system is to require annual or semi-annual inspections, observations and tests to validate the required certification approval and acceptance actions.

7. Amendment of air operator certificates

The certification of an operator is an on-going process. Few operators will be satisfied over time with the initial authorizations issued with their AOC. Evolving market opportunities will cause an operator to change aircraft models and seek approval for new operational areas requiring other additional capabilities. Additional technical evaluations should be required by the State before issuing the formal written instruments approving any changes to the original AOC and other authorizations. Where possible, each request should be “bridged”, using the original authorization as the foundation to determine the extent of the State’s impending evaluation before issuing the formal instrument.

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— END —