

Doc 8335

Manual of Procedures for Operations Inspection, Certification and Continued Surveillance

Sixth Edition, 2022



Approved by and published under the authority of the Secretary General

INTERNATIONAL CIVIL AVIATION ORGANIZATION



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AMENDMENTS

Amendments are announced in the supplements to the *Products and Services Catalogue;* the Catalogue and its supplements are available on the ICAO website at www.icao.int. The space below is provided to keep a record of such amendments.

RECORD OF AMENDMENTS AND CORRIGENDA

	AMENDMENTS			
No. Date Entered by				

CORRIGENDA				
No.	Date	Entered by		

FOREWORD

The sixth edition of this manual has been prepared with the objective of providing States and operators with detailed guidance concerning the establishment and maintenance of safe, regular and efficient international commercial air transport operations in accordance with the provisions of the *Convention on International Civil Aviation* (Chicago Convention, Doc 7300) and its associated Annexes. Previously, primary emphasis was placed on the procedures for the certification of commercial air transport operators by the State of the Operator and the continued safety oversight of the operator. The fifth edition, while continuing to place emphasis on the air operator certificate (AOC) and safety oversight, provided more detailed guidance on these aspects, introduced relevant aspects of the lease, charter and interchange of aircraft and the surveillance by States of foreign operators. The primary emphasis of this new edition is to provide further details and clarifications related to safety management, qualifications of the inspectors, surveillance programmes and Article 83 *bis* agreement summary.

In accordance with Annex 6, Part I — International Commercial Air Transport — Aeroplanes, and Part III — International Operations — Helicopters, Section II, International Commercial Air Transport, there is a need for the State of the Operator to exercise a positive and continuing measure of control over any operator of that State offering, or wishing to offer, commercial air transport services. Since Annex 6, Parts I and III, presents specifications for broad objectives rather than methods of realizing these objectives, details not covered by Annex 6, Parts I and III, have been provided as well as indications of an acceptable means of compliance with the Annex provisions.

The requirements for safety management systems (SMS) also have an impact on the surveillance of air operators. The State of the Operator also needs to evaluate and monitor the safety performance of its operators within the context of its State safety programme (SSP).

The method by which the State of the Operator exercises the necessary control of its operators is through the issuance of AOCs without which it is contrary to ICAO Standards to operate an international commercial air transport service. An AOC, once issued, should be subject to revocation or suspension if the operator is subsequently unable to meet the conditions specified. States need to establish systems and procedures for the initial certification and the continuing surveillance of the operations. Such a system should be firmly based upon aviation law.

This manual outlines the duties and responsibilities of both the State of the Operator and the operator and recognizes their interdependence in maintaining acceptable standards of operation and safe operating practices. The organization, administration and procedures required for inspection, certification and continuing surveillance of operators are outlined, including the establishment of a safety oversight system within the Civil Aviation Authority (CAA).

The development of an operator's operations manual is also stressed because of its importance in the certification process and in day-to-day operations. As a result of considerable interest reported by a number of ICAO technical field missions in the development of operations manuals, the *Guidance on the Preparation of an Operations Manual* (Doc 10153) has been published on the subject and should be considered as complementary to this manual.

While references are included in the manual to financial matters to be considered by the State authority, prior to taking a decision on the issuance of an AOC, the manual concentrates primarily on the technical and safety requirements to be met before the issuance of the certificate and during the conduct of the operations authorized by the certificate. The system and procedures described are based on established practices and are applicable to the whole range of commercial air transport operations.

It has been assumed in the preparation of this manual that the State has enacted basic enabling legislation which provides for the development and maintenance of a body of aviation regulations and rules and the establishment of a CAA, with the necessary powers to ensure compliance with the regulations. The basic enabling legislation should:

- make provision for the introduction of operating regulations compatible with the provisions of the Annexes to the Convention on International Civil Aviation:
- b) make provision for the delegation to a designated State official of the authority to develop and amend operating rules supplementary to the operating regulations;
- c) require commercial air transport operations to be conducted in accordance with conditions the State may consider applicable in the interests of safety; and
- d) make provision for the enforcement of the operating regulations and rules by specifying the penalty to be applied in the event of infringement or violation.

In this manual, the term "State" refers to the basic authority that normally establishes a CAA which has a Director General of Civil Aviation (DGCA) with power to exercise authority over civil aviation matters. The "operator" is considered to be an organization or enterprise engaged in civil commercial air transport operations. With the exception of the material contained in Part V dealing with lease, charter and interchange operations, it is assumed that, for the purpose of this guidance material, the State of the Operator and the State of Registry are one and the same.

Although it is recognized that bilateral and multilateral agreements by States are fundamental prerequisites to the establishment of international commercial air transport operations, such matters are generally outside the scope of the manual.

This manual also includes examples and references to detailed requirements prescribed by some States. A State may find it advantageous to adopt the detailed requirements of another State that has already established comprehensive operations certification and inspection procedures consistent with the guidance material in this manual.

This sixth edition is the outcome of the work undertaken by the Expert Group for Review of Doc 8335. ICAO gratefully acknowledges the contributions of all members of the Expert Group as well as other panels and individual experts who provided support, advice and input for this manual.

Comments on this manual, particularly with respect to its application, usefulness and scope of coverage, would be appreciated from all States, international organizations and ICAO Technical Cooperation field missions. These will be taken into consideration in the preparation of subsequent editions. Comments concerning the manual should be addressed to:

The Secretary General International Civil Aviation Organization 999 University Street, Montréal, Quebec H3C 5H7 Canada

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Annex 1 — Personnel Licensing Annex 2 — Rules of the Air Annex 6 — Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes; and Part III — International Operations — Helicopters Annex 7 — Aircraft Nationality and Registration Marks Annex 8 — Airworthiness of Aircraft Annex 9 — Facilitation Annex 11 — Air Traffic Services Annex 13 — Aircraft Accident and Incident Investigation Annex 14 — Aerodromes Annex 17 — Security Annex 19 — Safety Management Rules for Registration with ICAO of Aeronautical Agreements and Arrangements (Doc 6685) Procedures for Air Navigation Services — Aircraft Operations, Volume II — Construction of Visual and Instrument Flight Procedures (Doc 8168) Manual of All-Weather Operations (Doc 9365) ICAO Handbook for CAAs on the Management of Aviation Safety Risk related to COVID-19 (Doc 10144) Guidance on the Preparation of an Operations Manual (Doc 10153) Manual of Criteria for the Qualification of Flight Simulation Training Devices (Doc 9625), Volume I — Aeroplanes, and Volume II — *Helicopters*, Third Edition (in preparation)

Manual on the implementation of Article 83 bis of the Convention on International Civil Aviation (Doc 10059)

Manual on the Competencies of Civil Aviation Safety Inspectors (Doc 10070)

Manual on the Regulation of International Air Transport (Doc 9626)

Safety Oversight Manual (Doc 9734), Part A — The Establishment and Management of a State's Safety Oversight System; and Part B — The Establishment and Management of a Regional Safety Oversight System

Universal Safety Oversight Audit Programme Continuous Monitoring Manual (Doc 9735)

Airworthiness Manual (Doc 9760)

Safety Management Manual (Doc 9859)

Extended Diversion Time Operations (EDTO) Manual (Doc 10085)

Flight Planning and Fuel Management (FPFM) Manual (Doc 9976)

Manual on a 300 m (1 000 ft) Vertical Separation Minimum Between FL 290 and FL 410 Inclusive (Doc 9574)

Performance-Based Navigation (PBN) Operational Approval Manual (Doc 9997)

Manual on Flight Data Analysis Programmes (FDAP) (Doc 10000)

Manual on Electronic Flight Bags (EFBs) (Doc 10020)

Manual on the Implementation and Use of Cabin Electronic Flight Bags (Doc 10111)

Technical Instructions for the Safe Transport of Dangerous Goods by Air Corrigenda/Addenda/Guidance only (Doc 9284)

Guidance for Safe Operations Involving Aeroplane Cargo Compartments (Doc 10102)

Implications of Airline Codesharing (Cir 269)

Guidance on the Implementation of Article 83 bis of the Convention on International Civil Aviation (Cir 295)

ICAO Study on Aircraft Leasing

Government Safety Inspector (Operations), Air Operator Certification, FAA Course 18700

Government Safety Inspector (Airworthiness), Air Operator and Approved Maintenance Organisation Certification, FAA Course 18701

Note.— The Manual of Procedures for an Airworthiness Organization (Doc 9389) and the Continuing Airworthiness Manual (Doc 9642) have been declared obsolete.

GLOSSARY

- Note. Most of the terms below are definitions or descriptions found in Annexes to the Convention on International Civil Aviation, ICAO manuals or other guidance material.
- **Aeroplane.** A power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.
- **Aircraft.** Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.
- **Aircraft operating manual.** A manual, acceptable to the State of the Operator, containing normal, abnormal and emergency procedures, checklists, limitations, performance information, details of the aircraft systems and other material relevant to the operation of the aircraft.
 - Note.— The aircraft operating manual is part of the operations manual.
- **Airworthy.** The status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation.
- Air operator certificate (AOC). A certificate authorizing an operator to carry out specified commercial air transport operations.
- **Approved maintenance organization.** An organization approved by a Contracting State, in accordance with the requirements of Annex 8, Part II, Chapter 6 Maintenance organization approval, to perform maintenance of aircraft, engine, propeller or parts thereof and operating under supervision approved by that State.
- Note.— Nothing in this definition is intended to preclude that the organization and its supervision be approved by more than one State.
- **Cabin crew member.** A crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member.
- Charter. A contractual arrangement between an air carrier and an entity hiring or leasing its aircraft.
- Civil aviation safety inspector (CASI). A qualified person authorized by the State to carry out safety oversight activities for civil aviation.
- **Codeshare.** The use of the flight designator code of one air operator on a service performed by a second air operator, whose service is usually also identified (and may be required to be identified) as a service of, and being performed by, the second air operator.
- Note.— The practice of codesharing, by which one operator permits a second operator to use its airline designator code on a flight, or by which two operators share the same airline code on a flight, can take different forms.
- **Commercial air transport operation**. An aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire.

- **Configuration deviation list (CDL).** A list established by the organization responsible for the type design with the approval of the State of Design which identifies any external parts of an aircraft type which may be missing at the commencement of a flight, and which contains, where necessary, any information on associated operating limitations and performance correction.
- **Continuing airworthiness.** The set of processes by which an aircraft, engine, propeller or part complies with the applicable airworthiness requirements and remains in a condition for safe operation throughout its operating life.
- **Continuing airworthiness records.** Records which are related to the continuing airworthiness status of an aircraft, engine, propeller or associated part.
- Damp lease. An arrangement where the aircraft is leased with partial crew.
- Dry lease. An arrangement where the aircraft is leased without crew.
- **Financial or capital lease.** A lease used by air operators to avoid the otherwise substantial capital outlays/debt required in purchasing aircraft directly from the manufacturer, or to reduce taxation or other costs.
- Note.— For example, an air operator may sell all or part of its fleet to a bank or other financial institution and then lease the aircraft back. Financial leases are long-term arrangements that give the outward appearance of ownership, e.g. the aircraft bear the air operator's name/logo and are frequently registered in the air operator's State.
- **Flight simulation training device.** Any one of the following three types of apparatus in which flight conditions are simulated on the ground:
 - A flight simulator, which provides an accurate representation of the flight deck of a particular aircraft type or an accurate representation of the remotely piloted aircraft system (RPAS) to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;
 - A flight procedures trainer, which provides a realistic flight deck environment or realistic RPAS environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class;
 - A basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight or the RPAS environment in instrument flight conditions.
- **Franchising.** Franchising is the granting by an air operator of a **franchise** or right to use various of its corporate identity elements (such as its flight designator code, livery and marketing symbols) to a **franchisee**, i.e. the entity granted the franchise to market or deliver its air service product, typically subject to standards and controls intended to maintain the quality desired by the **franchiser**, i.e. the entity granting the franchise.
- **Foreign operator.** Any operator that holds an AOC issued by one State and that operates, or seeks to operate, into the airspace above the territory of another State.
- **Human Factors principles.** Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.
- **Human performance.** Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

Glossary (xvii)

Interchange. An aircraft interchange or interchange flight is a regularly scheduled, single-plane through service linking a route of one air operator at the interchange point to a route of a second air operator, with the same aircraft being crewed by and under the operational control of the respective authorized operator on each route. An interchange provides passengers with the benefit of a single-plane service on what is essentially an interline operation and may provide additional benefits to the operators involved in terms of better aircraft utilization.

- Joint service flight. A joint service flight is a flight identified by the designator codes of two airlines that typically have agreed with each other to share revenues and/or costs with the concurrence of their respective States.
 - Note.— Some States consider a joint service flight as a codesharing flight and some do not.
- **Lease.** A lease can be understood to be a contractual arrangement whereby a properly licensed air operator gains commercial control of an entire aircraft without transfer of ownership.
- **Lessee.** The term lessee means the party to which the aircraft is leased.
- Lessor. The term lessor means the party from which the aircraft is leased.
- **Maintenance.** The performance of tasks on an aircraft, engine, propeller or associated part required to ensure the continuing airworthiness of an aircraft, engine, propeller or associated part including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.
- **Maintenance programme.** A document which describes the specific scheduled maintenance tasks and their frequency of completion and related procedures, such as a reliability programme, necessary for the safe operation of those aircraft to which it applies.
- **Maintenance records.** Records that set out the details of the maintenance carried out on an aircraft, engine, propeller or associated part.
- **Maintenance release.** A document which contains a certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner in accordance with appropriate airworthiness requirements.
- **Master minimum equipment list (MMEL).** A list established for a particular aircraft type by the organization responsible for the type design with the approval of the State of Design containing items, one or more of which is permitted to be unserviceable at the commencement of a flight. The MMEL may be associated with special operating conditions, limitations or procedures.
- **Minimum equipment list (MEL).** A list which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the MMEL established for the aircraft type.
- **Modification.** A change to the type design of an aircraft, engine or propeller.
- Note..— A modification may also include the embodiment of the modification which is a maintenance task subject to a maintenance release. Further guidance on aircraft maintenance— modification and repair is contained in the Airworthiness Manual (Doc 9760).
- **NOTAM.** A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.

- **Operating lease.** An operating lease is designed to meet an air operator's need for additional aircraft, often on a seasonal or short-term basis.
- **Operational control.** The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.
- **Operational flight plan**. The operator's plan for the safe conduct of the flight based on considerations of aeroplane performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes concerned.
- **Operations manual**. A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.
- **Operations specifications**. The authorizations, including specific approvals, conditions and limitations associated with the air operator certificate and subject to the conditions in the operations manual.
- Operator. A person, organization or enterprise engaged in or offering to engage in an aircraft operation.
- **Organization responsible for the type design.** The organization that holds the type certificate, or equivalent document, for an aircraft, engine or propeller type, issued by a Contracting State.
- **Pooling arrangements.** Pooling arrangements are commercial agreements which may involve agreed capacity, conditions of operation, and the sharing between the parties of one or more of the elements of traffic, frequencies, equipment, revenues and costs.
- Principal place of business. The notion of the operator's principal place of business has not been defined so far in ICAO documents, although it is referred to in Article 83 bis as well as in the definition of the "State of the Operator" (see below). It should be a matter of appreciating the facts of each case and comparing the importance of the various places of business of an operator so that the main one can be selected. Domestic jurisprudence or case law may also offer definitions and criteria assisting in the determination of an air operator's principal place of business.
- **Repair.** The restoration of an aircraft, engine, propeller or associated part to an airworthy condition in accordance with the appropriate airworthiness requirements after it has been damaged or subjected to wear.
- **Rendering valid.** The action taken by a Contracting State, as an alternative to issuing its own licence or certificate, in accepting a licence or certificate issued by another Contracting State as the equivalent of its own licence or certificate.
- **Safety management system (SMS)**. A systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies and procedures.
- State of Registry. The State on whose register the aircraft is entered.

Note.— In the case of the registration of aircraft of an international operating agency on other than a national basis, the States constituting the agency are jointly and severally bound to assume the obligations which, under the Chicago Convention, attach to a State of Registry. See, in this regard, the Council Resolution of 14 December 1967 on Nationality and Registration of Aircraft Operated by International Operating Agencies which can be found in Policy and Guidance Material on the Economic Regulation of International Air Transport (Doc 9587).

Glossary (xix)

State of the Operator. The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

Note.— The responsibilities of the State of the Operator are summarized in Part I, Chapter 2.

Surveillance. The State activities through which the State proactively verifies through inspections and audits that aviation licence, certificate, authorization or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State.

Traffic right. A traffic right is a market access right which is expressed as an agreed physical or geographic specification, or combination of specifications, of who or what may be transported over an authorized route or parts thereof in the aircraft (or substitute conveyance) authorized.

Note.— The term "traffic rights" is, in one usage, applied collectively to have about the same meaning as market access rights.

Type design. The set of data and information necessary to define an aircraft, engine or propeller type for the purpose of airworthiness determination.

Wet lease. An arrangement where the aircraft is leased with crew.

ABBREVIATIONS

(used in this manual)

ACAS Airborne collision avoidance system
AFDD Audit findings and differences database

AMM Aircraft maintenance manual

AMO Approved maintenance organization

AOC Air operator certificate
ATC Air traffic control

ATPL Airline transport pilot licence

ATS Air traffic services

AWO All-weather operations

CAA Civil aviation authority

CASI Civil aviation safety inspector

CDL Configuration deviation list

CMA Continuous monitoring approach

COSCAP Cooperative Development of Operational Safety and Continuing Airworthiness Projects

CSA Comprehensive systems approach

CVR Cockpit voice recorder

DGCA Director general of civil aviation
EDTO Extended diversion time operations
EFOD Electronic Filing of Differences
ELT Emergency locator transmitter

EU European Union

FAA Federal Aviation Administration

FDR Flight data recorder

FMC Flight management computer
FMS Flight management system
GPWS Ground proximity warning system

HIRA Hazard identification and risk assessment

IASA International Aviation Safety Assessments Programme

IATA International Air Transport Association

IFFAS International Financial Facility for Aviation Safety

IFR Instrument flight rules

IOSA IATA Operational Safety Audit

ISD Implementation support and development

iSTARS ICAO Integrated Safety Trend Analysis and Reporting System

MCM Maintenance control manual MEL Minimum equipment list

MMEL Master minimum equipment list NASP National Aviation Safety Plan

OLF Online framework

RSOO Regional safety oversight organizations
RVSM Reduced vertical separation minima
SAAQ State aviation activity questionnaire
SAFA Safety assessment of foreign aircraft
SARPs Standards and Recommended Practices
SDCPS Safety Data Collection and Processing System

SMI Safety management implementation

SMS Safety management system(s)

SOA Safety oversight audit

SRBS Safety risk-based surveillance SRM Structural repair manual SSP State safety programme URL Uniform resource locator

USAP Universal Security Audit Programme

USOAP Universal Safety Oversight Audit Programme

VFR Visual flight rules

WAGMAR Website of aeronautical agreements and arrangements

Part I

SAFETY OVERSIGHT OF COMMERCIAL AIR TRANSPORT OPERATIONS — THE STATE

Chapter 1

ICAO UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME (USOAP)

- 1.1 The foundation of the safety of the commercial air transport operator is the oversight of the operator by the State, the objective of which is to ensure that the national aviation industry meets requirements equal to, or better than, those defined by ICAO Standards and Recommended Practices (SARPs), to progress towards achieving safety objectives and continuous improvement in line with the State's safety objectives and performance as established in the State safety programme (SSP).
- 1.2 Successful oversight by the State depends upon the capabilities of the national civil aviation authority (CAA), the implementation of SARPs and the critical elements of a State's safety oversight system.

Note.— The eight critical elements of a State's safety oversight system are listed in Chapter 3 of this Part.

- 1.3 The capability of a State's CAA to carry out the task is assessed on a regular basis by the ICAO Universal Safety Oversight Audit Programme (USOAP). The USOAP was initially launched in January 1999 in response to widespread concerns about the adequacy of aviation safety oversight around the world. Initially, USOAP examined the level of implementation by States of the safety provisions contained in Annex 1 *Personnel Licensing,* Annex 6 *Operation of Aircraft* and Annex 8 *Airworthiness of Aircraft*. The programme was expanded in 2005 to the USOAP Comprehensive Systems Approach (CSA) to include safety-related provisions contained in all safety-related Annexes to the *Convention on International Civil Aviation* (Chicago Convention, Doc 7300).
- 1.4 In order to provide the necessary level of confidence in the system, and subsequent to the Directors General of Civil Aviation Conference on a Global Strategy for Aviation Safety (Montréal, March 2006), it was determined that with respect to audits conducted under the CSA:
 - a) the results of these audits should continue to be shared openly among States;
 - b) a process should be developed by ICAO to provide for the release of relevant audit information to the public; and
 - c) States have given consent to the publication of the relevant information.
- 1.5 Currently, safety audit results are provided on the ICAO public website at https://www.icao.int/safety/pages/usoap-results.aspx. Safety audit information is also available with the ICAO Integrated Safety Trend Analysis and Reporting System (iSTARS). iSTARS is a web-based system on the ICAO secure portal that provides a quick and convenient interface to a collection of safety and efficiency datasets and web applications to make safety, efficiency and safety risk analyses.
- 1.6 In 2010, the 37th Session of the Assembly adopted Resolution A37-5, affirming that the evolution of USOAP to the Continuous Monitoring Approach (CMA) should continue to be a top priority for ICAO to ensure that information on the safety performance of Member States is provided to other Member States and to the travelling public on an ongoing basis. This vital improvement to international aviation safety required the participation and support of all Member States, particularly during the two-year transition period (2011 2012) while the tools and guidance required for

USOAP CMA were developed. In January 2013, USOAP CMA was fully launched and its processes and tools are still constantly reviewed to enable a more information-driven, risk-based and result-oriented approach. The objectives of the CMA include: monitoring States' safety oversight systems using a web-based platform entitled *the Online Framework* (OLF); validating States' progress through various on-site and off-site validation activities; and continuing to assess the effectiveness and sustainability of States' safety oversight systems through audits. With the CMA, USOAP has benefited from cost-effectiveness, dynamicity and flexibility (with the introduction of activities of limited scope).

1.7 Where USOAP findings indicate that a State experiences difficulties in the implementation of SARPs and the critical elements of a safety oversight system, ICAO can provide assistance to improve the capabilities of the State, through its Technical Cooperation Programme and with the help of other mechanisms, including the International Financial Facility for Aviation Safety (IFFAS). Such assistance can be provided either directly to a State or in association with groupings of other States on a regional basis.

Note.— Guidance on the USOAP and associated programmes is available in the Safety Oversight Manual, Part A, The Establishment and Management of a State's Safety Oversight System, Part B, The Establishment and Management of a Regional Safety Oversight System (Doc 9734), and also through the Universal Safety Oversight Audit Programme Continuous Monitoring Manual (Doc 9735).

Chapter 2

RESPONSIBILITIES OF THE STATE

2.1 NATURE OF THE RESPONSIBILITIES OF THE STATE

The responsibility of a Contracting State for the safe, regular and efficient conduct of flight operations is implicit in its acceptance of the international SARPs for the safety of air navigation to which Article 37 of the Chicago Convention refers; these SARPs appear in the Annexes to the Chicago Convention. Annex 6, Part I — *International Commercial Air Transport* — *Aeroplanes;* and Part III — *International Operations* — *Helicopters*, Section II, International Commercial Air Transport, has been developed with respect to the operations of international commercial air transport. Although the methods for discharging its responsibility may vary, no particular method can, in any way, relieve the State of the Operator of such responsibility.

2.2 DISCHARGE OF STATE RESPONSIBILITIES

- 2.2.1 In order to discharge its responsibility, the State should enact a basic aviation law that will provide for the development and promulgation of air navigation regulations which should be consistent with its acceptance of the Annexes. The State regulatory system should:
 - a) represent a well-balanced allocation of responsibility between the State and the operator for the safety of operations;
 - b) be capable of economic justification within the resources of the State;
 - c) enable the State to maintain continuing regulation and oversight of the activities of the operator without unduly inhibiting the operator's effective direction and control of the organization; and
 - d) result in the cultivation and maintenance of harmonious yet responsible relationships between the State and the operator.

Note.— Guidance on the establishment of a State's system is provided in the Safety Oversight Manual (Doc 9734), Part A, The Establishment and Management of a State's Safety Oversight System.

- 2.2.2 An essential element in the regulatory system is the certification of operators. Annex 6 requires that an operator shall be in possession of an air operator certificate (AOC) issued by the State of the Operator in order to engage in commercial air transport operations. States should therefore establish a system for both the initial inspection and certification and the continued safety oversight of the operator.
- 2.2.3 In order to assess the competence of an operator to provide a safe and regular service, the State of the Operator would first need to investigate the proposed operation, covering at least the organization, staffing, equipment, proposed routes and level and type of service and finances. The issuance of an AOC by the State of the Operator will be dependent upon the operator demonstrating an adequate organization, method of control and supervision of flight operations, training programme, as well as ground handling, maintenance management and maintenance arrangements, consistent with the nature and extent of the operations specified. If the operator is found competent, an AOC will be issued,

together with operations specifications, detailing the commercial air transport operations authorized. Subsequent to the issuance of an AOC, the State of the Operator is required to continue to monitor the operation by a systematic procedure which establishes safety oversight inspections.

- 2.2.4 Through the issuance of an AOC, the associated operations specifications and the subsequent continuing safety oversight, the State of the Operator will be able to ensure the protection of public interest and will be able to exercise indirect influence and control without encroaching upon the direct responsibility of the operator for the safety of the operation. The granting of an AOC by the State establishes that the operator has met the State criteria for an acceptable operation and that the State has every reason to believe that the operator is capable of providing a safe commercial air transport service.
- 2.2.5 It is imperative that the operations conducted by an operator are within the safety oversight capability of the State of the Operator. A review of the aircraft registry and the authorizations granted to an operator will assist the State in determining if the operations are within its safety oversight capability. Where this is not the case, the State is urged to take immediate and appropriate corrective actions.
- 2.2.6 In those States where the State is both the regulatory authority and an operator, the requirements of the Chicago Convention will be met and public interest will best be served by the separation of authority and responsibility between the State regulatory authority and the State operating agency. The necessary certification procedures should be followed as though the operator were a non-government entity.
- 2.2.7 A State regulatory system and safety oversight organization are described in the subsequent chapters of this Part.
- 2.2.8 A State may find that it does not have the resources to establish a system for the effective certification and oversight of its operators. Experience has been gained with the formation of regional safety oversight organizations (RSOO) where economies of scale can be achieved through the sharing and pooling of human and financial resources. The Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAPs) were designed to achieve the necessary level of regional cooperation in this context. Guidance is provided in the Safety Oversight Manual (Doc 9734), Part B, The Establishment and Management of a Regional Safety Oversight System.
- 2.2.9 As an alternative, where a State is in need of assistance and where regional cooperation is not viable, the Director General of Civil Aviation (DGCA) could consider the employment of a competent commercial organization to supply the necessary qualified personnel to perform the required inspection functions in an advisory capacity to the CAA. The State retains responsibility under the Chicago Convention and as such is responsible to ensure that the delegated tasks are performed in accordance with international and national requirements.

Chapter 3

STATE REGULATORY SYSTEM

3.1 DEVELOPMENT OF A STATE REGULATORY SYSTEM

3.1.1 General

There are two prerequisites for the introduction of a regulatory system:

- a) the provision, in the basic aviation law of the State, for air navigation regulations and the promulgation thereof; and
- b) the establishment of an appropriate State body, hereafter referred to as the CAA, with the necessary powers to ensure compliance with the regulations.

3.1.2 Basic laws relating to aviation

- 3.1.2.1 The basic laws of the State relating to aviation should:
 - a) authorize the establishment of a CAA to be headed by an accountable executive, hereafter referred to as the DGCA;
 - make provision for the delegation of the necessary authority and the assignment of corresponding responsibility to the DGCA to develop, issue and revise operating regulations and rules consistent with the air navigation regulations;
 - make provision for the adoption of operating regulations and rules based on the Annexes to the Chicago Convention;
 - d) make provision for the enforcement of the air navigation regulations and associated operating regulations and rules; and
 - e) require all commercial air transport operations to be conducted under State authority and in accordance with any conditions the State may consider applicable in the interests of safety and in accordance with all appropriate treaties and agreements between the State and other States.

Note.— Throughout the manual the term "regulations" is used in a generic sense to encompass what may be variously considered by States, but not limited to, as instructions, rules, edicts, directives, sets of laws, requirements, policies and orders. It is a matter for the judgement of individual States, taking into account their responsibilities under the Chicago Convention, as to the specific status given to a regulation when it is applied within the State and the penalty assigned in the event of non-compliance.

3.1.2.2 The operating regulations and rules, referred to in 3.1.2.1 b), need frequent revision to keep pace with developments in civil aviation and aviation safety. This is not possible unless these regulations and rules can be amended rapidly. One possible approach to ensure this would be to place these detailed operating regulations and rules under the authority of the DGCA and not incorporate them in national civil aviation law.

3.2 AUTHORITY OF THE DGCA

The regulations should contain provisions which authorize the DGCA to:

- a) establish a flight operations inspection organization to assist in carrying out the functions and responsibilities of the DGCA's office;
- b) whenever possible, develop, issue and revise operating regulations and rules consistent with the air navigation regulations;
- c) determine whether proposed commercial air transport operations are in the public interest;
- d) determine the technical and financial capability of a prospective operator to conduct the proposed operations with the ground based services made available (e.g. aerodrome, navigation aids, air traffic services (ATS), aircraft maintenance);
- e) issue AOCs with the associated operations specifications necessary to define the characteristics of the particular operation and the aircraft involved; and
- f) withdraw, revoke, suspend or amend an AOC and its associated operations specifications authorizing any operation where the conduct of the operation is considered contrary to the interests of safety, subject to providing the operator with due notice and the opportunity for consultation and appeal.

3.3 STRUCTURE OF THE CAA

- 3.3.1 The DGCA should establish an effective CAA and employ the necessary qualified personnel to carry out the various functions of that office. Although the scope of the DGCA's responsibilities should not vary substantially from State to State, the structure and size of the CAA will vary considerably depending on the number, size and complexity of civil air operations in the State.
- 3.3.2 In deciding upon the required organizational structure, the DGCA should review the requirements for inspection, certification and surveillance of operators as outlined in the subsequent chapters of this manual in the light of the number and size of potential air operators in the State. In many States it will be necessary to establish within the CAA a "CAA inspectorate" to ensure that the DGCA's responsibilities for the safety of commercial air transport are properly discharged and that the public interest is adequately protected. The establishment and functioning of the CAA inspection organization are discussed in Chapter 5 of this Part.

3.4 REGULATIONS FOR THE CERTIFICATION OF OPERATORS

- 3.4.1 The State regulations and rules for the operational inspection and certification of operators and for the conduct of subsequent commercial air transport operations should have sufficient detail to ensure that satisfactory compliance will result in the desired level of safety. It should be recognized that, while the scope of the regulations and rules will need to be extensive, it is not feasible or desirable to attempt to cover every conceivable operational detail. The State regulations and rules should provide a framework of positive control and guidance but should allow the operator the flexibility to develop operating instructions for the guidance of personnel on the details essential to the conduct of the operation. This is in accordance with the principle of "operator's responsibility" and helps to facilitate the development of the operating standards and techniques best suited to particular operational circumstances and conditions.
- 3.4.2 To facilitate compliance and avoid differences in interpretation, State regulations should be written in clear language, using plain language techniques, and should be complemented by appropriate guidance material.
- 3.4.3 The State regulations and rules need to require the operator to submit detailed operating instructions and procedures, governing the conduct of operations, to the CAA as a basis for certification and the subsequent conduct of operations. The operator's material to be submitted in the form of an operations manual, SMS manual as well as maintenance control manual (MCM) acceptable to the State of Registry should contain at least the material specified and such other material as the CAA may require. As discussed in Part III of this manual, the operator's operations, SMS manual and MCMs provide a most important basis for the CAA decision with respect to an application for an AOC.

Note. — The SMS manual can be a stand-alone document, or it may be integrated with other organizational documents maintained by the operator. More information is provided in the Safety Management Manual (Doc 9859).

3.5 CRITICAL ELEMENTS OF A SAFETY OVERSIGHT SYSTEM

- 3.5.1 The process described in 3.1 to 3.4 has been analyzed and the following critical elements of a State safety oversight system have been identified:
 - Primary aviation legislation
 - Specific operating regulations
 - State system and functions
 - Qualified technical personnel
 - Technical guidance, tools and provision of safety-critical information
 - Licensing, certification, authorization and approval obligations
 - Surveillance obligations
 - Resolution of safety issues
- 3.5.2 These critical elements form the foundation of SSP. These elements are fully described in Annex 6, Part I, Appendix 5 and in the Safety Oversight Manual (Doc 9734), Part A The Establishment and Management of a State's Safety Oversight System.

3.6 SAFETY MANAGEMENT

- 3.6.1 States are required to establish an SSP which is an integrated set of regulations and activities aimed at improving safety.
- 3.6.2 An SSP includes activities under 4 components, namely 1) State safety policy, objectives and resources; 2) State safety risk management; 3) State safety assurance and 4) State safety promotion.
- 3.6.3 As part of State safety risk management, States should require air operators to implement safety management systems (SMS) acceptable to the State, as described in *Annex 19 Safety Management*, Chapter 3. Further details on SMS to be implemented by service providers can be found in Annex 19, Chapter 4, which makes reference to Appendix 2, Framework for a Safety Management System (SMS).
- 3.6.4 The SSP is generally supported by the National Aviation Safety Plan (NASP), which is regularly updated to include the latest safety objectives and related actions based on the safety risks to be mitigated at national level. These actions can have an impact on the organizations located on the State's territory and shall be considered as part of the surveillance of these organizations and the acceptability of their SMS. These safety risks and actions to monitor can further give birth to the State's safety risk-based surveillance.
- 3.6.5 A full description of the requirements for the SSP and the operator's SMS is contained in Annex 19 and further described in the *Safety Management Manual* (Doc 9859) which is complemented by the ICAO Safety Management Implementation (SMI) website containing practical examples and tools. Further information with regard to the initial certification and continuing surveillance of the operator and its SMS is found in Parts III and IV of this manual.

Chapter 4

THE AOC

4.1 GENERAL

- 4.1.1 The AOC provides the basis for States to regulate the activities of operators and the means for a State to authorize an air operator to commence operations. The AOC, under the control of the issuing CAA, enables the CAA to exercise the continued safety oversight of the operator.
- 4.1.2 The AOC and the associated operations specifications are briefly introduced in this chapter. Detailed requirements and guidance for the AOC and the operations specifications can be found in Annex 6, Part I, Chapter 4, Appendix 6 and Attachment D; and in Part III, Section II, Chapter 2, Appendix 3 and Attachment C.
- 4.1.3 The application for an AOC, the evaluation by the State and the issuance of a certificate are dealt with in Part III of this manual.
- 4.1.4 The AOC and the associated operations specifications issued to an air operator by the State of the Operator are also intended to provide a basis for another State to authorize operations in its territory by that air operator, provided that the requirements under which the certificate was issued were at least equal to the applicable Standards specified in Annex 6, Part I, and Part III, Section II. The surveillance of operators from other States (foreign operators) is considered in more detail in Part VI of this manual.

4.2 THE AOC

- 4.2.1 Aircraft engaged in commercial operations are required by Annex 6 to carry a certified true copy of the AOC (see 4.4 below) and a copy of the associated operations specifications relevant to the aircraft type. The AOC certifies that the operator is authorized to perform commercial air operations, as defined in the associated operations specifications, in accordance with the operations manual and the civil aviation regulations of the State of the Operator.
- 4.2.2 The information on the AOC shows the State of the Operator and the identity of the responsible office of the CAA and the certificate number with its expiration date. It also shows the name of the operator and any other trading name relevant to the particular certificate, with the address of the operator's principal place of business. In addition, the certificate indicates the location in the operator's documentation of the contact details of the operator's operational management. Finally it shows the date of issuance of the certificate and the name and signature of the CAA official responsible for its issuance.
- 4.2.3 The contact details where 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, are required to be provided on board the aircraft and should include names, telephone and fax numbers, with country codes and e-mail addresses.
- 4.2.4 The period of validity of an AOC should be at least two years. Not all States apply a period of validity to AOCs, in view of the requirement for safety oversight of the operator to be a continuous process. However, should an expiry date not be applied, this should be appropriately indicated on the certificate (see Part III, 7.4.1).

4.3 OPERATIONS SPECIFICATIONS

- 4.3.1 The operations specifications associated with an AOC are an integral part of the authorization under which an operator conducts operations.
- 4.3.2 The specifications identify the CAA office involved, the number of the associated AOC, the name of the operator, the date of issuance and the signature of the CAA official responsible for its issuance and show the make, model and series, or master series, of the aircraft, the type of operation and the geographical areas in which operations are authorized.
- 4.3.3 The specifications cover all aspects of the operation and include special limitations and authorizations with criteria as appropriate.

4.4 CERTIFIED TRUE COPY OF THE AOC

There are several ways to certify a copy of the AOC. In any case, the certification statement shall attest that the copy is a true copy of the original, and shall be signed and display an official stamp or seal. The certification statement shall be permanently affixed to the copy, either by placing it on the first page of the document itself or on each page of the document, or by attaching it to the entirety of it. A model certification statement is reproduced below.

CERTIFICATION

I hereby certify that the attached is a true copy of the [title of the AOC], issued at [place] on [date] by [the issuing authority]. Signed at [place] on [date].

[signed by the appropriate certifying authority according to the laws of its State] [official stamp/seal]

STATE SAFETY OVERSIGHT ORGANIZATION

5.1 THE CAA INSPECTION ORGANIZATION

The CAA inspection organization should be established and operated as an independent entity within the CAA, directly responsible to the DGCA. The size of the operations inspection organization should be a function of the scale of flight operations conducted in the State by both commercial and general aviation. In order to carry out its responsibilities efficiently, the organization will need to be divided into specialized sections. The specialized sections may vary to suit the specific needs of the State, but in most cases it will be desirable to separate at least the flight operations, maintenance, financial and legal functions, and to further subdivide flight operations and maintenance into commercial air transport operations and general aviation. In any event, close coordination will be required by all sections. Although the paragraphs which follow pertain specifically to the section of the inspection organization dealing with commercial air transport operations, hereafter referred to as the CAA inspectorate, they are to some extent applicable to all other sections.

5.2 GENERAL RESPONSIBILITIES

- 5.2.1 The CAA inspectorate is responsible for conducting the required investigations and assessments preliminary to the issuance of an AOC and its associated operations specifications, and for exercising continuing safety oversight of operations for the purpose of:
 - making recommendations to the DGCA regarding the issuance or amendment of the AOC and the associated operations specifications, and the operator's competence to continue to exercise the privileges of the certificate;
 - making recommendations to the DGCA concerning any special conditions that, in light of the investigation, may need to be imposed;
 - c) informing the DGCA and the operator of any deficiencies needing rectification; and
 - d) making recommendations to the DGCA concerning appropriate enforcement action.
- 5.2.2 In carrying out its responsibilities, the CAA inspectorate neither shares nor diminishes the direct responsibility of the operator for safety and compliance with State operating regulations and rules. During the process of its investigation, the CAA inspectorate inevitably influences both the formulation of operating standards and the methods employed by the operator to meet these standards. Consequently, the DGCA has a responsibility to ensure that the CAA inspectorate is adequately staffed by competent and suitably qualified personnel and that appropriate guidance defines the type of influence that the CAA inspectorate may exercise.

5.3 STAFFING

- 5.3.1 The ability of a State to effectively supervise and control commercial air transport operations in the public interest is dependent upon the competence of the CAA inspectorate. To effectively fulfil its responsibilities, the CAA inspectorate needs to be properly organized and staffed with qualified personnel capable of accomplishing the required wide range of technical inspection activities. To adequately perform their duties, it is important that the CAA inspectorate staff have the qualifications, operational or technical work experience, and training compatible with the operations that they are required to certificate or inspect and that their qualifications compare favourably with those of operator personnel they will encounter in their inspections. Furthermore, the CAA inspectorate staff should enjoy conditions of service and remuneration consistent with their education, technical knowledge and experience and comparable to those personnel of the operator whose activities they will inspect and supervise.
- 5.3.2 In some States, certain activities are delegated by the DGCA to designated personnel of an operator. Examining and checking activities involving maintenance of a licence or rating such as aircraft type ratings, instrument ratings and pilot proficiency checks should be conducted using a CAA examiner or an examiner designated by the CAA. Other examining and checking activities that are not related to the issuance or modification maintenance of a licence or rating but rather to the maintenance of the operator's standards may be conducted by individuals appointed by the operator and not designated or approved by the CAA, provided they have completed an applicable training programme that has been approved by the CAA.
- 5.3.3 Candidates for designated examiner are proposed by the operator. The assessment and approval of these designated personnel performing examining activities in either the aircraft or flight simulation training devices need to be conducted by the CAA. In some cases, such approvals may be conditional on the continuing employment with the same operator.
- 5.3.4 The CAA is responsible for closely supervising and monitoring the activities, competency and currency of designated examiners. As a way to maintain proficiency and ensuring currency, each designated examiner should conduct a minimum number of examinations/checks annually as determined by the CAA.
- 5.3.5 Further, on a periodic basis, the CAA should physically observe examinations/checks being carried out by designated examiners, with the objective of monitoring performance, determining if remedial measures are required (e.g. additional training) and renewing the designated examiner's approval when necessary.
- Note.— Guidance on the responsibilities and qualifications of examiners and chief examiners and their oversight is contained in the Manual of Procedures for Establishment and Management of a State's Personnel Licensing System (Doc 9379).
- 5.3.6 Operators may assign pilots or flight engineers possessing appropriate experience on the aircraft type and the operator's routes to function as line check pilots or line check flight engineers provided the CAA approves the selection criteria, training programme and supervision of the operator for such assignment.
- 5.3.7 A State that is unable to provide sufficient staff for its operations inspectorate could arrange for experienced personnel of an operator to be seconded to the CAA to act as civil aviation safety inspectors (CASIs). In this case, a strategy to mitigate potential conflict of interest issues should be established and documented. However, it may be impossible to ensure that a CASI in such a case would not be involved in inspections concerning the operator from which the secondment was effected. It is still incumbent upon the DGCA to ensure that operator personnel, seconded as CASIs, are adequately trained and gualified and subsequently supervised in the carrying out of their duties.

5.3.8 A State unable to provide sufficient staff for its operations inspectorate could also arrange to use the services of experienced CASIs from another State authority on a part-time basis. The details of any such arrangement, including procedures for requesting the services of a CASI on a particular occasion or for a specific period of time, should be documented in an agreement between the CAA and that other authority.

5.4 DUTIES AND RESPONSIBILITIES OF THE CIVIL AVIATION SAFETY INSPECTOR (CASI)

- 5.4.1 The DGCA should assign a CASI to each operator, who would be responsible for managing the CAA oversight of the operator. This assignment should be for a specified time period, e.g. two or three years, after which another CASI would be assigned to the operator, if the size of the CAA inspectorate permits such change. A number of CAA inspectors may assist the CASI assigned to an operator, depending on the size and complexity of the operator's activities and on the specialized inspector qualifications that are required.
- 5.4.2 The primary function of the inspection staff is to determine the operational level of safety that the operator is capable of achieving, and does in fact achieve, in actual operations. To do so, the major part of the CASI's work involves inspecting, assessing, reporting and making recommendations. Recommendations, as well as criticism, concerning operations observed are to be based on fact, not opinion, and are to be carefully and fully documented. Any deficiencies noted by CASIs need to be immediately directed to the attention of the personnel involved. Should necessary corrective action not be accomplished within a reasonable time, as specified by the CASI, the matter should be reported to the DGCA for a decision regarding possible restrictions on operations or enforcement action against the operator.
- 5.4.3 CASIs should maintain in frequent contact with their assigned operators to assess the functioning of their organization and the performance of their staff during the conduct of operations, maintenance and training. In the course of these contacts with the operator's management and its operational and technical personnel, the CASI should always promote compliance with the safety regulations and strive to establish and maintain harmonious relationships. The importance of the CASI's good judgement, initiative, behaviour, attitude and sense of fairness, coupled with the necessary firmness in dealing with the operator's representatives, cannot be overstressed.
- 5.4.4 It is impractical to attempt to detail the guidance necessary to cover every situation and problem that might confront the inspection staff. Moreover, the duties and responsibilities of an individual CASI will vary depending upon the technical specialty and the specific tasks which are assigned. However, CASIs are expected to accomplish some or all of the following tasks as they relate to a particular specialty:
 - a) conduct routine inspections such as the inspection of a station facility, ramp, en-route operation and base, and carry out oversight or checks considered necessary at prescribed intervals;
 - b) assess the effectiveness of the operator's SMS;
 - c) conduct such inspections or oversight in accordance with an established work programme and applicable standard procedures and instructions;
 - d) advise the operator, in writing, of any significant deficiency, requesting a proposal for remedial action;
 - e) conduct follow-up on inspection reports to ensure that appropriate action has been taken in a timely manner;
 - submit reports on each inspection or investigation in the manner prescribed, and complete and process the applicable inspection forms;

- g) investigate and report, as required, possible violations of the basic aviation law or related safety operating regulations and rules;
- h) continuously review the operator's pertinent documentation (e.g. operations, training and MCMs), company policies, operating instructions and information to staff and system of amendments to determine whether they are accurate and made available in a timely manner to persons requiring their use:
- keep appropriate CASI informed on all aspects of the current operation and projected developments in the company including changes in executive personnel, in assigned responsibilities and in the operator's organization in general; and
- j) conduct qualification, approval and supervisory activities with respect to personnel proposed as designated examiners by an operator, if allocated by the CAA PEL department.
- All the safety oversight activity of a CASI, with respect to a particular operator, should be carefully planned. While it will not be possible to cover all aspects of an operation during every inspection, as much as possible should be covered over a specific period of time, and appropriate records should be maintained. Inspections should also be planned on the basis of a safety risk assessment exercise so that aspects of the operation that involve the greatest safety risk should receive more frequent attention. The planning by the CASI should take into account the results of the hazard identification and safety risk assessment conducted and maintained by the operator as part of the operator's SMS.

Note.— Guidance on the specific duties and responsibilities of a CAA airworthiness inspector is contained in the Airworthiness Manual (Doc 9760).

QUALIFICATIONS AND TRAINING OF THE CIVIL AVIATION SAFETY INSPECTOR

6.1 COMPETENCIES OF THE CIVIL AVIATION SAFETY INSPECTOR

- 6.1.1 The CAA should establish a competency framework for its CASIs, which should include:
 - a) competencies required to perform the allocated safety oversight tasks;
 - b) associated minimum qualification requirements;
 - c) initial and continuation training programmes in order to maintain and enhance inspector competency at the level necessary to effectively exercise their duties; and
 - d) regular review of the training provided to verify that it is effective and updated whenever necessary.
- 6.1.2 The Manual on the Competencies of Civil Aviation Safety Inspectors (Doc 10070) provides the ICAO competency framework for CASIs. CAAs electing to implement competency-based training and assessment for CASIs should use the ICAO competency framework as a basis to develop their competency model to suit their context. A methodology for CAAs to adapt the ICAO competency framework into their own competency model is provided in the Procedures for Air Navigation Services Training (PANS-TRG, Doc 9868).
- 6.1.3 The satisfactory execution of the various functions of the CAA inspectorate depends on the qualifications, experience, competence and dedication of individual inspectors. In addition to the crucial importance of technical competency in performing certification, inspection and surveillance functions, it is likewise critical that CASIs possess a high degree of integrity, are impartial in carrying out their tasks, are tactful, have a good understanding of human nature and are able to get along well with people. Persons subject to oversight by CASIs are often apprehensive and sensitive to perceived intrusions by CAA representatives into what they consider their own domain. Such apprehension or resentment can usually be reduced or overcome when the CASIs responsible for oversight explain that their objective is to assist rather than hinder, and that their oversight activities are being carried out in the interest of enhancing safety. Considering the specialized and sensitive nature of the CASI's mission, the qualifications, previous experience and personal characteristics of each person performing inspection and oversight duties must be verified and carefully evaluated before selections and appointments are made.

6.2 QUALIFICATIONS OF THE CIVIL AVIATION SAFETY INSPECTOR

6.2.1 General

6.2.1.1 CASIs should, by their qualifications and competencies, command the professional respect of the inspected personnel and should be at least as qualified as the personnel to inspect or supervise.

6.2.1.2 The *Manual on the Competencies of Civil Aviation Inspectors* (Doc 10070) provides examples of various areas of activities of CASIs along with the associated qualifying experience desirable from applicants before they are trained as CASIs by the CAA. While not absolute, these provisions can be used as broad guidelines for the initial employment of flight operations CASIs. Further guidance will be developed for other operations of the CASIs as identified in Doc 10070.

6.2.2 CASI qualifications for flight crew licensing assessment activities

- 6.2.2.1 A flight operations inspector conducting flight crew licensing assessment activities for a certificate, licence or rating (i.e., Annex 1 related) should:
 - hold a current and qualified pilot licence/rating at least equal to the licence/rating for which assessments are conducted; and
 - b) have relevant operational experience as a pilot associated with the licence or rating being assessed.

Note. — An example of operational experience for airline transport pilot licence (ATPL) assessments on aeroplanes is to require not less than 5 000 hours as a pilot of civil or military air transport aircraft.

6.2.3 Qualifications of a commercial air transport flight operations inspector

- 6.2.3.1 A flight operations inspector should have operational experience as a pilot in civil or military air transport operations and have:
 - a) held previous appointments either in operational management in air transport operations; or
 - b) previous experience as a designated examiner or instructor.

Note. — It cannot be expected that in all cases the flight operations inspector would possess the same level of flying experience on the inspected aircraft type as the personnel being inspected.

- 6.2.3.2 To carry out en-route inspections, a flight operations inspector should:
 - a) possess appropriate route and area experience;

Note.— The flight operations inspector should at least be experienced on comparable routes and be adequately briefed on the particular route under inspection. A flight operations inspector cannot be expected to possess actual flying experience on all of the routes on which inspections are conducted.

- b) be qualified or have been recently qualified on the type of aircraft used, or on a type of aircraft with similar operational characteristics. When establishing aircraft types with similar operational characteristics, the CAA should demonstrate how the different types are similar taking into consideration the following elements, and record the results of its assessment:
 - engine technology;
 - 2) certification basis;
 - 3) level of automation;

- 4) flight controls logic; and
- 5) size and mass of the aircraft; and
- have experience with comparable types of operations to those which the inspection will cover, including
 any particular authorizations detailed on the operation specifications (e.g., EDTO, LVO, PBN).

6.3 TRAINING OF THE CIVIL AVIATION SAFETY INSPECTOR AND MAINTENANCE OF TECHNICAL QUALIFICATIONS

6.3.1 Initial training

- 6.3.1.1 At the end of the initial training, CASIs should have acquired the competencies identified by the CAA as necessary to perform the authorization phase duties and tasks. Initial training is typically organized as follows:
 - a) introduction;
 - b) basic;
 - c) specialization; and
 - d) on-the-job training.
- Note 1. Detailed information on the content of the introduction, basic and on-the-job training components is provided in the Manual on Competencies of Civil Aviation Safety Inspectors (Doc 10070).
- Note 2. Guidance on initial training components for airworthiness inspectors is contained in the Airworthiness Manual (Doc 9760).
- 6.3.1.2 The initial training should cover at least the following:
 - a) CAA regulations and procedures;
 - b) SSP, NASP, SMS and quality systems;
 - c) enforcement procedures;
 - d) human factors principles; and
 - e) training for the specific role and tasks of the inspector, with emphasis on those areas requiring an approval by the CAA.
- 6.3.1.3 For flight operations inspectors, the specialization training should also include training on aircraft-specific subjects, as appropriate to the role and tasks of the inspector, in particular on aircraft systems and operations. Flight operations inspectors may obtain aircraft type qualifications through courses conducted by aircraft manufacturers, approved training organizations or air operators' training courses. As a general rule, it is not desirable for the CASI to obtain qualifications from an operator under the CAA inspectional jurisdiction, unless adequate measures are in place to prevent any actual or perceived conflict of interest.

- 6.3.1.4 Specific course material is available for the training of CASIs in the technicalities of the certification of operators. Examples of such courses include those offered by the Federal Aviation Administration (FAA) Government Safety Inspector in the field of:
 - a) Operations Air Operator Certification (GSI-Ops), Course 18700;
 - b) Airworthiness Air Operator and Approved Maintenance Organization Certification (GSI-Air), Course 18701;
 - c) Operations Air Cargo Certification (GSI-AC), Course 18702; and
 - d) Government Safety Inspector Personnel- Personnel Licensing (GSI-PEL), Course 18710.

Note. — These courses are available on the ICAO Global Aviation Training website at https://www.icao.int/Training/Pages/default.aspx.

6.3.2 Continuation training

- 6.3.2.1 To ensure that CASIs maintain proficiency and keep current on aircraft and equipment, techniques, procedures and new developments in their respective areas of expertise, it is essential that they receive periodic continuation training, which should include:
 - a) changes in regulations and CAA procedures relevant to the CASI's tasks;
 - b) technical training, appropriate to the role and tasks of the CASI, including training on aircraft-specific subjects as well as changes in operational environment and evolving technologies; and
 - c) results from past certification and surveillance activities.
- 6.3.2.2 In some States, technical training may be available at an aviation training facility operated by the CAA. More often however, such training will need to be obtained through courses offered by manufacturers, training organizations, other States or under ICAO auspices. It is emphasized again that in order to maintain good relationships and avoid possible embarrassment or controversy, it is not desirable for CASIs to acquire this training from an operator or organization under their inspectional jurisdiction, unless adequate measures are in place to prevent any actual or perceived conflict of interest.
- 6.3.2.3 Insofar as possible, the maintenance of licence qualifications and of an acceptable level of proficiency and knowledge of aircraft performance, limitations, equipment, systems, operations, etc., will permit CASIs to better assess the knowledge, techniques and overall competence of the personnel of an operator. For example, flight operations inspectors should receive recurrent training on aircraft systems and operations relevant for their allocated tasks. It is also desirable that flight operations inspectors receive periodical training in a flight simulation training device or in an aircraft.
- 6.3.2.4 Only through periodic practical and specialized theoretical training, both technical and supervisory, can the CAA inspectorate manpower be used effectively and CASIs maintain a high level of expertise. The net result of such training is better job performance and greater respect from the operator.

Part II THE COMMERCIAL AIR TRANSPORT OPERATOR

RESPONSIBILITIES OF THE OPERATOR

- 1.1 The operator has a responsibility for the safe conduct of operations and for compliance with any laws or regulations which the State of the Operator may promulgate. These laws and regulations, which are the means by which the State implements the provisions of the Annexes, are not in themselves sufficient to provide the operator with comprehensive and detailed instructions on which to base an operation. The responsibility for the development of operating instructions necessary for the safety, regularity and efficiency of an operation therefore rests upon the operator. These operating instructions must not conflict with the laws and regulations of the State of the Operator or those of other States into or over which operations are conducted. The primary means used by an operator to promulgate these operating instructions is the operations manual and the MCM which are discussed in Chapter 2 of this Part and in Part III.
- 1.2 The SMS of a certified operator of aeroplanes or helicopters authorized to conduct international commercial air transport in accordance with Annex 6 *Operation of Aircraft*, Part I *International Commercial Air Transport Aeroplanes;* and Part III *International Operations Helicopters*, Section II, International Commercial Air Transport, respectively, have to be made acceptable to the State of the Operator. This SMS is required to cover, as a minimum, the SMS Framework found in Annex 19, Appendix 2.

Note.— Guidance on SMS is provided in the Safety Management Manual (Doc 9859).

THE OPERATOR — ORGANIZATION

2.1 GENERAL

- 2.1.1 Annex 6, Part I, and Part III, Section II, states that an operator shall establish and maintain a method of control and supervision of flight operations as one of the prerequisites for the issuance and continued validity of an AOC. The operator therefore needs to have the capability of organizing, conducting and supervising the intended or existing commercial aviation operation.
- 2.1.2 The number of management and supervisory personnel required depends upon the size and complexity of the operation. It is necessary for the operator to establish the responsibilities and functions of the different officers involved, their relationship with the other officers and their relationship within the flight operations area and the organization as a whole. The authority, tasks, responsibilities and relationships of each key position are to be clearly understood and followed by the individuals occupying these positions.

2.2 ORGANIZATION AND ADMINISTRATION

- 2.2.1 A sound and effective management structure is essential. It is particularly important that the operational management should have proper status in the organization and be in suitably experienced and competent hands. Clear lines of authority and specific duties and responsibilities of subordinate elements and positions need to be established.
- 2.2.2 Acceptable procedures are to be established and followed for conveying company decisions, procedures and operating instructions to affected personnel to keep them informed at all times of items relevant to their activities.
- 2.2.3 The operator needs to develop a complete description of the qualifications required for and the duties and responsibilities of the key management positions, these include:
 - accountable executive
 - operations manager
 - chief pilot
 - fleet manager(s)
 - cabin crew manager
 - safety manager
 - training manager
 - continuing airworthiness manager
 - ground services manager
 - quality manager
 - security manager
- 2.2.4 Some of the above positions may be combined, depending on the size and complexity of the operation, if the management structure is acceptable to the CAA.

2.3 OPERATIONS MANUAL

- 2.3.1 The operations manual is the means used to define the company structure and individual duties and responsibilities.
- 2.3.2 With respect to the company's organizational structure the operations manual will contain:
 - a) a description of the organizational structure including the general organization of the company and of the operations department. The relationship between the operations department and the other departments of the company and the subordination and reporting lines of all divisions, departments, etc., which pertain to the safety of flight operations, should be defined;
 - the name of each manager responsible for flight operations, continuing airworthiness and maintenance, crew training and ground operations, with a description of their function and responsibilities and their contact details;
 - c) a description of the duties, responsibilities and authority of operations management personnel pertaining to the safety of flight operations and in compliance with applicable regulations;
 - d) a description of the system for supervision of the operation by the operator including how the safety of flight operations and the qualifications of personnel involved in all such operations are supervised and monitored. In particular, it contains the procedures related to the competence of operations personnel and the control, analysis and storage of records, flight documents and safety-related data; and
 - e) a system for the promulgation of additional operational instructions and information, supplementary to that in the operations manual, including the applicability of this information and the responsibilities for its promulgation.

2.4 MAINTENANCE AND CONTROL MANUAL

- 2.4.1 Annex 6, Part I, Chapter 8 and Part III, Section II, Chapter 6, require operators to provide an MCM acceptable to the State of Registry, for use and guidance for maintenance and operational personnel concerned. The operator, who is accountable for the MCM, is required to ensure that the manual is amended and revised as necessary by means of establishing an appropriate revision control system, and that copies of the changes are distributed to holders of the manual. In addition, Annex 6, Part I, Chapter 8, and Part III, Section II, Chapter 6, require that the design of the MCM observe human factors principles. Guidance material on the application of human factors principles can be found in the *Human Factors Training Manual* (Doc 9683).
- 2.4.2 Annex 6, Part I, Chapter 11, and Part III, Section II, Chapter 9, specify the information to be included in the MCM. The MCM should describe the operator's procedures necessary to ensure the continuing airworthiness of the operator's aircraft, and should include the following information:
 - a) a description of the procedures required by air operators to ensure that:
 - i) each aircraft is maintained in an airworthy condition;
 - ii) the operational and emergency equipment necessary for the intended flight is serviceable; and
 - iii) the Certificate of Airworthiness of each aircraft remains valid;

- a description of the administrative arrangements between the air operator and the approved maintenance organization (AMO), when applicable, including how to review the arrangements, when applicable;
- c) a general description and location of the facilities;
- d) procedures to ensure that the maintenance organization's scope of work includes the work required on the operator's aircraft;
- e) a description of the maintenance procedures and the procedures for completing and signing a maintenance release when maintenance is carried out by a person or organization other than that of an AMO;
- f) the title(s), name(s) and duties of the person or group of persons employed to ensure that all maintenance is carried out and controlled in accordance with the MCM, and an organizational chart showing the associated chains of responsibilities
- g) a reference to the maintenance programme for each aircraft type operated (refer to the *Airworthiness Manual* (Doc 9760), Part III);
- h) the procedures specifying how the management organization ensures that all scheduled and unscheduled maintenance is performed on the operator's aircraft on time and in a controlled and satisfactory manner;
- i) management of the approval of modifications and repairs;
- j) a description of the methods used for the completion and retention of the air operator's continuing airworthiness records (refer to the Airworthiness Manual (Doc 9760), Part III);
- k) in the case of aeroplanes over 5 700 kg or helicopters over 3 175 kg maximum take-off mass:
 - a description of the procedures for monitoring, assessing and reporting maintenance and operational experience to the State of Registry;
 - ii) a description of the procedures for complying with the service information reporting requirements of Annex 8, Part II; and
 - iii) a description of the procedures for assessing continuing airworthiness information and recommendations available from the organization responsible for the type design, and for implementing resulting actions considered necessary as a result of the assessment in accordance with a procedure acceptable to the State of Registry;
- a description of the procedures for the coordination of scheduled maintenance, the implementation of action resulting from mandatory continuing airworthiness information and, if applicable, how their alternative means of compliance is requested and complied with to ensure the work is carried out properly;
- m) a description of the establishment and maintenance of a system of analysis and the continued monitoring of performance and efficiency of the maintenance programmes, in order to correct any deficiency in the programmes;
- n) a description of aircraft types and models to which the manual applies;

- a description of procedures for ensuring that unserviceable systems and components affecting airworthiness are recorded and rectified;
- p) a description of the procedures for advising the State of Registry of significant in-service occurrences for complying with the service information reporting requirements of Annex 8; and
- q) the procedures to ensure that the mass and balance statement reflects the current configuration status
 of the aircraft.
- 2.4.3 Additional procedures may be necessary to ensure the air operator's maintenance personnel responsibilities and aircraft maintenance programme requirements are met. The following additional procedures are recommended:
 - a) a description of the procedures to ensure the aircraft is maintained in accordance with the maintenance programme;
 - b) a description of the training programme for the maintenance personnel employed by the air operator applicable to their assigned duties and responsibilities;
 - c) a description of the air operator's SMS;
 - a description of the procedure to ensure that modifications and repairs comply with the State of Registry's airworthiness requirements; and
 - e) a description of the procedure used for the MCM revision and control.

Note.— Where an operator's SMS is already addressed in other documents, an appropriate reference to such document, together with its relevant interfaces with the MCM, can be described instead. Guidance material on SMS can be found in the Safety Management Manual (Doc 9859).

2.4.4 Annex 6, Part I, Chapter 8, and Part III, Section II, Chapter 6, require the air operator to provide the State of the Operator and the State of Registry with a copy of the air operator's MCM, together with all amendments and/or revisions, and should ensure to incorporate such mandatory material as the State of the Operator or the State of Registry may require.

Part III

THE AOC APPLICATION, EVALUATION AND CERTIFICATION

GENERAL

Note 1.— Guidance on the airworthiness aspects of an application for an AOC are contained in the Airworthiness Manual (Doc 9760), Part IV, Chapter 2.

Note 2.— The procedures outlined in the Airworthiness Manual (Doc 9760), Chapter 1, and further described in the succeeding chapters are based on those contained in the ICAO Government Safety Inspector Operations — Air Operator Certification (GSI-OPS-18700) and ICAO Government Safety Inspector Airworthiness — Air Operator and Approved Maintenance Organization Certification (GSI-AIR-18701), Operations — Air Cargo Certification (GSI-AC), Course 18702 — Government Safety Inspector Personnel- Personnel Licensing (GSI-PEL), Course 18710 prepared by the United States FAA in conjunction with ICAO.

1.1 INTRODUCTION

- 1.1.1 The purpose of an AOC is to certify that specified commercial air transport operations are authorized by the State of the Operator and are to be conducted in compliance with applicable regulations and rules. The DGCA will need to establish procedures for the issuance of an AOC and for the continuing safety oversight and inspection by the CAA of the operations conducted in accordance with the AOC and the related operations specifications. An AOC comes in two parts, the AOC itself and the associated operations specifications that define the operation.
- 1.1.2 During the certification process, the DGCA is to be satisfied that the applicant, who will have the ultimate responsibility for the safety of the operation, is eligible for the issuance of an AOC and has the ability and competence both to conduct safe and efficient operations and to comply with applicable regulations and rules. The DGCA, in addition to assessing the ability and competence of the applicant, should also endeavour to guide the applicant in organizational and procedural matters which will result in a safe and economically successful operation. Thus, if the objectives of both the State and the applicant are achieved in the certification process, they will have commenced their shared responsibility for safety, regularity and efficiency of operations, which will in turn enhance the public confidence in the operations conducted by the applicant as an operator and holder of an AOC.
- 1.1.3 At the commencement of the certification process, the DGCA should appoint a CASI as the project manager and establish a certification team consisting of qualified and experienced CASIs of the necessary specializations, such as operations, maintenance and safety management. The applicant should be informed that the project manager will be responsible for coordinating all aspects of the certification process and will be the focal point for dealing with all matters between the applicant and the CAA.
- 1.1.4 Since each operation may differ significantly in complexity and scope, the project manager and the certification team need considerable latitude in taking decisions and making recommendations during the certification process. The ultimate recommendation by the project manager and decision by the DGCA regarding certification and awarding an AOC is to be based on the determination of whether or not the applicant meets the requirements established by the State in its air navigation regulations and is adequately equipped and capable of conducting the proposed operation in a safe and efficient manner.

- 1.1.5 The process described in Part III is for the evaluation of an applicant and the initial issuance of an AOC. Subsequent requirements for the introduction of new aircraft types or models, or for the introduction of new types of operations, will follow broadly similar lines.
- 1.1.6 Guidance on air operator certification and validation is provided in Annex 6, Part I, *International Commercial Air Transport Aeroplanes*, Attachment D and Part III, *International Operations Helicopters*, Attachment C.
- 1.1.7 While the process described here is intended for the certification of an air operator, Annex 8, Part II, and the *Airworthiness Manual* (Doc 9760), Part III, contain provisions related to the process for the certification of an AMO, which is similar to the process for an approved training organization.

1.2 CERTIFICATION PROCEDURE

- 1.2.1 The procedure for the application and granting of an AOC is best organized in phases and will normally take the following sequence:
 - a) pre-application phase;
 - b) formal application phase;
 - c) document evaluation phase;
 - d) demonstration and inspection phase; and
 - e) certification phase.
- 1.2.2 Each of these phases is briefly introduced below, and each will be dealt with in greater detail in the succeeding chapters of this Part.
- 1.2.3 During any of these phases, the applicant may formally terminate all efforts toward certification or the CAA office may determine that the applicant will not be able to proceed with the certification process. The DGCA needs to be notified of any certification project that is terminated.

1.3 PRE-APPLICATION PHASE

- 1.3.1 A prospective operator who intends to apply for an AOC should enter into preliminary discussions with the CAA and should be provided with complete information concerning the type of operations which may be authorized, the data to be provided by the applicant and the procedures which will be followed in the processing of the application. It is essential that the applicant has, in this pre-application phase, a clear understanding of the form, content and documents required for the formal application. A standard information package should be developed to provide information to applicants.
- 1.3.2 The CAA should advise the prospective operator on the approximate period of time that will be required to conduct the certification process, subsequent to the receipt of a complete and properly executed application. This advice is of particular importance in the case of new operators so that such applicants may avoid undue financial outlays during the certification period.

- 1.3.3 In those cases where an applicant's organization is in the formative stage, and the applicant has little or no operating experience, the applicant should be advised that it may not be possible to judge the organization's operating competency until a sufficient period of operational proving, including proving flight operations, has been carried out, and that the overall period required to reach a final decision on the application may be protracted and considerable financial outlays unavoidable.
- 1.3.4 The importance of a thorough and careful preliminary assessment of the application cannot be overemphasized. The more thoroughly the applicant's competence is established at this stage, the less likelihood there will be of having serious problems in the document evaluation and the demonstration and inspection phases preceding certification or during the course of subsequent operations. Analysis of the application as detailed in Chapter 2, Part III, will indicate either that it is acceptable on a preliminary basis or that it is unacceptable. If in the latter case the deficiencies are such that they can be rectified, the applicant should be given a reasonable opportunity to resubmit the application. Such an assessment is essential at an early stage to reveal any critical deficiencies in the proposals and will enable the applicant to prepare alternative proposals addressing the identified deficiencies.
- 1.3.5 If the application is acceptable to the CAA on the basis of the preliminary assessment, the applicant should be encouraged to proceed with preparations for the commencement of operations on the basis that an AOC will be issued subject to satisfactory completion of the remainder of the certification procedure.
- 1.3.6 The pre-application phase should include a parallel assessment of the financial, economic and legal status of the applicant and the proposed operation. The financial viability of the operation may be the most critical factor in reaching a decision on whether or not an AOC should be awarded. The applicant needs guaranteed access to sufficient financial resources to obtain all the required equipment, facilities and manpower and to fully support operations in the early stages when revenues are difficult to predict and may, in any case, be very low. Marginal or severely limited resources frequently result in an adverse effect on safety and efficiency; experience indicates that operators tend to take short cuts on such vital matters as required maintenance, acquisition of adequate spare parts, training of personnel and other similar matters with safety implications. The determination of the financial resources of the applicant is usually based on an audit of the operator's assets and liabilities and a thorough evaluation of all financial information and other pertinent data such as proposed arrangements for the purchase or lease of aircraft and major equipment.
- 1.3.7 Aspects that should therefore be considered are: sufficient financial resources; route structure and aircraft appropriate to the proposed operation; an intended level of service that meets a need or demand and is in the public interest; the proposed operation is in accordance with bilateral or multilateral air transport agreements relating to traffic rights, frequencies, capacity, routes, etc., to which the State is a party; and the availability of traffic studies or other data indicating that the proposed operation should be economically successful.
- 1.3.8 In many States it may not be possible for the CAA to have qualified personnel or staff to carry out the financial, economic and legal assessment of the applicant and the proposed operation. In such cases it is essential that the DGCA obtain the necessary professional assistance from other agencies of the State to assist in the assessment and certification process.
- 1.3.9 It is essential that the financial, economic and legal aspects be assessed as satisfactory early in the certification process, before committing additional resources to that process. If the proposed operation is not considered to be viable in respect of the financial, economic and legal factors, further action should be suspended until it is determined whether these deficiencies can be rectified.

1.4 FORMAL APPLICATION PHASE

- 1.4.1 Upon completing the assessment concerning the financial, economic and legal aspects of the AOC application and after correcting any deficiencies, a provisional determination should be made regarding the general feasibility of the operation. If the operation is found to be provisionally acceptable, the second phase of the certification process, the formal application phase, can be undertaken.
- 1.4.2 The formal application for an AOC accompanied by the required documentation should be submitted in the manner prescribed by the CAA. The applicant needs to submit all required documents as provided in Chapter 3 of this Part, including the financial capability assessment of the prospective operator to conduct proposed operations by the appropriate authority as described in 1.3 of this Chapter.
- 1.4.3 It is interpreted by the CAA that, upon submission of a formal AOC application, the applicant is aware of the regulations and rules applicable to the proposed operation, is prepared to show the method of compliance, and is prepared for an in-depth evaluation, demonstration and inspection related to the required manuals, training programmes, operational and maintenance facilities, aircraft, support equipment, record keeping, dangerous goods programme, security programme, flight crew and key management personnel, including the functioning of the administration and safety management system. If any activities or services are outsourced, the applicant needs to provide further details.

1.5 DOCUMENT EVALUATION PHASE

- 1.5.1 The document evaluation phase involves the detailed examination of all documentation and manuals provided by the applicant, to establish that every aspect required by the regulations is included and adequately covered. It would also include an evaluation of the SMS implementation plan which should take into account the size of the applicant as well as the complexity of its aviation products or services.
- 1.5.2 In order to facilitate this phase of the certification process, the applicant should have coordinated all aspects of the development of the required documentation with the CAA certification team, prior to the submission of the formal application. CASIs review the documents submitted in the preceding phase to determine whether the applicant complies with applicable safety regulations and operating practices. In this phase, the applicant's training programmes are granted initial approval, and maintenance programs are approved or accepted as required. Facilities are evaluated, emergency evacuation demonstrations are conducted, and all other discrepancies and open questions are resolved.

1.6 DEMONSTRATION AND INSPECTION PHASE

- 1.6.1 Inspections in this phase will be carried out for base and station facilities, operational control and supervision facilities, training programmes and training facilities, aircraft and maintenance control and planning systems, observing training programmes; reviewing maintenance, operations, and record keeping procedures; and reviewing actual en-route operations. This could also include interviews with personnel to ensure that the procedures are transmitted and understood. In addition, the inspection should also make assessment on the implementation of the safety management structure, processes, activities and interfaces.
- 1.6.2 Demonstrations will be carried out for the operational control system, aircraft emergency evacuation and ditching situations, and may involve demonstration flights as part of this process. CASIs evaluate the applicant's regulatory compliance and safety operating practices. Subject to the determination by the CAA, data from reliable analytical methods or from demonstrations by other operators may be used in the emergency evacuation or ditching demonstrations as described in Chapter 5 of this Part.

1.7 CERTIFICATION PHASE

- 1.7.1 The certification phase is the conclusion of the certification process when the CAA project manager has determined that all certification requirements, both operational and economic, have been completed in a satisfactory manner, and that the operator will comply with the applicable regulations and is fully capable of fulfilling its responsibilities and conducting a safe and efficient operation.
- 1.7.2 The certification phase shall also ensure that the applicant has all the necessary components and elements, processes, activities and interfaces for the initial phase of its SMS implementation to give the assurance that it will operate as intended and that it will be effective, considering the State's safety objectives and targets.
- 1.7.3 The CAA project manager should submit a written report to the DGCA to recommend the issuance of the AOC.
- 1.7.4 The culmination of this phase is the issuance of the AOC, and the associated operations specifications under the authority of which the operation will be conducted.
- 1.7.5 Subsequent to the issuance of an AOC, the CAA will be responsible for continued surveillance and for conducting periodic inspections to ensure the operator's continued compliance with CAA regulations, authorizations, limitations and provisions of its AOC and operations specifications. These periodic inspections are components of a continuing safety oversight programme.

PRE-APPLICATION PHASE

2.1 INITIAL INQUIRY AND CAA RESPONSE

- 2.1.1 The pre-application phase commences when the applicant makes an initial inquiry by letter, telephone or personal visit to the CAA. The applicant should contact the CAA as far in advance as possible of an anticipated start of operations.
- 2.1.2 The CAA should advise the applicant to thoroughly review the CAA regulations, directives and advisory materials and provide guidance concerning personnel, operations, maintenance and safety management, and an explanation of the certification process, in a standard information package for applicants for an AOC.
- 2.1.3 The standard information package should include a form for the prospective operator's pre-assessment statement to be completed by the applicant (see Attachment A to this Part), and an advisory pamphlet containing:
 - a) a description of the application process for obtaining an AOC;
 - b) an introduction to the specific CAA regulations;
 - c) guidance on the evaluation of an applicant for certification;
 - d) guidance on the issuance of an AOC and associated operations specifications;
 - e) instructions for completing the pre-assessment statement form (see Attachment B to this Part);
 - f) a list of the documents that should accompany the formal application;
 - g) a schedule of events in the certification process; and
 - h) any other CAA directive or advisory material necessary for the certification process should also be provided.
- 2.1.4 The purpose of the prospective operator's pre-assessment statement is to establish the intent of the applicant to continue with the process for certification and to thus enable the CAA to commit resources and plan the certification process.
- 2.1.5 An example for a pre-assessment statement form and instructions for completing this form are provided in Attachments A and B to this Part.

2.2 CAA ACTION UPON RECEIPT OF A COMPLETED PROSPECTIVE OPERATOR'S PRE-ASSESSMENT STATEMENT

- 2.2.1 Upon receipt of a completed prospective operator's pre-assessment statement, the CAA will appoint a project manager and a certification team consisting of appropriately qualified specialized CASIs.
- 2.2.2 The CAA certification team will conduct a review of the applicant's pre-assessment statement and, if the information provided is considered acceptable, the project manager will schedule a pre-application meeting with the applicant.

2.3 PRE-APPLICATION MEETING

- 2.3.1 The purpose of the pre-application meeting is to confirm the information provided in the pre-assessment statement to determine whether or not the applicant has sufficient knowledge of the appropriate CAA regulations and requirements and to confirm, for the applicant, the expectations of the CAA.
- 2.3.2 The pre-application meeting should be attended by the CAA project manager and certification team and the key management personnel of the applicant. The applicant should be prepared to discuss, in general terms, all aspects of the proposed operations.
- 2.3.3 At the pre-application meeting, the applicant and any key management personnel attending the meeting should be briefed with as much detail as necessary to ensure that they understand the certification process, using the schedule of events in the certification process to facilitate the discussion and to ensure that all elements of the certification process are covered.
- 2.3.4 The applicant should be made aware of the government department responsible for financial, economic and legal matters, and for the necessary assessment of the applicant's financial resources and ability to support the proposed operations. It is essential that the financial, economic and legal assessments are commenced early since an AOC should not be granted without a satisfactory assessment of these aspects from the appropriate department.
- 2.3.5 The CAA project manager and the certification team should prepare an application package for delivery at the pre-application meeting. This package should be more detailed than the standard information package described in 2.1.3 and designed to assist the applicant in the preparation of a formal application for certification. This application package should contain: the advisory pamphlet already discussed; a list of the documents that should be provided with the formal application; a schedule of events in the certification process; an example of the type of operations specifications associated with an AOC; and any other information that may be helpful. The required documents should be discussed in detail at the pre-application meeting to provide the applicant with as much assistance as possible.
- 2.3.6 Subsequent to the pre-application meeting, the certification team will evaluate the results of the meeting. Should the certification team consider that the applicant is not ready to make a formal application, advice should be given on further preparation and another pre-application meeting should be scheduled or, alternatively, the applicant may be advised to withdraw the intent to apply for certification.
- 2.3.7 Should the certification team establish that the information provided in the pre-application statement is satisfactory and that the applicant has a clear understanding of the certification process, the applicant should then be invited to prepare and proceed with a formal application, as outlined in Chapter 3 of this Part.

FORMAL APPLICATION PHASE

3.1 FORMAL APPLICATION PACKAGE

- 3.1.1 The formal application for certification should be an application form or letter with attachments containing the information required by the CAA, comprising a formal application package. The development of the application and the attached documents should have been coordinated with the CAA certification team, subsequent to the pre-application meeting. Such coordination between the personnel of the applicant and the CAA certification team, will ensure the quality of the application package and facilitate the later document evaluation process.
- 3.1.2 The application should be signed by the applicant's accountable manager and should contain at least the following information:
 - a) a statement that the application serves as a formal application for an AOC;
 - b) the name and address of the applicant;
 - the location and address of the applicant's principal place of business, main base of operations and maintenance base or AMO name and location.
 - d) any maintenance arrangements or organization's maintenance capabilities or forecast capabilities, if applicable;
 - e) a description of the applicant's business organization and corporate structure, and names and addresses of those entities and individuals having a major financial interest;
 - f) the name and address of the applicant's legal representative;
 - g) the identity of key management personnel, for example: accountable executive, operations manager, chief pilot, fleet manager(s), cabin crew manager, safety manager, training manager, continuing airworthiness manager, ground services manager, security manager and quality manager;
 - h) the nature of the proposed operations passenger/cargo/mail, day or night, visual flight rules (VFR) or instrument flight rules (IFR), whether or not dangerous goods are to be transported;
 - i) the desired date for the operation to commence; and
 - j) if the State legislation requires a fee for the issuance of the AOC, it should be paid at this time to support the applicant's commitment before the State commits any resources to the project.
- 3.1.3 The attachments that need to accompany the formal application are:
 - a) the identification of the operation specifications sought, with information on how associated conditions will be met, as described in 3.2.1;

- b) the schedule of events in the certification process with appropriate events addressed and target dates;
- an initial statement of compliance or detailed description of how the applicant intends to show compliance with each provision of the air navigation regulations;
- d) the management structure and key staff members including titles, names, backgrounds, qualifications and experience, with regulatory requirements satisfied;
- e) the SMS manual or related SMS documentation;
- f) a list of designated destination and alternate aerodromes for scheduled services, areas of operation for non-scheduled services and bases for operations, as appropriate to the intended operations;
- g) a list of aircraft to be operated;
- h) documents of purchase, leases, contracts or letters of intent;
- arrangements for crew and ground personnel training and qualification and the facilities and equipment required and available;
- j) the operations manual;
- k) the MCM;
- I) details of the method of control and supervision of operations to be used;
- m) the status of the assessment of financial, economic and legal matters by the appropriate government department;
- n) a maintenance programme, approved by the State of Registry, for each aircraft type operated;
- o) a reliability programme as required;
- p) a maintenance quality assurance system or its alternative system; and
- q) maintenance arrangements with an AMO or evidence of application for the approval of an AMO.

A more detailed description of some of these attachments is provided in 3.2.

3.2 ATTACHMENTS TO THE FORMAL APPLICATION

3.2.1 *Identification of operations specifications sought.* Requirements for and guidance on the operations specifications are provided in Annex 6, Part I, Appendix 6 and Part III, Appendix 3. The CAA should have standard operations specifications to ensure that operators conducting similar operations with comparable equipment function to the same standards. The applicant will identify the desired operations specifications appropriate to the intended operation from the CAA's standard operations specifications provided at the pre-assessment meeting. These desired operations specifications will include the applicant's intended authorizations, conditions and limitations specific to the aircraft type or types and to the proposed operations, and will form the basis for the operations specifications that will ultimately be issued in association with the AOC.

- 3.2.2 Schedule of events. The schedule of events is a key document that lists items, activities, programmes, aircraft and facility acquisitions that will be made ready for inspection by the CAA before certification. The schedule should include dates for:
 - a) when crew members and maintenance personnel will commence training;
 - b) when maintenance facilities will be ready for inspection;
 - c) when each of the required manuals will be ready for evaluation;
 - d) when aircraft will be ready for inspection;
 - e) when terminal facilities will be ready for inspection;
 - f) if and when emergency evacuation demonstrations, ditching demonstrations and demonstration flights are planned; and
 - g) proposed assessments of training staff and other persons subject to CAA approval.

The dates should be logical in sequence and provide time for CAA review, inspection and approval of each item. The overall plan is to be kept under constant review to maintain control of the certification process.

Note.— Subject to the determination by the CAA, data from reliable analytical methods or from demonstrations by other operators may be used in the emergency evacuation or ditching demonstrations as described in Chapter 5 of this Part.

- 3.2.3 Initial statement of compliance. The initial statement of compliance should be a complete list of all CAA regulations applicable to the proposed operation. Each regulation or sub-part should be accompanied by a brief description or a reference to a manual or other document. The description or reference should describe the method of compliance in each case. The method of compliance may not be finalized at the time of the formal application, in which case a date should be given by which the final information will be provided. The purpose of the statement of compliance is to ensure that the applicant has addressed all regulatory requirements. It aids the CAA certification team to assess where the regulatory requirements have been addressed in the applicant's manuals, programmes and procedures.
- 3.2.4 Management structure and key staff members. The CAA regulations should establish basic management positions and the qualifications for these positions, with some variation in the requirement dependent upon the complexity of the proposed operation. The requirements should cover the following positions or their equivalent: accountable executive or general manager, operations manager, chief pilot, fleet manager(s), cabin crew manager, safety manager, training manager, continuing airworthiness manager, ground services manager, security manager and quality manager. The list should include the management positions, the names of the individuals involved and their qualifications and relevant management experience and, where appropriate, their licences, ratings and aviation experience.
- 3.2.5 SMS documentation. Annex 19 requires operators of aeroplanes or helicopters authorized to conduct international commercial air transport, in accordance with Annex 6, Part I or Part III, Section II, to respectively implement SMS. The SMS documentation should include an SMS manual or other related documents.
 - Note.— Guidance on SMS is contained in the Safety Management Manual (Doc 9859).
- 3.2.6 Aerodromes and areas. A list should be provided of the destination and alternate aerodromes designated for proposed scheduled operations and areas of operation for non-scheduled operations.

- 3.2.7 Aircraft to be operated. A list of the aircraft to be operated should be provided, with the make, model, series and the nationality and registration marks for each aircraft and details of the origin and source for each aircraft, if these details are known. It is possible that the details for individual aircraft may not yet be available, in which case, evidence should be provided as described in 3.2.8.
- 3.2.8 Documents of purchase, leases, contracts or letters of intent. Documents of purchase, leases, contracts or letters of intent should provide evidence that the applicant is actively procuring aircraft, facilities and services appropriate to the operation proposed. If formal contracts are not completed, letters or other documents showing preliminary agreements or intent should be provided. These documents should relate to aircraft, station facilities and services, weather reporting, communications facilities, maintenance facilities and service, maintenance arrangements, aeronautical charts and publications, aerodrome analysis and obstruction data, outsourced training and training facilities.
- 3.2.9 Crew and ground personnel training and required facilities. Details of the facilities required and available for training company personnel and of the training programme with dates for commencement and completion of the initial programme should be provided. Training will include: human performance, threat and error management, the transport of dangerous goods and security. Specific attention should be paid, with respect to crew members, to company procedures indoctrination, emergency equipment drills, aircraft ground training, flight simulators and other flight simulation training devices and aircraft flight training. All these aspects should cover both initial and recurrent training.
- 3.2.10 Operations manual. The operations manual, which may be provided in separate parts, should set out the applicant's general policies, the duties and responsibilities of personnel, operational control policy and procedures, and the instructions and information necessary to permit flight and ground personnel to perform their duties with a high degree of safety. The size, as well as the number of volumes, of the operations manual will depend upon the size and complexity of the proposed operations.

Note.— Annex 6, Part I, Appendix 2 and Part III — International Operations — Helicopters, Appendix 8, provides the organization and content of an operations manual.

- 3.2.11 *MCM.* Annex 6, Part I, Chapters 8 and 11, and Part III, Section II, Chapters 6 and 9, require operators to ensure that an MCM, acceptable to the State of Registry, is provided for use and guidance for maintenance and operational personnel as applicable. The MCM should describe the administrative arrangements between the applicant and the AMO. It should also define the procedures to be used, the duties and responsibilities of operations and maintenance personnel, and the instructions and information to ensure that maintenance and operational personnel perform their duties at the required standards of completion and safety. Details on the requirements and content of the MCM are described in the *Airworthiness Manual* (Doc 9760), Part III, Chapter 7.
- 3.2.12 Maintenance programme. Annex 6, Part I, Chapter 8 and Part III, Section II, Chapter 6, require operators to provide a maintenance programme approved by the State of Registry for the use and guidance of maintenance and operational personnel. The maintenance programme, including a maintenance schedule, will detail the maintenance requirements for individual aircraft.
- 3.2.13 Reliability programme. Annex 6, Part I, Chapter 11 and Part III, Section II, Chapter 9, provide that a reliability programme, when applicable, should be part of the maintenance programme. Details on the requirements and content are detailed in the *Airworthiness Manual* (Doc 9760), Part III, Chapter 7.
- 3.2.14 *Method of control and supervision of operations*. This should set out the applicant's proposals for control and supervision of operations including dispatch, flight watch or flight following, and communication procedures.
- 3.2.15 Assessment of financial, economic and legal matters. The status of the assessment of financial, economic and legal matters should be clearly identified in the formal application package since a successful outcome of this assessment is essential to the issuance of an AOC.

3.3 CURSORY REVIEW OF THE FORMAL APPLICATION PACKAGE

- 3.3.1 The CAA certification team will make a cursory review of the formal application package to check that the required attachments have been presented, that they address the required information and are of an appropriate quality to allow for a productive formal application meeting and to proceed with the certification process. The project manager will notify the applicant of the results of the cursory review informally, followed by written notification of acceptance or rejection of the formal application package.
- 3.3.2 The cursory review of the required operations manuals and MCMs, as well as other safety-related manuals of the applicant, should be extended to include the procedures for the distribution, amendment and use of the documents. The CAA certification team needs to check whether:
 - a) the manuals are easy to revise;
 - b) the system allows personnel to determine the revision status of the manual;
 - c) the date of the last revision is found on each page; and
 - d) the manual references appropriate CAA regulations.
- 3.3.3 In the case of the operations manual, the cursory review should also include the need to address the required subjects, including at least:
 - a) operations administration and supervision;
 - b) safety management;
 - policy and procedures regarding flight operations and fuel planning, en-route fuel management, minimum fuel and fuel emergency;
 - d) minimum flight altitudes;
 - e) aerodrome or heliport operating minima;
 - f) rules to limit flight time and flight duty periods and for the provision of adequate rest periods for flight and cabin crew members, complemented as applicable by fatigue risk management provisions;
 - g) aircraft performance;
 - h) route guide;
 - i) procedures for search and rescue;
 - j) instructions for the carriage of dangerous goods and emergency response action in the event of a dangerous goods incident;
 - k) navigation instructions;
 - I) communications instructions;
 - m) initial and recurrent training programmes; and
 - n) security procedures and instructions.

- 3.3.4 In the case of the MCM, the cursory review should extend to the required contents, noting that the manual is required to be acceptable to the State of Registry of the aircraft.
- 3.3.5 The cursory review of the SMS manual (which may be in the form of stand-alone documents or integrated with other organizational documents maintained by the operator) should be extended to include the framework that comprises the SMS components and elements.
 - Note.— Guidance on SMS is contained in the Safety Management Manual (Doc 9859).
- 3.3.6 During the cursory review, the CAA project manager may identify the need for additional expertise on the certification team, e.g. to deal with a specific aircraft type or a particular navigation system.

3.4 ACCEPTABILITY OF THE FORMAL APPLICATION

- 3.4.1 If the formal application package is incomplete or otherwise unacceptable, the CAA should inform the applicant, providing details of the deficiencies and advice on the resubmission of the formal application.
- 3.4.2 If the information in the formal application package is considered acceptable by the certification team, the project manager will schedule a formal application meeting with the applicant.

3.5 FORMAL APPLICATION MEETING

- 3.5.1 A formal application meeting should be conducted between the CAA project manager, the certification team and all the key management personnel of the applicant, with the objective of resolving any questions on the part of either the CAA or the applicant to establish a common understanding on the future procedure for the application process.
- 3.5.2 In particular, the formal application meeting should confirm that the management background information satisfies regulatory requirements; it should address any errors or omissions in the application package, resolve any scheduling date conflicts and agree on a process for revising event dates, reinforce the communication and working relationships between the CAA certification team and applicant personnel and, finally, determine the acceptability of the formal application package. It should be understood that acceptance of the formal application package by the project manager does not constitute acceptance or approval of any of the attachments which will be subjected to later in-depth review. The identification of significant discrepancies during the in-depth review may require further meetings between appropriate members of the CAA certification team and the applicant personnel.
- 3.5.3 Subsequent to the formal application meeting and subject to successful acceptance of the application package, the project manager should provide the applicant with a letter acknowledging receipt and acceptance of the formal application.
- 3.5.4 During the certification process, the applicant may formally terminate all efforts toward certification or the CAA office may determine that the applicant will not be able to proceed with the certification process. The DGCA needs to be notified of any certification project that is terminated. The CAA may:
 - a) deny an application for an AOC if the CAA finds that the applicant is not properly or adequately equipped or is not able to conduct safe operations;
 - b) terminate the certification process for lack of contact or inactivity of greater than 90 calendar days;

- c) terminate the certification process when it is clear that continuing the process will not result in approval or acceptance (e.g., multiple failures of the applicant's submissions); or
- d) restart the certification process if the applicant makes a change in aircraft make or model.

DOCUMENT EVALUATION PHASE

4.1 GENERAL

- 4.1.1 After the formal application has been accepted, the CAA certification team will commence a thorough evaluation of all the documents and manuals that are required by the regulations to be submitted to the CAA. The document evaluation phase involves the detailed evaluation of all manuals and documentation and the methods, procedures, and policies described in them. The purpose of this evaluation is to ensure compliance with regulations and conformity to safe operating practices. The applicant should have coordinated all aspects of the development of the required documentation with the CAA certification team prior to submission of the formal application package. The complexity of the information that needs to be evaluated in the applicant's manuals and documents depends upon the complexity of the proposed operation. The CAA should endeavour to complete these evaluations in accordance with the schedule of events prepared by the applicant and agreed at the formal application meeting. If a document or manual is incomplete or deficient, or if non-compliance with regulations or safe operating practices is detected, the document or manual should be returned to the applicant for corrective action.
- 4.1.2 Section 4.2 below lists documents or manuals requiring an approval or a technical evaluation. Documents or manuals that are satisfactory will be approved or accepted, as required by the regulations. Approval should be indicated by a signed document or certificate. Acceptance of material that does not require formal approval should be indicated either by letter or by the absence of any CAA objection to the material within a previously specified period.
- 4.1.3 The complexity of the information that needs to be addressed in the applicant's documents and manuals depends upon the complexity of the proposed operation.

4.2 EXAMPLES OF DOCUMENTS AND MANUALS TO BE EVALUATED

- 4.2.1 The following is a non-exhaustive list of the documents and manuals that should be provided by the applicant and evaluated by the CAA during this phase. It is important to keep in mind that the AOC certification process is a joint project between different specialties, and one should confer with another to ensure all manuals are coordinated and that there is no contradiction or differences in procedures described in different manuals (e.g. defects rectification and minimum equipment list (MEL) procedures). It is therefore imperative that the airworthiness inspection division and OPS sections of the CAA coordinate with one another and that there is documented evidence that both organizations have participated in the issuance of the AOC:
 - a) draft operations specifications;
 - b) statement of compliance;
 - c) management of personnel résumés providing qualifications and aviation experience;
 - d) aircraft flight manuals;
 - e) operations manual (individual manuals and items listed below form part of the operations manual):

f)

g)

h)

i)

j)

k)

I)

m)

plan for demonstration flights.

1)	aircraft operating manual;
2)	MEL;
3)	configuration deviation list (CDL);
4)	aircraft performance manual;
5)	mass and balance control manual;
6)	aircraft loading and handling manual or ground handling manual;
7)	training manuals for flight crew, cabin crew, operations personnel and ground personnel;
8)	route guide;
9)	dangerous goods manual;
10)	passenger briefing cards;
11)	aircraft search procedure checklist; and
12)	operational control procedures, dispatch, flight following, etc.;
S	MS manual and related documentation;
s	ecurity programme manual;
N	ICM;
n	naintenance programme including maintenance schedule;
tı	raining manual for maintenance personnel;
р	lan for emergency evacuation demonstration;
р	lan for ditching demonstration; and

- Note 1.— Subject to the determination by the CAA, data from reliable analytical methods or from demonstrations by other operators may be used in the emergency evacuation or ditching demonstrations as described in Chapter 5 of this Part.
- Note 2.— Annex 6, Part I, Attachment F, and Part III, Attachment D, provide guidance material on the flight safety document system that is required to be established.
- 4.2.2 All manuals are to be provided with procedures for the development, control and distribution of each manual, the means to keep the manual up to date and the means for the publication and distribution of amendments.

4.2.3 Manuals will require appropriate revision and amendment when new requirements, operations or equipment are introduced.

4.3 EVALUATION OF THE DOCUMENTS

- 4.3.1 Draft operations specifications. Operations specifications form part of the AOC. The CAA standard operations specifications will have been given to the applicant at the pre-application meeting and a list of desired operations specifications will be identified by the applicant to form the draft operations specifications. This draft will have been edited by the applicant and the CAA certification team to add necessary authorizations, conditions and limitations to produce operations specifications appropriate to the applicant's intended operation. Information on the operations specifications should be available in the operations manual. Subsequent amendments to the specifications can be initiated later by the operator or the CAA as required by changing circumstances.
- 4.3.2 Statement of compliance. The certification team will evaluate the statement of compliance, the purpose of which is to ensure that the applicant has met all regulatory requirements applicable to the proposed operation. The statement also indicates to the certification team where the regulatory requirements have been addressed in the applicant's manuals, programmes and procedures. The final statement of compliance needs to be completed and accepted by the CAA prior to the commencement of the flight operations inspection described in 5.5 of this Part.
- 4.3.3 Management personnel résumés providing qualifications and aviation experience. The list should include the management positions, the names of the individuals involved and their qualifications and relevant management experience and their licences, ratings and aviation experience.
- 4.3.4 Aircraft flight manuals. Flight manuals are required for individual aircraft and are subject to the control of the State of Registry. Arrangements for the administration, control and amendment of copies of the flight manuals should be examined together with the means for providing aircraft performance and limitations information to the flight crew. The flight manual should contain at least the information required by Annex 8, Parts IIIA, IIIB, IVA and IVB.
- 4.3.5 *Operations manual.* The operations manual is the means by which the applicant intends to control all aspects of the intended operation. Its structure normally consists of four parts: a general section; aircraft operating information; areas, routes and aerodromes; and training. The arrangements for the administration and control of the operations manual should have already been evaluated during the cursory review in the formal application phase of the certification process.
- 4.3.5.1 Requirements for the provision of an operations manual, including indication of specific items that require the approval of the State of the Operator, structural organization and mandatory content, are given in Annex 6, Part I, and Part III, Section II. The minimum subjects to be addressed in an operations manual are listed in Annex 6, Part I, Appendix 2, and Part III, Section II, Appendix 8. Guidance on the development of an operations manual is contained in the *Guidance on the Preparation of an Operations Manual* (Doc 10153).
- 4.3.5.2 The operations manual and subsequent amendments have to be submitted to the CAA for scrutiny and where required acceptance or approval. The CAA will require revision of the manual as necessary to achieve compliance with State regulations and safety requirements.
- Note.— Annex 6, Part I, Attachment D, and Part III, Attachment C, provides guidance material on approval and acceptance actions.
- 4.3.5.3 Prior to initiating the ground or flight operations phase of the inspection, a detailed review of the operations manual should be completed by the certification team. The operations manual should provide, in a clear and concise manner, the necessary policy guidance and instructions to the applicant's personnel on how operations are to be conducted. The operations manual should not contain information that is not relevant to the proposed operations. Thus,

at the outset, a determination should be made as to the adequacy of the operations manual. The subsequent ground and flight operational inspections will determine the capability of the applicant's organization to effectively carry out the policies and instructions set forth in the operations manual.

- 4.3.5.4 An adequate operations manual should at least:
 - a) implement the regulations of the State of the Operator including any specified mandatory material and not conflict with the regulations of any other State where operations will be conducted;
 - b) provide clear, complete and detailed operating instructions, policies and procedures so that operational staff, i.e. crew members and ground operations, loading, maintenance, operational control and administrative personnel, are fully informed of what is required of them. Through the proper use of this material, it will be expected that such personnel perform their duties to a high degree of precision, thus resulting in safe and efficient operations. Procedures should be effective, represent sound safety philosophy and be capable of being accomplished;
 - c) make provisions for revision to ensure that the information contained therein is kept up to date;
 - d) present the necessary guidance and instructions to personnel in a suitable and convenient format. It should be ascertained that the applicant has provided the required instructions following the guidance provided regarding the form and content of these documents; and
 - e) outline standardized procedures for all crew member functions.
- 4.3.5.5 In connection with the detailed review of the operations manual, the CASI should ascertain that effective procedures have been established by the applicant for the revision, distribution and use of the operations manual. Each manual should be numbered and issued according to a specific distribution list, and each holder made responsible for its prompt and accurate update. The distribution list should contain all operations personnel and others requiring the information therein for proper performance of their duties. Those parts of the manual required to be carried on board each aircraft should be designed for convenient use and all parts should permit ready and accurate reference.
- 4.3.5.6 Examples of manuals or other items which may be included in the operations manual and which require evaluation are given in 4.3.5.6.1 to 4.3.5.6.13.
 - Note.— Information about the SMS manual is contained in the Safety Management Manual (Doc 9859).
- 4.3.5.6.1 *Aircraft operating manuals*. Aircraft operating manuals for each type of aircraft to be operated are required by Annex 6, Part I, Chapter 6 and Part III, Section II, Chapter 4. Aircraft operating manuals are required to contain normal, abnormal and emergency procedures, details of the aircraft systems and the checklists to be used.
- 4.3.5.6.2 *MEL*. An MEL is required for each type and model of aircraft to be operated, which provides for the operation of the aircraft, subject to specified conditions, with particular equipment inoperative. This list prepared by the applicant in conformity with, or more restrictive than, the master minimum equipment list (MMEL) for the type approved by the State of Design, is tailored to the applicant's aircraft and installed equipment. The MEL is required to be approved by the State of the Operator. The MEL needs to be available to flight crew, maintenance personnel and personnel responsible for operational control. The MEL also needs to include instructions for its use. It is important to ensure that the tasks described in the MEL are within the privilege of a pilot or maintenance staff, (e.g. O and M), the maintenance actions and deferral meet the regulatory requirements of the State, and that the MEL reflects the applicant's aircraft configuration.
- Note.— Annex 6, Part I, Attachment E, and Part III, Section II, Attachment B, provide guidance material on the MEL.

- 4.3.5.6.3 *CDL*. A CDL for each aircraft type and model may be established by the organization responsible for the type design and approved by the State of Design to provide for the commencement of a flight without specified external parts. The CDL contains any necessary information on associated operating limitations or performance corrections and should be available to flight crew, maintenance personnel and personnel responsible for operational control. A CDL needs to include instructions for its use. It is important to ensure that the tasks described in the CDL are within the privilege of a pilot or maintenance staff, (e.g. O and M), the maintenance actions and deferral meet the regulatory requirements of the State and that the CDL reflects the applicant's aircraft configuration
- 4.3.5.6.4 Aircraft performance manual. Aircraft performance manuals are required for each type and model of aircraft to be operated. The manuals need to contain adequate performance information and procedures for the calculation of performance for all phases of flight to enable aircraft to be operated within the performance limitations specified in the aircraft flight manual. The manual should cover performance limitations for take-off, en-route and landing in all engines operating and in appropriate engine inoperative situations, and should take into consideration appropriate factors affecting performance, such as line-up distance for take-off, runway conditions (wet, contaminated, etc.), aircraft configuration and technical status and environmental conditions. The applicant should have a system for the provision of current performance and obstacle data for the aircraft, routes and aerodromes/heliports in use.
- 4.3.5.6.5 Mass and balance control manual. The manual provides for a system to obtain, maintain and distribute to operational personnel information on the mass and balance of each aircraft operated and the means to keep this information up to date. The manual includes procedures for the preparation of load sheets, the distribution of passengers and cargo, determining passenger, baggage and cargo mass and for the use of standard mass, as well as last-minute change procedures.
- 4.3.5.6.6 Aircraft loading and handling manual or ground handling manual. This manual contains procedures and limitations for servicing, fuelling, loading and unloading, preflight preparation and post-flight securing, applicable to the aircraft type and model. The manual needs to be available to flight crew, maintenance personnel, ground handlers and handling agents.
- 4.3.5.6.7 Training manuals for flight crew, cabin crew, operations personnel, ground personnel and maintenance personnel. Training manuals are required for all operational, maintenance and ground personnel. These should cover all aspects of initial and recurrent training and conversion and upgrading training.
- 4.3.5.6.8 Route guide. The route guide is required to ensure that the flight crew and personnel responsible for operational control have the necessary information for communications, navigation aids, aerodromes/heliports, instrument procedures for departure, en-route and arrival for the conduct of the particular operation.
- 4.3.5.6.9 Dangerous goods manual. All applicants will require a manual containing procedures for the handling of dangerous goods, emergency response to dangerous goods incidents and the training of personnel. The details required will depend upon the intended status of the applicant with respect to the transport of dangerous goods. If a declaration has been made that dangerous goods will be carried as cargo, the applicant will require comprehensive material on the control, loading and carriage of dangerous goods and on response to dangerous goods incidents and emergencies. If it is not intended to transport dangerous goods as cargo, the applicant will still need to cover dangerous items that form part of the normal aircraft equipment, dangerous items that are permitted to be carried by passengers and dangerous items that may be carried in the form of company material. In both cases, the operators will require procedures for the handling of dangerous goods, emergency response information and details of the required training appropriate to the level of activity proposed.
- 4.3.5.6.10 *Passenger briefing cards*. Passenger briefing cards need to be provided to supplement oral briefings and be particular to the type and model of aircraft and the specific emergency equipment in use.
- 4.3.5.6.11 Aircraft search procedure checklist. The checklist needs to be carried on board and describes the procedures to be followed in searching for a bomb in case of suspected sabotage and for inspecting aircraft for concealed weapons,

explosives or other dangerous devices when a well-founded suspicion exists that the aircraft may be the object of an act of unlawful interference. The checklist should be supported by guidance on the appropriate course of action to be taken should a bomb or suspicious object be found and information on the least-risk bomb location specific to the aircraft.

- 4.3.5.6.12 Operational control procedures, dispatch, flight following, etc. The manual is required to contain the details of the applicant's operational control procedures and procedures for dispatch and flight following. It should cover procedures for use in emergency situations and all communication procedures.
- 4.3.5.6.13 Rules limiting the flight time and flight duty periods and providing adequate rest periods for flight and cabin crew members. These rules are included in the operations manual and need to be in accordance with the regulations of the State of the Operator or approved by that State. The applicant should state in its scheme the minimum times allocated to preflight preparation and immediate post-flight activities. There should be procedures to take into account duty periods, which include flight duty periods and activities other than flight duties, such as ground school, simulator training, attendance at emergency drill practice, management or office duties, particularly with respect to rest periods and the subsequent commencement of a flight duty period. Responsibility should be clearly defined for issuing instructions and decisions on questions relating to flight time, flight duty periods and rest periods and for processing reports when the pilotin-command exercises his/her discretionary authority to extend duty or reduce rest periods. Provisions in the operations manual for a fatigue risk management system may complement these rules, with the approval of the State of the Operator.
- 4.3.6 Security programme manual. The manual should describe the operator security programme, which should meet the requirements of the national civil aviation security programme of the State of the Operator. The manual should include the security procedures applicable to the type of operations.
- 4.3.7 *MCM*. This manual sets out the applicant's intentions and procedures with regard to maintaining the airworthiness of the aircraft used, during their operational life. This applies whether or not the applicant for an AOC also intends to apply for approval as an AMO or intends to contract out maintenance to an AMO.
- 4.3.8 *Maintenance programme*, The maintenance programme is a document which describes the specific maintenance tasks and their frequency of completion necessary for the continued safe operation of those aircraft to which it applies. A maintenance programme, including the information contained in Annex 6 Part I, Chapter 8, approved by the State of Registry, is required for individual aircraft, taking into account the requirements of the State of design of the aircraft. Further guidance on the requirements and content of a maintenance programme are described in the *Airworthiness Manual* (Doc 9760), Part III, Chapter 7.
- 4.3.9 Signs, markings and placards. Airworthiness standards should encompass requirements for passenger information signs, marking and placards found inside the cabin. These standards should stipulate that the aircraft needs to contain specified signs, markings and placards, as well as any additional information, instrument markings, and placards required for the safe operation of systems and equipment to display limitations or if there are unusual design, operating or handling characteristics. Signs, markings and placards are subject to applicable standards set out by the State of Design as part of the type certification process and are approved, accepted or validated by the State of Registry to demonstrate evidence that the aircraft meets its airworthiness requirements. Operators should also comply with national regulations of the State of the Operator related to the signs, markings and placards on board their aircraft, which may be in addition to the standards set by the State of Design and State of Registry (e.g. specific language requirements for markings or placards). The operator may wish to add additional signs, markings or placards not required by national regulations. The State of the Operator should have an approval process in place to address individual operator requests for additional signs, markings or placards.
- 4.3.10 Plans for demonstrations which require evaluation. Paragraphs 4.3.11.1 to 4.3.11.3 contain plans that require evaluation by the CAA.
- 4.3.10.1 *Plan for emergency evacuation demonstration.* The applicant needs to have a plan for demonstrating aircraft evacuation. Evacuation demonstrations carried out by the aircraft manufacturer or other operator for the same type and

model of aircraft may be taken into account by the CAA when a decision is made on the actual demonstration required. A description of the emergency equipment installed on the aircraft needs to be attached to the plan.

- 4.3.10.2 *Plan for ditching demonstration.* Where over-water flights are included in the proposed operation, the applicant needs to have a plan to demonstrate ditching equipment and the ability to carry out ditching procedures including the preparation of passengers, aircraft and ditching equipment.
- 4.3.10.3 Plan for demonstration flights. Where the CAA has determined that demonstration flights are required, a plan for these demonstration flights should be prepared so that the applicant can demonstrate the ability to operate and maintain aircraft and conduct the type of operation specified. The determination by the CAA as to whether or not demonstration flights will be required, and if such flights are required, their number and type, will depend on the CAA's assessment of the capabilities of the operational and maintenance systems established by the applicant.

Note.— Subject to the determination by the CAA, data from reliable analytical methods or from demonstrations by other operators may be used in the emergency evacuation or ditching demonstrations described in Chapter 5 of this Part.

Chapter 5

OPERATIONAL DEMONSTRATION AND INSPECTION PHASE

5.1 GENERAL

- 5.1.1 The operational demonstration and inspection phase involves the inspection of base and station facilities, operational control and supervision facilities training programmes and training facilities. State regulations should require an applicant to demonstrate the ability to comply with regulations and safe operating practices before beginning revenue operations. As such, this phase involves the AOC applicant's demonstration of their operational control system, emergency evacuation and ditching procedures, and may involve demonstration flights.
- 5.1.2 These demonstrations will include actual performance of activities and/or operations while being observed by CASIs of the certification team. This will also involve on-site evaluations of aircraft maintenance equipment and support facilities. During these demonstrations and inspections, the CAA evaluates the effectiveness of the policies, processes, procedures, activities, instructions and interface management as described in the manuals and other documents developed by the applicant. During this phase, emphasis should be placed on the applicant's management effectiveness. Deficiencies should be brought to the attention of the applicant, and corrective action should be taken before an AOC can be issued.
- 5.1.3 The preliminary assessment of the application, as described in Chapters 3 and 4, should provide the DGCA with a general appreciation of the scope of the proposed operation and the potential ability of the applicant to conduct it safely. However, before authorizing the issuance of the AOC, the CAA will need to thoroughly investigate the operating ability of the applicant. This important and more detailed phase of the investigation and assessment will require the applicant to demonstrate thorough, day-to-day administrative, operational and safety management capabilities, including, in some cases, proving flights over proposed routes, the adequacy of facilities, equipment, operating procedures and practices, and the competence of administrative, flight and ground personnel. Demonstration flights may include any aspect to be covered by a special authorization in the operations specifications which will be associated with the AOC when issued. Training or positioning flights observed by a CASI may be credited towards meeting demonstration flight requirements. Emergency evacuation and ditching demonstrations may also be required during this phase of the investigation of the applicant's capabilities, as described in 5.4.11 and 5.4.12 of this Part.
- 5.1.4 The operational demonstration phase should encompass all aspects of the proposed operation. However, such matters as the inspection of the passenger services organization, though necessary, is not covered in this manual.
- 5.1.5 Since the precise details of inspections will be determined by many factors, such as the nature, scope and geographical areas of operations, the type of airborne and ground equipment to be used and the method of operational control and supervision, it is not practicable to prepare comprehensive material adaptable to universal use. Consequently, the material that follows in this chapter should be regarded as a listing of the more important aspects of the operation to be investigated, the exact procedure for inspection being determined by the circumstances of each case.
- 5.1.6 It will also be necessary to ascertain that facilities located in other States, which are to be utilized, are adequate and that crew licences are acceptable to other States where operations will take place. Arrangements for this determination are a matter of agreement between the State of the Operator and the other States concerned.

- 5.1.7 Coordination between the CAA certification team with the applicant will be of particular importance during this phase. The applicant should keep the CAA certification team informed of the times and locations of required demonstration and inspection tasks. This is particularly important since observations will be conducted simultaneously at different locations. The CAA certification team should be alert to the possibility of using flight simulators or mock up aircraft structures to accomplish certain demonstrations. Such arrangements will require the consent of the project manager. For example, low visibility take-offs and landings could be demonstrated in an aircraft simulator.
- 5.1.8 The demonstration of an emergency oceanic diversion to an alternate airport might not be feasible in actual flight, but could be demonstrated in a simulator. In addition, the flight dispatch department could demonstrate in flight oceanic re-release of flight during a table-top exercise. The CAA certification team should also remain alert to the possibility of observing multiple demonstration tasks simultaneously. For example, the operations inspector could observe a check pilot evaluating pilots when the checking syllabus includes low visibility take-offs and landings and an emergency en-route diversion.
- 5.1.9 Demonstration Plans. The applicant needs to submit demonstration plans, including:
 - a) an emergency evacuation plan;
 - b) a ditching plan; and
 - c) proving the test plan.
- 5.1.10 Aircraft conformity inspection. The applicant needs to notify the CAA of aircraft availability in advance before the proposed aircraft evaluation and provide the completed aircraft configuration or equivalent documents. The certification team reviews the applicant's conformity submissions to confirm all required records are present and of sufficient quality to continue. The certification team evaluates the applicant's aircraft conformity process using the completed aircraft configuration and documentation provided by the applicant.
- 5.1.11 The applicant's safety review is built into the process used. This demonstrates the applicant's ability to analyze and assess data, and to take action on the information. It also demonstrates the applicant's oversight of safety. During the certification process, the applicant should have set objectives and gathered information on their operations. At that point, the applicant assesses the operations and builds a plan of action. The certification team should be assured that the applicant will follow their safety review process and that appropriate action will be taken to correct deficiencies.
- 5.1.12 Demonstration and inspection deficiencies. If, at any time during the demonstration and inspection phase, the applicant does not meet the schedule of events, or the applicant's conduct of various activities (such as training, emergency evacuation) or certain items (such as MEL, recordkeeping procedures) proves to be deficient, appropriate corrective action must be taken. Required and recommended corrective measures for addressing specific types of deficiencies are indicated in the appropriate subject matter discussions in other chapters of this manual. The project manager should schedule meetings with the applicant, as necessary, to review all deficiencies in detail. If appropriate, the project manager shall negotiate a new or modified schedule of events and re-enter the demonstration and inspection phase or the document evaluation phase, as appropriate.
- 5.1.13 Conclusion of demonstration and inspection phase. The project manager needs to ensure that the accomplishment of the applicant's events is complete and acceptable for the next certification phase.
- 5.1.14 Applicant is adequately prepared. At the close of the applicant debrief meeting, the project manager and certification team should determine whether the applicant is prepared to proceed to the last phase of the certification process. If the applicant has met the requirements of the Demonstration and Inspection Phase and is ready to proceed to the Certification Phase, the project manager should inform the applicant that they may proceed with the certification.

- 5.1.15 Applicant is not prepared. If it is evident that the applicant is not adequately prepared to proceed with the certification process, the project manager should advise the applicant of the reasons for concern. When it is apparent that the applicant will not be able to prepare adequate manuals and/or documents, the project manager should advise the applicant to start the demonstration and inspection phase again after complete preparation on the applicant's part. It is appropriate for the project manager to recommend to the applicant one or more of the following actions:
 - a) further review the certification process and all applicable guidance;
 - b) thorough review of the applicable regulations;
 - c) change proposed key management personnel;
 - d) retain the services of a professional aviation consultant; and/or
 - e) cease efforts to become CAA-certificated.

5.2 ORGANIZATION AND ADMINISTRATION

- 5.2.1 During the operational demonstration and inspection phase, the applicant's organizational structure, managerial style, direction and philosophy will be evaluated to ensure that necessary and proper control can be exercised over the proposed operation. A sound and effective management structure is essential; it is particularly important that the operational management should have proper status in the applicant's organization and be in suitably experienced and competent hands. Through discussions with key management personnel and through observation, the CAA certification team will evaluate the appropriateness of the management structure and determine whether or not clear lines of authority and specific duties and responsibilities of subordinate elements and individuals are established. These duties and responsibilities need to be clearly outlined in the applicant's operations, SMS documentation, MCMs and other company documents. It should also be determined that acceptable processes are established for conveying company procedures and operating instructions to the personnel involved to keep them appropriately informed at all times. The authorities, tasks, responsibilities and relationships of each position need to be clearly understood and followed by the individuals occupying these positions.
- 5.2.2 At all levels, it is necessary that the applicant's personnel are thoroughly integrated into the operation and are made fully aware of the channels of communication to be used in the course of their work and of the limits of their authority and responsibility.
- 5.2.3 The applicant's staffing level needs to be evaluated to determine whether an adequate number of personnel are employed at management and other levels to perform the necessary functions. The number and nature of personnel will vary with the size and complexity of the organization. Through a sampling questioning process, the CAA certification team will determine whether or not management personnel are qualified, experienced and competent to perform their assigned duties.
- 5.2.4 Experience has shown that the quality of an operation is directly related to the standards maintained by its management. Competent management usually results in safe operations. An excess of managers can lead to fragmentation of responsibility and control and to as much difficulty and inefficiency as a shortage. Either case can result in a lowering of operational standards. Thus, the evaluation of an applicant's organization is a very significant phase of the certification inspection process. Once it has been determined that the applicant's organization is adequately staffed and managed, a detailed examination of the organization should be initiated, and the suitability and use of the associated operations and MCMs should be assessed.

5.3 SAFETY MANAGEMENT SYSTEM

- 5.3.1 Based on the applicant's submitted SMS manual, CASIs should ascertain during the demonstration and inspection phase that all the components and elements of the SMS framework are "present" and "suitable" and ready for the commencement of operations, including the necessary organizational structures, accountability, responsibilities, policies and procedures, regardless of the size and complexity of its operations.
- 5.3.2 The following paragraphs detail some of the more important starting requirements before the applicant can commence operations. While this guidance has provided some important starting requirements, the CAA needs to ultimately determine what requirements the applicant needs to demonstrate to indicate their management of safety and be issued with an AOC, as the complexity and size of the applicant and State of the Operator's requirement may be different

5.3.3 SMS documentation

5.3.3.1 The SMS documentation should include a top-level "SMS manual", which describes the service provider's SMS policies, processes and procedures to facilitate the organization's internal administration, communication and maintenance of the SMS. It should help personnel to understand how the organization's SMS functions, and how the safety policy and objectives will be met. The documentation should include a system description that provides the boundaries of the SMS. It should also help to clarify the relationship between the various policies, processes, procedures and practices, and define how these link to the service provider's safety policy and objectives. The documentation should be adapted and written to address the day-to-day safety management activities that can be easily understood by personnel throughout the organization. Further details about the SMS documentation are given in the *Safety Management Manual* (Doc 9859).

5.3.4 Checklist prior to SMS acceptance

- 5.3.4.1 Further to the SMS manual or related documentation, the competent authority shall verify the elements detailed in 5.3.4.2 to 5.3.4.5.
- 5.3.4.2 The key personnel should understand their responsibilities. The commitment of the accountable executive to safety and his/her support to the key personnel should be demonstrated; this includes their engagement to the safety policy and the safety objectives, including the policy on the protection of safety data, safety information and related sources. The competence of the safety manager should be verified. The key operational managers should also have sufficient knowledge of the hazard identification and safety risk assessment procedures and processes. Interviews can be conducted in order to verify these competencies and commitment.
- 5.3.4.3 An important element to verify is whether the applicant's safety data and safety information contained in the Safety Data Collection and Processing System (SDCPS) shares a common approach with the State's SDCPS. The taxonomy should be harmonized or standardized to facilitate information sharing and exchange. Common definitions as well as common performance indicators or targets should foster the State and its stakeholders to collaboratively achieve compatible safety objectives. All these aspects should be considered as part of the initial acceptance of an SMS as it will foster a continuous improvement of safety to commonly achieve between the State and its stakeholders.
- 5.3.4.4 The applicant's SMS should take into consideration the SSP and its NASP, which presents the strategic direction for safety management at the national level and the State's safety objectives, its associated safety performance indicators, targets and alert levels, which in turn will help drive the applicant's SMS safety objectives, performance indicators and targets. The applicant's safety performance indicators and targets should be acceptable to the State.

Note.— Further guidance on acceptance of safety performance indicators and targets is provided in the Safety Management Manual (Doc 9859).

5.3.4.5 Before the beginning of operations, staff should be trained on the safety policy and safety objectives, as well as the policy on the protection of safety data, safety information and related sources. The competent authority should verify that the staff know how to report, notably how to use the internal voluntary reporting system.

5.3.5 Interfaces

The CAA should also verify that safety risks associated with operational functions, such as the weight and balance calculations, cargo loading, de-icing/anti-icing activities, rectification of maintenance items, etc. that are (sub)contracted internally to another department or externally to other organizations are sufficiently mitigated. Procedures, processes and the roles and responsibilities should be clearly defined and understood by operational personnel from both the applicant and their sub(contracted) department or external organizations.

5.3.6 Acceptance of the SMS

- 5.3.6.1 The SMS of the applicant shall be made acceptable to the CAA, which should have its own formal process: this could be part of the approval certificate, should it be an AOC, a maintenance approval or any other similar approval. The CAA has the discretion to materialize the acceptance of this SMS through, for example, the validity of the certificate, the acceptance of the safety management manual, the outcome of the surveillance activities, the closure of the SMS-related findings, etc.
- 5.3.6.2 The CAA should develop or use available SMS evaluation tool(s), such as those from international organizations or authorities¹, to help it assess the suitability of the policies, organizational structures, accountability, responsibilities, policies and procedures of the applicant's SMS components and elements. Beyond the initial acceptance, such tool(s) should be utilized during the continuing surveillance to assess the performance and maturity of the SMS. The continuing surveillance of the operator should focus on the areas of greater safety risk.

Note.— The ICAO Safety Management Implementation (SMI) website contains examples on how to implement safety risk-based surveillance (SRBS), including an application that allows building safety risk-based surveillance activity schedules. The ICAO Handbook for CAAs on the Management of Aviation Safety Risk related to COVID-19 (Doc 10144) provides guidance to States on the management of aviation safety risks related to COVID-19.

5.4 GROUND OPERATIONS INSPECTION

5.4.1 General

5.4.1.1 The purpose of this phase of the certification inspection is to ascertain, through on-site inspections, the adequacy and suitability of the applicant's staffing, training programme, ground equipment, facilities and procedures to conduct the operations specified in the application.

¹ To quote a few, the following international associations have developed SMS assessment tools: SMICG at https://www.skybrary.aero/index.php/SM ICG SMS Evaluation Tool; EUROCONTROL at https://www.skybrary.aero/index.php/SMS in Air Traffic Management; CANSO https://www.easa.europa.eu/document-library/general-publications/management-system-assessment-tool

5.4.1.2 Although the inspection of maintenance facilities and procedures is part of the ground inspection, it will be carried out separately by airworthiness inspectors who are part of the CAA certification team. This aspect is therefore covered in more detail in Chapter 6 of this Part.

5.4.2 Fixed facilities

- 5.4.2.1 Buildings. This inspection should be designed to determine that the buildings to be utilized by the applicant at each base and terminal, including those located in other States, are properly equipped; are provided with the necessary sanitary facilities and security and emergency controls, warnings and equipment; and are adequate for the operation to be conducted. Such an inspection would include hangars, maintenance and overhaul workshops, administrative staff and operations personnel offices, passenger service areas, cargo storage, and handling buildings. Inspection on site may be replaced by an assessment of the buildings from the State's aeronautical information publication, charts or diagrams, complemented by documents, describing the facilities and ground handling arrangements, or by a review of existing usage by other operators.
- 5.4.2.2 Aerodromes and heliports. The destination and alternate aerodromes or heliports to be utilized in the operation should be inspected to determine their adequacy for operational use. However, this inspection requirement may be waived in those cases where the CASI is already familiar with the aerodrome or heliport and its associated facilities and is satisfied that they are adequate for the proposed operation. In those cases where the proposed operation covers a large part of the world, it will not be feasible for the CAA certification team to determine the adequacy of all the aerodromes or heliports of potential use. Accordingly, the CAA certification team should consider inspecting only those considered by the applicant to be for major use and recommend to the DGCA that, before awarding the AOC, the operations manual contain the list of aerodromes that are considered adequate for use, and should specify that the use of other aerodromes or heliports in the approved area of operations be prohibited without prior approval of the CAA.
- 5.4.2.3 Approval of a particular aerodrome or heliport may be granted without inspection by the CAA if the operator evaluates the facility as adequate for its operations, using an acceptable documented process, possibly as part of its SMS, and establishes operating minima and appropriate procedures.
- 5.4.2.4 Inspections or evaluations should cover at least the following items as applicable:
 - a) runways;
 - b) clearways;
 - c) stopways;
 - d) taxiways;
 - e) ramp and parking areas;
 - f) lighting (including approach lighting);
 - g) visual and non-visual approach aids for all-weather operations (AWO) special authorizations granted;
 - h) navigation facilities;
 - i) communications services;
 - ATS;

- k) meteorological services;
- I) aeronautical information services;
- m) aerodrome service equipment (e.g. runway contaminant sweepers, snowploughs);
- n) ground de-icing installations and equipment;
- o) rescue and fire-fighting equipment and services;
- p) availability of equipment and handling and dispensing procedures for fuel and lubricants;
- q) public protection, including security precautions;
- r) obstacles affecting flight operations;
- s) instrument departure, arrival and approach procedures and associated charts; and
- t) aerodrome/heliport operating minima.
- Note 1.— Instrument approach procedures should be in conformity with PANS-OPS, Volume II (Doc 8168).
- Note 2.— The Manual of All-Weather Operations (Doc 9365) provides guidance to the operator and the State on the determination of aerodrome operating minima.
- 5.4.2.5 In conjunction with the aerodrome inspection, the CASI should determine the adequacy of the applicant's procedures for acquiring current aerodrome data and instrument procedure charts and distributing these to all personnel who require such information in their performance of duty.

5.4.3 Mobile equipment

- 5.4.3.1 The mobile equipment to be utilized in the operation should be inspected with primary emphasis on adequacy, suitability and the safety aspects of its use. Such equipment would include fueling vehicles, ground power units, oxygen and compressed gas servicing equipment, towing tugs, cargo and baggage handling equipment, catering vehicles, sanitary servicing trucks, de-icing equipment, etc.
- 5.4.3.2 An evaluation of the mobile equipment and the procedures for its use, performed by an audit organization, using suitable and recognized evaluation systems, may be acceptable at the discretion of the State. For example, equipment inspections conducted as part of industry-recognized fuel quality audits, de-icing/anti-icing quality control audits or audits for ground operations may be acceptable to the State.
- Note.— Commercial organizations or associations, such as the International Air Transport Association (IATA), generally manage these recognized evaluation systems.

5.4.4 Operational control organization

- 5.4.4.1 *General.* Evaluation of the overall effectiveness of an operational control organization should include a thorough analysis of the following factors:
 - a) Annex 6, Part I and Part III, Section II, requires an operator to establish and maintain a method of control and supervision of flight operations that is approved by the State of the Operator. Responsibility for operational control can be delegated only to the pilot-in-command, and to a flight operations officer/flight dispatcher if the approved method of control and supervision of flight operations requires the use of flight operations officer/flight dispatcher personnel. Because of the nature and extent of the duties and responsibilities involved in the supervision of flight operations, the State and the operator should consider the advantages of an approved method of control and supervision of flight operations requiring the services of a flight operations officer/flight dispatcher. In such a system, the flight operations officer/flight dispatcher is assigned to duty in the company operations control centre and is responsible, while on duty, for carrying out the operational control procedures and policies specified in the operations manual. The flight operations officer/flight dispatcher may be licensed or not depending upon the requirements of the State of the Operator.
 - b) The operations manual should specify the responsibilities and functions assigned to flight operations officers/flight dispatchers. The actual responsibilities assigned are part of the approved method of control and supervision of flight operations. Annex 6, Part I and Part III, Section II, gives information on the duties of flight operations officers/flight dispatchers. The duties assigned will be very similar for all such operations personnel, whether licensed or unlicensed.
 - c) The responsibilities of a flight operations officer/flight dispatcher include the provision of assistance to the pilot-in-command in flight preparation; completion of operational and ATS flight plans; liaison with the air traffic, meteorological and communication services; and the provision to the pilot-in-command during flight of information necessary for the safe and efficient conduct of the flight. Flight operations officers/flight dispatchers should also be responsible for monitoring the progress of each flight under their jurisdiction and for advising the pilot-in-command of company requirements for cancellation, re-routing or re-planning, should it not be possible to operate as originally planned. In connection with the foregoing, it should be understood that the pilot-in-command is the person ultimately responsible for the safety of the flight.

Note.— The duties and responsibilities of a flight operations officer/flight dispatcher are established in Annex 6, Part I and Part III, Section II. Further guidance is contained in the Guidance on the Preparation of an Operations Manual (Doc 10153). The requirements for age, skill, knowledge and experience for the licensing of flight operations officers/flight dispatchers are indicated in Annex 1 — Personnel Licensing.

- d) In evaluating the structure, responsibilities and performance of the operational control organization, it should be remembered that:
 - rapidly improving communications capabilities and advances in weather forecasting and reporting in some areas have brought about a trend towards consolidation and centralization of operational control facilities;
 - availability of computerized or stored flight plans and fuel load determination and the use of direct pilot/operations control centre communications have facilitated the performance of the operational control of flights; and
 - the pilot-in-command may, in many cases, have more up-to-date information and may be in a better
 position to evaluate evolving flight conditions than personnel in a distantly located operations control
 centre.

- 5.4.4.2 Additional considerations. In addition to the factors listed in 5.4.4.1, items such as the type of operation and its geographical scope and size should also be evaluated in relation to the level of support required. The guidelines below are provided to assist the CASI in determining the adequacy of operational control:
 - a) Staffing. The CASI should determine that:
 - the operational control centre is staffed with sufficient personnel to competently handle the assigned workload in accordance with State regulations;
 - the applicant observes the daily duty time limitations prescribed by State regulations for flight operations officers/flight dispatchers;
 - 3) the applicant is not using flight operations officers/flight dispatchers to perform other functions such as that of clerks and maintenance officers, to the detriment of the primary function; and
 - 4) the conditions at the operational control centre facilities such as space, temperature, lighting, noise level and controlled access are adequate for carrying out dispatch and operational control responsibilities.
 - b) Communications. The CASI should determine that:
 - 1) the communications facilities meet the requirements of the proposed operation;
 - 2) the procedures to be used to notify flights regarding hazardous conditions relating to aerodromes or navigation aids, etc., are adequate;
 - 3) NOTAMs will be made available to flight *crew* personnel in a timely manner;
 - 4) emergency communications procedures and facilities are adequate;
 - 5) flight operations officers/flight dispatchers are able to establish rapid and reliable voice communications with the flight crew at the gate;
 - 6) communications between the operational control centre and appropriate ATS facilities are adequate;
 - air-ground communications and point-to-point circuits used for flight safety messages are adequate and are reasonably free of congestion to ensure rapid and reliable communications throughout the geographical area of operations;
 - 8) flight operations officers/flight dispatchers are familiar with all facets of operations within their geographical areas of responsibility and are properly authorized and qualified in the use of all communications channels required by the approved method of control and supervision of flight operations;
 - the necessary emphasis is placed on the timely receipt of messages both in the aircraft and at the operational control centre or en-route stations; and
 - facilities for the communication of weather information to en-route stations and to aircraft are adequate.

c) Meteorology. The CASI should:

- if the applicant has established a meteorological department, determine that it will be provided with adequate staff and facilities;
- 2) determine whether adequate procedures have been established to ensure the availability of weather forecasts and reports needed by the applicant for flight planning purposes;
- determine that the applicant has procedures to utilize all useful weather information pertinent to the area with which the operational control is concerned;
- 4) give particular attention to the level of knowledge possessed by individual flight operations officers/flight dispatchers with respect to meteorology in general and to the weather conditions in the area with which they are concerned;
- 5) determine that the applicant has provided the means whereby the pilots and the flight operations officers/flight dispatchers are provided with timely information pertaining to clear air turbulence, thunderstorms, icing conditions and volcanic ash, as well as to the best routes and altitudes for avoiding such occurrences;
- give particular attention to procedures to be employed by operational control for disseminating information pertaining to clear air turbulence, thunderstorms, volcanic ash, icing conditions and other significant weather phenomena;
- 7) determine that the necessary procedures have been established for providing adequate weather information to the pilot-in-command at en-route stops; and
- 8) determine the adequacy of the procedures to be employed throughout the applicant's system with respect to in-flight meteorological reporting.

d) Procedures. The CASI should:

- 1) give particular attention to the exercise of responsibility by pilots-in-command and flight operations officers/flight dispatchers in their analysis of all factors pertaining to the flight. In this context, the CAA inspector should determine that the flight operations officers/flight dispatchers will be able to perform their functions in accordance with the terms of the applicable operating instructions and procedures. It is emphasized again that the flight operations officer/flight dispatcher is responsible for assisting the pilot-in-command in the preflight planning, and authorization of delay and release of flights, in accordance with the approved method of control and supervision of flight operations;
- 2) determine that the applicant has established procedures to ensure that flight operations officers/flight dispatchers are adequately trained and informed on important aspects of flight planning such as weather forecasts and reports, fuel requirements, aerodrome limitations, NOTAM, navigation equipment, navigation facilities, ATM procedures and aircraft performance data;
- determine the adequacy of procedures and methods to be used to comply with State regulations concerning aircraft performance, i.e. the computation of the mass of the aircraft and the centre of gravity location, critical speeds, climb gradients, runway and obstacle clearance limitations;
- 4) determine that procedures for the release of a flight are established, which will ensure that the aircraft and its load are in conformity with the relevant flight release documents, e.g. aircraft maintenance release, MEL, CDL, aircraft mass and balance form and manifest; and

- 5) determine that the procedures to be used for flight monitoring and aircraft tracking are adequate and meet the requirements of State regulations.
- e) Operational and ATS flight plans. The CASI should:
 - 1) determine the adequacy of the data to be included in the operational flight plans to be used by the applicant; and
 - review the policy with regard to operational flight plans and ATS flight plans to determine compliance with State regulations.

5.4.5 Flight crew qualifications, licensing and training

The CASI should determine that the applicant has established procedures and training programmes to ensure that flight crew qualifications meet the requirements of the State regulations and that personnel are duly licensed and hold appropriate and valid ratings. In this regard, State regulations should be based on Annex 1 and Annex 6, Part I or Part III, Section II.

5.4.6 Cabin crew competency and training

The CASI should also determine that the applicant has established a training programme to ensure that cabin crew members are competent in executing those safety duties and functions to be performed in the event of an emergency including a situation requiring emergency evacuation.

5.4.7 Training programmes

- 5.4.7.1 The training programme should be described in detail either in the operations manual or in a training manual which, whilst it will form part of the operations manual, will be issued as a separate manual. The choice will generally depend upon the extent of the operations and the number and types of aircraft in the operator's fleet. Most applicants find it convenient to set forth their training programmes in a training manual of one or more volumes to facilitate easy application and updating. Depending on the scope and complexity of the proposed operation, the training programmes required by Annex 6, Part I, or Part III, Section II, may be carried out under the direct control of the applicant or conducted by other training facilities under contract to the applicant, or a combination thereof. In any event the CAA certification team will need to carry out a thorough analysis and inspection of all phases of the applicant's ground and flight training programmes. This analysis and inspection should permit a determination as to whether the training methods, syllabi, training aids/devices, training standards, related facilities and record keeping are adequate. The qualifications of ground and flight instructor personnel should be established and their effectiveness evaluated.
- 5.4.7.2 Factors to be considered in the assessment and inspection of an applicant's training programme are:
 - a) the completeness of the training syllabus and adequacy of facilities, aids, equipment and related training material. These items should satisfactorily provide for the particular type of training required and be utilized in such a manner as to achieve the desired training standards and objectives. Particular attention should be given to the availability of approved flight simulation training devices appropriate to the flight training syllabus;

Note.— Guidance on the suitability, use and approval of flight simulation training devices is contained in the Manual of Criteria for the Qualification of Flight Simulation Training Devices (Doc 9625), Volume I — Aeroplanes and Volume II — Helicopters.

- the adequacy and effectiveness of audio-visual training systems that use computer-based instructions, slides, videos and/or films for presenting instructions on aircraft systems, aerodrome qualifications and other related subjects;
- the existence of provisions to obtain the necessary training material and to instruct personnel whenever new types of operations, new aircraft and/or equipment, or new or revised maintenance methods or procedures are introduced;
- d) the competency of the applicant's instructors, check pilots and training supervisors;
- e) the competency of personnel designated as examiners by an applicant, to whom the DGCA intends to delegate responsibility for type ratings, instrument ratings and pilot proficiency checks (see Part I, 5.3.2);
 and
- f) the competency of training and checking personnel of training organizations to which the applicant intends to contract training.
- 5.4.7.3 In assessing the scope, quality and effectiveness of the training programme, the CASI should observe actual training or instruction being given so that it can be determined that:
 - a) the applicant adheres to the prescribed syllabus;
 - b) the applicant's ground and flight instructors and check pilots are competent; and
 - c) training personnel are able to recognize and appropriately deal with weak or unsatisfactory trainees.
- 5.4.7.4 During the inspection of the training programme, the applicant's plan for the maintenance of pilot qualifications, for conversion and pilot upgrading, should also be reviewed to ensure that:
 - a) the training and associated qualification checks are carried out in a conscientious manner by properly qualified and authorized personnel;
 - in flight training, no manoeuvre that might result in an accident is prescribed, taking into account the aircraft involved and the experience and qualifications of the pilot in training and also of the instructor or check pilot;
 - c) initial and recurrent training and checking is conducted in a systematic manner and in accordance with the training syllabus, without undue reliance upon the individual skill or preferences of the instructor or check pilot; and
 - d) simulation of abnormal or emergency situations is not permitted when passengers or cargo are carried.

Note.— The State of the Operator should encourage a policy whereby hazardous flight manoeuvres which are required to be performed should be carried out in an approved flight simulation training device rather than in actual flight.

5.4.7.5 The CASI will normally find it convenient to approve the applicant's training programme in discrete self-contained sections such as initial training, recurrent training, transition training, conversion training and upgrading training, which can then be further divided into subsections such as ground training, simulator training and flight training.

Should any section or subsection of the training programme not meet the required standards, it should be referred back to the applicant with a detailed explanation of its deficiencies and of the corrective action necessary. When all requirements for the training programme have been fully met, including upset prevention and recovery training as applicable, the applicant should be notified officially that the training programme has been approved. In this regard it should be made clear to the applicant that any subsequent change to the training programme will require the approval of the CAA.

5.4.8 Record keeping

- 5.4.8.1 *General*. During the review of records to be maintained by the operator, the following factors should be taken into consideration:
 - a) In accordance with Annex 6, Part I, and Part III, Section II, the State regulations will require an operator to maintain certain records pertaining to the conduct of the operations for a specified period. The primary objective of the inspection of operations and flight records is to ensure that operators comply with established procedures and appropriate State regulations. The procedures for record keeping need to be evaluated as part of the certification inspection process to indicate the manner in which records will be kept and whether or not such recording will be conducted in compliance with relevant regulations.
 - b) The review should cover at least the proposals for the maintenance of records for the following:
 - 1) flight crew members;
 - 2) cabin crew members;
 - 3) flight operations officers/flight dispatchers;
 - flight and cabin crew member duty periods, flight duty periods, rest periods and, for flight crew members, flight time;
 - 5) operational flight planning;
 - 6) operational control records; and
 - 7) financial records.
 - c) Procedures for record keeping should be examined for:
 - 1) potential accuracy and care in preparation;
 - 2) classification and effectiveness of the filing system;
 - completeness of coverage;
 - 4) compliance with required recording periods; and
 - 5) security of access to records and protection from disasters.

- 5.4.8.2 Flight crew member records. An inspection should be conducted prior to the commencement of operations and should include a review of flight crew records to determine that the qualifications of flight crew members are current. The flight crew records should make provision for the following information:
 - a) full name;
 - b) current assignment;
 - c) flight crew member licence State issuing the licence and, if appropriate, the validation or conversion, licence type, number and ratings, including instrument rating, and the language proficiency endorsement;
 - d) medical assessment and date;
 - e) record of last proficiency check;
 - f) record of last instrument rating check;
 - g) flight time records, including flight time in aircraft for which currently qualified;
 - h) route and aerodrome qualifications (pilot-in-command, and co-pilot, if required by the operator);
 - i) training record, type of training, total time, dates and certification of satisfactory completion; and
 - i) crew member certificate, including the number and expiration date, if such certificates are issued.
 - Note.— Crew member certificate provisions are contained in Annex 9 Facilitation.
- 5.4.8.3 Cabin crew member records. These records should make provision for the following information:
 - a) full name;
 - b) current assignment;
 - c) if a licence is required by the State regulations, licence, number and expiration date;
 - Note.— There is no requirement in ICAO Annexes for a licence for cabin crew members.
 - d) crew member certificate, including the number and expiration date, if such certificates are issued;
 - Note.— Crew member certificate provisions are contained in Annex 9 Facilitation.
 - e) initial training, including dangerous goods, general indoctrination and aircraft emergency procedures training; and
 - recurrent training, including dangerous goods, emergency and evacuation procedures training on specific aircraft.
- 5.4.8.4 Flight operations officer/flight dispatcher records. An inspection should be conducted prior to the commencement of operations and should determine compliance with applicable regulations pertaining to licensing and current qualifications. Flight operations officer/flight dispatcher records should contain the following information:

- a) full name;
- b) licence and validity (if a licence is required by State regulations);
- c) aircraft qualifications;
- d) route or area qualification;
- e) maintenance of competency; and
- f) duty time records (if required by State regulations).
- 5.4.8.5 Flight and cabin crew member duty periods, flight duty periods, rest periods and, for flight crew members, flight time. The proposals for keeping these records should permit the operator and the CAA to check compliance with the operations manual and State regulations relating to flight time, duty period, flight duty period and rest period limitations. In addition, the proposals should cover the recording of reports when the pilot-in-command uses discretion to extend duty or reduce rest periods.
- 5.4.8.6 *Operational flight planning records*. This part of the inspection should cover the procedures for the keeping of records relating to individual flights to ensure that:
 - a) an operational flight plan will be completed and retained;
 - b) the operational flight plan provides for all of the information required by the operations manual;
 - c) flight preparation forms will be completed and recorded; and
 - d) oil and fuel records will be kept.
- 5.4.8.7 *Operational control records.* The proposals for operational control system records should be checked to ensure that:
 - a) an operational control log will be maintained and that all operational control duties will be adequately documented; and
 - b) all flights will be planned and conducted with the active participation of the flight operations officer/flight dispatcher on duty in accordance with the procedures laid down in the operations manual, if the approved method of control and supervision of flight operations requires the use of flight operations officer/flight dispatcher personnel.
- 5.4.8.8 *Financial records*. The procedures for keeping and reviewing financial records are beyond the scope of this manual but should be covered by appropriate instructions issued by the DGCA.

5.4.9 Fuel computation procedures

5.4.9.1 The objective of this inspection is to determine whether the applicant's aircraft will be dispatched with adequate fuel loads calculated in accordance with statutory regulations and the policy set forth in the operations manual. To make this determination, the fuel computation policy and sample operational flight plans for flights to be dispatched from different bases on routes and route sectors calling for wide differences in fuel requirements and including sectors on

which aircraft fuel capacity is critical, should be examined and the fuel to be carried validated against expected aircraft performance, with appropriate corrections for wind conditions and flight levels en-route.

5.4.9.2 The fuel policy should consider the additional fuel necessary to proceed to an adequate aerodrome in the event of failure of one engine or loss of pressurization, at the most critical point while en-route, whichever is higher.

5.4.10 Aircraft mass and balance procedures

- 5.4.10.1 This part of the inspection is to ascertain that aircraft will be safely and correctly loaded in accordance with:
 - a) the requirements for the computation of aircraft mass and balance in the operations manual;
 - b) regulations restricting mass to meet aircraft performance requirements;
 - c) mass and centre of gravity limitations as specified in the aircraft flight manual and the operations manual;
 - d) limitations on deck and bulkhead loading as specified in the aircraft flight manual and the operations manual; and
 - e) limitations in respect of the transport of dangerous goods as specified in the current edition of the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284).
- 5.4.10.2 In addition to the foregoing, another important feature of this evaluation is an investigation of the applicant's method of exercising overall mass control. The CASI should examine the system and methods whereby aircraft mass is checked and maintained to ensure that mass fluctuations due to modifications and other causes are fully taken into account and that the mass statement is accurate.

5.4.11 Emergency evacuation demonstration

- 5.4.11.1 An operator is required to assign to each crew member the necessary functions to be performed in an emergency or in a situation requiring emergency evacuation. Annex 6, Part I, and Part III, Section II, requires that the training, which includes instruction in the use of all emergency and life-saving equipment and drills in the emergency evacuation of the aircraft, be performed on an annual basis. It is considered that the most effective crew training in this regard would be accomplished by combined training of flight crew and cabin crew. Therefore, State regulations should require an applicant to establish, to the satisfaction of the DGCA, procedures to be followed, assignment of duties, qualifications of crew members and equipment to be used that will permit an emergency evacuation in 90 seconds or less, of the maximum number of persons, including crew members, authorized to be carried on each type of aircraft used in commercial air transport operations.
- 5.4.11.2 Unless reliable analytical methods or previous demonstrations by the aircraft manufacturer or other operators of the same type and model of aircraft are available to satisfy the CASI of the applicant's emergency evacuation capability, the certification inspection should require a demonstration of the adequacy of aircraft emergency procedures, crew member emergency evacuation training and emergency equipment. Specific points to be noted during an evacuation demonstration are:
 - a) the adherence by crew members to the execution of assigned duties and responsibilities both in the aircraft and on the ground;
 - b) the location of each crew member during the evacuation;

- c) the effectiveness of the pilot-in-command in the exercise of command responsibilities;
- d) the succession of command in the event of casualties;
- e) the effectiveness of crew members in performing their assigned evacuation duties; and
- f) the shortcomings, deficiencies or delays encountered.
- 5.4.11.3 In making their report on the demonstration, CASIs should record the following from the time each phase of the evacuation demonstration begins:
 - a) time to open each approved exit door;
 - b) time to deploy and inflate emergency evacuation slides;
 - c) time before the slide receives its first evacuees;
 - d) time for first evacuees to leave over-the-wing exits; and
 - e) total number of persons evacuating each exit.
- 5.4.11.4 If the applicant cannot satisfactorily demonstrate emergency evacuation for each particular type, model and configuration of aircraft within the time limit specified by the State, the applicant should be required to take steps to correct the deficiency which could include the following:
 - a) revising evacuation procedures;
 - b) improving crew training;
 - c) modifying or changing the equipment used;
 - d) changing the passenger compartment arrangement; and
 - e) reducing total passenger seating capacity.

5.4.12 Ditching demonstration

- 5.4.12.1 Unless data from reliable analytical methods or from previous demonstrations by the aircraft manufacturer or other operators of the same type and model of aircraft is available to satisfy the CASI that the applicant's procedures, equipment and training for a ditching situation are adequate, the CAA certification team should require a simulated ditching demonstration during the operational inspection phase of the certification process for each aircraft type, model and configuration which will be operated on extended flights over water. CASIs should first determine whether the aircraft has an airworthiness certification covering ditching. If the aircraft is not certificated for ditching, extended flights over water should not be authorized.
- 5.4.12.2 The following are specific points to be noted and evaluated during a simulated ditching demonstration:
 - a) was adequate preparation of the passengers and aircraft for a premeditated ditching conducted?
 - b) were there adequate items of emergency equipment, i.e. life rafts, inflatable slides, life jackets, medical kits, first aid kits and emergency locator transmitter (ELT), carried on board in sufficient number?

- c) was emergency equipment properly stowed and could it be readily removed or ejected from the aircraft in the time specified?
- d) were means provided and utilized to prevent emergency equipment from drifting away from survivors?
- e) did slides, life jackets and life rafts inflate fully within acceptable time limits; did the slides deploy properly; and did other emergency equipment function properly?
- f) were the emergency exits to be utilized selected, and could such exits be opened readily?
- g) were emergency procedures and related checklists adequate, and were they properly used by the crew members?
- h) was the crew properly trained?
- i) were crew members familiar with and did they adhere to the timely execution of their assigned duties and responsibilities?
- j) could crew members, using available emergency equipment and following the procedures outlined in the operations manual, facilitate the evacuation of the aircraft under the critical conditions expected during the short period of time the aircraft would remain afloat?
- k) were adequate safety precautions followed by the crew members to prevent possible injury to passengers or themselves?
- 5.4.12.3 In the observation of the demonstration, to assist in the assessment of the ditching demonstration, the CASI should record the following:
 - a) time from start of the simulated ditching demonstration until each exit door or emergency exit to be utilized was opened;
 - b) time when each life raft was launched;
 - c) time required to inflate each life raft; and
 - d) time when life rafts were boarded by all passengers and crew members.
- 5.4.12.4 Any deficiencies identified during the evaluation conducted by the CAA certification team or noted during the ditching demonstration regarding the evacuation procedures or related emergency equipment, such as inflatable slides, emergency exits and life rafts, are to be rectified by the applicant. This may require additional evaluation or demonstrations before these emergency procedures can be considered acceptable by the CAA certification team.

5.4.13 Ground inspection deficiencies

Unsatisfactory conditions noted by the CAA certification team during the ground inspection need to be brought to the attention of the applicant for corrective action. The opportunity should be provided for the applicant to remedy any deficiencies affecting the safety of the operation before the commencement of any flight operations inspection. All discrepancies and items of non-compliance need to be corrected or resolved, with acceptable records of the corrective actions taken being kept, to the satisfaction of the CAA certification team and the DGCA prior to the inauguration of commercial service.

5.5 FLIGHT OPERATIONS INSPECTION

5.5.1 General

- 5.5.1.1 Following the ground operations phase of the inspection programme prior to certification, it may be necessary, particularly in the case of new operators, to carry out a series of inspections in the course of flight. Such inspection flights provide an opportunity for the applicant to demonstrate the ability to carry out the proposed operations in accordance with applicable regulations. Passengers should not be carried during inspection flights prior to certification and observer personnel on board the aircraft should be kept to a minimum. However, it is generally desirable for the applicant to have on board company personnel who can take decisions and make commitments on behalf of the applicant concerning action to correct deficiencies.
- 5.5.1.2 All demonstration flights are to be conducted using the methods and procedures proposed by the applicant in the formal application package (see Part III, Chapter 3).

5.5.2 Planning

The applicant and the CAA certification team should plan well in advance for the conduct of the flight operations inspection programme. All concerned need to have a clear understanding and agreement as to what needs to be accomplished by the applicant to show compliance with the applicable operating regulations and rules. General objectives for pre-certification inspection flights should include the determination of the adequacy of:

- a) in-flight procedures laid down in the operations manual and compliance with those procedures;
- b) the facilities and equipment provided to the flight crew to conduct the flight safely and in accordance with regulations;
- the support provided by the operational control system to the flight crew and the aircraft tracking capability, if applicable;
- d) the general provision made for ground handling of the aircraft and assisting the flight crew to carry out their duties at all aerodromes utilized by the applicant along the routes; and
- e) en-route facilities.

5.5.3 Preflight inspection

The preflight procedures followed by the flight crew and the assistance rendered by the ground organization during the preflight phase should be observed for compliance with the operations manual. These procedures relate to the following:

- a) meteorological and route briefing, provision of NOTAMs;
- b) filing of the ATS flight plan;
- c) flight planning;
- d) fuel computation;
- e) measures taken by the pilot-in-command concerning the:
 - airworthiness of the aircraft, including the maintenance release, and use of the MEL and, if available, the CDL;
 - complement of instruments and equipment required to be on board;
 - 3) preparation of the operational flight plan;
 - 4) fuel required and the fuel and oil on board the aircraft;
 - 5) mass of the aircraft and the centre of gravity location;
 - capability to comply with the aircraft mass and performance limitations, climb gradient and obstacle clearance requirements;
 - 7) correct calculation of critical speeds (V₁, V_r, V₂, etc.) appropriate to the runway and take-off conditions;
 - 8) security of the load and its correct distribution;
 - 9) information concerning dangerous goods;
 - 10) completion and signing of the operational flight plan and the aircraft mass and balance form;
 - 11) carriage of the required publications and manuals, e.g. aircraft operating manual, aircraft flight manual, route guide, MEL and CDL, if available, and their correct amendment; and
 - 12) carriage on board of required documents or appropriate copies of documents, e.g. certificate of registration, certificate of airworthiness, crew licences, aircraft radio station licence, journey log or technical log and noise certification attestation (when commercial operations commence, after issuance of an AOC, this list will include the AOC and its associated operations specifications, and passenger and/or cargo manifests as appropriate).
- boarding of all crew including personnel in excess of the minimum crew and their briefing on the location and use of emergency equipment, no smoking signs, use of seat belts, location and use of emergency exits, etc.;

- g) external and internal aircraft inspection by flight crew and cabin inspection by cabin crew;
- h) procedures preparatory for radio and navigation equipment setting, including data entry in flight management avionics, if available;
- i) procedures for inertial equipment initializing and cross-checking;
- j) flight deck preparation and procedures and use of checklists; and
- k) crew coordination.

5.5.4 In-flight inspection

- 5.5.4.1 Prior to take-off, the CASI should observe the following:
 - a) procedures preparatory to starting engines;
 - b) engine start-up procedures;
 - c) proper communication and coordination with the ground crew regarding:
 - 1) engine start-up procedures;
 - 2) removal of chocks; and
 - 3) push back and ground towing, if so required, prior to taxiing.
 - d) taxiing and use of aerodrome chart;
 - e) use of checklists;
 - f) acceptance and recording of air traffic control (ATC) clearance; and
 - g) briefing of the flight crew for take-off, departure and initial climb, including use of navigation aids.
- 5.5.4.2 During the flight, the CASI should check the following items:
 - a) compliance with rules of the air;
 - b) flight crew knowledge of:
 - 1) aircraft limitations;
 - 2) aircraft normal and emergency procedures;
 - 3) aircraft systems and equipment; and
 - 4) cruise control;
 - c) adequacy of flight deck procedures;

- d) crew discipline, coordination and vigilance;
- e) altitude control and procedures for altitude/level change;
- the operations manual, including the aircraft operating manual, to confirm that it will meet requirements that may arise during flight;
- g) use of flight deck security procedures;
- h) competence of crew members, including the language proficiency of flight crew members in the language used for radiotelephony communications;
- i) flight crew use of company frequencies and operational control of the flight;
- j) use of en-route and terminal navigation facilities;
- k) pilot knowledge of routes and aerodromes, including departure contingency procedures;
- I) adequacy of weather information and environmental data provided and their use by the flight crew;
- m) use of air/ground communications;
- n) use of navigation procedures and equipment;
- o) use of checklists for each phase of flight;
- p) adherence to ATC clearances and to changes to clearances;
- q) compliance with meteorological reporting procedures and with procedures for reporting hazardous flight conditions;
- use and availability of flight documents, whether these are provided electronically or as hard copy. Special notice should be taken of the manner in which the maps and charts contained in the route guide section of the operations manual are used in flight and in the conduct of departure, arrival, approach and missed approach procedures;
- s) adequacy and use of breathing oxygen in flight;
- t) flight crew use of safety harnesses;
- u) use of passenger cabin "no-smoking" and "seat belt" signs;
- y) general compliance with the regulations of the State of the Operator and other States concerned with the operation;
- w) flight crew management of the flight, including in-flight fuel management, human performance, threat and error management and decision-making, and proficiency in the manual and automatic control of the aircraft in all phases of flight;
- x) conduct of flight crew arrival, approach and landing briefing;
- y) adherence to aerodrome/heliport operating minima; and

 conduct of approach and landing procedures, after landing procedures, taxi and shut-down procedures and use of appropriate checklists.

Note.— All of the foregoing checks are to be conducted without interfering with crew duties and vigilance in flight. In some cases, particularly with respect to b) above, it may be necessary for the CASI to complete the check during the post-flight phase.

- 5.5.4.3 *Cabin crew.* During the in-flight inspection, the CASI should observe the procedures used by the cabin crew for passenger briefing on:
 - a) stowage of carry-on baggage;
 - b) observing the "no-smoking" signs;
 - c) how and when to use seat belts;
 - d) when seat backs are required be in the full upright position;
 - e) procedures for donning oxygen masks and restrictions during use of oxygen;
 - f) emergency procedures including the location and use of emergency exits;
 - g) location and use of life jackets;
 - h) restrictions on the use of toilets; and
 - i) location and content of passenger emergency briefing cards.
- 5.5.4.3.1 The CASI should note that cabin crew members are provided with, and occupy, for take-off and landing, forward or rearward facing seats equipped with safety harnesses and that such seats are located near floor level and other emergency exits, as required by the State of Registry.
- 5.5.4.3.2 Cabin crew should be questioned regarding their familiarity with the location and use of various types of emergency equipment, i.e. life rafts, ELT, medical kits and first aid kits, and with their specific duties in the event of an emergency such as a ditching or an emergency evacuation. This discussion with the cabin crew members provides an opportunity for the CASI to assess the effectiveness of their training. The performance of cabin crew will be evaluated with regard to their effectiveness in performing their assigned duties and the fulfilment of their responsibilities for requiring passengers to comply with their instructions and the applicable regulations.

Note.— A sample cabin inspection checklist, which lists the various cabin items to be checked by CASIs, is included in the Attachment to Part IV.

5.5.5 Post-flight inspection

The following should be observed:

- a) use of appropriate after shut-down checklists;
- b) completion by the pilot-in-command of the journey log book or technical log and the reporting of any aircraft unserviceability;
- availability and, if necessary, completion of appropriate reports regarding incidents, near misses, bird strikes, lightning strikes, volcanic ash encounters or ingestion and any other unusual occurrences of operational significance;
- d) where a stopover is scheduled for crew rest, the adequacy of the accommodation provided and the actual rest period available; and
- e) where the stop is an intermediate stop, the arrangements made to assist the crew in the preparation for the next stage of the flight.

5.5.6 Flight inspection deficiencies

- 5.5.6.1 Unsatisfactory conditions noted by the CASI during any part of the flight inspection should be brought to the attention of the applicant for corrective action. The opportunity should be provided for the applicant to remedy any deficiencies affecting the safety of the operation before any further flights are undertaken. All discrepancies and items of non-compliance need to be corrected or resolved, with acceptable records of the corrective actions taken being kept, to the satisfaction of the CAA certification team and the DGCA prior to the inauguration of commercial service.
- 5.5.6.2 Some examples of deficiencies requiring corrective action are:
 - a) flight crew member not properly trained, e.g. assistance from applicant supervisors or a CASI required;
 - b) flight crew member not familiar with aircraft, systems, procedures or performance;
 - c) cabin crew member not properly trained in emergency evacuation procedures or in the use of emergency equipment or not familiar with the location of that equipment;
 - d) numerous aircraft deficiencies and/or system malfunctions;
 - e) inadequate mass and balance or load control;
 - f) unsatisfactory operational control, e.g. improper flight planning and flight release procedures;
 - g) unacceptable maintenance procedures or practices; and
 - improper aircraft servicing and ground handling procedures.

Chapter 6

MAINTENANCE CONTROL DEMONSTRATION AND INSPECTION PHASE

6.1 GENERAL

- 6.1.1 The applicant (operator) is required to demonstrate that an organization, with the necessary qualified staff, equipment and facilities is set up and responsible for ensuring that the aircraft remain in an airworthy condition for the duration of their operational life. This is also referred to as managing the continuing airworthiness of the aircraft.
- 6.1.2 It is also assumed that in the case of an applicant seeking authority to operate leased aircraft registered in a different State, suitable arrangements have been made between the State of the Operator and the State of Registry regarding responsibility for the continuing airworthiness of the aircraft.
- 6.1.3 These demonstrations will include actually performing activities and/or operations while being observed by the CASIs of the certification team. This will also involve on-site evaluations of aircraft maintenance and support facilities. During these demonstrations and inspections, the CAA evaluates the effectiveness of the policies, methods, procedures and instructions as described in the manuals and other documents developed by the applicant. During this phase, emphasis should be placed on the applicant's management effectiveness. Deficiencies should be brought to the attention of the applicant in writing and corrective action taken before an AOC can be issued.
- 6.1.4 Further detailed guidance on the maintenance control aspects of air operator certification, as well as approval of the MCM and the preparation of maintenance-related operations specifications associated with an AOC, is contained in the *Airworthiness Manual* (Doc 9760), Part IV, which should be considered as supplementary to the material contained in this manual.

6.2 MAINTENANCE CONTROL ORGANIZATION

- 6.2.1 Annex 6, Part I, Chapter 8 and Part III, Section II, Chapter 6, require that an operator employ a person, or group of persons, to ensure that all maintenance is carried out in accordance with the MCM. Compliance with this requirement should be clearly demonstrated during the inspection.
- 6.2.2 CASIs should determine that the structure of the applicant's maintenance control organization is set forth, clearly delineating duties and responsibilities for all key personnel including the manager(s) for engineering and maintenance. The names of all incumbents should be listed. The details of the organizational structure should be included as a part of the MCM and, if necessary, also promulgated separately.

6.3 MAINTENANCE CONTROL MANUAL

6.3.1 State regulations will need to require the applicant, in accordance with Annex 6, Part I, and Part III, Section II, to prepare a detailed MCM for the use and guidance of maintenance organization personnel. The MCM needs to be

acceptable to the State of the Registry. The operator needs to ensure that the MCM is revised as necessary to keep the information contained therein up to date. Copies of all revisions will be furnished promptly to all organizations or persons to whom the manual has been issued. Accordingly, one of the first steps in the maintenance inspection is a thorough analysis of the MCM, the correction of any discrepancies and the tentative acceptance by the CASI. During the course of the maintenance control inspection, the CASI, assisted by qualified CAA airworthiness inspectors, should:

- a) determine that the major provisions of the MCM are being followed in practice;
- ensure that the major provisions described in the MCM are being followed and reflect the organizational activities and practices;
- ensure that the maintenance control manual provides clear instructions, procedures and information;
 and
- d) determine that the procedures will result in the desired outcome.
- 6.3.2 The details in and number of volumes of the MCM will vary depending upon the type, complexity and number of aircraft involved. However, CASIs should use the following as a checklist to verify that the MCM meets requirements and provides clear instructions, procedures and information covering:
 - a) operations and maintenance personnel duties, responsibilities and authorities relating to maintenance, inspection and servicing;
 - b) details of the maintenance system to be followed, including procedures for performing routine and non-routine maintenance inspections, alterations, repairs and servicing;
 - c) airworthiness certification and inspection standards and procedures for aircraft, parts and components;
 - d) details of the reliability programme;
 - e) procedures for preparing the maintenance release, the circumstances under which this release is issued and the personnel authorized to sign it;
 - f) methods, technique and practices for accomplishing preventive maintenance and alterations;
 - g) procedures to ensure that required maintenance or inspections are handled by appropriately trained, qualified and certificated/licensed personnel;
 - h) procedures to assess the cause and any potentially hazardous effects or defects, or combination of defects, and to analyse occurrences in order to initiate any necessary further investigation and analysis.
 Mandatory occurrence reporting to the CAA may be required by State regulations;
 - i) procedures to prevent the personnel who performed maintenance work on aircraft from also conducting required inspections of such work;
 - j) procedures to ensure that work interruptions do not adversely affect maintenance work and required inspections;
 - k) methods used for designating critical items requiring inspection;
 - the responsibilities, authority and names of personnel who have been duly appointed to conduct inspections;

- m) procedures to ensure that inspections are completed satisfactorily before aircraft are released to service;
- n) procedures for refuelling and defuelling aircraft;
- o) fire precaution procedures during refuelling and defuelling;
- p) procedures for preventing or eliminating fuel contamination;
- methods for servicing and maintenance prescribed by, or requiring the prior approval of, the chief of maintenance;
- r) procedures for ensuring that the organization responsible for type design, usually the manufacturer, receives adequate reports of occurrences involving that aircraft type so that it can issue changes to the instructions for continued airworthiness; and
- s) procedures for assessing and incorporating instructions for continued airworthiness and maintenance or inspection information issued by:
 - 1) the organization responsible for the type design; or
 - 2) the State of Design; or
 - the State of Registry.
- 6.3.3 As a minimum, the following should be covered in the manual in respect of each type and model of aircraft used:
 - a) frequency schedules of each check, overhaul or inspection of airframes, engines, propellers (where applicable), equipment, instruments and component systems;
 - b) procedures and standards for maintenance, inspection and servicing;
 - c) approved service life, where applicable, for various components, parts, accessories, etc.;
 - d) list of approved permissible unserviceability (CDL, if available, and MEL);
 - e) arrangements whereby personnel or organizations other than the applicant's can be approved to perform maintenance and/or inspections of aircraft;
 - f) time limits between required inspections;
 - g) procedures for maintaining the aircraft mass and centre of gravity report;
 - h) procedures and standards for acceptance or rejection of items requiring inspection;
 - i) procedures for preventive maintenance and servicing;
 - j) time limitations for replacing instruments, components, appliances, etc.;
 - k) procedures to ensure that certain aircraft systems and navigation equipment are fully serviceable for the appropriate special authorizations in the operations specifications;

- I) procedures for the procurement and sourcing of replacement parts;
- m) procedures to ensure that appropriate maintenance, records and inspection have been complied with; and
- n) details of performing various inspection tests, checks, etc.
- 6.3.4 The CASI should check the MCM to ensure that it is complete and up to date and distributed to those who require it. The CASI should also ascertain the efficiency and promptness of the amendment service and determine that all instructions for continued airworthiness issued by the organization responsible for the type design and the States concerned are promptly assessed and circulated to all those who need such information.
- Note 1.— Annex 6, Part I, Attachment D and Attachment C, provide guidance material on approval and acceptance actions.
- Note 2.— The Airworthiness Manual (Doc 9760), Part IV, Chapter 2, contains further guidance on the maintenance control organization.

Chapter 7

CERTIFICATION PHASE

7.1 GENERAL

The continued validity of an AOC is dependent upon an air operator maintaining the requirements for 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 in the AOC and its associated operation specifications, under the supervision of the CAA.

7.2 FINAL PREPARATION FOR THE ISSUANCE OF AN AOC

- 7.2.1 The CAA project manager will have notified the applicant of all discrepancies that need to be resolved before an AOC and its associated operations specifications can be issued.
- 7.2.2 The project manager reviews the final operations specifications and makes any changes necessary.
- 7.2.3 The project manager and the CAA certification team need to ensure that all the requirements for certification have been met and also to have determined that the applicant is fully capable of fulfilling all the responsibilities incumbent in the conduct of the proposed operations and of complying with the applicable laws and regulations, and the provisions of the certificate and operations specifications.
- 7.2.4 An AOC will not be issued until the State organization responsible for the economic and financial assessment of the applicant has presented a favourable report, and until the CAA is satisfied that the operator has the financial resources to conduct its planned operations, including resources for the disruptions that can be reasonably expected in daily operations.
- 7.2.5 The project manager will provide appropriate recommendations on the issuance or denial of an AOC to the DGCA.

7.3 ISSUANCE OF AN AOC AND THE ASSOCIATED OPERATIONS SPECIFICATIONS

- 7.3.1 The CAA should assign an AOC number and determine the date of issuance. The certificate should be signed by the CAA official responsible for its issuance at the level required by the State of the Operator. The associated operations specifications should also be signed by the CAA official responsible for its issuance at the level required by the State of the Operator.
- 7.3.2 The requirements for the layout and the content of an AOC are provided in Annex 6, Part I, Chapter 4, and Part III, Section II, Chapter 2. The format, content and further guidance on the content for the associated operations specifications are also provided in Annex 6, Part I, Appendix 6, and Part III, Appendix 3.

7.4 PERIOD OF VALIDITY OF AN AOC AND THE ASSOCIATED OPERATIONS SPECIFICATIONS

- 7.4.1 Annex 6 provides for the date of issuance and an expiry date to be entered on an AOC. In practice, States vary in the application of a period of validity to an AOC and the associated operations specifications. Some States apply a specific period and some do not. A period of validity, if applied, should not be less than two years. If the AOC is issued with no limit on the period of validity, the AOC should be appropriately annotated (e.g. "Expiry date: Valid until revoked, suspended or cancelled").
- 7.4.2 In general, an AOC or any portion of an AOC issued by a CAA remains valid until:
 - a) the CAA amends, suspends, revokes or otherwise terminates the certificate;
 - b) the AOC holder surrenders the certificate to the CAA;
 - c) the AOC holder suspends operations for more than a period determined and published by the DGCA in the State regulations; or
 - d) the expiry date, if any.

7.5 IDENTIFICATION OF INDIVIDUAL AIRCRAFT BY NATIONALITY AND REGISTRATION MARKS

- 7.5.1 ICAO Standards call for the operations specifications to include designation of the make, model and series (or master series) of the aircraft that are to be used. Some States require that the nationality and registration marks of the individual aircraft involved in the operations authorized also be included in the operations specifications.
- 7.5.2 Where, in accordance with the standard format for the operations specifications, the identification of individual aircraft is not provided, a reference is required to be given to indicate the location of this information on board. It is essential that information on the identification of individual aircraft, used by an operator for a particular operation, is maintained up to date however it is provided.

7.6 AMENDMENTS TO THE AOC AND THE OPERATIONS SPECIFICATIONS

7.6.1 Any subsequent changes to the operation specified or to the equipment approved for use will necessitate amendments to the operations specifications. It is appropriate that an AOC will itself be a very basic document and that all aspects of the operation that might be the subject of change would be dealt with in the associated operations specifications such that changes involve reissue of the minimum documentation.

Note.— Provisions for the content of the air operator certificate and its associated operations specifications are contained in Annex 6, Part I, Chapter 4, and Part III, Section II, Chapter 2.

7.6.2 The process for the amendment of operations specifications will be similar to the original certification process, with the exception that in many cases it will be far less complex, dependent upon the subject of the change that necessitates the amendment. Where changes involve new types of operation, new geographical areas or new aircraft, the appropriate level of complexity will have to be applied to the process.

7.7 RENEWAL OF AN AOC

- 7.7.1 Annex 6, Part I, and Part III, Section II, states that the continued validity of an AOC is dependent upon an operator maintaining the requirements for 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 in the AOC and the associated operations specifications, under the supervision of the State of the Operator.
- 7.7.2 Whether an AOC has a specific expiry date or not, the State of the Operator is required to conduct continuing surveillance of the operator and thus to continuously determine that the AOC remains valid, as described in the *Airworthiness Manual* (Doc 9760), Part IV, Chapter 2.
- 7.7.3 Should the State's regulations prescribe a specific duration for an AOC or an expiration date, the State should develop a procedure for the renewal of the AOC. The process could be administrative in nature or part of the continuing surveillance exercised by the State of the Operator. If the process is to be considered as surveillance, the State's procedure should identify the critical elements to be inspected before renewal. Critical elements can also be determined and inspected on the basis of a safety risk assessment exercise so that the aspects of the operation that involve the greatest safety risk should receive more frequent attention. In all cases where formal renewal is a requirement, such renewal should not involve a complete recertification procedure and thus will not be an onerous or prolonged process.
- 7.7.4 The operator needs to apply for renewal of the AOC prior to the expiration date. The request for renewal should contain the same basic information that was submitted prior to the original certification (see 3.1.2 of this Part) and should be received by the CAA well before the expiration date of the AOC.

Note.— Guidance on the implementation of SRBS is provided in the Safety Management Manual (Doc 9859).

Attachment A

PROSPECTIVE OPERATOR'S OR MAINTENANCE ORGANIZATION'S PRE-ASSESSMENT STATEMENT

(Part III, Chapter 2, refers)

	PRE-ASSESSMENT STATEMENT				
	(To be completed by an applicar maintenance organization (AMO). See				
Sec	tion 1A. To be completed by all applican	ts			
Company registered name and trading name if different. Address of company: mailing address; telephone; fax and e-mail. Address of the principal place of business, including telephone, fax and e-mail.					
			Secondary business a	ddress:	
Type of operation:					
3.	Proposed start-up date:	4. Requested d	esignator for aircraft ope	rating agency in order of preference:	
		a)	b)	c)	
5.	Management and key staff personnel				
	Name	Т	itle	Telephone, fax and e-mail	
Sec	tion 1B. Proposals for maintenance (to b	e completed by all	applicants as appropr	iate)	
6.	☐ Air operator intends to perform its mair	ntenance as an AMO	(complete 7 and 8).		
	Air operator intends to arrange for maintenance and inspections of aircraft and associated equipment to be performed by others (complete 7 and 11).				
	☐ Air operator intends to perform maintenance under an equivalent system (complete 7 and 11).				
	☐ AMO (complete 8).				
7.	Air operator proposed types of operation:		8. AMO proposed rat	ings:	
	□ Passengers and cargo □ Aircraft maintenance □ Cargo only □ Engine maintenance □ Scheduled operations □ Components maintenance □ Charter flight operations □ Specialized maintenance				

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Section 1C. To be completed by air operator applicants					
9.	Aircraft data (provide a copy of the lease agreeme leased aircraft)		Geographic a		f intended operations and proposed
a)	Number of aircraft by type and model. Aircraft nationality and registration marks where available. b) Number of seats and/o payload cap	or cargo			
Sec	tion 1D. To be completed by all applicants	1			
11.	Additional information that provides a better under necessary):	erstanding of the prop	osed opera	tion or b	usiness (attach additional sheets, if
Sec	Proposed training (aircraft and/or flight simulation to the tion 1E. The signature and the information core maintenance organization, as appropriate.		lenote an in	tent to a	apply for an AOC and/or approval
	e of organization:				
•	nature:	Date: (day/month/year)		Name a	nd title:
Sec	tion 2. To be completed by the Civil Aviation A	uthority (CAA)			
Rec	eived by (name and office):				Date received: (day/month/year)
	e forwarded to the Director General of Civil Aviation //month/year):	(DGCA)	For: 🗆 /	Action	☐ Information only
Ren	narks:				

Section 3. To be completed by the office of the DGCA	
Received by:	Pre-application number:
Date (day/month/year):	
Local office assigned responsibility for designation of the CAA project manager and the certification team:	Date forwarded to local office for initiation of the formal certification or approval process: (day/month/year)
Remarks:	

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Attachment B

INSTRUCTIONS FOR THE COMPLETION OF THE PROSPECTIVE OPERATOR'S OR MAINTENANCE ORGANIZATION'S PRE-ASSESSMENT STATEMENT AS SET OUT IN ATTACHMENT A

Section 1A. To be completed by all applicants.

- 1. Enter the official name and mailing address, telephone, fax and e-mail address of the company. Include any other name under which business is conducted if different from the official company name.
- 2. This address should be the physical location where the primary activities are based. It is where the offices of management required by legislation are located. If the address is the same as under item 1, enter "same". Include secondary business addresses and identify the type of operation conducted at such addresses.
- Enter the estimated date when operations or services are intended to commence.
- 4. This information will be used to assign a company identification number, known as a designator for aircraft operating agency. You may indicate up to three, three-letter identifiers, such as ABC, XYZ. If all choices have already been allocated to other operators or maintenance organizations, another identifier will be allocated.
- 5. Enter the names, titles, telephone numbers and other contact details of management and key staff personnel.

Section 1B. To be completed by all applicants, as appropriate.

- 6. Indicate whether the applicant air operator intends to perform maintenance as an AMO or intends to contract out all or part of its maintenance, or perform its maintenance using an equivalent system.
- 7. The proposed type of air operation will be indicated. Check all applicable boxes.
- 8. The proposed maintenance organization ratings below will be indicated. Check all applicable boxes.
 - □ *Aircraft maintenance*. Large aeroplane, small aeroplane, helicopter, other kind of aircraft (such as glider, balloon, airship, light sport aircraft, etc.).
 - Engine maintenance. Insert categories of engine (such as reciprocating, turbine and electric).
 - Components maintenance. Insert the standard numbering system (SNS) code derived from ASD/ATA S1000D specification for identifying the aircraft system applicable to the rating.
 - Specialized maintenance. Insert the class of approval necessary for the specialized maintenance using the following ratings: composite material maintenance, surface treatment such as peening, plating, painting, non-destructive testing, welding, other – unique processes accepted/approved by the State.

Note.— Depending on the CAA certification framework, an alternate list of ratings can be used, such as a list of four ratings: mechanical, workshop, avionics and specialized service.

Section 1C. To be completed by air operator applicants.

- Data for all aircraft to be used to be provided. Provide a copy of the lease agreement for all leased aircraft.
 - a) Indicate number and types of aircraft by make, model and series, and indicate individual aircraft nationality and registration marks; and
 - b) number of passenger seats and/or cargo payload capacity.
- 10. Indicate geographic area(s) of intended operation and proposed route structure.

Section 1D. To be completed by all applicants.

- 11. Provide any information that would assist CAA personnel in understanding the type and scope of the operation or business to be performed by the applicant. If an air operator intends to contract out maintenance and inspection of its aircraft and/or associated equipment, identify the AMO selected and list the maintenance and inspections that the contracting organization will perform. Provide copies of all maintenance contracts where applicable.
- 12. For air operator applicants, identify the type of aircraft and/or flight simulation training devices, including flight simulators, to be used and the training to be provided. For maintenance organization applicants, identify the types of aircraft to be maintained and in addition identify the training that the quality assurance staff, certifying staff and other maintenance staff will receive based on the ratings requested.

Section 1E. To be completed by all applicants.

Signature of the pre-assessment statement by the accountable manager denotes an intent to seek certification as an air operator or approval as a maintenance organization.

Section 2. The application is to be forwarded by the receiving office to the DGCA with all available information and a recommendation on the action to be taken.

Section 3. The DGCA will authorize the appropriate CAA office or section, where certification or approval action is to be continued, to designate a project manager and a certification team.

Part IV

SURVEILLANCE OF THE OPERATOR BY THE STATE OF THE OPERATOR

Chapter 1

GENERAL

- 1.1 Surveillance of an operator by the State of the Operator is inherent in the system of certification. It is an essential part of the responsibility of a State to ensure that the required standard of operation is maintained in order to provide a safe and reliable commercial air transport service to the public. Authority for this continuing process should be contained in the provisions of the basic aviation law of the State.
- 1.2 Detailed requirements for a State safety oversight organization and the training of CASIs are set out in Part I, Chapters 5 and 6, respectively, of this manual.
- 1.3 The DGCA should have the authority and responsibility for exercising surveillance of commercial air transport operations to ensure that accepted safety practices and proper procedures for the promotion of safety in operations are maintained. To achieve this objective, the DGCA, through the CASI, is responsible for continuously monitoring operations conducted by each operator. Such surveillance could result in the revision of operations specifications or in the temporary suspension of an AOC and, in an extreme case, could result in the revocation of an AOC.
- 1.4 Required surveillance and the related inspections should be planned and conducted by the CASIs assigned to an operator as responsible for the standard of conduct of the operations. Whenever specialized assistance is required, the CASIs should request such help from the DGCA. All CASIs authorized to conduct surveillance activities need to be in possession of credentials identifying them as inspectors employed by the CAA.
- 1.5 The safety oversight of operators is to be conducted on a continuous basis, whether or not the AOC has a specific duration with an expiration date. It should be based on periodic random inspections, including ramp inspections. Should a State's regulations prescribe a specific duration for an AOC, an operator needs to apply for renewal of the AOC prior to the expiration date, as per Part III, Chapter 7, of this manual.

Chapter 2

SURVEILLANCE PROGRAMME

2.1 OBJECTIVES OF THE SURVEILLANCE PROGRAMME

- 2.1.1 The surveillance programme should provide a comprehensive and conclusive assessment of an operator's continuing competence.
- 2.1.2 During the certification process, the CAA will have determined the methods, systems or procedures that the operator intends to use to ensure compliance with the applicable regulations, the AOC and its associated operations specifications and the operator's operations and MCMs. A prime objective of the surveillance programme is to confirm that such methods, systems or procedures are being followed and are effective in the demonstration of operator compliance and achievement of safety objectives.
- 2.1.3 The surveillance programme of an operator should:
 - a) establish that the operator has conducted, and is likely to continue to conduct, operations in accordance with good operating practices, the AOC's operations specifications, the operations manual and MCMs and the relevant operating regulations and rules;
 - b) ensure that all changes in the applicable operating regulations and rules, in any amendments to the AOC or associated operations specifications, or otherwise any improvements in operating procedures, are put into practice and reflected in appropriate amendments to the operations manual or the MCM;
 - c) keep the DGCA informed of the competency, current operating practices and records of compliance of the operator;
 - afford the DGCA the opportunity to recommend CAA regulatory or policy changes if the surveillance activities indicate such action would result in improvements in operating safety standards in general; and
 - e) establish whether the exercise of the privileges of an AOC and the associated operations specifications by a particular operator should be continued, made the subject of further operating limitations, or be amended, suspended or revoked.

2.2 ESTABLISHMENT OF THE SURVEILLANCE PROGRAMME

- 2.2.1 The surveillance programme should be developed on the basis of a safety risk assessment exercise; aspects of the operation involving areas of greater safety risk should receive more attention and be prioritized. The surveillance programme should consider the results of the hazard identification and risk assessment (HIRA) conducted and maintained by the operator as part of the operator's SMS, as well as the operator's safety assurance.
- 2.2.2 The State may establish an SRBS programme that prioritizes the resources to be used for the surveillance of its operators based on operators' safety risk profiles. Guidance on the establishment safety risk profiles, including typical factors which could be considered, are presented in the *Safety Management Manual* (Doc 9859). Monitoring the

safety performance in between inspections can complement inspection activities and alert the CAA of any issues that may require attention.

Note.— The ICAO Safety Management Implementation (SMI) Website provides additional guidance on the establishment of an SRBS programme of air operators, including an application allowing building safety risk-based surveillance activities schedules

2.3 CONTENT OF THE SURVEILLANCE PROGRAMME

- 2.3.1 The surveillance programme should include the following elements:
 - a) surveillance activities (audits, inspections, tests, safety events analyses);
 - b) the timeframe or frequency of the activities;
 - c) items to be covered or scope of the activities; and
 - d) related methodology or procedures, job aids and guidance on how the activities should be conducted, starting from the notification to the operator to the closure of the deficiencies identified during the activities.
- 2.3.2 Oversight activities should be accomplished on a continuing basis, planned and performed at specified times or intervals, or conducted in conjunction with the renewal of an AOC, when applicable. Regardless of the method used, all significant aspects of the operator's procedures and practices should be evaluated, and appropriate surveillance activities, commensurate with the scale and complexity of the operator's activities should be conducted at least once every 12 months. This timeframe may be adapted if the State is using an SRBS programme.
- 2.3.3 Surveillance activities should include the audits and inspections of the following areas:
 - a) headquarters;
 - b) station facility;
 - c) aerodrome (or heliport);
 - d) ramp;
 - e) crew training; and
 - f) in-flight (cockpit and cabin when the operator is approved for the transportation of passengers).

Note.— Guidance on the conduct of a ramp inspection is provided in the Attachment to Part IV.

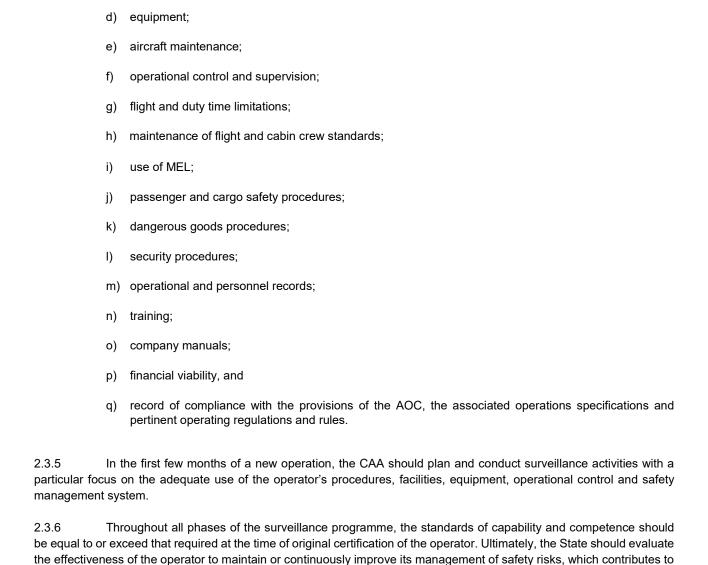
- 2.3.4 The areas to be covered in the surveillance activities should be similar to those examined during the original certification process and include the additional authorizations granted. They should include at least a re-evaluation of the operator's:
 - a) organization;
 - b) safety management system, including flight data monitoring, when applicable;

facilities;

the overall safety performance at the State level.

2.3.7

c)



Many AOC holders, especially those that are newly certificated, are making greater use of outsourcing to

reduce costs and remain competitive. Another common practice is the use of a varied aircraft fleet mix. AOC holders using a variety of aircraft types, or a mix of models of the same type, have a far more complex operation than those using a single fleet make and model. Following certification, these practices add to the complexity of tasks for air operator management of the operations, training, and maintenance of the carrier and its contractors. Conducting surveillance of a newly certificated air operator is often more difficult because of the numerous changes that typically occur during the first several years of operation. This difficulty is compounded when these changes occur in conjunction with rapid growth.

2.4 SIGNIFICANT DETERIORATION OF THE OPERATOR'S FINANCIAL CONDITION

- 2.4.1 As part of the surveillance programme, the CAA should also carefully examine any conditions that may indicate a significant deterioration in the operator's financial condition. Examples of trends which may indicate problems in a new operator's financial condition are:
 - a) significant lay-offs or turnover of personnel;
 - b) delays in meeting payroll;
 - c) reduction of safe operating standards;
 - d) decrease in standards of training;
 - e) withdrawal of credit by suppliers;
 - f) inadequate maintenance of aircraft;
 - g) shortage of supplies and spare parts;
 - h) curtailment or reduced frequency of revenue flights; and
 - i) sale or repossession of aircraft or other major equipment items.
- 2.4.2 When any financial difficulties are identified, the CAA should increase the technical surveillance of the operation, with a particular emphasis on upholding safety standards. This matter should also be referred to the DGCA for any action deemed necessary, such as a financial audit.

2.5 AIRCRAFT LEASES

- 2.5.1 Aircraft leases and contractual arrangements entered into by the operator for training, aircraft maintenance or servicing, etc., need to be thoroughly reviewed and a determination made of whether these arrangements are producing satisfactory results as far as the maintenance of safety standards and regulatory compliance are concerned.
- 2.5.2 During the review of aircraft leases and contractual arrangement, the CAA may consider audit information provided by a third party, which uses an internationally recognized audit system designed to assess the operational, management and control systems of the operator and its core operational activities.

Note.— An example of an internationally recognized audit system that may be acceptable to the State is the IATA Operational Safety Audit (IOSA) programme.

2.6 FLIGHT CREW TRAINING PROGRAMME

2.6.1 The flight crew training programme should also come under close scrutiny during surveillance activities to ensure that the training standards, which were demonstrated when the programme was initially approved, are being maintained. If there are indications that the training provided is not achieving the desired training objectives, or has resulted in a high failure rate on various tests or examinations, the CAA must ensure that the operator revises the training programme to confirm that trainees will reach the required level of competence.

- 2.6.2 If the CAA has approved flight crew proposed by an operator as designated examiners, their performance needs to be observed and evaluated during the course of the CAA surveillance programme of designated examiners. Flight crew approved as designated examiners need to satisfactorily demonstrate competency in evaluating the performance of other flight crew members. The personal ability and integrity of flight crew approved as designated examiners should be exemplary and their knowledge of requirements for the prescribed standards of performance expected of flight crew being tested should not be in doubt.
- 2.6.3 A similar but less thorough intensive process is required for the surveillance of flight crew assigned by the operator to verify activities unrelated to the issuance or modification of a license or rating, such as line checks, route checks, etc.

2.7 SAFETY MANAGEMENT SYSTEM

- 2.7.1 Insofar as the organization progresses and develops a more mature SMS supported by valuable safety data and safety information, the surveillance will focus much more on the outcome of the SMS processes and the safety performance monitoring of the operator. During the surveillance of an operator's SMS, the following items need to be verified:
 - a) the effectiveness of the operator's hazard identification and safety risk assessment, exchanges on the operator's safety risk profile, and their comparison with safety data and safety information analysis performed by the State to identify systemic and cross-cutting hazards that might not otherwise be identified by the safety data analysis processes of individual organizations;
 - whenever applicable, the maturity of the Flight Data Management System, which will provide useful information on what safety risks to focus on to improve the organization's safety performance (such as runway excursions or unstable approaches);
 - the functioning of the safety committees, as well as review of the Safety Review Board meetings, such
 as safety information brought to these meetings and nature of the discussion during these meetings;
 documented safety decisions and pertinence, follow-up of safety actions;
 - d) consideration to the State's safety objectives or elements of the SSP/NASP, when relevant to the operator's safety risk profile; consideration to the relevant elements of the annual safety review, when published by the State;
 - e) the capabilities of the operator to progress against expected outcomes, providing assurance to the competent authority that an organization has ongoing and acceptable measures and processes towards a better safety performance and continuous improvement;
 - f) functioning of the internal voluntary safety reporting system, assessment of the safety reporting culture and analysis of the reported events which would help to better identify the safety hazards and review the safety risk assessment (likelihood and severity), refine the safety objectives, foster the safety communication needs around safety critical information and customize the training needs to the areas of greater concerns, beyond the regulatory, prescriptive and mandatory training syllabus;
 - g) understanding the organization's safety culture; and
 - h) identification of areas for improvement.

Note. — More detailed information on the assessment of safety culture is provided in the Safety Management Manual (Doc 9859).

2.7.2 The management of changes by the organization is also part of the surveillance activities as it is an important marker of the organization's maturity to manage changes and assess potential safety impacts of these changes. These changes should not be limited to safety, but they should also cover security, cyber security, environment and meet the quality requirements of the Occupational Safety and Health Administration, as appropriate, when these changes have an impact on safety. The continued performance of such changes over time, may affect both the frequency and scope of surveillance activities, considering the scope, complexity and potential impact on safety of these changes.

2.8 CONDUCT AND RECORD OF SURVEILLANCE ACTIVITIES

- 2.8.1 CASIs conducting surveillance activities should be thorough and require the operator to convincingly demonstrate that operations are being conducted in accordance with the AOC and associated operations specifications, the operator's manuals and appropriate civil aviation regulations.
- 2.8.2 The CAA should record all surveillance activities, in order to be able to answer any questions that may arise concerning the factual basis for the CASI's recommendations.
- 2.8.3 Surveillance activity reports should indicate whether the safety oversight system and procedures employed by the CAA are effective in determining an operator's competence, record of compliance and overall capability.
- 2.8.4 Any SMS-related surveillance activity report should particularly address the dimension of proactive safety risk management and safety performance of the organization. The report should document the areas needing further improvement (e.g. ineffective safety risk controls, new or emerging safety risks to consider, unsuitable process, opportunities for improvement, etc.). This evaluation may also cover the organization's safety objectives and its degree of achievement, its relationship to State objectives through the relevant SSP and NASP, and clarify any finding(s) requiring specific action(s), including timelines. Findings shall reflect the degree of urgency to attain the safety objectives or push the individual organization towards a quicker, better achievement or continuous improvement.

Chapter 3

RESOLUTION OF SAFETY ISSUES

- 3.1 The responsibility for aviation safety does not rest entirely with the CAA. All operators, aircraft owners, maintenance organizations, training organizations, and certain aerodrome operators who qualify for and accept a CAA certificate, have statutory or regulatory safety duties. Aviation safety is based on each individual stakeholder's duty and responsibility to provide for public safety and for AOC holders to provide service with the highest possible degree of safety in the public interest.
- 3.2 When deficiencies are observed in the course of the safety oversight programme for a particular operator, the cause should be determined, prompt action taken to rectify the deficiency and appropriate follow-up initiated to determine the effectiveness of the corrective action. Additional inspections should be planned and conducted whenever problems in particular areas are repeated.
- 3.3 Should the safety oversight programme and related inspection reports reveal that an operator has failed to meet or is unable to meet or maintain the required standards for certification or the conditions specified in the AOC and its associated operations specifications, the CAA is to advise the operator of the deficiency observed and of the remedial action required. Remedial action will normally be required within a specified time. If an operator does not correct a deficiency as required, the DGCA should be informed and, if necessary, make a recommendation that the AOC and its associated operations specifications be amended, suspended or revoked.
- 3.4 Whenever the CASI responsible for oversight of an operator believes that safety considerations dictate immediate action to amend, suspend or revoke an AOC, the DGCA needs to be informed. If, after careful review of all circumstances involved and necessary coordination and consultation within the CAA, there is agreement on the need to amend, suspend or revoke the operator's AOC, the DGCA should advise the operator in writing, summarizing both the proposed action and the reasons for it. When an AOC is amended, suspended or revoked for any reason, the operator is required to promptly return the AOC to the issuing official. The ICAO international register of AOCs, when operational, should be updated by the CAA with the status of the operator.

Attachment

GUIDANCE ON THE CONDUCT OF A RAMP INSPECTION

1. GENERAL

The items to be checked by the CASI during a ramp check are summarized below:

- A. Flight deck
- B. Cabin/Safety
- C. Aircraft external condition
- D. Cargo
- E. General

2. DETAILED LIST

The detailed list contains information on the items to be checked. For each item, guidance is provided on how to perform the check. Each item is also provided with the applicable reference in Annexes to the Chicago Convention or other material, where available. However, the specific references in the checklist should be checked for the complete requirements.

3. SCOPE

- 3.1 It is not possible to cover all items on the list at every ramp inspection. Inspections should be planned to cover high-risk items and to cover all other items over a series of inspections. It is essential that adequate records be kept and that there is complete coordination between all CASIs involved in ramp inspections for any one operator.
- 3.2 More detailed information regarding which provisions in Annexes to the Chicago Convention may be transferred in whole or in part from the State of Registry to the State of the Operator is provided in the *Manual on the Implementation of Article 83* bis of the Convention on International Civil Aviation (Doc 10059).

4. ITEMS TO BE CHECKED

A. Flight deck — general

A 1. General condition

Instructions: Check cleanliness, tidiness and general condition.

References: Nil.

A 2. Emergency exit

Instructions: Check whether in compliance with ICAO SARPs.

References: Annex 8, Part IIIA, 4.1.7; Part IIIB, 4.6; Part IVA, 4.1.7; and Part IVB, 4.6.

A 3. Equipment

Instructions: Check for the presence of the following equipment where required:

Two sensitive pressure altimeters with counter drumpointer or equivalent presentation (IFR operations);

Airborne collision avoidance system (ACAS);

Cockpit voice recorder (CVR) and flight data recorder (FDR);

ELT;

Ground proximity warning system (GPWS) with forward looking terrain avoidance function; and

Where a flight management computer (FMC) is provided — valid database.

References:

Altimeters — Annex 6, Part I, 6.9.1 c).

ACAS II — Annex 6, Part I, 6.19; and Annex 10, Volume IV, 4.3.5.3.1 and 4.3.5.3.3.

CVR and FDR — Annex 6, Part I, 6.3; and Part III, Section II, 4.3.

GPWS — Annex 6, Part I, 6.15.

ELT — Annex 6, Part I, 6.17; and Part III, Section II, 4.7.

Electronic navigation data products — Annex 6, Part I, 7.5.2; Part III, Section II, 5.5.2; and Annex 15, 6.2.1.

A. Flight deck — documentation

A 4. Manuals

All required manuals

Instructions: Check for presence. Check whether manuals are up to date and accepted or approved as required. Aircraft flight manual data may be included in the operations manual which may itself be in several parts, some of which are dealt with in A 5, 6 and 7 below.

References:

Flight Manual — Annex 6, Part I, 6.2.3 b), 11.1 and Part III, Section II, 4.2.3 b), 9.1.

Operations Manual — Annex 6, Part I, 4.2.3, 6.2.3, and Appendix 2; and Part III, Section II, 2.2.3, 4.2.3 and Appendix 8.

Aircraft operating manual — Annex 6, Part I, 6.1.4, and Appendix 2, 2.2; and Part III, Section II, 4.1.4 and Appendix 8, 2.2.

A 5. Checklists

Instructions: Confirm checklists are available and up to date. Check whether their content is in compliance with the requirement. Normal, non-normal and emergency checklists are sometimes combined in a Quick Reference Handbook;

Check the availability of an aircraft search procedure checklist; and

Confirm availability of the checklist of emergency and safety equipment.

References:

Flight crew checklists — Annex 6, Part I, 4.2.6, 6.1.4, and Appendix 2, 2.2.2; and Part III, Section II, 2.2.6, 4.1.4 and Appendix 8, 2.2.10.

Aircraft search procedure checklist — Annex 6, Part I, 13.3; and Part III, Section II, 11.1.

Checklist of emergency and safety equipment — Annex 6, Part I, Appendix 2, 2.2.10; and Part III, Appendix 8, 2.2.8.

A 6. Route Guide

Instructions: Check whether a route guide, including charts, is available, suitable and up to date.

References: Annex 6, Part I, 6.2.3 c), 7.5.2 and Appendix 2, 2.3.1; Part III, Section II, 4.2.3 c), and Appendix 8, 2.3.1; and Annex 15, 6.2.1.

A7. MEL

Instructions: Check whether the MEL is available and up to date.

References: Annex 6, Part I, 6.1.3, Appendix 2, 2.2.9, and Attachment E and Part III, Section II, 4.1.3, Appendix 8, 2.2.7, and Attachment B.

A 8. Documents required to be carried on board

a) Certificate of registration

Instructions: Check for presence and accuracy and format.

References: Convention on International Civil Aviation (Doc 7300), Article 29; and Annex 7, Section 8.

b) Identification plate

Instructions: Check presence and location.

Reference: Annex 7, Section 9.

c) Certificate of airworthiness

Instructions: Check that the certificate of airworthiness of the aircraft is on board and valid.

References: Convention on International Civil Aviation (Doc 7300), Articles 29, 31, 39 a) and 40; Annex 8, Part II, Chapter 3.

d) Crew member licences

Instructions: Check validity of: date; type rating; instrument rating; competency check; language proficiency endorsement; medical assessment; and format (see also item E 3 below).

References: Convention on International Civil Aviation (Doc 7300), Articles 29, 30 b), 32 a), 39 b) and 40; Annex 1, 1.2.1, 1.2.2, 1.2.4, 1.2.5, 1.2.9, 2.1.3, 2.1.7, 2.1.10, Chapters 5 and 6.1.1; Annex 6, Part I, 9.1.1, 9.4.4; and Part III, Section II, 7.1, 7.4.3.

e) Journey log book or technical log and voyage report

Instructions: Check whether entries are up to date, validity of maintenance release. Check number of deferred defects (specify in the report where necessary). Check that defect deferments include time limits and comply with the stated time limits. Where applicable, check compliance with the aircraft MEL.

References: Convention on International Civil Aviation (Doc 7300), Articles 29 and 34; Annex 6, Part I, 4.3.1, 4.5.4, 4.5.5, 8.8, 11.4; and Part III, Section II, 2.3.1, 2.5.4, 2.5.5, 6,7,9.4.

f) Radio station licence

Instructions: Check whether available and up to date.

References: Convention on International Civil Aviation (Doc 7300), Articles 29 and 30 a).

g) Noise certification document or statement, where applicable

Instructions: Check whether available and valid.

References: Annex 6, Part I, 6.13; Part III, Section II, 4.11; and Annex 16, Volume I, Part II, Chapter 1.

h) AOC (certified true copy) and operations specifications (copy)

Instructions: Check whether available, applicable and valid.

References: Annex 6, Part I, 4.2.1, 6.1.2, Appendix 6, Attachment D 6; and Part III, Section II, 2.2.1, 4.1.2, Appendix 3, Attachment C 3.

i) Article 83 bis agreement summary (certified true copy) - if applicable

Instructions: Check whether available.

References: Convention on International Civil Aviation (Doc 7300), Articles 12, 30, 31, 32 a), 83 bis; Annex 6, Part I, 6.1.5, Appendix 10; and Part III, Section II, 4.1.5, Appendix 6.

A 9. Operational flight plan

Instructions: Check for presence, accuracy and signature(s), and for adequate fuel and oil reserve planning and supply on board. Check for presence of ATS flight plan.

References: Annex 6, Part I, 4.3.3, 4.3.6, Appendix 2, 2.1.12, 2.1.16; Part III, Section II, 2.3.3, Section III, 2.8, Appendix 8, 2.1.11, 2.1.15.

A 10. Mass and balance sheet

Instructions: Check for presence of load sheet and accuracy.

References: Annex 6, Part I, 4.3.1, Appendix 2, 2.1.14; Part III, Section II, 2.3.1, Appendix 8, 2.1.13.

A 11. Aircraft performance limitations using current route, airport obstacles and runway conditions

Instructions: Check for availability of aircraft performance information, including limitations and runway conditions analysis based on current airport data.

References: Annex 6, Part I, 5.1, 5.2, 5.3, Attachment B; and Part III, Section II, 3.1, 3.2 and 3.3.

A 12. Cargo manifest and, if applicable, passenger manifest

Instructions: Check for availability of completed cargo manifest and, if required, passenger manifest.

References: Convention on International Civil Aviation (Doc 7300), Article 29; Annex 9, 2.13, 2.14, 4.13, and Appendices 2 and 3.

A 13. Preflight inspection

Instructions: Check for presence of preflight inspection or preparation forms.

References: Annex 6, Part I, 4.3.1; and Part III, Section II, 2.3.1.

A 14. Weather reports and forecasts

Instructions: Check for availability of weather reports and forecasts adequate for the flight.

References: Annex 2, 2.3.2; Annex 6, Part I, 4.3.5.2; and Part III, Section II, 2.3.5.2.

A 15. NOTAM

Instructions: Check for availability of NOTAMs for the route of flight.

References: Annex 6, Part I, 4.1.1; Part III, Section II, 2.1.1; and Annex 15, Chapter 5.

A. Flight deck — safety equipment

A 16. Portable fire extinguishers

Instructions: Check for presence, number, condition and expiry date.

References: Annex 6, Part I, 6.2.2 b) and Part III, Section II, 4.2.2 b); Annex 8, Part IIIA, 8.3, Part IIIB, 6.3, Part IVA, 7.3, and Part IVB, 6.3.

A 17. Life jackets/flotation devices

Instructions: Check for presence, condition and, where applicable, expiry date.

References: Annex 6, Part I, 6.5, and Part III, Section II, 4.5; Annex 8, Part IIIA, 8.3; Part IIIB, 6.3; Part IVA, 7.3; and Part IVB, 6.3.

A 18. Safety harness

Instructions: Check for presence, condition and quantity.

References: Annex 6, Part I, 6.2.2 c); and Part III, Section II, 4.2.2 c).

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A 19. Oxygen equipment

Instructions: Check for presence, quantity and condition.

References: Annex 6, Part I, 4.3.9, 6.7 and Part III, Section II, 2.3.8, 4.8.

A 20. Emergency flashlight

Instructions: Check for appropriate quantities of emergency flashlight. Check their condition if possible.

 $References: Annex\ 6,\ Part\ II,\ 6.10\ and\ Part\ III,\ Section\ II,\ 4.4.2;\ Annex\ 8,\ Part\ IIIA,\ 8.3;\ Part\ IIIB,\ 6.3;\ Part\ IVA,\ 7.3;\ and\ Part\ IIIA,\ 8.3;\ Part\ IIIB,\ 6.3;\ Part\ IVA,\ Part\ I$

Part IVB, 6.3.

B. Cabin/Safety

B 1. General condition

Instructions: Check for cleanliness, tidiness and general condition.

Reference: Annex 8, Part III, Chapter 8.

B 2. Cabin crew seats and safety harness

Instructions: Check for presence and compliance with the requirement.

References: Annex 6, Part I, 6.16, and Part III, Section II, 4.12.

B 3. First aid kit/emergency medical kit (provisions on medical kit is only applicable to Annex 6, Part I)

Instructions: Check for presence, condition, location and expiry date if available.

References: Annex 6, Part I, 6.2.2 a), and Part III, Section II, 4.2.2 a).

B 4. Portable fire extinguishers

Instructions: Check for presence, number, condition and expiry date if available.

References: Annex 6, Part I, 6.2.2 b), and Part III, Section II, 4.2.2 b); Annex 8, Part IIIA, 8.3; Part IIIB, 6.3; Part IVA, 7.3; and Part IVB, 6.3.

B 5. Life iackets/flotation devices

Instructions: Check for presence, condition and expiry date as applicable.

References: Annex 6, Part I, 6.5 and Part III, Section II, 4.5; Annex 8, Part IIIA, 8.3; Part IIIB, 6.3; Part IVA, 7.3, and Part IVB, 6.3.

B 6. Seat belts

Instructions: Check for presence and condition.

References: Annex 6, Part I, 6.2.2 c) and Part III, Section II, 4.2.2 c).

B 7. Emergency exit lighting and marking, emergency flashlights

Instructions: Check for presence of emergency exit signs, lighting and marking, and emergency flashlights (one per cabin crew member). Where possible, check condition of floor path lighting/marking and of flashlights. References:

Flashlights — Annex 6, Part I, 6.10 f), and Part III, Section II, 4.4.2 k); Annex 8, Part IIIA, 8.3; Part IIIB, 6.3; Part IVA, 7.3; and Part IVB, 6.3.

Emergency exit lighting and marking — Annex 8, Part IIIA, 4.1.7.3; Part IIIB, 4.6.3; and Part IVB, 8.5.

B 8. Slides/life rafts and pyrotechnical distress signalling devices (as required)

Instructions: Check bottle gauge, slide bar and slide expiry date. Check presence of life raft, when required. References: Annex 6, Part I, 6.5, 6.6; Part III, Section II, 4.5, 4.6; Annex 8, Part IIIA, 4.1.7.2, 4.1.7.4; Part IIIB, 4.6.2 to

4.6.4); Part IVA, 4.1.7; and Part IVB, 4.6.

B 9. Oxygen supply — cabin crew and passengers

Instructions: Check for presence and condition where applicable.

References: Annex 6, Part I, 4.3.9, 6.7 and Part III, Section II, 2.3.8, 4.8.

B 10. Emergency briefing cards

Instructions: Check for presence and accuracy.

References: Annex 6, Part I, 4.2.12.1 e), 6.2.2 d) and Part III, Section II, 2.2.11 e), 4.2.2 d).

B 11. Cabin crew members

Instructions: Check that the number of cabin crew is appropriate. Check whenever possible that the location of cabin crew members allows to effect a safe and expeditious evacuation of the aircraft.

References: Annex 6, Part I, 12.1 and Part III, Section II, 10.1.

B 12. Access to emergency exits

Instructions: Check that appropriate access to emergency exits is provided and that it is not impeded.

References: Annex 8, Part IIIA, 4.1.7.2, 4.1.7.3; Part IIIB, 4.6.2, 4.6.3; Part IVA, 4.1.7; and Part IVB, 4.6.2, 4.6.3.

B 13. Safety of cabin baggage

Instructions: Check that the crew and the passengers do not carry oversized hand baggage for the stowage capacity of the aircraft. Check proper stowage of cabin baggage.

References: Annex 6, Part I, 4.8 and Part III, Section II, 2.7.

B 14. Seating capacity

Instructions: Check that the number of persons boarding does not exceed the number permitted (number of seats normally, except specific circumstances).

References: Annex 6, Part I, 6.2.2 c) and Part III, Section II, 4.2.2 c).

B 15. Security of the flight crew compartment door (if applicable)

Instructions: Check that the flight crew compartment door, if provided, is lockable. Where applicable, check that the flight crew compartment door is penetration resistant.

Reference: Annex 6, Part I, 13.2.

C. Aircraft external condition

C 1. General external condition

Instructions: Check general condition of the airframe: apparent corrosion; cleanliness; presence of ice, snow, frost; legibility of markings, etc.

References:

Markings: Annex 7, Sections 3, 4, 5; Annex 6, Part I, 6.2.4, and Part III, 4.1.4; Annex 8, Part IIIA, 9.6.2, Part IIIB, 7.6, Part IVA, 9.6.2, and Part IV, 7.6.

Structure protection: Annex 8, Part IIIA, 4.1.4; Part IIIB, 4.1.5; Part IVA, 4.1.4; and Part IVB, 4.1.5.

C 2. Doors and hatches

Instructions: Check for passenger and cargo door condition, external markings, seals, operating instructions and condition of hatches.

References: Markings: Annex 8, Part IIIA, 9.6.2; Part IIIB, 7.6; Part IVA, 9.6.2; and Part IV, 7.6.

C 3. Wings and tail

Instructions: Check wings, vertical and horizontal stabilizers, including all flight control surfaces. Check for obvious damage, corrosion, disbonding, evidence of lightning strikes, dents, looseness of fittings, missing static discharges, etc.

References: Nil.

C 4. Wheels, brakes and tires

Instructions: Inspect for damage, wear and signs of underinflated tires.

References: Nil.

C 5. Undercarriage

Instructions: Visual inspection. Focus on lubrication, leakage and corrosion, and wear on door fittings and hinges.

References: Nil.

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C 6. Wheel well

Instructions: Visual inspection. Focus on cleanliness, leakage and corrosion.

References: Nil.

C 7. Intake and exhaust nozzle

Instructions: Visual inspection. Focus on damage, cracking, dents and loose/missing fasteners (intake) and low pressure turbine blades (where visible), obvious damage to sensors, jet pipe nozzle, exhaust, thrust reversers, etc. References: Nil.

C 8. Fan blades (if applicable)

Instructions: Visual inspection. Check for foreign object damage, cracks, cuts, corrosion, erosion, etc.

References: Nil.

C 9. Propellers (if applicable)

Instructions: Visual inspection. Check for corrosion, looseness of blades in hub, erosion, stone damage, anti/de-icing system, etc.

References: Nil.

C 10. Previous structural repairs

Instructions: Visual inspection. Note any previous repairs, check condition and verify compliance to standard practices.

References: Nil.

C 11. Obvious damage

Instructions: Visual inspection. Note unassessed and unrecorded damage including corrosion, lightning strike damage, and bird strikes, etc.

References: Annex 8, Part II, 3.6.

C 12. Leakage

Instructions: Visual inspection: fuel, oil, hydraulic leaks. Inspect for toilet leaks at service locations.

References: Nil.

D. Cargo

D 1. General condition of cargo compartment and containers

Instructions: Check for cleanliness and general condition of cargo compartment and containers. Check damage to compartment liners and condition of fire protection, detection and extinguishing system, if appropriate. Check condition of container locking devices.

References: Annex 8, Part IIIA, 4.1.6 g), and Part IIIB, 4.2 g).

D 2. Dangerous goods

Instructions: If dangerous goods are on board, check that the pilot has received appropriate notification, Check that the operations manual includes relevant information as required by Annex 18.

References: Annex 6, Part I, Appendix 2, 2.1.35; Part III, Appendix 8, 2.1.28; and Annex 18, 9.1 and 9.2.

D 3. Safety of cargo on board

Instructions: Check that loads are properly distributed and safely secured.

References: Annex 6, Part I, 4.3.1 e), and Part III, Section II, 2.3.1 e).

E. General

E 1. Additional remarks

Instructions: Record and report any items of significant nature that may be observed which are not covered by this quidance

References: Nil.

E 2. Refuelling

Instructions: Check that the procedures relating to refuelling with passengers on board are complied with.

References: Annex 6, Part I, 4.3.8; and Part III, Section II, 2.3.7.

E 3. Language for communication

Instructions: Check that all pilots, and those flight navigators required to use the radio telephone, are fluent in the language used for radiotelephony communications or in the English language.

References: Annex 1, 1.2.9, Appendix 1; and Annex 10, Volume II, 5.2.1.2.

Part V LEASE AND CHARTER OPERATIONS

Chapter 1

GENERAL

Note 1.— More information on the continuing airworthiness aspects of leasing may be found in the Airworthiness Manual (Doc 9760), Part IV, Chapter 6.

Note 2.— Further information is available in the Manual on the Regulation of Air Transport (Doc 9626), the Manual on the implementation of Article 83 bis of the Convention on International Civil Aviation (Doc 10059) and in the circulars Guidance on the Implementation of Article 83 bis of the Convention on International Civil Aviation (Cir 295) and Implications of Airline Codesharing (Cir 269).

- 1.1 The purpose of including material on lease and charter, and other aspects of cooperation between operators, in this manual is to draw to the attention of certificating authorities a number of legal and practical operational problems, which have to be considered in the certification of an operator proposing to utilize leased aircraft, or when an operator, in possession of an AOC, proposes to act as a lessor or lessee or otherwise cooperate with another operator. These practices are economically driven and advantageous to operators. However, the certificating authority is responsible to ensure that safety takes precedence over any economic issues presented by the operator.
- 1.2 In recent years the practice of leasing aircraft has come into wide usage. Many leases involve aircraft owned by individuals or companies that are registered in one State and leased to operators from another State. The term "lessor" means the party from which the aircraft is leased and the term "lessee" means the party to which the aircraft is leased.
- 1.3 There are various types of aircraft leases that can be characterized by their purpose. A financial or capital lease is used by air operators to avoid the otherwise substantial capital outlays/debt required in purchasing aircraft directly from the manufacturer, or to reduce taxation or other costs. For example, an air operator may sell all or part of its fleet to a bank or other financial institution and then lease the aircraft back. Financial leases are long-term arrangements which give the outward appearance of ownership, e.g. the aircraft bears the air operator's name/logo and is usually registered in the air operator's State.
- 1.4 In contrast, an operating lease is designed to meet an air operator's immediate need for additional aircraft, often on a seasonal or short-term basis. An air operator with excess or under-utilized aircraft can lease them to other air operators.
- 1.5 For regulatory purposes, there are two basic types of aircraft leases, namely, a dry lease and wet lease.
 - a) A dry lease is understood to be the lease of an aircraft where the aircraft is operated under the AOC of the lessee. It is normally a lease of an aircraft without crew, operated under the custody and the operational and commercial control of the lessee, and using the lessee's airline designator code and traffic rights.
 - b) A wet lease is generally understood to be a lease of an aircraft where the aircraft is operated under the AOC of the lessor. It is normally a lease of an aircraft with crew, operated under the commercial control of the lessee and using the lessee's airline designator code and traffic rights. Some authorities define a wet lease as the lease of an aircraft with at least the flight crew, while other authorities define a wet lease as the lease of an aircraft with at least one crew member, or the lease of an aircraft with an entire aircraft crew (flight and cabin crew members).

- 1.6 There are variations that can be encountered in aircraft lease arrangements. For example, a damp lease is generally understood to be a wet lease of an aircraft where the aircraft is operated under the AOC of the lessor, with partial crew. In a damp lease, the lessor provides the aircraft with partial crew (e.g. flight crew) and the lessee provides the rest of the crew (e.g. cabin crew). In this case, the State of the Operator should ensure that both the flight and cabin crew are trained to use common communications and emergency procedures and that the cabin crew receives appropriate training as detailed in Chapter 3 of this Part.
- 1.7 There are a number of different types of lease, which may be short term or long term. All the various aspects need to be addressed by the responsible authorities. Lease arrangements may also be known as short term wet lease, charter or sub-charter. There may also be cascading subleases. These aspects are discussed in Chapter 3 of this Part.
- 1.8 Other aspects of cooperation between operators, either nationally or internationally, need to be subjected to oversight by the civil aviation authorities of the States concerned. These aspects concern code-sharing, franchising and interchange, which are further discussed in Part VI, Chapter 4.
- 1.9 Unless suitable arrangements are made between the States involved, a lease may create complex legal, safety, enforcement and practical problems for either the State of Registry of the aircraft or the State of the Operator, or both of these States. These problems arise because of possible uncertainty concerning which party is responsible for the safe operation and airworthiness of the aircraft, and uncertainty concerning the regulations of which State are applicable. The responsible authorities are responsible for resolving such uncertainties before a lease takes effect. The determination of responsibilities is a factual issue that depends upon the terms of the lease or other agreements. Determining which party to a lease is responsible for the operational control and airworthiness will in turn clarify the regulations of which State will apply, and what oversight responsibilities a particular State has for the operation of a leased aircraft. In some instances, the oversight responsibilities of the State of Registry and the State of the Operator may overlap.
- 1.10 Problems associated with leasing have become more widespread because a considerable number of lessors have entered the leasing market, including:
 - a) companies formed for the specific purpose of purchasing and leasing aircraft;
 - b) commercial banks and other financial institutions;
 - c) aircraft manufacturers; and
 - d) airline companies.
- 1.11 Some leases run for a long term while others are for short periods to cover temporary requirements.
- 1.12 In addition to the problems presented to State authorities, questions also arise concerning what steps can be taken to protect the financial interests and the assets of the lessor. This relates primarily to whether the laws and regulations of the State of Registry and its surveillance capabilities are adequate to cover the interests of the lessor in situations where the lessee, the operator of the aircraft, is from another State. Where the State of Registry and the State of the Operator are adequately carrying out their responsibilities for safety oversight, these actions should tend to protect the lessor's interests in a leased aircraft.
- 1.13 In many States, national regulations charge the competent authority, the CAA, with the responsibility for ensuring that every aircraft on its registry complies with the detailed technical and safety regulations promulgated by that State, wherever such aircraft may be operated. Practical problems arise because the aviation authorities in some States do not have sufficient personnel or funding resources to properly carry out their regulatory responsibilities, particularly in international commercial air transport. These responsibilities include ensuring that every aircraft on their registry, including those leased to an operator conducting flights under the authority of another State, are operated in compliance with the regulations of the State of Registry. These responsibilities in turn create serious surveillance and enforcement problems

for the State of Registry because these leased aircraft are frequently operated in distant areas where CAA personnel from the State of Registry would find it difficult to conduct safety inspections. Compliance with the pertinent safety standards and regulations of the State of Registry may therefore diminish. Violations of regulations may occur by design or from ignorance and be unknown to the State of Registry. As a result, it is unlikely that enforcement action would be taken with respect to such leased aircraft.

- 1.14 Problems inherent in aircraft leasing were not anticipated when the *Convention on International Civil Aviation* was formulated. It was assumed that operators would normally own the aircraft they operated and that the nationality of an aircraft would normally be that of the operator, i.e. that the State of Registry and the State of the Operator would be one and the same. As a result, the Chicago Convention specifies in a number of respects that the fundamental responsibility for an aircraft lies with the State of Registry. The various responsibilities of the State of Registry are further expanded in the Annexes to the Chicago Convention.
- 1.15 Various ICAO Assembly sessions recognized that a State of Registry may be unable to fulfil its responsibilities adequately when aircraft are leased or chartered, particularly without crew, by an operator from another State. A note was therefore added to Annex 6 Operation of Aircraft, Chapter 3, and to ten other Annexes, suggesting that the State of Registry delegate to the State of the Operator, subject to the acceptance by the latter State, those functions of the State of Registry that can more adequately be discharged by the State of the Operator. It was recognized, however, that such a delegation would only be a matter of practical arrangement by which the State of Registry would discharge certain functions, which had been allocated by the Chicago Convention, through an agent, the State of the Operator. Hence, the means suggested by these notes does not totally relieve the State of Registry from its obligations under the Chicago Convention. This note, which had been added in 1950 by Amendment 10 to Annex 6, Chapter 3, was revised and expanded, in 1973, by Amendment 6 to Annex 6, Part I, as Note 1 to Chapter 3. Similar notes in the other Annexes were also amended at that time.
- Nevertheless, where aircraft were leased to operators in certain States willing to accept the responsibility, this arrangement provided for a partially acceptable interim solution because the State of Registry could delegate some of its responsibilities under the Chicago Convention to the State of the Operator. Such an arrangement, however, did not in all cases absolve the State of Registry from its responsibilities under its own national regulations for aircraft on its registry. The problem was more acute when an aircraft registered in one State was leased, under a dry lease, to an operator in another State where that State was unwilling, or unable, to accept delegation of responsibility from the State of Registry. Additionally, the leasing problems become even more severe where the safety standards of the State concerned may not be acceptable to the State of Registry, or to the lessor, or where the State of the Operator does not have the capability of properly administering and enforcing existing safety regulations. Under such circumstances the potential lessor may be reluctant to lease an aircraft to an operator from the other State or, if a lease was executed, the State of Registry could be considered negligent if it consented to delegating its responsibilities to such a State.
- 1.17 ICAO became increasingly aware of the foregoing problems and recognized the general desire of Contracting States for a provision that would permit the transfer of certain responsibilities from the State of Registry to the State of the Operator in case of a lease, charter or interchange of an aircraft. It was decided at the 23rd lesson of the Assembly that it was necessary to amend the Chicago Convention in order to relieve the State of Registry of its responsibility with respect to Articles 12, 30, 31, 32 (a) to the Chicago Convention and thereby to more effectively deal with this matter.
- 1.18 The following amendment to the *Convention on International Civil Aviation* was approved by the 23rd Session of the Assembly in 1980:

Article 83 bis

Transfer of certain functions and duties

- (a) Notwithstanding the provisions of Articles 12, 30, 31 and 32 (a), when an aircraft registered in a Contracting State is operated pursuant to an agreement for the lease, charter or interchange of the aircraft or any similar arrangement by an operator who has his principal place of business or, if he has no such place of business, his permanent residence in another Contracting State, the State of registry may, by agreement with such other State, transfer to it all or part of its functions and duties as State of registry in respect of that aircraft under Articles 12, 30, 31 and 32 (a). The State of registry shall be relieved of responsibility in respect of the functions and duties transferred.
- (b) The transfer shall not have effect in respect of other contracting States before either the agreement between States in which it is embodied has been registered with the Council and made public pursuant to Article 83 or the existence and scope of the agreement have been directly communicated to the authorities of the other contracting State or States concerned by a State party to the agreement.
- (c) The provisions of paragraphs (a) and (b) above shall also be applicable to cases covered by Article 77.
- 1.19 The Protocol relating to the amendment of the Chicago Convention was signed in Montréal on 6 October 1980. This amendment came into force upon ratification by 98 Contracting States on 20 June 1997. The change in the Chicago Convention was intended to alleviate most of the safety oversight problems inherent in the lease, charter or interchange of aircraft. The primary purpose of the transfer of certain functions under an Article 83 *bis* agreement should be to enhance safety oversight capabilities by delegating responsibility for oversight to the State of the Operator, recognizing that this State is in a better position to carry out these responsibilities.
- 1.20 However, before agreeing to transfer any functions, the State of Registry should determine that the State of the Operator is fully capable of carrying out the functions to be transferred in accordance with the Chicago Convention and ICAO SARPs. This determination can be accomplished by various means, including an SOA conducted by the State of Registry or through review of reports of SOAs conducted either by ICAO, under the Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA), or by another Contracting State. There may be circumstances where States are unable to reach agreement on the delegation and acceptance of responsibilities as provided for in Article 83 *bis* or where delegation is not an alternative that is acceptable to the parties involved. In such circumstances the State of Registry would retain responsibility for maintaining proper surveillance of aircraft on its registry when operated under lease arrangements under the authority of another State.
- 1.21 Note 1 to Annex 6, Part I, Chapter 3, was further revised in 1983 by Amendment 16 to Annex 6, Part I, when reference to Article 83 *bis* was introduced to indicate the means by which States could proceed pending the entry into force of Article 83 *bis*. This note was again revised in 1998 by Amendment 23 to indicate that Article 83 *bis* had entered into force on 20 June 1997. The list of State Parties to the *Protocol Relating to an Amendment to the Convention on International Civil Aviation Article* 83 bis is published on the ICAO website.
- 1.22 In accordance with Annex 6, an aircraft, when operating under an Article 83 *bis* agreement between the State of Registry and the State of the Operator, shall carry a certified true copy of the agreement summary, in either an electronic or hard copy format. Detailed guidance on the implementation of Article 83 *bis*, including the agreement summary, can be found in the *Manual on the Implementation of Article 83* bis of the Convention on International Civil Aviation (Doc 10059). It is important that the agreement summary of an Article 83 bis agreement is accessible to a CASI to determine which functions and duties are transferred under the agreement by the State of Registry to the State of the Operator, when conducting surveillance activities, such as ramp checks.

- 1.23 Where transfer of responsibility is not a viable solution, the State of Registry may have to consider the following alternatives:
 - a) amend its national laws and/or regulations to require cancellation of registration in its State when aircraft are dry leased to operators from States that are unwilling to accept delegated responsibility or whose safety programmes are not considered adequate for acceptance of delegated responsibility;
 - amend its national laws and/or regulations to provide that aircraft on its registry, dry leased to operators from other States, is required to be operated in accordance with the regulations of the State of the Operator; or
 - c) endeavour to obtain additional technical staffing and funding to maintain acceptable surveillance over the operation of aircraft on its registry that are leased to operators from other States.
- 1.24 States may restrict dry leasing by their operators of aircraft which are registered in other States, from sources in other States, to types of aircraft that are currently on their own national registers.
- 1.25 States may restrict wet leasing by their operators from sources in other States, of aircraft which are registered in other States, to types of aircraft that are within the current capability of the lessee to properly handle and dispatch.
- 1.26 This general summary concerning leased aircraft is intended primarily to acquaint States and operators with problems that may arise where an operator, using leased aircraft registered in another State, may have to comply with a confusing combination of:
 - a) regulations of the State of Registry;
 - b) regulations of the State of the Operator; and
 - the operating regulations and rules of a third State over whose territory operations may be conducted.

DRY LEASE

2.1 GENERAL

- 2.1.1 Under most dry lease agreements the lessee, who provides the crew, is the accountable party who exercises operational control over the aircraft with all the attendant responsibilities. If the lessee does not have operational control of the leased aircraft under the lease agreement, the responsible authority needs to carefully evaluate the arrangements to ensure that the operation can be conducted with an adequate level of safety in accordance with the applicable regulations.
- 2.1.2 State regulations should require that when an applicant for an AOC, or an existing operator, wishes to use dry leased aircraft, the applicant or operator should provide the CAA with the following information:
 - a) the aircraft type, model and serial number;
 - b) the name and address of the registered owner;
 - c) State of Registry, nationality and registration marks;
 - d) certificate of airworthiness and statement from the registered owner that the aircraft fully complies with the airworthiness requirements of the State of Registry;
 - e) name, address and signature of lessee or person responsible for operational control of the aircraft under the lease agreement, including a statement that such individual and the parties to the lease agreement fully understand their respective responsibilities under the applicable regulations;
 - f) copy of the lease agreement or description of lease provisions;
 - g) duration of the lease; and
 - h) areas of operation.
- 2.1.3 After careful review within the authority and liaison as necessary with other competent authorities, the CAA needs to make the determination as to which party to the lease agreement is in fact responsible for the conduct of the operation. In making this determination, the CAA will consider the responsibilities of the parties under the lease agreement for:
 - a) flight crew member licensing and training;
 - b) cabin crew member training;
 - c) airworthiness of the aircraft and the performance of maintenance;
 - d) operational control, including dispatch and flight following;

- e) scheduling of flight crew and cabin crew members; and
- f) signing the maintenance release.
- 2.1.4 If the lease arrangement is determined to be a dry lease involving aircraft that possess valid certificates of registration and certificates of airworthiness issued by the State of the Operator, which is also the State of Registry, the problems of compliance with the safety regulations promulgated by the State of the Operator can be readily managed and proper surveillance provided for the operation of the aircraft. If the dry lease arrangement is acceptable to the CAA, the operations manual and/or the operations specifications should be amended to provide at least the following data:
 - a) names of the parties to the lease agreement and the duration thereof;
 - b) nationality and registration marks of each aircraft involved in the agreement;
 - c) type of aircraft to be used;
 - d) areas of operation; and
 - e) regulations applicable to the operation.

Note.— The operations specifications would provide the data requested in c) and d). Information in a), b) and e) can be provided in the operations manual or in the operations specifications in the "other" block of authorizations.

2.2 DRY LEASE OF AIRCRAFT REGISTERED IN OTHER STATES

- 2.2.1 In cases where the dry lease involves an aircraft of a nationality different from the State of the Operator, the regulatory and compliance problems become more acute. As with other applications for the use of dry leased aircraft, State regulations should require that the operator, who is the lessee, provide the CAA with the information required by 2.1.2.
- 2.2.2 When the State of Registry is not the State of the Operator, it is desirable for the State of Registry and the State of the Operator to enter into agreement regarding the transfer of all or part of the functions, duties or responsibilities of the State of Registry under the Chicago Convention, if possible under its national laws, to the State of the Operator. Such a transfer arrangement is provided by Article 83 bis for those States for which it is in force. When the State of Registry cannot carry out its oversight responsibilities in accordance with the Chicago Convention, and it cannot reach a satisfactory agreement with the State of the Operator on the transfer of its oversight responsibilities pursuant to Article 83 bis, the use of aircraft under dry lease arrangements should be discouraged. Should the parties to the proposed dry lease agreement wish to pursue the matter, the lessor, or the lessee, may endeavour to enter the aircraft, which is the subject of the proposed lease, on the registry of the State of the Operator of the lessee. This change of registration of the leased aircraft would help to ensure that an adequate level of safety oversight is being applied to the operation of the leased aircraft.
- 2.2.3 If the national laws of the State of the Operator permit dry leased aircraft owned by individuals or companies of a nationality different from that of the State of the Operator to be placed on its registry, the DGCA should promulgate regulations requiring that:
 - a) the aircraft be subject to the airworthiness certification, maintenance and inspection procedures of the State (the State of the Operator) as the State of Registry;
 - b) the responsibility or custody of the aircraft and control of all operations be vested in the lessee;

- c) the responsibility for the airworthiness and maintenance of the aircraft be vested in the lessee;
- d) the duration of the lease be clearly established; and
- e) the registration of the aircraft be valid so long as the lease is in force and the aircraft is operated in accordance with the regulations of the State, as the State of Registry and the State of the Operator, the terms or conditions specified in the operator's AOC, the associated operations specifications and the operations and MCMs.
- 2.2.4 Where a dry lease has been agreed, but no transfer of responsibility has been agreed to between the States concerned, and regardless of the registration of the dry leased aircraft, the lessee should be required to show that:
 - the flight crew hold current valid and appropriate certificates or licences issued or validated by the State of Registry;
 - the aircraft will be maintained in accordance with the airworthiness requirements of the State of Registry;
 and
 - c) the aircraft will be operated in compliance with the applicable regulations of the State of Registry and the State of the Operator, the operator's AOC, the associated operations specifications and the operations and MCMs.
- 2.2.5 Several practical problems confront an operator who arranges a dry lease for an aircraft registered in another State. In order to satisfy the requirements of Article 32 (a) of the Chicago Convention and continuing airworthiness requirements, the operator is required to use flight crew and maintenance personnel who possess current certificates or licences issued or rendered valid by the State of Registry. This may be accomplished by employing persons who already possess such certificates or licences. Alternatively, if this is not feasible or desirable, the operator needs to arrange for personnel already employed to take the necessary written and flight tests or practical examinations in order to obtain appropriate certificates or licences from the State of Registry. This may involve sending flight crew and maintenance personnel to the State of Registry for the requisite written examinations. Upon successful completion of these tests, arrangements need to be made for these individuals to take the required flight tests or practical examinations leading to appropriate certification or licensing by the State of Registry of the leased aircraft. In this context the operator may have to pre-position personnel with the aircraft to be leased in the State of Registry and make appropriate arrangements for the conduct of written and practical tests and the issue of certificates and licences.
- 2.2.6 Perhaps the least costly method of overcoming the problem mentioned in 2.2.5 above is to arrange for the State of Registry to validate licences or certificates issued by the State of the Operator, or by another State, to the operator's personnel. Such validations would be subject to requirements established by the State of Registry.
- 2.2.7 Another low-cost option would be to have the State of Registry send a CASI to the State of the Operator, where the personnel and aircraft are located, to administer the required testing and certification for the operator's personnel. However, if such an arrangement is acceptable to the competent authority of the State of Registry, it may require reimbursement of the costs involved in providing such certification services.
- 2.2.8 Once the necessary certification, licensing or validation of certificates and licences has been accomplished, the question arises concerning whether the State of Registry or the State of the Operator is responsible for ensuring that these individuals satisfy recent experience requirements and maintain their licence qualifications required under the regulations of the State of Registry.
- 2.2.9 The question of compliance with the airworthiness requirements of the State of Registry is another serious problem inherent in a dry lease arrangement.

- 2.2.10 The State of the Operator needs to carefully evaluate all aspects of a dry lease arrangement before authorizing the use of such aircraft by an operator under its jurisdiction. Once authorized, it is especially important for the State of the Operator to carefully monitor the operations and maintenance of the leased aircraft. Should the State of the Operator have reason to believe that an operator is not complying with the regulations of the State of Registry, the competent authority of the State of Registry should be advised and a request made that the matter be investigated.
- 2.2.11 If the State of the Operator has accepted a transfer of responsibility from the State of Registry, the State of the Operator needs to ensure that the operator is complying fully with its regulations with respect to the dry leased aircraft.
- 2.2.12 The main question to be addressed is whether the State of Registry can or will be responsible for the operation and maintenance of a dry leased aircraft or whether the State of the Operator is capable of properly exercising these responsibilities when transferred by the State of Registry.

WET LEASE

3.1 GENERAL

- 3.1.1 In wet leases the lessor normally exercises operational control of the aircraft. A wet lease situation therefore means that an aircraft will be operated under an AOC issued by the State of the lessor. In this case the State of the Operator may also be the State of Registry of the leased aircraft.
- 3.1.2 The terms of a wet lease agreement are important since they may obscure the true relationship between, and the obligations of, the parties to the agreement. Additional information may be needed by the authorities concerned. The actual lease arrangements and other relevant information need to be examined by the respective authorities responsible for monitoring the operation of the wet leased aircraft. The final determination of responsibility for the exercise of operational control will depend upon a careful examination of all the factors in the particular situation.
- 3.1.3 Where both parties to a wet lease agreement hold AOCs, serious factual questions arise concerning which party, the lessor or the lessee, is actually responsible for the operation and compliance with the applicable safety regulations. The responsible authority or authorities, if the lessor and lessee are from different States, need to resolve such questions before operations involving use of the wet leased aircraft can be commenced.

3.2 DETERMINATION OF RESPONSIBILITY FOR OPERATIONAL CONTROL AND SAFETY

- 3.2.1 Normally the decision as to whether the lessor or the lessee is responsible for the safety of the operation will be made by the DGCA or a designated representative assigned to supervise the operations conducted by the lessee. Consultation and coordination with counterparts from the State of the Operator of the lessor of the aircraft, who are assigned to work with the lessor, are most important in this decision process. The decision to be made is whether the aircraft should be operated under the lessor's AOC and associated operations specifications, or whether it should be operated under the authority of the lessee.
- 3.2.2 The usual determination is that if a party, the lessor, leases an aircraft to another and also provides the flight crew, maintenance and fuel for the aircraft, the lessor of the aircraft is regarded as the operator. If the lessor makes a charge for the use of the aircraft and related service, the operation of the aircraft will be subject to the applicable regulations of the State of the Operator of the lessor. Operational control of the aircraft may be the responsibility of the lessor even though the lease may be characterized in terms similar to those of a dry lease, expressly stating that services such as flight following, communications and weather information, are to be performed by the lessee. In some instances, it is therefore necessary to examine the manner in which the operations are to be conducted, to determine which party to a lease will actually have operational control and hence responsibility and accountability for safety.
- 3.2.3 In the rare event that there is a determination that the lessee will be the operator of a wet leased aircraft under a wet lease agreement, the responsible authority needs to determine whether the lessee can effectively maintain operational control of the aircraft. In such cases, the training and supervision of the flight crew, including how they are to be integrated into the lessee's operations, become critical considerations. If it is apparent that the lessee will not be able to maintain effective operational control under the terms of the agreement, the responsible authority is to require that those terms be modified. Otherwise the authority should not approve the proposed wet lease.

- 3.2.4 Additional complications may arise when an aircraft, dry leased to an operator, is registered in a State (State of Registry) different from the State (State of the Operator) responsible for the operator currently using that aircraft under the dry lease, and this operator is proposing to further lease the aircraft, as a wet lease, to another operator, possibly in a third State. In such cases there may be an agreement under Article 83 *bis* between the State of Registry of the aircraft and the State of the Operator, or the State of Registry may seek such an agreement because of a proposed wet lease to an operator from a third State. For example, an authority may conclude that although it can effectively carry out the State of Registry responsibilities when the aircraft is dry leased to an operator in another State, it cannot effectively execute those same responsibilities when that operator decides to wet lease the aircraft to a lessee in a third State.
- 3.2.5 In such cascading subleases, operational control resides with the operator holding the AOC under which the aircraft is operated. The State of the Operator is responsible for safety oversight of the operation.
- 3.2.6 Practical safety problems develop in wet lease operations when the lessor provides only the flight crew while the lessee provides the cabin crew. In such cases, the cabin crew members, employed by the lessee, will not be familiar with the aircraft, associated emergency equipment and the emergency procedures used by the flight crew. In these circumstances the lessee's cabin crew members will need to receive additional training, under the approved training programme of the lessor, with respect to their emergency duties on the particular aircraft. In addition, they may have no knowledge of the requirements of the lessor's State of the Operator with respect to flight and duty time limitations and the provision of rest periods, and to the performance of their duties and responsibilities aboard the wet leased aircraft. These aspects need also to be taken into account.
- 3.2.7 In some instances the registered owner of an aircraft involved in a wet lease does not possess an AOC or may not have experience or knowledge regarding aircraft operations. Difficult questions arise when such an owner wishes to lease aircraft to an operator of another State who has been granted an AOC by that State to operate wet leased aircraft. In such cases the same questions and problems regarding operator and State responsibility, as referred to in 3.2.1 through 3.2.6 above, need to be addressed and resolved.

3.3 SHORT-TERM WET LEASE, CHARTER OR SUB-CHARTER

- 3.3.1 Some wet leasing operations, charters or sub-charters are organized for short terms at very short notice, for example, where an operator wishes to replace an unserviceable aircraft on a particular service and is forced to contract with another operator for that service to be operated.
- 3.3.2 Authorities should establish procedures for operators to provide lists of approved lessors and lessees to facilitate such short-term leases or charters. For operators in one State, potential lessors may be from another State and appropriate arrangements should be made between States which may be concerned.
- 3.3.3 In order to facilitate operations and such leases, information on the need for this type of arrangement and the possible lessors should be sought by a State from its operators such that appropriate arrangements could be put in place to enable approval for an actual short-term wet lease or charter to be given very quickly.
- 3.3.4 In the case of a short-term wet lease, charter or sub-charter, the lessor will retain all responsibilities and operational control.
- 3.3.5 Charters and sub-charters most frequently occur in non-scheduled flights. For scheduled service, an aircraft is usually operated under a wet lease, dry lease or interchange arrangements.

STATE OVERSIGHT OF OTHER ASPECTS OF COOPERATION BETWEEN OPERATORS

4.1 CODESHARE ARRANGEMENTS

- 4.1.1 Codesharing is a marketing arrangement under which an airline places its designator code on a flight operated by another airline and sells and issues tickets for that flight. Operators throughout the world continue to form codeshare alliances to strengthen or expand their market presence or competitive ability. Codesharing may be between operators from the same State or operators from different States.
- 4.1.2 In deciding whether to authorize a codeshare arrangement, a State of the Operator may consider whether the arrangement is in the public interest. Where the codeshare will involve an operator from another State, such public interest determinations should include consideration of whether the operations of that operator meet an acceptable level of safety. In making these safety determinations, the responsible authority should consider whether or not that operator will conduct operations in accordance with standards that meet or exceed minimum international standards.
- 4.1.3 In considering the safety of a proposed codesharing involving an operator from another State, the responsible authority should consider requiring an audit of the standards maintained by that operator in conducting its operations. Such a system of codeshare audits should establish criteria for determining satisfactory audit results. The initial audit would be followed by periodic audits for the duration of the codeshare arrangement. Should an audit reveal that an operator was failing to maintain a satisfactory standard of safety, the responsible authority should withhold or withdraw its approval of the codeshare. Sources of information on the maintenance of safety standards are contained in Part VI, Chapter 3 of this manual.

Note.— An example of an internationally recognized audit system that may be acceptable to the State for the codeshare audit is the IATA Operational Safety Audit (IOSA) programme.

- 4.1.4 A codeshare audit of the standards maintained by an operator from another State may, at the discretion of the responsible authority, be performed by a third party provider using one of the internationally recognized evaluation systems, which are designed to assess the operational, management and control systems of the operator.
- 4.1.5 An authority may consider requiring an operator to monitor a codeshare partner from another State on an ongoing basis. Such monitoring of a codeshare partner should include the following factors:
 - a) accident/incident rates;
 - b) the operator's financial condition, ownership and economic condition;
 - the operator's management, operating history, current organization, sophistication and stability (including any turnover of key personnel, strikes, etc.);
 - d) age of equipment, equipment on order and equipment being returned;

- e) operational capabilities (e.g. international service as compared to only domestic service) and established infrastructure (e.g. approved maintenance and repair facilities, and flight simulation training devices);
- the interface and cooperation between codeshare partners, including familiarity with personnel, sharing of data through meetings, conferences, etc.;
- g) any operational restrictions; and
- h) significant changes in outsourcing activities and/or services.

4.2 FRANCHISING

- 4.2.1 The Manual on the Regulation of International Air Transport (Doc 9626) describes the concept and provides examples of franchise agreements. Airline franchising is a commercial arrangement that involves a franchiser operator granting a franchise or right to use various of its corporate identity elements (such as its flight designator code, livery and marketing symbols) to a franchisee operator to market or deliver the latter's air service products, typically subject to standards and controls intended to maintain the quality desired by the franchiser. Generally, this increasingly common practice consists of a large airline franchising part of its short-haul and medium-haul network to smaller, more cost-efficient operators.
- 4.2.2 Franchising arrangements are independent of, but may coexist with, a codesharing arrangement.
- 4.2.3 Identification of the operator (in the context of Annex 6) in the case of franchising. Under Annex 6 provisions, an air operator is responsible for conducting the commercial operations in accordance with the AOC issued by the State of the Operator. Therefore, franchising flights are conducted under the responsibility of the operator that is actually operating the flight no matter what the aircraft livery or flight number might be. The oversight of such operation is normally conducted by the State of the Operator. However, if the operator uses aircraft registered in a State other than that of the operator, oversight may be required by the State of Registry if an agreement such as Article 83 bis or a bilateral agreement is not in place between the States concerned.
- 4.2.4 A franchising arrangement allows a franchisee airline to use the name or assume the public face of a franchiser airline of another or the same State. While such alliances can serve to "multinationalize" the economic identity of an operation, they can also add complexity to the exercise of safety oversight by States. The States involved should be clear about their oversight responsibilities for aircraft operations, including those under various commercial cooperative arrangements such as franchising.

4.3 INTERCHANGE

- 4.3.1 The Manual on the Regulation of International Air Transport (Doc 9626) defines the concept of interchange as follows: an aircraft interchange or interchange flight is a regularly scheduled, single-plane through service linking a route of one air operator at the interchange point to a route of a second air operator, with the same aircraft being crewed by and under the operational control of the respective authorized operator on each route.
- 4.3.2 An interchange provides passengers with the benefit of a single-plane service on what is essentially an interline operation and may provide additional benefits to the operators involved in terms of better aircraft utilization.

4.3.3 Interchange operations may involve operators from two States of the Operator, neither of which may be the State of Registry of the aircraft involved. It is therefore necessary for the States concerned to be clear about their respective responsibilities. Whilst in the case of interchange there can be no confusion over which operator has operational control, other aspects are similar to those encountered when aircraft are leased under a dry lease.

Part VI

STATE RESPONSIBILITIES REGARDING COMMERCIAL AIR TRANSPORT OPERATIONS BY FOREIGN OPERATORS

THE PRINCIPLES OF SURVEILLANCE OF FOREIGN OPERATORS

1.1 INTRODUCTION

- 1.1.1 The State regulations and procedures for the approval, surveillance and resolution of safety issues, associated with commercial air transport operations by an operator from another State (herein after referred to as a "foreign operator") should be in conformity with the Annexes to the Chicago Convention. It is of particular importance to recognize that the primary role in the safety oversight of any operator is that of the State of the Operator which issued the AOC.
- 1.1.2 A State undertakes, in accordance with Article 12 to the Chicago Convention, to ensure that every aircraft flying over or maneuvering within its territory shall comply with the rules and regulations relating to the flight and maneuvre of aircraft there in force.
- 1.1.3 Article 33 to the Chicago Convention provides that certificates of airworthiness and certificates of competency and licenses issued, or rendered valid, by the State in which an aircraft is registered, shall be recognized by other States, provided that the requirements under which such certificates or licences were issued or rendered valid are equal to or above the minimum standards which may be established from time to time pursuant to the Chicago Convention.
- 1.1.4 This requirement for recognition is now extended by Annex 6 Operation of Aircraft, Part I, International Commercial Air Transport Aeroplanes; and Part III, International Operations Helicopters, Section II, such that Contracting States shall recognize as valid an AOC 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 Annex 6, Part I, and Part III.

1.2 SAFETY CLAUSE

- 1.2.1 States enter into air services agreements to allow their operators to provide service to another State and vice versa. These bilateral agreements are often based primarily on political and economic considerations and do not always address safety. On 13 June 2001, the ICAO Council adopted a resolution and a related model clause on aviation safety that should be included in air services agreements (see Attachment A to this Part).
- 1.2.2 The model clause addresses safety requirements that each party to an agreement would need to maintain and helps to ensure that aircraft using airspace and airports in another State are operated and maintained in accordance with ICAO Standards. Ongoing dialogue, as well as surveillance of air operations, would be required to maintain the validity of such an agreement.
- 1.2.3 This safety clause provides States with a standardized process to address concerns that they may have regarding the safe operation of aircraft from other States. In addition, by drawing attention to the safety aspects of a bilateral or multilateral air service agreement, a safety clause emphasizes the responsibilities of States for providing adequate safety oversight of commercial air transport operations.

1.2.4 The model clause on aviation safety contains no reference to sanctions or penalties for non-compliance with Standards on the basis that air service agreements normally include an article addressing non-compliance issues.

1.3 THE RIGHT OF STATES TO INSPECT AIRCRAFT FROM OTHER STATES

- 1.3.1 States are entitled, by Article 16 to the *Convention on International Civil Aviation*, to search aircraft from other States on landing and departure and to inspect the certificates and other documents prescribed by the Chicago Convention and its Annexes, provided there is no unreasonable delay to the operation.
- 1.3.2 Annex 6, Part I, Chapter 4, and Part III, Section II, Chapter 2, requires that States shall establish a programme with procedures for the surveillance of operations in their territory by a foreign operator and for taking appropriate action when necessary to preserve safety.
- 1.3.3 Annex 8, Part II, allows the State to prevent a damaged foreign aircraft from resuming its flight operation on the condition that the CAA shall advise the State of Registry immediately. The State of Registry will consider the airworthiness of the aircraft and prohibit the aircraft from resuming flight until it is restored to an airworthy condition or permit the aircraft to resume its flight, if considered airworthy, or permit the aircraft to conduct a non-commercial air transport operation, under prescribed limiting conditions, to an aerodrome at which it will be restored to an airworthy condition.
- 1.3.4 Article 29 to the Chicago Convention requires an aircraft to carry:
 - · its certificate of registration
 - · its certificate of airworthiness
 - · the appropriate licences for each member of the flight crew
 - its journey log book (often referred to as the technical log)
 - if it is equipped with radio apparatus, the aircraft radio station licence
 - if it carries passengers, a list of names and places of embarkation and destination
 - · if it carries cargo, a manifest and detailed declarations of the cargo
- 1.3.5 Annex 7 requires that an aircraft shall carry in a prominent position near the main entrance, an identification plate inscribed with at least its nationality and registration marks.
- 1.3.6 Annex 6, Part I and Part III, Section II, further requires the carriage of:
 - a certified true copy of the operator's AOC and a copy of the associated operations specifications
 relevant to the aircraft type with a required minimum content, which includes the location on board the
 aircraft where the contact details, at which operational management can be contacted without undue
 delay, are listed;
 - if subject to the requirements of Annex 16, Volume I, a document attesting noise certification;
 - the aircraft flight manual or other document containing performance data;

- the operator's operations manual or those parts of it that pertain to flight operations, which shall include the aircraft operating manual, checklists for normal, abnormal and emergency procedures and the MEL;
- · current and suitable charts to cover the route of the flight;
- an aircraft search procedure checklist; and
- and information and instructions relating to the interception of civil aircraft.
- 1.3.7 When the licences of the flight crew, the AOC and associated operations specifications, the document attesting noise certification, the certificate of registration or the certificate of airworthiness are issued in a language other than English, Annex 1, Annex 6, Part I, and Part III, Section II; and Annexes 7 and 8 require that these shall include an English translation.
- 1.3.8 In accordance with Annex 6, an aircraft operating under an Article 83 bis agreement shall carry a certified true copy of the agreement summary. This summary needs to be accessible to a CASI to determine which functions and duties are transferred under the agreement by the State of Registry to the State of the Operator. The agreement summary should include the content and follow the layout as provided in Annex 6. More detailed information regarding which provisions in the Annexes to the Chicago Convention may be transferred in whole or in part from the State of Registry to the State of the Operator is provided in the Manual on the Implementation of Article 83 bis of the Convention on International Civil Aviation (Doc 10059).
- 1.3.9 ICAO developed a Website of Aeronautical Agreements and Arrangements (WAGMAR) that is available to States, operators and the public to search for information concerning registered aeronautical agreements and arrangements (https://dna.icao.int/WAGMAR). The WAGMAR system can automatically generate agreement summaries from the information uploaded by registering States, or alternatively store agreement summaries provided by States as part of the agreement registration. In addition, WAGMAR will allow States to certify a system generated Article 83 bis agreement summary as a true copy.
- 1.3.10 The journey log book may be replaced by a general declaration containing the information recommended to be contained in the journey log book by Annex 6, Part I, Chapter 11, and Part III, Section II, Chapter 9, which is in common practice referred to as a voyage report.
- 1.3.11 In addition to the required documentation, other specific items for inspection should be listed in a documented procedure, such as a checklist with instructions for use. This procedure can be derived from the sample inspection checklist provided in Part IV, Attachment. The inspection should be carefully planned and may only focus on part of the listed items, depending on the time available and the number of CASIs. For recurring operations by a foreign operator, the total list of items should be covered periodically over a series of inspections to assess the operator's compliance with international standards.

1.4 STATE APPROVAL FOR A FOREIGN OPERATOR TO OPERATE WITHIN ITS TERRITORY

Note.— The term "approval" for a foreign operator in this Part does not have the same meaning as the approval process for a national operator, as defined in Annex 6, Part I, Attachment D, Section 3. In the context of foreign operators, the term "approval" may be understood as a validation process for the AOC of the foreign operator, leading to the recognition of the AOC and to an authorization for operations by the foreign operator. Where suitable, the term "approval" is equivalent in Part VI to the term "validation", in relation to foreign operators.

1.4.1 As a result of the above and in order to exercise its authority and to satisfy its obligations under the Chicago Convention with respect to the safety of operations within its territory, a State should develop procedures for the safety

oversight of foreign operators and for the authorization of such operators to operate within its territory in a manner consistent with the State's national regulatory requirements.

- 1.4.2 Bilateral or multilateral agreements. In the case where bilateral or multilateral agreements have been established, approvals should be granted on the basis of such an agreement after safety assessments have been completed. Such agreements, which are considered technical agreements that may be concluded between CAAs and may cover mutual recognition of AOCs, should consider the provisions outlined below and should include appropriate safety provisions.
- 1.4.3 Where no bilateral or multilateral agreement exists, an administrative review of the relevant documentation of the operator should be performed at a minimum, and should be supplemented by safety-related information, if available, from ICAO, or from safety programmes by States (such as ramp checks). This information can be supplemented, in part, by the consideration of audits, including operator audits. The State may consider audits performed by other States, by internationally recognized audit organizations as provided in 1.5, or by its CAA. An approval should be granted in the absence of any significant negative findings/major deficiencies.

Note.— Examples of significant or major findings during a ramp inspection are given in Chapter 6 of this Part.

- 1.4.4 In the case of any significant negative findings/major deficiencies, the document review should be followed by discussions with the State of the Operator seeking resolution of such deficiencies prior to granting an approval. A foreign operator should be given the opportunity to resolve any significant negative findings/major deficiencies.
- 1.4.5 In case of unresolved significant negative findings/major deficiencies, States should deny the approval of a foreign operator and should consider appropriate additional measures, such as those described in Chapter 6 of this Part and in the model clause of Attachment A to this Part.

1.5 OPERATOR AUDITS BY ESTABLISHED COMMERCIAL AUDIT ORGANIZATIONS

An audit of the standards maintained by an operator from another State, performed by an established commercial audit organization, using one of the internationally recognized evaluation/audit systems, may be acceptable as additional supporting information, at the discretion of the State. The results of such an audit should not be the only source of information for the determination of an approval for a foreign operator, as the audit may not evaluate those conditions inherently related to the State of the Operator's ongoing oversight responsibilities that include, but are not limited to, the sufficiency of operational procedures, approval of appropriate MELs and ensuring compliance with the aircraft maintenance programmes approved by the State of Registry.

Note 1.— The use of an industry programme does not replace the authority and/or responsibility of the CAA, and does not support automatic approvals by other States. It weakens the safety oversight concept of ICAO Contracting States in that it establishes a passive system where oversight is being delegated to industry.

Note 2.— An example of an internationally recognized audit system is the IOSA programme.

1.6 VALIDITY AND RENEWAL OF APPROVALS

1.6.1 Approvals to foreign operators should normally be subject to a limited time period, taking into consideration the validity of the operator's AOC, and should be renewed in accordance with the same procedures as detailed in 1.4. The limited time period of the approval may extend beyond the validity of the operator's AOC, for example, if the State of the Operator only issues AOCs of a short validity period (e.g. one year) or if the AOC expires soon after the initial approval,

as long as the State receives, in a timely manner, documented confirmation that the AOC of the foreign operator has been renewed and remains valid.

- 1.6.2 In order to maintain an approval, foreign operators should be subject to appropriate surveillance by States. This should include regular ramp checks and documentation reviews. In case any significant negative finding/major deficiency is encountered during this process, States should take appropriate measures, including consultations with the CAA of the State of the Operator and, if acceptable to the concerned State, an audit of the foreign operator. If significant negative findings/major deficiencies remain, States should withdraw the approval of a foreign operator and should consider appropriate additional measures as described in the model clause of Attachment A to this Part.
- 1.6.3 A foreign operator may re-apply for approval following a withdrawal.

1.7 SHARING OF SAFETY INFORMATION

Safety relevant findings regarding foreign operators should be shared between Contracting States.

1.8 APPROVAL PROCESS AND CONTINUED SURVEILLANCE

A flow chart of the approval process and ensuing continued surveillance is in Attachment B to this Part.

APPLICATION BY A FOREIGN OPERATOR

2.1 ACTION BY THE STATE

- 2.1.1 States should establish procedures to facilitate the application by foreign operators for approval to operate into their territory.
- 2.1.2 These procedures should contain the required forms, instructions on completion and the documentation to be provided.
- 2.1.3 States should be careful in their requirements for applications to request only details relevant to specific State regulations and ICAO SARPs for the evaluation of the safety operations under consideration and their future surveillance.
- 2.1.4 States should reduce the amount of required data by using the information available to them from an official source, such as direct from the operator or the international register of AOCs to be established by ICAO.
- 2.1.5 The forms and instructions for operations involving only an overflight of the State's territory may differ from those for operations into the State.
- 2.1.6 States should assess the effect of the differences from ICAO SARPs filed by the State of the Operators in the Electronic Filing of Differences (EFOD) system on the requested operation into their territory.
- 2.1.7 Examples of forms that might be provided for this purpose are given in Attachment C to this Part. Instructions for the form are either self-explanatory or similar to the instructions contained in Part III, Attachment B, for related topics of Part III, Attachment A.

2.2 ACTION BY THE OPERATOR

- 2.2.1 The operator will need to make applications to each State into or over which it is intended to operate. The operator will also need to keep its own CAA, as the authority of the State of the Operator, informed of all applications to operate into other States.
- 2.2.2 Applications should be made direct to the CAAs of the States into which it is intended to operate. In some cases it will be possible to download information and both the instructions for making an application and the necessary forms from a website maintained by the CAA in question.
- 2.2.3 The operator will need to make specific reference to compliance with ICAO SARPs and regulations of the State into or over which it is intended to operate. These regulations may be more restrictive than the regulations of the State of the Operator.

2.2.4 The password-protected ICAO-NET website, accessible to States at https://login.icao.int provides a list of available uniform resources locators (URLs) for the websites of national CAAs of Contracting States, when selecting the DGCA directory after log-in.

EVALUATION OF AN APPLICATION BY A FOREIGN OPERATOR

- 3.1 When evaluating an application by an operator from another State to operate within its territory, a State will examine both the safety oversight capabilities and record of the State of the Operator and, if different, the State of Registry, as well as the operational procedures and practices of the operator. This is necessary in order for the State, in the terms of Article 33 to the Chicago Convention, to have confidence in the validity of the certificates and licences associated with the operator, its personnel and aircraft, in the operational capabilities of the operator and in the level of certification and oversight applied to the activities of the operator by the State of the Operator.
- 3.2 A State can obtain information on the safety oversight capabilities, and the level of compliance with ICAO Standards, of another State by accessing information from the ICAO Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA) Online Framework (OLF) secure website at www.icao.int/safety/pages/usoap-results.aspx. Safety audit information is also accessible from iSTARS at https://www.icao.int/safety/iStars/pages/intro.aspx.
- 3.4 States can obtain information on an operator from another State by applying to the State of the Operator for reports of any inspections that may have been conducted, and from the international register of AOCs to be established by ICAO.
- 3.5 A State can also request access to reports of audits of the operator in question, conducted by independent aviation audit organizations and/or by other air operators, such as code-sharing partners. Such non-regulatory audits should be used in conjunction with other information such as a report from the ICAO USOAP CMA or other inspection results to evaluate the application.

APPROVAL OF AN APPLICATION

- 4.1 Following receipt of an application by a commercial air transport operator from another State to provide an air service over or into its territory, a State will review the application as per Chapter 1, 1.4 of this Part, in light of its regulations. If the State decides to approve the service, it should issue an appropriate written authorization to the operator. This document may include additional authorizations, conditions and limitations for elements not listed in the operator's AOC and its associated operations specifications but considered necessary for compatible operations within the State approving the service. The additional authorizations should not authorize operations that the State of the Operator has not authorized in the operations specifications associated with the AOC, nor duplicate authorizations in those operations specifications, but should be issued in exceptional cases, for example, to authorize operations to a restricted-use aerodrome.
- 4.2 These authorizations, conditions and limitations, that may be included, are intended to provide more detailed information and may address unique and special requirements associated with the airspace of the State where the operations will occur. The issue of these authorizations, conditions and limitations is part of the State approval of the operations. Such authorizations, conditions and limitations should not conflict with the AOC and the operations specifications issued by the State of the Operator.

The process is illustrated in Attachment B to this Part.

4.3

RAMP INSPECTION OF OPERATORS FROM OTHER STATES

5.1 GENERAL

- 5.1.1 In accordance with Annex 6, the operator must ensure that all employees, when abroad, comply with the laws, regulations and procedures of those States in which operations are conducted. Furthermore, the operator needs to ensure that all pilots are familiar with the laws, regulations and procedures pertinent to the performance of their duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating thereto. Other members of the flight crew must be familiar with these laws, regulations and procedures as are pertinent to the performance of their respective duties in the operation of the aeroplane.
- 5.1.2 One of the primary objectives of a ramp inspection is to provide CASIs with the opportunity to evaluate compliance of a foreign operator with ICAO SARPs, as well as applicable laws, regulations and procedure of the State in which operations are conducted. Continued safety surveillance by a State on operations by foreign operators within its territory is inherent in the system of approval and is an essential part of the State's responsibility to ensure that the required operational safety standards are maintained within its territory.
- 5.1.3 The necessary ramp inspections should therefore be planned by the CASIs and conducted when aircraft from other States are within the territory of the State. These inspections should be planned such that they do not cause unreasonable delay in the operation of the aircraft.
- 5.1.4 The process is illustrated in Attachment B to this Part.

5.2 INSPECTORS

5.2.1 All inspectors who conduct ramp inspections on foreign aircraft are to be experienced CASIs who understand the difference between ramp inspections conducted on their own operators as part of their AOC management responsibilities and ramp inspections conducted on aircraft of foreign operators. These inspectors will be specifically trained and authorized to conduct such inspections and possess appropriate credentials identifying them as inspectors employed by the CAA.

Note.— An example of course material for the training of CASIs involved in ramp inspections of foreign operators is included the European Aviation Safety Agency Ramp Inspection Manual (RIM). Course material is also available in the FAA training course number 27100142, "How to Conduct a 14 CFR Part 129 Ramp Inspection".

5.2.2 Ramp inspections on aircraft should be conducted by CASIs already experienced in the inspection of its national operators or who have been specifically trained to inspect foreign aircraft. The foreign operator's ramp inspections should be carried out in a similar manner to the ramp inspections of national operators, with some important differences, as the standards applied would be based primarily on ICAO Standards and not on national regulations. CASIs should have demonstrated a language proficiency in English of at least ICAO operational level (level 4) for flight operations inspectors and of sufficient fluency for other CASIs to ensure adequate communications with the foreign operator staff

during the conduct of the inspection and the resulting follow-up actions. CASIs need to be trained and knowledgeable in the following:

- the Chicago Convention and its Annexes 1, 6, 7 8,18 and 19;
- differences between ICAO Standards and national regulations, which may be more detailed or restrictive:
- diplomacy, including dealing with potential language difficulties and cultural differences;
- sovereignty of foreign aircraft, which means that the inspector authority is limited to document, communicate and report findings, except as provided in Chapter 1, 1.3.3 of this Part;
- · observing, recording and reporting procedures during inspections of foreign operators; and
- surveillance activities, which are not linked to the certification process of the operator.

5.3 PRE-INSPECTION PLANNING

- 5.3.1 CASIs should prepare for a ramp inspection by updating themselves on relevant ICAO differences lodged by the State of the foreign operator and any recent changes to national regulations with respect to operations by operators from other States.
- 5.3.2 A check should be made of the authority for the operator to operate, and to operate the particular aircraft concerned, by consideration of its nationality and registration marks. In the future, data may be available from the international register of AOCs to be established by ICAO.
- 5.3.3 The record of the operator's history in the State should be examined, including safety-related accidents, incidents, violations, or complaints, including records of past aircraft inspections and, in particular, those of the specific aircraft concerned in the inspection to be conducted, to check for any outstanding actions or recurring trends that might warrant particular attention.
- 5.3.4 Ramp inspections customarily involve the aircraft and its crew, line station operations, servicing, cargo and maintenance, and the ramp and gate area condition and activity. Time constraints may apply only to the inspection of the aircraft and crew. Determination should be made of the number of CASIs and the specializations to be involved, the distribution of tasks and the time to be allocated to each task.
- 5.3.5 While the plan will include comprehensive ramp inspections, it will not be possible to cover all the desired elements in the time available for a particular inspection without causing unreasonable delay to the operation. As inspections on aircraft of any one operator may be conducted at different airports by different CASIs, the overall inspection plan will need to take this into account. Some elements should be covered at every inspection, others can be covered over a number of inspections. Thus comprehensive records should be kept of all ramp inspections of aircraft of a particular operator in a central database, accessible to and updated by the CASIs concerned. From these records it is necessary to plan the content of inspections so that a complete inspection of the aircraft of any one operator is undertaken over a defined period.

- 5.3.6 CASIs should observe the following during ramp inspection activities:
 - CASIs should not interrupt crew or ground personnel when they are performing a particular phase of their duties:
 - when inspection activities require CASIs to interact directly with the crew or ground personnel, inspectors should perform the activities at a time that does not interfere with their duties;
 - CASIs should time inspection activities so that they do not delay or interfere with passenger boarding and disembarking; and
 - inspection activities should not adversely impede aircraft servicing or catering.
- 5.3.7 Selection of a particular aircraft to inspect should normally be done at random, in a non-discriminatory manner. However, the CAA should apply principles of safety risk management to identify operations perceived to present a higher safety risk and, as a result, conduct additional inspection activities aimed at those operations that can be linked to a specific:
 - a) State of the Operator or State of Registry;
 - b) aircraft type;
 - c) nature of operations (scheduled, non-scheduled, cargo, air taxi, etc.);
 - d) foreign operator;
 - e) individual aircraft;
 - f) new entrant foreign operator operating scheduled services into the State's airspace;
 - g) foreign operator undertaking significant change of scope and type of operations (e.g., non-scheduled to scheduled operations, cargo to passenger-carrying, addition or removal of aircraft type, and/or major change of route structure); or
 - h) foreign operator requiring additional surveillance due to safety concerns.

5.4 INSPECTIONS

- 5.4.1 The documents to be covered at any ramp inspection of a foreign operator are the following:
 - · certificate of registration
 - · certificate of airworthiness
 - · licences and medical assessment of the flight crew
 - AOC and associated operations specifications relevant to the aircraft type, which are required information to be carried on board until an international register of AOCs may eventually provide an alternative way to access this information
 - · aircraft flight manual or other document containing performance data
 - · radio station licence
 - journey logbook or technical log or general declaration
 - · maintenance release
 - fuel and oil records

- document attesting noise certification
- · Article 83 bis agreement summary, if applicable
- 5.4.2 The overall condition of the aircraft should be covered at every inspection:
 - · aircraft markings
 - out-of-tolerance leakage of fuel, engine oil or hydraulic fluid
 - landing gear and wheel well areas
 - · fuselage and pylons, as applicable
 - · wings and pylons, as applicable
 - engines, their intakes, exhaust cones and reverser systems
 - · propellers, as applicable
 - · empennage or tail assembly
 - baggage and cargo (especially dangerous goods and special cargo)
- 5.4.3 Documents that should be covered over a defined number of inspections include:
 - MFI
 - · aircraft operating manual
 - · airfield performance data
 - · checklists for normal, abnormal and emergency procedures
 - aeronautical charts (route guide)
 - aeroplane search procedure checklist
 - · visual signals for use by intercepting and intercepted aircraft
 - mass and balance forms and their completion
 - · weather reports and forecasts
 - · operational flight plan
 - NOTAMs
- 5.4.4 Aircraft equipment that should be covered over a defined number of inspections:
 - · adequate oxygen supply for crew and passengers
 - passenger briefing cards and contents
 - portable fire extinguishers flight crew compartment and cabin
 - · life rafts and life jackets or individual flotation devices, as applicable
 - pyrotechnical distress signaling devices, as applicable
 - first-aid kits and medical kits, as applicable
 - · penetration resistant cockpit door, as applicable
 - · emergency exit signs and lighting
- 5.4.5 The following additional aircraft equipment should also be covered over a defined number of inspections, as applicable, to the aircraft and the operation:
 - ACAS
 - ELT
 - FDR and CVR
 - GPWS with forward looking terrain avoidance capability
- 5.4.6 At the completion of the inspection, inform the flight crew, if present, of any findings. For a safety-of-flight discrepancy, the CASI needs to immediately inform the flight crew, station personnel, and the operator.
- 5.4.7 More detailed guidance on the conduct of ramp inspection of aircraft, including those of foreign operators, is provided in the Attachment to Part IV.

ACTION ON FINDINGS — RESOLUTION OF SAFETY ISSUES

6.1 GENERAL

- 6.1.1 After a ramp inspection of a foreign operator, the CASI's actions resulting from findings will depend on the seriousness of the safety finding. Action may also involve the State of Registry of the aircraft, if different from the State of the Operator.
- 6.1.2 Generally, the State in which territory the inspection takes place should have detailed procedures to guide the CASI when deciding an action. The State's regulations should define the scope of possible enforcement actions affecting foreign operators. There is a clear difference in the action resulting from a finding on an aircraft of a foreign operator, for which safety is the only basis for action, and from a finding on an aircraft of a national operator, for which safety as well as compliance with certification standards and with applicable national regulations need to be considered.
- 6.1.3 Several levels of seriousness of findings should be detailed in the inspection procedures, with a description of related types of action. Actions to be taken after findings during a ramp inspection of a foreign operator are shown in Table 6-1.
- 6.1.4 Table 6-2 is based on the ramp check guidance contained in the Attachment to Part IV. It provides examples of findings, as well as the suggested levels of seriousness outlined in Table 6-1.

Table 6-1. Examples of levels of seriousness of findings and related actions

	ACTIONS				
Seriousness of findings	Information to pilot-in-command	Information to responsible CAA (State of the Operator and/or State of Registry) and operational management of the operator	Corrective actions required		
Minor	Yes	No	No		
Significant	Yes	Yes Letter to CAA and copy to operator's management.	No		
Major	Yes	Yes	Yes		
		Letter to CAA and copy to operator's management. In case of aircraft damage affecting airworthiness, a direct communication with the CAA in the State of Registry should be established. Under the provisions of Annex 8, that CAA decides about conditions regarding return to flight status. Confirmation afterwards with a letter to the CAA and a copy to the operator's management.	Actions consisting of operational restrictions, corrective actions before flight or at maintenance base, grounding and/or withdrawal of approval to operate in the territory of the State will depend on national regulations.		

Table 6-2. Examples of findings and levels of seriousness

140			SERIOUSNESS	
Item number	Item description	Minor	Significant	Major
		A. Flight deck -	– general	
1	General condition	Dirty and untidy.		Large unsecured objects (e.g. cargo or baggage) Unserviceable flight crew seats.
2	Emergency exits	Not all exits are serviceable, but properly deferred in accordance with MEL provisions.	Not all exits are serviceable and MEL provisions not applied.	No emergency exits serviceable/no provisions in MEL for continued operation.
3	Equipment: • GPWS	Inoperative and in accordance with MEL provisions.	Inoperative and MEL provisions not applied.	Not installed. Forward looking GPWS. required and not installed.
	• FMC		Flight management system (FMS) database recently outdated (less than 28 days).	FMS database more than 28 days outdated.
	ACAS/CVR/FDR/ELT	Inoperative and in accordance with MEL provisions.	Inoperative and MEL provisions not applied.	Required and not installed.
		A. Flight deck — do	ocumentation	
4	Manuals: Aircraft flight manual		No evidence of State of Registry approval. Incomplete, but performance calculations possible.	Not on board and performance calculations not possible.
	Operations manual		Incomplete (see Annex 6, Appendix 2) or not approved by State of the Operator or not the current version.	Not on board.
5	Checklists	Not within reach.	Not readily available and used or not the current version.	Not on board.
6	Route guide (navigation charts)	Not within reach.	Recently out of date. (28 days or less). Photocopies of current charts.	Significantly out of date (more than 28 days). Not on board.
7	MEL		Not on board or MMEL used, but no deferred defects. MEL content does not reflect aircraft equipment fitted. MEL not approved.	Not on board or MMEL used, with deferred defects.

ltom			SERIOUSNESS	
Item number	Item description	Minor	Significant	Major
8 a)	Certificate of registration	Non-certified copy.	Not on board. No English translation.	
8 c)	Certificate of airworthiness		Not an original or certified true copy. No English translation.	Not on board. Out of date.
8 d)	Crew member licences (see also E — General, 3, Language for communications, in this table)	Form or content not in compliance with ICAO Standards.	No English translation.	Not valid for the type of aircraft. Not on board or no proper validation from the State of Registry. Expired or no Class 1 medical assessment.
8 e)	Journey log book or equivalent technical log	Minor defects not documented.	On board but not properly completed.	Not on board or no equivalent document. Maintenance release expired or not valid. MEL rectification interval deadline expired for deferred defects.
8 f)	Radio station licence	Non-certified copy.	Not on board.	
8 g)	Noise certificate (where applicable)	Not on board. No English translation.		
8 h)	Air operator certificate (AOC) (certified true copy)		Not a certified true copy of AOC.	Not on board.
	Operations specifications (copy)		Not accurate (out of date, incorrect operation type/route, incorrect aircraft or operator, etc.) or no English translation.	
8 i)	Article 83 <i>bis</i> agreement summary (certified true copy, in either electronic or hard copy format)		No English translation.	Not on board.
9	Operational flight plan	Copy not retained on ground.	Actual flight calculations but no actual documents. Lack of fuel monitoring data (arrival flight). Fuel calculation unsatisfactory. (departing flight).	No or incomplete flight preparation. Required fuel calculation not available or not updated for actual conditions. Operations outside of en-route limitations and authorizations
10	Mass and balance sheet and data		Incorrect but within aircraft limits.	Incorrect and outside operational limits or missing. Mass and balance data not available.

ltom			SERIOUSNESS	
Item number	Item description	Minor	Significant	Major
11	Aircraft performance limitations using current route, airport obstacles and runway analysis data	Incomplete, but not affecting the operation on that date (e.g. no contaminated or wet runway data, but these conditions are not present).	Not current data or data validity date not available.	Not available.
12	Cargo manifest and, if applicable, passenger manifest		Some limited inaccuracy or missing data not affecting safety.	Not available or grossly inaccurate/incomplete.
13	Preflight inspection	Form on board but incomplete.	Not performed for inbound flight.	Not performed for outbound flight.
14	Weather reports and forecasts	Not the latest available data but valid.	Not printed but handwritten.	Not valid or not available.
15	NOTAMs		Some en-route relevant data missing.	Not available.
	A	— Flight deck: safety	equipment	
16	Portable fire extinguishers	Not easily accessible.	Expired Not properly secured.	Empty or insufficient number or missing. Significantly low pressure Not accessible.
17	Life jackets/flotation devices, (if required)	Not directly accessible.	Expired, as applicable.	Not available for each cockpit crew member on board.
18	Harness		Seat belt instead of harness.	Not available or serviceable for all flight crew members.
19	Oxygen equipment, (if required)		No direct access.	Not available or serviceable for all flight crew members. Oxygen quantity not sufficient.
20	Electric flashlight (night operations conducted by operator)	Only one available.	Weak battery.	Not in cockpit or unserviceable.
		B — Cabin/Safe	ty	
1	General condition	Dirty, untidy and in bad condition.	Loose carpet. Loose or damaged floor panel. Unserviceable seats (and not identified as such).	Not possible to perform, unrestricted, normal and abnormal duties.
2	Cabin crew seats	Harness/belt is difficult to operate.	Strap or buckle worn out or damaged; item is not serviceable.	For any member of the minimum required cabin crew: a seat is not available; or proper harness and seat belt not available or not serviceable.

ltom		SERIOUSNESS		
Item number	Item description	Minor	Significant	Major
3	First aid kit/emergency medical kit	Expired. Incomplete. Not at the indicated location.		Not available.
4	Portable fire extinguishers	Not directly accessible.	Expired. Not properly secured.	Empty, significantly low pressure, or missing, or not serviceable.
5	Life jackets/ Flotation devices (if required)	Not directly accessible.	Expired, as applicable.	Not available for each person to be carried.
6	Seat belts (passenger seats)	Strap or buckle worn out or damaged. Not available or serviceable for all passenger seats and aircraft dispatched in accordance with MEL.	Not available or serviceable for all passenger seats, and aircraft not despatched in accordance with MEL.	Not available or not serviceable for any passenger.
7	Emergency exit lighting and marking, emergency flashlights		Some emergency exit signs out of order. Insufficient number of emergency flashlights; emergency flashlights not correctly located; emergency flashlight batteries weak or flat.	Emergency lighting equipment defects not acceptable according to MEL provisions.
8	Slides/life-rafts (as required) (for long-range over water flights)	Not in specified location, as established by the State of the Operator.	Incorrectly installed.	Insufficient number. Not serviceable.
9	Oxygen supply (cabin crew and passengers)	Insufficient quantity of oxygen or insufficient quantity of masks for passengers and crew members.	Insufficient quantity of oxygen or insufficient quantity of masks for passengers and crew members, and flight performed above flight level 250.	
10	Emergency briefing cards	Not enough emergency briefing cards for all passengers.	Briefing cards from another aircraft or from obviously different versions. Some information missing or incorrect.	No emergency briefing cards on board.
11	Cabin crew members		Cabin crew members not in specified location.	Insufficient number of cabin crew members.
12	Access to emergency exits			Impeded by luggage or cargo, etc. Impeded by seats.
13	Safety of cabin baggage			Not securely stowed.

Item			SERIOUSNESS	
number	Item description	Minor	Significant	Major
14	Seating capacity			More seats than certified capacity. Insufficient serviceable seats for all passengers on board.
		C — Aircraft external	l condition	
1	General external condition	Minor defects.	The defects need not necessarily be corrected before flight (visible corrosion, marking not legible, etc.).	Safety-related defect (correction required before departure). Inadequate de-icing.
2	Doors and hatches	Minor defects but serviceable.	Door operating instructions missing or unclear. Seal slightly damaged.	Unserviceable and not compatible with number of passengers on board. Seal missing or badly damaged.
3	Flight controls	Minor defects.	Poor condition (damage, missing bonding strips or static discharges, play, lack of lubrication, disbanding).	Damage, corrosion, leaks or wear outside limits of MEL, structural repair manual (SRM), etc.
4	Wheels, tires and brakes	Minor defects.	Signs of underinflation. Incorrect tire pressure. Unusual wear and tear.	Tires worn out or damaged beyond limits. Brakes worn out, leaking or damaged beyond limits. Damaged components or missing parts (e.g. tie bolts, heat sensors).
5	Undercarriage	Minor defects.	Significant signs of leakage, strut underpressure, corrosion and obvious lack of lubrication.	Damage, corrosion, missing parts and/or leakage outside limits.
6	Wheel well	Minor defects or dirty.	Signs of leakage, corrosion and obvious lack of lubrication.	Damage, widespread corrosion, leakage outside limits.
7	Intake and exhaust nozzle	Minor defects.	Damage to casing or lining. Dents and cracks in exhaust area all within limits, but not recorded in Technical Log or equivalent document. Minor leaks of oil and fuel.	Damage (nicks, dents, cracks etc.) outside the MEL, aircraft maintenance manual (AMM), SRM, etc., limits. Leakage outside limits.
8	Fan blades (if applicable)	Minor defects.	Damage to fan blades within limits but not recorded in technical log or equivalent document.	Damage (nicks, dents, cracks etc.) outside the MEL, AMM, SRM, etc., limits.

ltom			SERIOUSNESS	
ltem number	Item description	Minor	Significant	Major
9	Propellers (if applicable)	Minor defects.	Damage to propellers within limits but not recorded in technical log or equivalent.	Damage (nicks, dents, cracks, etc.), leakage, looseness of blades outside the MEL, AMM, SRM, etc., limits.
10	Previous structural repairs	Minor defects.	No information about temporary repairs, doubts about old repairs, and repairs acceptable for continuation of flight.	Improperly performed repairs or apparent unsatisfactory design. Damage to old repair.
11	Obvious un-repaired damage	Within limits and recorded.	Within limits but not recorded.	Unassessed and not recorded damage affecting airworthiness.
12	Leakage	Within limits.	Long-standing water and lavatory leaks (blue ice).	Leakage (oil, fuel, hydraulic, water) outside limits.
		D — Cargo		
1	General condition of cargo compartment and containers	Partly defective lights Minor defects, but safe condition.	Partly damaged panelling. Partly damaged containers. Defective lights. Floor locks (partly) unserviceable. Limited access to cargo area (for combis). Dividing net or door protection net damaged.	Damaged panelling outside limits. Damaged containers. Structural damage outside limits. Defective or missing fire extinguishing system (where applicable). Cargo area not used in accordance with classification. No access to cargo area (for combis). No barrier net (combis and cargo aircraft). No smoke barrier/curtain. Floor locks unserviceable and outside MEL limits.
2	Dangerous goods	Unable to recognize dangerous goods presented to operator for shipment.	No dangerous goods regulations or references.	No, or incomplete, information to the pilot-in-command of dangerous goods carried, in contradiction with Doc 9284 provisions. Deficiencies: leakage, wrong packaging, label missing. Dangerous goods not correctly secured. Loading not performed in accordance with Annex 18. Dangerous goods carried without authorization or in contradiction to Annex 18 or Doc 9284 provisions.

Item		SERIOUSNESS						
number	Item description	Minor	Significant	Major				
3	Safety of cargo on board	Minor damage to: lashing, tie down equipment, pallet/container and/or locks.	Cargo not safely secured and/or properly distributed: - lashing - tie-down equipment - pallets and containers - locks Load distribution/floor load limit exceeded.					
		E — General						
1	Additional remarks	General findings with minor safety impact.	General findings with significant safety impact.	General findings with major safety impact.				
2	Refuelling	Cabin crew not aware of refuelling with passengers on board.	No procedures in place for refuelling with passengers on board.	Procedures in place but not carried out.				
3	Language for communications		Pilot licences with no language proficiency endorsement, for the English language or the language used in radiotelephony.	Pilots not fluent in the English language or in the language used in radiotelephony.				
4.	Age limit for flight crew			Exceeds the upper age limit of 60 years for single-pilot commercial air transport operations.				
				Exceeds the upper age limit o 65 years in case of operations of more than one pilot.				

Attachment A

ICAO MODEL CLAUSE ON AVIATION SAFETY

(Supplementary to Part VI, Chapter 1, 1.2)

1. PURPOSE AND SCOPE

- 1.1 A model clause on aviation safety consists of an article specifically addressing aviation safety, which States may incorporate into bilateral or multilateral air service agreements. Such a safety clause would assist States in ensuring that foreign aircraft operating in their airspace are operated and maintained in accordance with ICAO standards.
- 1.2 A safety clause provides States with a standardized process to address safety concerns they may have regarding the safe operation of foreign aircraft and emphasizes the responsibilities of States for providing adequate safety oversight of commercial air transport operations.
- 1.3 The model clause on aviation safety contains no reference to sanctions or penalties for non-compliance with Standards, on the basis that air service agreements normally include an article addressing non-compliance issues.
- 1.4 The ICAO Council adopted the following Resolution and model clause on 13 June 2001.

2. ICAO COUNCIL RESOLUTION

(extract from C-DEC 163/08)

- Whereas the primary objective of the Organization continues to be that of ensuring the safety of international civil aviation worldwide.
- Whereas Article 37 of the Convention requires each Contracting State to collaborate in securing the highest practicable degree of uniformity in regulations and practices in all matters in which such uniformity will facilitate and improve air navigation,
- Considering that the rights and obligations of States under the Chicago Convention and under the Standards and Recommended Practices adopted by the Council of ICAO on aviation safety could be complemented and reinforced in cooperation between States,
- Considering that the agreements on air services represent the main legal basis for international carriage of passengers, baggage, cargo and mail,
- Considering that provisions on aviation safety should form an integral part of the agreements on air services,
- *Noting* that nothing prevents States who incorporate the ICAO model safety clause into their aviation agreements from including any additional, or more restrictive criteria, which the parties agree are necessary for assessing the safety of an aircraft operation.

The Council:

Urges all Contracting States to insert into their agreements on air services a clause on aviation safety, and

Recommends that Contracting States take into account the model safety clause attached to this resolution.

3. MODEL CLAUSE

(extract from C-DEC 163/08)

- 1. Each Party may request consultations at any time concerning the safety standards maintained by the other Party in areas relating to aeronautical facilities, flight crew, aircraft and the operation of aircraft. Such consultations shall take place within thirty days of that request.
- 2. If, following such consultations, one Party finds that the other Party does not effectively maintain and administer safety standards in the areas referred to in paragraph 1 that meet the Standards established at that time pursuant to the *Convention on International Civil Aviation* (Doc 7300), the other Party shall be informed of such findings and of the steps considered necessary to conform with the ICAO Standards. The other Party shall then take appropriate corrective action within an agreed time period.
- 3. Pursuant to Article 16 of the Convention, it is further agreed that, any aircraft operated by, or on behalf of an airline of one Party, on service to or from the territory of another Party, may, while within the territory of the other Party be the subject of a search by the authorized representatives of the other Party, provided this does not cause unreasonable delay in the operation of the aircraft. Notwithstanding the obligations mentioned in Article 33 of the Chicago Convention, the purpose of this search is to verify the validity of the relevant aircraft documentation, the licensing of its crew, and that the aircraft equipment and the condition of the aircraft conform to the Standards established at that time pursuant to the Convention.
- 4. When urgent action is essential to ensure the safety of an airline operation, each Party reserves the right to immediately suspend or vary the operating authorization of an airline or airlines of the other Party.
- 5. Any action by one Party in accordance with paragraph 4 above shall be discontinued once the basis for the taking of that action ceases to exist.
- 6. With reference to paragraph 2 above, if it is determined that one Party remains in non-compliance with ICAO Standards when the agreed time period has lapsed, the Secretary General of ICAO should be advised thereof. The latter should also be advised of the subsequent satisfactory resolution of the situation.

Attachment B

APPROVAL PROCESS AND CONTINUING SURVEILLANCE

Note.— Internationally recognized evaluation/audit systems may complement this process.

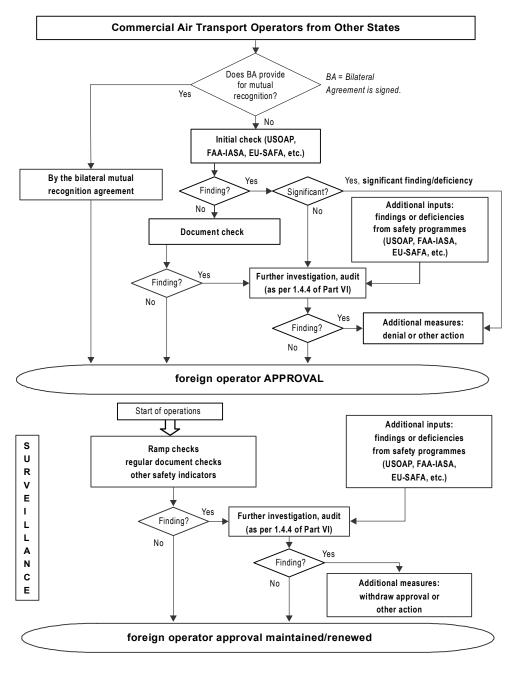


Figure VI-Att B-1. Flow chart of the approval process and continuing surveillance

VI-Att B-1

Attachment C

FOREIGN OPERATOR'S APPLICATION FORM

(Part VI, Chapter 2, 2.1, refers)

Application Form for Com (To be completed by a fore					
Section 1A. To be completed by all applicants					
Company registered name and trading name if different. A of company: mailing address; telephone; fax; and e-mail.		2. Address of the principal place of business including: telephone; fax; and e-mail.			
Proposed start-up date of operations: (dd/mm/yy):		ICAO 3-letter designator for aircraft operating agency:			
Operational management personnel					
Name:			Title:	Telephone, fax and e-mail:	
6. Name and contact information within the CAA of the	e State of the Oper	rator:			
Section 1B. Type of approval requested — to be	completed by all	applicants	s by checkin	g the applicable boxe(s)	
a) □ Air operator intends to conduct commerceb) □ Air operator intends to only conduct over	-		-	te]	
8. Air operator proposed types of operation:	9. Geographic	c areas of i	ntended oper	ations and proposed route structure:	
Section 1C. To be completed by air operator					
Provide location on board or provide separate do part of the aircraft fleet operated under the AOC:		e individua	l aircraft natio	onality and registration marks are listed as	
11. Provide the following information:					

Aircraft type (make, model		Low vi	sibility ope	erations			Noise ² Certification (Annex 16,	PBN			
and series, or master series)	Dangerous goods	Approach and landing	Take-off	Operational credit(s)	RVSM ¹ approval	EDTO ¹	indicate chapter)	Operations AR	Others ³	Remarks	
[Aircraft type 1] [Aircraft type 2] [Aircraft type 3] [Aircraft type 4] etc.											
Attach copies of: • AOC and associated operations specifications; • Insurance certificate; • In case of wet-lease of aircraft, approval of the CAA of the State of the Operator, with identification of the operator that exercises operational control on the aircraft; and • Document authorizing the specific traffic rights, issued by [Department of Commerce] or resulting from a bilateral air transport agreement (if required by the State to which the operator is flying to).											
Signature: Date (dd/mm/yy):					n/yy):	Name and title:					
Section 2. To be	completed b	y the CAA									
Evaluated by:						CAA decision: Approval granted					
						☐ Not approved					
Name Office Remarks:											
Signature of CAA representative: Date (dd/mm/yy):											
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— END —

^{1.} As approved by the State of the Operator.

^{2.} As approved by the State of Registry.

^{3.} 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).

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