



**THE REPUBLIC OF SUDAN  
SUDAN CIVIL AVIATION AUTHORITY  
(SCAA)**

**AIR OPERATORS CERTIFICATION  
PROCEDURES MANUAL**

**First Edition  
April 2012**



# THE REPUBLIC OF SUDAN SUDAN CIVIL AVIATION AUTHORITY (SCAA)



## Air Operators Certification Procedures Manual

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Khartoum  
April 2012



## FOREWORD

This Air Operators Certification Procedures Manual (AOC PM) has been prepared with the aim of providing both potential applicants for an Air Operator Certificate (AOC) and the Sudan Civil Aviation Authority Inspectors a standardized and harmonized guidance leading to the successful certification of prospective air operators.

This Manual is designed to be used in conformity with the applicable air operator certification regulations, standards and requirements that are contained in Sudan Civil Aviation regulation (SUCAR) Part 6 and specifically SUCAR Part 6, Subpart 2 that has been developed and promulgated in accordance to the laws of the Republic of Sudan.

Additional information is contained in the “Air Operators Certification Information Pamphlet” that is published under my authority to provide a birds-eye-view of the requirements enabling prospective applicants to have immediate access to essential information on requirements and processes followed for an AOC to be granted.

This Procedures Manual has, as much as possible, attempted to provide adequate information on the requirements and processes to be followed and fully complies with the guidance provided by the International Civil Aviation Organization (ICAO) in its document: ICAO Doc 8335 – Manual of Procedures for Operations Inspection, Certification and Continued Surveillance. Every effort has been applied to ensure that guidance provided by ICAO and accepted international practices have been adopted and consistently followed.

Comments and feedback on the manual, including recommendations for amendment action are invited and should be forwarded to Director, Safety and Standards Management Office, Sudan Civil Aviation Authority.

This AOC Procedures Manual has been approved and published under my authority.

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## CHAPTER 1 GENERAL INFORMATION

### 1.1 Introduction

1.1.1 The responsibility on the Government of the Republic of Sudan, with respect to the certification of air transport operators, is implicit in its acceptance of the International Standards and Recommended Practices for the safety of air navigation to which Article 37 of the Convention on International Civil Aviation refers. In order to discharge this responsibility, the Sudan Civil Aviation Authority (SCAA) has, in addition to the applicable regulations contained in Part 6 of the Sudan Civil Aviation Regulations (SUCARs), has developed the procedures contained in this Manual to serve as a guidance both to the SCAA Officers and prospective operators. This manual, therefore, contains the applicable Air Operator Certification Procedures consistent with the Annexes to the Convention on International Civil Aviation, the Sudan Civil Aviation Regulations and accepted global best practices as provided for in various ICAO guidance materials. Satisfactory completion of all the processes contained in this manual is a prerequisite for any potential operator and applicant for an air transport activity in the Republic of Sudan to gain an Air Operator Certificate (AOC) that would enable the prospective operator to provide air transport services.

1.1.2 No Sudanese operator shall operate an aircraft for the purpose of commercial air transportation within and outside Sudan unless it holds an Air Operator Certificate issued by the SCAA. Accordingly, exercising the powers conferred to it by the Civil Aviation Authority Act 2010; SCAA has laid down requirements for the issuance of an AOC in its Sudan Civil Aviation Regulations (SUCAR Part 6 (2011) and SUCAR Part 6, Subpart 2 (2012), as amended from time-to-time. An AOC shall, therefore, be issued to a prospective applicant who meets the established requirements for the specific type of air transportation activity; he or she would like to engage in.

1.1.3 Sudan civil aviation regulations require that an AOC holder maintain the standards of operation and the level of safety demonstrated during the process of the issuance of an AOC at all times and as long as the AOC holder is exercising the privileges attached to the AOC. The SCAA has established a surveillance program to ensure that operational standards and safety requirements are maintained at all times. Failure to maintain the demonstrated operational standards and safety requirements would lead to an enforcement action that may also include the suspension and/or revocation of the AOC. Thus, an AOC may be amended, cancelled, suspended or revoked if the SCAA is no longer satisfied that the AOC holder can maintain safe operations, does not comply with the AOC requirements, violates the national rules and regulations or conduct his operations in a non-ethical manner.

### 1.2 Responsibilities of the Operator

1.2.1 The operator has a responsibility for the safe conduct of operations and for compliance with applicable laws, regulations and related directives, instructions,



procedures and guidance material that may be developed and promulgated, at the appropriate level by the Government of Sudan and its civil aviation authority. Those laws, regulations, and requirements including specific safety instruction are the means by which the SCAA implements the provisions of the Annexes and meets its international obligations for aviation safety. However, the SCAA also recognizes that laws and regulations are not, in themselves, sufficient to provide the operator with comprehensive and detailed instructions on which to base its air service operations. This means that the responsibility for the development of detailed operating instructions necessary for the safety, regularity and efficiency of air operation remains the responsibility of the operator. In developing detailed operating procedures for the benefit of its staff, an air operator should make sure that those operating instructions do not conflict with the established aviation-related laws and regulations of the Republic of Sudan or those of other States into which territory or over whose airspace flight operations would be conducted.

- 1.2.2 The primary means used by an air operator to establish and disseminate company-based operating instructions is the Operations Manual and the aircraft maintenance related manuals (Maintenance Management Exposition), which are required by applicable SUCARs and addressed in this manual.
- 1.2.3 SUCAR Part 6 and SUCAR 6 – Subpart 2, mandatorily require the implementation of a Safety Management System in accordance with *Annex 6 of the Chicago Convention*. This Safety Management System, which needs to be acceptable to the SCAA, should, at least cover the following elements:
  - a) the identification of safety hazards;
  - b) the necessary remedial action to maintain an acceptable level of safety;
  - c) continuous monitoring and regular assessment of the safety level achieved;
  - d) continuous improvement to the overall level of safety.
- 1.2.4 The safety management system is also required to clearly define the lines of safety accountability throughout the organization and the direct accountability for safety of the senior management. In the absence of a properly established safety management system, a prospective operator shall be required to establish a flight safety and accident prevention program that also contains information on the lines of safety accountability throughout the organization and the direct accountability for safety of the senior management. A flight safety and accident prevention program shall be submitted to the SCAA for approval.

### **1.3 Requirements for the issuance of an AOC**

#### **1.3.1 General**

The issuance of the AOC for commercial operation shall be dependent upon the applicant demonstrating an adequate organization, financial soundness, technical capabilities consistent with the nature and extent of the operations specified. When the SCAA is satisfied that an applicant has successfully met the requirements





established, it shall grant an AOC, setting forth the operational authorization and limitations to carry out the specified commercial air transport.

#### 1.3.2 Requirements of AOC for the conduct of air transport services

- a) An applicant for AOC for the conduct of air transport services shall fulfill the relevant requirements mentioned in 1.2.1 and other applicable provisions of the relevant laws, regulations and associated requirements and procedures;
- b) An AOC applicant shall identify a suitable operations base to the satisfaction of the SCAA.

### 1.4 Definitions

When used in this manual; the following terms will have the definitions indicated in this paragraph.

**Aerodrome.** A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

**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–Category.** Classification of aircraft according to specific basic characteristics, e.g., aeroplane, helicopter, glider, free balloon.

**Aircraft operating manual.** A manual, acceptable to SCAA, 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.

**Air Operator Certificate (AOC).** A certificate authorizing an operator to carry out specified commercial air transport operations.

**Air Transport (Economic) License.** A license issue by the Air Transport Directorate confirming that the prospective operator has adequate resources to start and maintain an air transport service.

**Approval.** Approval by the Director General of the SCAA.

**Authority.** Sudan Civil Aviation Authority.

**Balloon/Free Balloon.** A non-power-driven lighter-than-air aircraft.

**Base.** Location of the operation centre from where the main operation is conducted.

**SCAA.** Sudan Civil Aviation Authority.

**SCAA Inspector.** A person authorized by the Director General of the SCAA to perform regulatory function including inspections and surveillance of approved service providers.

**Cargo.** Things other than passengers carried on aircraft.

**Commercial Air Transport Operation.** An aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire.



**Crew.** Person(s) assign by an operator for duty on an aircraft during flight time.

**Director General.** Director General of Sudan Civil Aviation Authority.

**Flight crewmember.** A licensed crewmember charged with duties, essential to the operation of an aircraft during a flight duty period.

**Flight plan.** Specified information provided to air traffic units, relative to an intended flight or portion of a flight of an aircraft.

**Glider.** A non-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.

**Helicopter.** A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axes.

**Operations manual.** A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

**Operator.** A person, organization or the enterprise engaged in or offering to engage in air transport operation under an Air Operator Certificate issued by the SCAA.

**Pilot-in-Command.** A pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

**Private aircraft.** An aircraft engage on private operations.

**Private operations.** Flight operations other than aerial work, charter or commercial air transport in which no remuneration, hire or reward is given to the pilot, the owner or the operator of the aircraft in respect of the flight or the purpose of that flight.

**State of the operator.** An ICAO Contracting 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 is located.

**State of registry.** An ICAO Contracting State on whose registry the aircraft is entered.

## 1.5 Abbreviations

When used in this manual, the following abbreviations shall represent the terms indicated in this paragraph:

ACT	AOC Certification Team
AIP	Aeronautical Information Publication
AIR	Airworthiness Directorate of the SCAA
AOC	Air operator certificate
ATS	Air Traffic Services
CCO	Chief Certification Officer
CDL	Configuration Deviation List
DG	Director General, Sudan Civil Aviation Authority
ETOPS	Extended Twin Engine Operations
FDR	Flight Data Recorder
ICAO	International Civil Aviation Organization
MEL	Minimum equipment list



MNPS	Minimum Navigations Performance Specifications
MME	Maintenance Management Exposition
NOC	No objection certificate
NOTM	Notice To Airmen
OPS	Flight Operations Directorate of the SCAA
POPS	Prospective Operator's Pre-assessment Statement
RVSM	Reduced Vertical Separation Minima
SCAA	Sudan Civil Aviation Authority
SSMO	Safety and Standards Management Office
SUCARs	Sudan Civil Aviation Regulations
SARPs	Standards and Recommended Practices

### 1.6 Air operator certification process

The Republic of Sudan subscribes to the five-phase air operator certification process recommended by ICAO as presented in ICAO Doc 8335 – Manual of Procedures for Operations Inspection, Certification and Continued Surveillance. The five phases are:

Phase 1 – Pre-application Phase

Phase 2 – Formal Application Phase

Phase 3 – Document Evaluation Phase

Phase 4 – Demonstration (Compliance Evaluation) Phase, and

Phase 5 – Certification Phase

### 1.7 Application processing time

1.7.1 Formal application for an AOC should be submitted to the SCAA, at least, six (6) months prior to the planned commencement date of operation, taking into consideration the time required for the assessment and review of documents and the information submitted, the completeness of documents and information submitted and the progress the applicant makes in demonstrating an adequate organization, method of control and supervision of flight operations, training program, procurement of aircraft and associated maintenance arrangements consistent with the nature and extent of operations specified.

1.7.2 As much as possible, the SCAA would endeavor to complete the certification process within a pre-targeted period; however, this is mostly dependent on the ability of the prospective operator to provide all required information and also meet the schedule established by the SCAA and the prospective operator to conduct necessary inspections as applicable.

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## CHAPTER 2 PRE-APPLICATION PHASE

*This is the first step leading to the issuance of an AOC, as it comprises of the first approach by prospective operator seeking information from the Civil Aviation Authority on requirements to start a commercial air operation in Sudan. In this phase, the SCAA will provide the prospective operator with all required information including awareness of all regulatory requirements, which must be met in order to obtain an AOC. The steps that need to be followed (Certification Phases) should also be clearly explained to the prospective operator while some of the information would be submitted in the form of a Pamphlet. It is essential that the prospective operator has a clear understanding of the regulatory and procedural requirements, the formal application form, documents that would need to be developed and submitted with the formal application and any other essential issues that the prospective operator needs to know to complete the certification process successfully.*

### **2.1 Air Operator Certification Rules and Regulations**

- 2.1.1 In discharging its international obligations and responsibilities for regulating air transportation and ensuring safety of aircraft operations, the SCAA has laid down detailed laws, regulations, requirements and procedures that are compatible with international Standards and Recommended Practices (SARPs) and accepted best practices.
- 2.1.2 As clearly laid down in Paragraph 1.2 above, the operator has a primary responsibility to ensure safety of flight operations and for compliance with applicable laws, regulations and related directives, instructions, procedures and guidance material that may be developed and promulgated from time-to-time. Those laws, regulations, and requirements including specific safety instruction are the means by which the SCAA implements the provisions of the Annexes to the Convention on International Civil Aviation and meets its international obligations for aviation safety.
- 2.1.3 To this end, the Republic of Sudan has promulgated the Civil aviation Act, 2010; the Civil Aviation Safety Act, 2010, the Sudan Civil Aviation Regulations (SUCARs), 2011 and various procedures and guidance material, all designed to assist prospective operators and the SCAA in their effort to enhance the safety, regularity and efficiency of aircraft operations in Sudan.
- 2.1.4 Specifically, SUCAR Part 6 – *Aircraft Operations* in general and SUCAR Part 6, Subpart 2 – *Air Operator Certification, Administration and Organization* have been developed to give effect to the relevant international SARPs on the certification and supervision of air operators. However, the SCAA also recognizes that laws and regulations are not, in themselves, sufficient to provide the operator with comprehensive and detailed instructions on which to base its air service operations.
- 2.1.5 The Republic of Sudan, as part of its obligation as an ICAO Contracting State, requires all Sudanese operators to comply with the provisions of the applicable SUCARs and the relevant ICAO Annexes. Where a standard has not been promulgated in the applicable



SUCARs, the government has decreed that the provisions contained in the relevant Annexes would serve as Sudanese regulations.

## 2.2 Administrative and General Requirement

- 2.2.1 On first contact, the prospective operator should be guided to the appropriate SCAA Office that has the overall responsibility for conducting the certification process from beginning to end. This Office is the **“Flight Operations Directorate (OPS)”** of the **“Safety and Standards Management Office (SSMO)”**.
- 2.2.2 The OPS Directorate should, in addition to information detailed below, provide the prospective operator an Intent Declaration Form that includes Prospective Operators Pre-application Statement (POPS) (**Appendices-1A and 1B**) and the Air Operator Certification Information Pamphlet enable the applicant to fully appreciate the requirements and conditions set for acquiring an AOC. The prospective applicant should also be informed on the need to acquire an Air Transport (Economic) License prior to commencing the air operator certification process.
- 2.2.3 Acquiring an Air transport (Economic) License, issued by the Air Transport Directorate of the SCAA is a prerequisite in order to start an air operation in the Sudan and be granted an AOC. This information should be clearly provided to the prospective operator to avoid future misunderstanding and loss of time.
- 2.2.4 Specific information to be provided to prospective operators on first contact, include but are not limited to the following:
- Explain regulatory and other requirements to be eligible for an AOC certificate;
  - Describe the certification process and the role of the applicant throughout the process;
  - Answer applicant’s questions;
  - Provide applicant with clear instructions and guidance on the Intent Declaration Form, and the documents required for the formal application;
  - Provide applicant with information on the overall process and the need to hold a “Pre-application Meeting” prior to the submission of the “Formal Application Package.”
- 2.2.5 As soon as initial contact has been made by a prospective operator to launch an air operation service, the Director of the Flight Operations Directorate shall inform the Director General of SCAA through the SSMO of the initial contact that has been made.
- 2.2.6 The AOC Information Pamphlet developed to provide comprehensive information on the requirements and procedures of obtaining an AOC is designed to provide highly important and essential information in a format that is brief and yet contains all relevant and essential information. Essential information contained in the Pamphlet includes, but are not limited to:
- Privileges, conditions and limitations pertaining to an AOC with reference to the applicable regulations;
  - Categories and conditions of operation;
  - Type of operation allowed;



- d) Inspection procedures for determining applicant's qualification and experience, managerial ability and adequacy of staff, facilities, equipment and finance;
  - e) Examination of proposed route structure, traffic potential and economic viability;
  - f) Determination of the need for the proposed operation in light to international agreements to which Sudan is a party;
  - g) Rights and authority of SCAA flight operations, maintenance of aircraft airworthiness and training inspectors;
  - h) SCAA inspection and surveillance policy;
  - i) Requirement for the development of Operations Manual and Maintenance Manuals; and
  - j) Approximate period of time that will be required subsequent to the receipt of a complete and properly executed application.
- 2.2.7 The Pre-application meeting is an important and integral part of the process that would help the SCAA and the prospective operator to appreciate the process and also clear any misunderstanding that may exist in the minds of the prospective applicant.
- 2.2.8 The Pre-application meeting shall, among other items of interest to both parties, shall address:
- a) Introduction of participants;
  - b) Verification of the contents of the intent declaration information, including POPS submitted;
  - c) Advising prospective applicant and his team on relevant regulatory requirements and possible additional issues that may be required;
  - d) Explanation of minimum requirements for the submission of the formal application package and the start of the actual process;
  - e) Explanation of the schedule of events and certification process, including a brief explanation of the steps required for achieving an AOC;
  - f) Information on the full contents of the Formal Application Package and the importance of delivering a complete package at the time of submitting the formal application;
  - g) Information on applicable fees and schedule of payment; and
  - h) Advise of approximate time required following receipt of Formal Application Package including all required documents.
- 2.2.9 At the end of the pre-application meeting SCAA should provide the prospective operator the application package.
- 2.2.5 In addition to the duly completed application form, the Formal Application Package includes essential flight operations and maintenance related documentation as well as specific information that may be required by the SCAA to proceed with the certification process.
- 2.3 Issues to be considered following the Pre-application Meeting**
- 2.3.1 Following the Pre-application meeting, the SCAA team would decide whether it is satisfied with the information so far gathered and prepare to accept a formal application from the prospective applicant.



- 2.3.2 Should the SCAA team be not satisfied with the outcome of the Pre-application meeting, the SCAA should express its dissatisfaction to the prospective applicant in writing, explaining the reasons and recommending a best solution that would enable the process to move forward. Consideration can be made to receive the solutions requested during the submission of the Formal Application Package.
- 2.3.3 Once the SCAA is satisfied with information so far gathered and has determined that the process can start on the submission of the application package, it should so advise the prospective operator and encourage him to submit the formal application package and also prepare to undertake several actions leading to the submission of the formal application.
- 2.3.4 On being informed that the SCAA has accepted the intent to start an air transportation service, the prospective operator, among other things, should undertake the following actions as part of its preparation to submit a formal application to be granted an AOC:
- a) Acquire an air transport (economic) license from the Air Transport Directorate authorizing establishment of air operation, if he has not already done so;
  - b) Select locations for training and maintenance;
  - c) Prepare letters of intent for lease or purchase of aircraft;
  - d) Complete application form including all the information that is required;
  - e) Develop and prepare compliance statement indicated on how he intends to comply with each applicable regulation;
  - f) Develop project schedule; and
  - g) Gather information (knowledge and experience) on key management personnel as required by the application form.

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### CHAPTER 3 FORMAL APPLICATION PHASE

*Any person/operator intending to provide commercial air transport services in the Republic of Sudan or wishes to acquire an Air Operator Certificate issued by the Sudan Civil Aviation Authority shall apply for an Air Operator Certificate to the Director General, Sudan Civil Aviation Authority in a prescribed form and meet all requirements as presented in SUCAR Part 6, Subpart 2 and this Manual.*

#### 3.1 The Application Form and Package

- 3.1.1 Following a successful completion of the Pre-application meeting and when the prospective operator has completed his preparations to submit a formal application, an application letter, based on an example (**Appendix-2**) that has already been provided to the prospective applicant should be submitted to the SCAA (Director, Flight Operations Directorate).
- 3.1.2 Unless it has been agreed upon prior to the start of the second phase, the application submitted should be complete and contain all the documents and information that is required by the SCAA to initiate the review of documents and information submitted.
- 3.1.3 The application should be signed by the owner of the proposed company or the Chairman of the Board (if already established) and shall include a statement that the application submitted serves as a formal application for an AOC by the prospective operator, hence fore also referred to as the “applicant”.
- 3.1.4 The prepared Application Form should be completed and contain at least the following information:
- a) the name and address of the applicant;
  - b) the location and address of the applicant’s principal place of business and the main base of operations;
  - c) 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;
  - d) the name and address of the applicant's legal representative;
  - e) information on key management personnel including their title, name, background, qualification and experience. For example:
    - i. Chief Executive Officer/ Accountable Manager,
    - ii. Flight Operations Manager,
    - iii. Safety Manager,
    - iv. Maintenance Manager; and
    - v. Quality Manager/ Quality Assurance Manager; etc as prescribed in the applicable SUCAR.
  - f) the nature of the proposed operations — passenger/cargo/mail, day or night, VFR or IFR, whether or not dangerous goods are to be transported; and the desired date for the operation to commence.
- 3.1.5 The information to be provided with the formal application shall include information on:





- a) the identification of the operation specifications sought, with information on how associated conditions will be met;
- b) the schedule of events in the certification process with appropriate events addressed and target dates;
- c) 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 details of the safety management system and/or the applicants flight safety and accident prevention program;
- 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 the intended aircraft to be operated;
- h) documents of purchase, leases, contracts or letters of intent;
- i) arrangements for crew and ground personnel training and qualification and the facilities and equipment required and available;
- j) the operations manual;
- k) the maintenance related manuals;
- l) details of the method of control and supervision of operations to be used; and
- m) the status of the assessment of financial, economic and legal matters by the appropriate government department.

### 3.2 Detailed information on flight operations

3.2.1 The following detailed information on flight operations should also be submitted at the time a formal application is submitted to the SCAA:

- a) Type of aircraft, instruments, flight documents, communication and navigation equipment and any other equipment to be used;
- b) Arrangements for maintenance and inspection of aircraft and associated equipment;
- c) State of Registry of the aircraft – if foreign registered, a copy of the lease agreement;
- d) Data on each flight crewmember including types of certificates or license number, ratings, medical certificate and currency in assigned aircraft;
- e) Arrangements for crew and ground personnel training and qualification and installations and equipment available;
- f) Proposed routes, minimum flight altitudes, destination and alternate aerodromes, data on instrument approach procedures, proposed aerodrome operating minima and navigation and communication facilities;
- g) Detail of operational control and supervision methods;
- h) Nature of operations:
  - i. scheduled or non-scheduled
  - ii. passenger/cargo/mail



- iii. day or night
  - iv. VFR or IFR
  - i) Detailed description of how the applicant intends to show compliance with each provision of the applicable code of air navigation regulations;
  - j) Specified financial data; and
  - k) Desired date for operation to commence
- 3.2.2 Application for an AOC or an amendment to existing AOC must be submitted to the SCAA in the form and manner that is prescribed by the SCAA.
- 3.2.3 Once an application is received and registered, the Safety and Standards Management Office in coordination with the appropriate Directorates of the SCAA (Flight Operations and Airworthiness directorates), evaluate the SCAA's (OPS/AIR) capability and resources to conduct and complete the certification process to meet the desired date for an operation to commence.
- 3.2.4 This would lead to the appointment of the AOC Certification Team (ACT) for that particular applicant and the designation of the Chief Certification Officer (CCO) under whose responsibility the certification process would be conducted.
- 3.2.5 The Directors of the Flight Operations and Airworthiness Directorates shall consult with each other and select members of the ACT and recommend the CCO to Director SSMO for approval.
- 3.2.6 Following the designation of the Certification Team and the appointment of the Chief Certification Officer, the ACT under the leadership of the CCO reviews the application package for completeness and advises the applicant of any missing document before arranging a "Formal Application Meeting" with the applicant and his team.
- 3.2.7 Prior to holding the formal application meeting, CCO and ACT members should make preliminary assessment of information received. This includes:
- a) Company personnel policy;
  - b) Contractual or service agreements for aircraft maintenance or training;
  - c) Aircraft lease agreements;
  - d) The prospective operator's organizational structure and management practices and philosophy;
  - e) The background, qualifications and experience of key management personnel;
  - f) Determine whether the applicant has developed operations, maintenance and training manuals and if so, briefly review them to determine their basic content;
  - g) Conduct an initial review of various phases of the applicant's ground school, maintenance and flight training programs in order to make a general assessment of their adequacy and conformity to training-related regulations;
  - h) Conduct an initial enquiry into the applicant's proposed maintenance and inspection program for aircraft and related equipment;
  - i) Ascertain what demonstration or proving flights the applicant will be required to conduct;
  - j) As required, use specialized service of other experts within the SCAA in such areas as law, engineering, personnel licensing and training, aircraft performance, loading, etc.



- k) Consult with the AOC Committee, Director General, Director of SSMO, Director of Flight Operations, Director of Airworthiness, as required, regarding any controversial or questionable issues or problems that arise at any time during the preliminary assessment and operational inspection process.
- 3.2.8 Subsequent to the preliminary assessment, an in-depth inspection of the applicant's organization, aircraft, facilities and personnel would be carried out during the document review and operational and maintenance inspection (demonstration) phases of the certification process (Chapters 4 and 5).
- 3.2.9 On the completion of the preliminary assessment CCO and his Team shall develop a preliminary assessment report for the Director General and if requested for the AOC Committee through Director SSMO.

### **3.3 Formal application meeting**

- 3.3.1 The CCO should schedule a formal application meeting with the appropriate officials of the applicant in order to become fully informed concerning:
- a) the nature and extent of the proposed operation,
  - b) the types of aircraft to be utilized,
  - c) the organizational structure,
  - d) management philosophy,
  - e) established lines of authority, and
  - f) the duties and responsibilities of key personnel.
- 3.3.2 The meeting should also be used to:
- a) Introduce the Chief Certification Officer, the members of the AOC Certification Team and the applicant's representatives (counterparts to the ACT);
  - b) Clarify roles and responsibilities of the SCAA, the Certification Team and the prospective applicant;
  - c) Confirm acceptance of the information that has been submitted by the applicant;
  - d) Conduct review of submitted material to ensure completeness;
  - e) Review and resolve schedule of events, conflicts, including SCAA's resource problem area and impact of not meeting the schedule of events and resolve shortcomings and open questions;
  - f) Review forthcoming certification process in detail;
  - g) Answer applicant's questions with respect to the process and any additional requirements;
  - h) Agree on certification schedule and resolve scheduling date conflicts, and
  - i) Confirm acceptability of application based upon meeting results
- 3.3.3 The Chief Certification Officer should make use of the formal application meeting to:
- a) Explain to the applicant the type of AOC that is contemplated, the significance of any limitations that may be prescribed and the operations specifications that will be issued in conjunction with the AOC;
  - b) Inform the applicant during the meeting, and in writing, any commitments made or serious difficulties noted during the course of the preliminary assessment, in order to proceed with the next step.



- 3.3.4 Following the conclusion of the meeting, the AOC Certification Team should assess the results of the meeting and report its conclusions on the outcome to the Director General through Director SSMO.
- 3.3.5 When the SCAA is satisfied, on the basis of the report of the CCO and his Team, that there is a reasonable degree of certainty to believe that the applicant is able to satisfactorily conduct the proposed operation, it should proceed with the process with the assurance that an AOC will be issued subject to approval of the submitted documents and satisfactory completion of the operational inspection.
- 3.3.6 It should be noted that the document review and compliance evaluation process would be started only after the formal application meeting has been successfully concluded and an understanding have been reached on the process to follow.
- 3.3.7 As stated above, the application package should be complete in that it contains all the required information along with the supporting documents. Failure to submit all required information and documents, as required by and in line with the applicable SUCARs and specifically SUCAR Part 6 and SUCAR Part 6 – Subpart 2 may result in the rejection of the application or in significant delay with respect to the granting and issuance of the Air Operator certificate and related Operating Specifications.

#### **3.4 Additional information on contents of the application package**

- 3.4.1 This paragraph contains information intended to aid the prospective operator to appreciate some of the information and documents that comprise part of the formal application package.
- 3.4.2 In all instances, the prospective operator is expected to familiarize himself with all requirements for the issuance of an AOC that are contained in the related regulatory and procedural SCAA documents. The AOC Certification Information Pamphlet contains brief information on the required information and documents, however, the major source of information on requirements and the process are the applicable SUCARs (SUCAR Part 6 and SUCAR Part 6 – Subpart 2).
- 3.4.3 The following information is provided as an additional tool to briefly explain the contents of some of the information and document required.
- 3.4.4 *Basic operational requirements*
  - 3.4.4.1 The applicant should establish adequate operational management organization that shall be adequately staffed with qualified and trained personnel to conduct operations safely and efficiently to the satisfaction of the SCAA.
  - 3.4.4.2 The applicant should have in possession of all the necessary operational documents and publications of SCAA such as the relevant Sudan Civil Aviation Regulations (SUCARs), Aeronautical Information Publications (AIP), National Civil Aviation Security Program, NOTAMS, aeronautical maps and charts, etc., for reference by the concerned personnel of the operator.
  - 3.4.4.3 The applicant should also establish a system to maintain all relevant documents up to date and disseminate the information to all concerned operational personnel.
  - 3.4.4.4 International requirements as well as corresponding SUCARs require that an applicant for an AOC establish and maintain a method of control and supervision of flight



operations, as one of the pre-requisites for the issuance and continued validity of the AOC. The applicant therefore needs to establish capability of organizing, conducting and supervising the intended or existing commercial aviation operation.

3.4.4.5 The number of management and supervisory personnel required depends upon the size and complexity of the operation. It is necessary for the applicant to establish the responsibilities and functions of the key personnel, their relationship with each other and their role within the operations area and the organization as a whole. The authority, tasks, responsibilities and relationships of each key position holder has to be clearly defined and submitted to the SCAA for approval.

#### 3.4.5 *Organization and administration*

3.4.5.1 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.

3.4.5.2 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.

3.4.5.3 The applicant should develop a complete description of the qualifications required for and the duties and responsibilities of the key management positions, described in 3.1.4e, above. The list should include the management positions, the names of the individuals involved and their qualifications and relevant management experience and, where appropriate, their licenses, ratings and aviation experience.

3.4.5.4 The SCAA has, in its regulations, established basic management positions and the qualifications for these positions, with some variation in the requirement dependent upon the complexity of the proposed operation.

3.4.5.5 It is possible that some of the key management positions may be combined, depending on the size and complexity of the operation. However, such an arrangement shall be presented to the SCAA for acceptance and approval.

#### 3.4.6 *Documents on leasing of aircraft*

In the case that the applicant intends to lease aircraft for the intended operation, he should submit a copy or a written Memorandum of Understanding of any planned leasing arrangements to the SCAA for its consideration and approval.

#### 3.4.7 *Schedule of events/activities*

3.4.7.1 The schedule of events is a key document that lists items, activities, programs, aircraft and facility acquisitions that will be made ready for inspection by the SCAA before certification.

3.4.7.2 The schedule of events should include dates when:

- a) crew members and maintenance personnel will commence training;
- b) aircraft and maintenance facilities will be ready for inspection;



- c) each of the required manuals will be ready for evaluation; when aircraft will be ready for inspection;
  - d) terminal facilities will be ready for inspection;
  - e) emergency evacuation demonstrations, ditching demonstrations and demonstration flights are planned (as applicable);
  - f) proposed assessments of training staff and other persons subject to SCAA approval would be conducted; and
  - g) the intended period/date to commence commercial operations.
- 3.4.7.3 The dates should be logical in sequence and provide time for SCAA review, inspection and approval of each item. The overall plan is to be kept under constant review to maintain control of the certification process.
- 3.4.7.4 The prospective operator should use the prescribed template (**Appendix-3**) for schedule of events that would facilitate completion of the process as planned.
- 3.4.8 *Identification of operations specifications sought*  
Requirements for and guidance on the operations specifications are provided in the SUCARs. The SCAA has already established standard operating specifications, to ensure that operators conducting similar operations with comparable equipment function to the same standards. The applicant will identify the desired operating specifications appropriate to the intended operation, from the SCAA's standard operating specifications provided during the pre-application meeting. The desired operating specifications may 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 operating specifications that will ultimately be issued in association with the air operator certificate.
- 3.4.9 *Initial statement of compliance*
- 3.4.9.1 The initial statement of compliance should be a complete list of all SCAA 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.
- 3.4.9.2 The method of compliance may not be completed at the time of the formal application, in which case a date should be given by which the information will be provided.
- 3.4.9.3 The purpose of the statement of compliance is to ensure that the applicant has addressed all regulatory requirements. It aids the SCAA certification team assess where the regulatory requirements have been addressed in the applicant's manuals, programs and procedures.
- 3.4.10 *Safety management system*
- 3.4.10.1 The details of the applicant's safety management system including:
- a) the safety policy; safety organization;
  - b) safety assessments; occurrence reporting;
  - c) hazard identification;



- d) risk assessment and risk management;
- e) event investigation and analysis;
- f) performance monitoring;
- g) safety promotion; and
- h) safety assurance.

3.4.10.2 Under circumstances acceptable to the SCAA (size, type and complexity of operation, area of operation, etc.), the SCAA may accept a flight safety and accident prevention program in lieu of full-fledged safety management system.

#### 3.4.11 *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.

#### 3.4.12 *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 3.5.12 below.

#### 3.4.13 *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:

- a) aircraft;
- b) station facilities and services;
- c) weather reporting;
- d) communications facilities;
- e) maintenance;
- f) aeronautical charts and publications;
- g) aerodrome analysis and obstruction data; and
- h) outsourced training and training facilities.

#### 3.4.14 *Crew and ground personnel training and required facilities*

3.4.14.1 Details of the facilities required and available for training company personnel and of the training program with dates for commencement and completion of the initial program.

3.4.14.2 Training will include: human performance; threat and error management; the transport of dangerous goods; and security. Specific attention should be paid, with respect to crewmembers training with regards to:

- a) company procedures indoctrination;
- b) emergency equipment drills; aircraft ground training;



- c) flight simulators and other flight simulation training devices; and
- d) aircraft flight training. All these aspects should cover both initial and recurrent training.

#### 3.4.15 *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.

#### 3.4.16 *Maintenance Management Exposition (MME)*

The Maintenance Management Exposition Manual should describe the administrative arrangements between the applicant and the approved maintenance organization and should define the procedures to use, the duties and responsibilities of operations and maintenance personnel and the instructions and information to permit maintenance and operational personnel involved to perform their duties with a high degree of safety.

#### 3.4.17 *Maintenance program*

The maintenance program, including maintenance schedule, will detail the maintenance requirements for individual aircraft.

#### 3.4.18 *Maintenance contract*

The applicant shall provide a formal maintenance contract. The contract will be reviewed by SCAA for the satisfactory demonstration by applicant for the proposed scope of undertaking. Such information related to the maintenance contracts will be part of the operations specification authorization.

#### 3.4.19 *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.

#### 3.4.20 *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 air operator certificate. It should be noted that the "Air Transport (Economic) License" issued by the SCAA Air Transport Directorate is dependent on the satisfaction of the Directorate with respect to the financial health of the applicant.

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## CHAPTER 4

### DOCUMENT EVALUATION PHASE

*The purpose of conducting document evaluation is to ascertain that the applicant has fully understood its responsibilities and accountability and has therefore submitted all the required information and document that are indicative of his full awareness of his responsibilities and accountability as well as of his commitment to engage in a commercial air transport activity compatible with national and international requirements as well as accepted industry best practices. Detailed review of information and documents submitted demonstrates that the applicant is prepared to establish an adequate organization has demonstrated or is capable of demonstrating financial soundness and technical capabilities consistent with the nature and extent of the operations applied for.*

#### 4.1 General

- 4.1.1 The primary objective of this phase in the process is to assess, in as much detail as possible, that the information and documents received comply with the laws, regulations, directives, instructions and procedures of the Republic Sudan, relating to the operation of commercial transport in Sudan or in other ICAO contracting States with which the Republic of Sudan has entered an air service agreement.
- 4.1.2 The technical review of information and documents received would be reviewed under four major areas that would address and cover all the requirements that would lead to the acceptance and/or approval of the information and documents submitted as the case may be.
- 4.1.3 Although the Flight Operations Directorate and the Airworthiness Directorate, singularly or in coordination, would lead the review and certification process, it is normal that other Directorates and departments of the Civil Aviation Authority would also be involved on a case-by-case basis and as is required and requested by the Chief Certification Officer.

#### 4.2 Technical and Document Review

- 4.2.1 After the necessary assessment of administrative and financial information submitted in the application, the SCAA will undertake assessments of technical information provided by the applicant and will review the documents submitted by the applicant in support of policy and equipment.
- 4.2.2 Submitted information and documents will be classified into four areas for ease of conducting a comprehensive review and also to ensure that specific documents are reviewed and analyzed by the appropriate departments. Nevertheless, it should be noted that the Chief Certification Officer who is responsible and accountable to the AOC committee through Director SSMO leads the whole process leading to the awarding of an AOC.
- 4.2.3 As indicated and for ease of reference, the four areas are:
  - a) Assessment of administrative and organization-related information and documents;



- b) Assessment of Flight Operations-related information and documents;
  - c) Assessment of Aircraft maintenance-related information and documents; and
  - d) Assessment of common area (Operations and Airworthiness)-related information and documents.
- 4.2.4 Although this classification has been established for ease of reference and division of labor, it should be noted that information and documents falling under the general subjects could also be closely associated with the Flight Operations and/or Airworthiness related items.
- 4.2.5 Prior to commencing review, the Certification Team shall ensure that the manuals submitted by the applicant are prepared in accordance with the requirements specified in SCAA documents.
- 4.2.6 As a general rule, the Chief Certification Officer shall also ensure that the applicant has presented traffic studies or other data to indicate that the proposed operation is economically viable. The data to be presented would have been reviewed and accepted by the Air Transport directorate as part of the process of issuing the “Air Transport (Economic) License.”
- 4.2.7 As a first step and to ensure the highest degree of competence and safety, the Certification Team would have reviewed the organizational and management establishment of the proposed organization and check that the applicant has qualified key management post holders serving full time in the positions discussed in Chapter 1, paragraph 1.5.4 or equivalent positions as may be approved by the SCAA.
- 4.2.8 It should be noted that all key management post holders and specifically those who occupy posts that require technical knowledge and experience should be presented to the SCAA for approval. The only exception could be the Chief Executive Officer of the organization to be established although information on his qualification and experience would still have to be submitted to the SCAA.

### 4.3 Documents and Manuals to be evaluated

- 4.3.1 The following is a non-exhaustive list of the documents and manuals that should be submitted by the applicant and evaluated by the SCAA during this phase.
- 4.3.2 *General area*(documents: that may also involve Directorates and Departments other than OPS and AIR):
- a) Detailed and completed Statement of Compliance;
  - b) Key management personnel resumes, outlining proposed management qualifications and civil aviation compliance histories;
  - c) Security procedures;
  - d) Safety Management System or Flight Safety and Accident Prevention Manual;
  - e) Quality management/quality system manual.
- 4.3.3 *Common area* (Operations and Airworthiness – refer also to SCAA Document: *Air Operator Certification Coordination Policy and Procedures Manual*):
- a) Aircraft lease;
  - b) Aircraft proving test plan;
  - c) Aircraft performance management;
  - d) Approved aircraft flight manual;



- e) Exemption and deviation requests;
- f) Special approvals;
- g) Flight safety and accident prevention program;
- h) RNAV;
- i) Minimum Equipment List (MEL) and MEL management program;
- j) Configuration Deviation List (CDL);
- k) Flight Data Recorder (FDR);
- l) Cockpit Voice Recorder (CVR)
- m) Reduced Vertical Separation Minima (RVSM);
- n) Extended Twin Engine Operations (ETOPS).

#### 4.3.4 *Flight Operations related:*

- a) Operations policy, procedures and administration manual;
- b) Aircraft operations manual;
- c) Training manuals;
- d) Cabin safety manual;
- e) Route guide;
- f) Dangerous goods procedures;
- g) Checklist presentation;
- h) Passengers briefing cards
- i) Contracts dealing with operation tasks;
- j) Emergency evacuation demonstration plan;
- k) Detailed checklists;
- l) Management personnel requirements;
- m) Ground handling requirements.

#### 4.3.5 *Aircraft maintenance related:*

- a) Maintenance control manual;
- b) Maintenance program;
- c) Reliability program;
- d) Service difficulty reporting;
- e) Maintenance arrangements;
- f) Maintenance scheduling tasks;
- g) Certificate of airworthiness and maintenance records;
- h) Aircraft technical log;
- i) Ground services manual;
- j) Fueling procedures;
- k) Mass and balance manual;
- l) Training manual;
- m) Quality assurance program;
- n) Detailed checklists.



- 4.3.6 All manuals should include 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.
- 4.3.7 Manuals will require appropriate revision and amendment when new requirements, operations or equipment are introduced.

#### **4.4 Evaluation of the documents**

##### *4.4.1 Draft operations specifications*

- 4.4.1.1 Operations specifications form part of the AOC. The SCAA standard operations specifications will have been given to the applicant at the pre-application meeting and a list of desired operations specifications identified to form the draft operations specifications.
- 4.4.1.2 This draft would have been edited by the applicant and the SCAA 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 SCAA as required by changing circumstances.

##### *4.4.2 Statement of compliance*

- 4.4.2.1 The fully completed Statement of Compliance is the final evolution of the Initial Statement of Compliance that was submitted with the formal application. The fully completed Statement of Compliance ensures each applicable regulatory requirement has been adequately addressed in the appropriate manuals, programs, and/or procedures.
- 4.4.2.2 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, programs and procedures. The final statement of compliance needs to be completed and accepted by the SCAA prior to the commencement of the flight operations inspection described in Chapter 5 of this Manual.

##### *4.4.3 Aircraft flight manuals*

Approved aircraft flight manuals should be provided specific to 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 the relevant SUCARs (Various Volumes of SUCAR 8).

##### *4.4.4 Operations manual*

- 4.4.4.1 Operations manual and subsequent revisions containing company policy, procedures and operating instructions should be submitted and reviewed. Revision would be



required as necessary to achieve compliance with the SUCARs and safety requirements.

4.4.4.2 A detailed review of the operations manual should be completed prior to initiating the ground or flight inspections. 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.

4.4.4.3 Subsequent ground and flight inspections (see Chapter 5) should determine the capability of the applicant's organization to effectively carry out the policies and instructions set forth in the operations manual.

4.4.4.4 An adequate Operations Manual should at least:

- a) Implement the requirements of the relevant SUCARs 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: crew members, maintenance, operational control, loading, traffic, administrative personnel, etc., are fully informed of what is required of them;
- c) Make provision for revision to ensure that the information contained there in is up to date;
- d) Present the necessary guidance and instructions to personnel in a suitable and convenient format; and
- e) Outline standardized procedures for all crewmembers functions.
- f) Procedures contained in the Operations Manual should be effective, represent sound safety philosophy and be capable of accomplishment and should normally cover specific factors that would be presented in the form of an inspector's check list;

4.4.4.5 SCAA inspectors should ascertain that effective procedures have been established for the revision, distribution and use of the operations manual with each manual numbered and issued according to a specific distribution list, and each holder made responsible for its prompt and accurate update.

4.4.4.6 Distribution list should contain all operations personnel and others requiring the information therein for proper performance of their duties and parts of the Operations Manual required to be carried on-board each aircraft should be designed for convenient use and all parts should permit ready and accurate reference.

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## CHAPTER 5

### DEMONSTRATION (COMPLIANCE INSPECTION) PHASE

*This is a highly important and relatively more detailed phase of the certification process that requires the applicant to demonstrate through day-to-day administration and operations, including a series of proving flights over the proposed routes, the adequacy of facilities, equipment, operating procedures and policies and the competence of administrative, flight and ground personnel. Activities in this phase encompass all aspects of the proposed operations in terms of safety. The nature of the inspection determined by factors such as the nature, scope and geographical areas of operation, the type of equipment in use, and the method of operational control and supervision employed.*

#### 5.1 General requirements

- 5.1.1 Sudan Civil Aviation Regulations require an applicant for an AOC to demonstrate proven ability to comply with regulations and safe operating practices before commencing commercial air transport operations. These demonstrations will include actual performance of activities and/or operations observed and assessed by the members of the Certification Team. The demonstration inspection also includes on-site evaluation of aircraft maintenance equipment and support facilities. During these demonstrations and inspections, the SCAA evaluates the effectiveness of the policies, methods, procedures and instructions as described in the manuals submitted and reviewed 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 taken before an AOC can be issued.
- 5.1.2 Demonstration inspections are conducted by the SCAA as the appropriate civil aviation agency of the State of the Operator. In the case that aircraft being inspected are registered in another Contracting State (wet-lease, for example) and crew licenses are also issued by the State of Registry as is required by the Convention on International Civil Aviation and Annex 1 to the Convention, findings relating to airworthiness of the aircraft and licensing or qualification of relevant personnel would have to be reported to the State of Registry for appropriate action. Facilities to be utilized in other States should also be inspected for adequacy. Acceptance of crew licenses throughout the area of operation should be confirmed.
- 5.1.3 The review and assessment of the application package submitted by the applicant, as described in Chapters 3 and 4, should already provide the Certification Team with a general appreciation of the scope of the proposed operation, and the potential ability of the applicant to conduct safe air transport operation. However, before authorizing the issuance of the AOC, the SCAA 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 through day-to-day administrative and operational 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.

- 5.1.4 Demonstration flights may include any aspect to be covered by a special authorization in the operations specifications, which would be issued as part of the AOC. Training or positioning flights observed by a SCAA inspector, may be credited towards meeting demonstration flight requirements. The Certification Team may also require the applicant to conduct emergency evacuation and ditching demonstrations during this phase of the certification process to assess the applicant's capabilities.
- 5.1.5 The compliance evaluation phase should encompass all aspects of the proposed operation. However, 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 every application for an AOC.
- 5.1.6 Consequently, the actual inspection can be tailored by the COO and the Certification Team to be relevant to the size, complexity and scope of operation of the applicant's intended air transport services. It will also be necessary to ascertain that facilities located in other States, which are to be utilized, are adequate and that crew licenses are acceptable to other Contracting 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.

## **5.2 Administration and organization**

- 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.
- 5.2.2 Through discussions with key management personnel and through observation, the SCAA 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 and maintenance control manuals and other company documents.
- 5.2.3 The Certification Team should also determine that effective and acceptable processes are established for conveying company procedures and operating instructions to the personnel involved to keep them appropriately informed at all times. The Certification Team should also ascertain that authorities, tasks, responsibilities and relationships of each position have been clearly identified and fully understood and followed by the individuals occupying these positions.
- 5.2.4 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.



- 5.2.5 The applicant's staffing should be evaluated to determine whether an adequate number of personnel are employed at the management and other levels to perform necessary functions. However, it should also be noted that the number and nature of personnel will vary with the size and complexity of the organization and through asking relevant and revealing questions at all levels, the Certification Team should be able to determine whether or not management personnel are qualified, experienced and competent to perform their assigned duties.
- 5.2.6 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 in a shortage of key management personnel. 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.
- 5.2.7 The following, although not exhaustive, would assist the Certification Team in their inspection and compliance evaluation of the applicant's administration and aspects:
- a) Organizational structure, managerial style, direction and philosophy must be evaluated to ensure that necessary and proper control is exercised over the proposed operation and the personnel involved;
  - b) Appropriate status of operational management in the organization should be suitably experienced and competent;
  - c) Clear lines of authority and specific duties and responsibilities of subordinate elements and individuals are established;
  - d) Duties and responsibilities must be clearly outlined in the Operations and Maintenance Manuals and other company documents;
  - e) Acceptable procedures must be established and followed for conveying company procedures and operating instructions;
  - f) Tasks, responsibilities and relationships of each key position must be clearly defined, understood and implemented;
  - g) Staffing must be investigated to determine whether an adequate number of personnel are employed at the executive and other levels to perform necessary functions;
  - h) Quality of an operation is directly related to the standards maintained by its management;
  - i) Competent management results in safe operations; Evaluation of the applicant's organization is a very significant phase of the certification inspection process; and
  - k) Review of documents, discussions and observations should enable the SCAA inspector to determine whether the applicant's organization is adequate to conduct the proposed operation.

### **5.3 Ground operations inspection**

- 5.3.1 Ground operations inspection are conducted to ascertain, through on-site inspections, the adequacy and suitability of the applicant's staffing, training program, ground equipment and facilities.





5.3.2 Although the inspection of maintenance facilities and procedures is part of the ground inspection, it would be carried out separately by airworthiness/maintenance-qualified inspectors (see Paragraph 5.5 – Maintenance Inspection).

5.3.3 The following presents ground operations inspection that requires to be conducted under this phase:

a) *Fixed facilities:*

- i. Adequacy of fixed facilities at each base and terminal, including those located in other States;
- ii. Availability of and adequacy of the necessary sanitary facilities and security and emergency alarms and equipment, for the operation to be conducted;
- iii. Adequacy of maintenance and overhaul workshops, hangars, administrative staff and operations personnel accommodation, passenger service areas, cargo storage and handling buildings;
- iv. All destinations and alternates should be inspected;
- v. Fixed facility inspection requirement may be waived in those cases where SCAA inspectors are already familiar with the aerodrome and associated facilities;
- vi. Consider inspecting only those aerodromes considered by the applicant to be major use aerodromes;
- vii. Requirement for prior approval by the SCAA with respect to the use of other aerodromes in the approved area; and
- viii. Adequacy of the applicant's procedures for acquiring current aerodrome data and distributing these data to the relevant staff members.

b) *Mobile equipment:*

Mobile equipment is inspected for adequacy, suitability and the safety aspects of its use. This includes:

fuelling vehicles, ground power units, oxygen and compressed air servicing equipment, towing tugs, cargo and baggage handling equipment, catering vehicles, sanitary servicing trucks, etc.

c) *Operational control organization:*

Thorough analysis whether the applicant has established a method of control and supervision of flight operations, Certification Team members should:

- i. Determine whether there is need for the services of flight operations officer;
- ii. Determine that operational control is staffed with sufficient personnel to completely handle assigned workload in accordance with SUCAR requirements;
- iii. Determine that the applicant observes the daily duty time limitations;
- iv. Determine that flight operations officers are not required to perform other functions such as that of clerks, maintenance officers, etc.;
- v. Determine that operational control facilities such as space, temperature, lighting, noise level and controlled access are adequate;



- vi. Determine adequacy of procedures and methods used to comply with relevant SUCARs concerning aircraft performance such as computation of the mass of the aircraft and the center of gravity location, critical speeds, climb gradients, obstacle clearance limitations, etc.;
  - vii. Determine that procedures for the release of flights are established;
  - viii. Determine that procedures used for flight monitoring are adequate and meet the requirements of the SUCARs.
- d) *Communication:*
- i. Determine that the communication facilities meet the requirements of the proposed operations;
  - ii. Review and evaluate procedures used to notify flights regarding hazardous conditions relating to aerodromes or navigation aids;
  - iii. Determine that NOTAM are made available to flight crew in a timely manner;
  - iv. Determine that emergency communication procedures and facilities are adequate.
- e) *Meteorology:*
- i. Determine whether adequate procedures have been established to ensure the availability of weather forecasts and reports needed by the applicant for flight planning purposes;
  - ii. Determine that the applicant correctly utilizes all useful weather information pertinent to the area with which the operational control is concerned.
- f) *Flight crew qualifications and licensing:*
- Determine that the applicant has established procedures and training programs to ensure that flight crew qualifications meet the requirements of SUCAR Part 1 and that personnel are duly licensed and hold appropriate and valid ratings.
- g) *Cabin attendant competency:*
- Determine that the applicant has established a training program to ensure that cabin attendants are competent in executing those safety duties and functions to be performed in the event of an emergency or in a situation requiring emergency evacuation.
- h) *Training programs:*
- i. Training programs are described in detail in the OPS manual or in training manual that forms part of the OPS manual but issued as a separate volume;
  - ii. Training programs required by applicable regulations carried out under the direct control of the applicant or conducted by other training facilities under contract to the applicant should be inspected;
  - iii. Thorough analysis of all phases of the ground and flight training program shall be conducted;



- iv. Analysis should permit the determination as to whether the training methods, syllabi, training aids/devices, training standards, related facilities and record keeping are adequate; and
- v. Qualification of ground and flight instructors should be established and their effectiveness evaluated.

*Training factors to be assessed include:*

- i. Completeness of the training syllabus, adequacy of training aids, facility, equipment and related training material;
- ii. Availability of training simulators and training devices appropriate to the training syllabus;
- iii. Adequacy and effectiveness of audio-visual training systems;
- iv. Proficiency, competency, knowledge and professional ability of instructors, applicant check pilots and training supervisors.

*SCAA inspectors should observe:*

- i. Adherence to the prescribed syllabus;
- ii. Competency of ground and flight instructors and check pilots;
- iii. Training personnel ability to recognize and appropriately deal with weak or unsatisfactory students.

*Additional training-related considerations:*

- i) Training program inspected to ensure that training and associated qualifications checks are carried out in a conscientious manner by properly qualified and authorized personnel.
- ii) No maneuver that might result in an accident should be during in-flight training using an aeroplane.
- iii) Initial and recurrent training should be conducted in a systematic manner and in accordance with the training syllabus.
- iv) Emergency situations affecting the flight characteristics of the aircraft should not be simulated when passengers are carried.
- v) Training programs should be approved in discreet, self contained sections such as initial, recurrent, transition, conversion and upgrading trainings, which can further be divided into sub-sections such as ground, simulator, flight trainings, etc.
- vi) Not satisfactorily completed section or sub-section should be referred back to the applicant with a detailed explanation of deficiencies and of the corrective action necessary.
- vii) When all training program requirements have been fully met, the CCO should so notify the applicant and inform him that any subsequent change to the training program has to be approved by the SCAA



i) *Emergency evacuation demonstration:*

An operator is required to assign to each crewmember the necessary functions to be performed in an emergency or in a situation requiring emergency evacuation. To ensure effective crew training in this regard, emergency evacuation training and demonstration is required to be accomplished by combined flight crew and cabin crew. During emergency evacuation demonstration, Certification Team members should inspect:

- i. Adequacy of aircraft emergency procedures;
- ii. Crew member emergency evacuation training;
- iii. Appropriateness and adequacy of emergency equipment;
- iv. Adherence to the execution of assigned duties and responsibilities;
- v. Location of each crewmember during the evacuation;
- vi. Adherence to the execution of assigned duties and responsibilities;
- vii. Location of each crewmember during the evacuation;
- viii. Effectiveness of the pilot-in-command in the exercise of command responsibilities;
- ix. The succession to command in the event of casualties;
- x. Effectiveness of crewmembers in performing assigned emergency evacuation duties;
- xi. Shortcomings, deficiencies and/or delays encountered to open each approved exit door, deploy and inflate emergency evacuation slides and before the slide receive the first evacuee;
- xii. Time required for first evacuees to leave over the wing exits; and
- xiii. Total number of persons evacuating each exit

j) *Ditching demonstration (as required)*

- i. 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 SCAA Certification Team that the applicant's procedures, equipment and training for a ditching situation are adequate, the 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.
- ii. The Certification Team 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.
- iii. 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, emergency locator transmitter, etc., 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?
- iv. In the observation of the demonstration, to assist in the assessment of the ditching demonstration, the SCAA Certification Team should record time:
- a) from start of the simulated ditching demonstration until each exit door or emergency exit to be utilized was open;
  - b) when each life raft was launched;
  - c) required to inflate each life raft; and
  - d) when life rafts were boarded by all passengers and crew members.
- k) *Record keeping*
- During the review of records to be maintained by the operator, the following factors should be taken into consideration:
- i. Regulatory (Annexes and SUCARs) requirement for an air operator to maintain certain records pertaining to the conduct of the operations for a specified period.
  - ii. The conduct of inspection of operations and flight records to ensure that operators comply with established procedures and appropriate regulations.
  - iii. Evaluation of record keeping of records 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.
  - iv. The evaluation of record keeping should cover at least the proposals for the maintenance of the following:
    - a. *flight crew member records;*
    - b. *cabin crew member records;*
    - c. *flight operations officer/flight dispatcher records;*



- d. *flight and cabin crew member duty periods, flight duty periods, rest periods records and, for flight crew members, flight time records;*
- e. *operational flight planning records; and*
- f. *financial records.*
- v. Procedures for record keeping should be examined for:
  - g. *potential accuracy and care in preparation;*
  - h. *classification and effectiveness of filing system;*
  - i. *completeness of coverage;*
  - j. *compliance with required recording periods; and*
  - k. *security of access to records and protection from disasters.*

#### *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 crewmembers are current. The flight crew records should make provision for the following information:

- i. full name;
- ii. current assignment;
- iii. flight crew member license — State issuing the license and, if appropriate, the validation or conversion, license type, number and ratings, including instrument rating, and the language proficiency endorsement;
- iv. medical assessment and date;
- v. record of last proficiency check;
- vi. record of last instrument rating check;
- vii. flight time records, including flight time in aircraft for which currently qualified;
- viii. route and aerodrome qualifications (pilot-in-command, and co-pilot if required by the operator);
- ix. training record, type of training, total time, dates and certification of satisfactory completion; and
- x. crew member certificate, including the number and expiration date, if such certificates are issued.

#### *Cabin crew member records*

These records should make provision for the following information:

- i. full name;
- ii. current assignment;
- iii. license, number and expiration date;
- iv. crew member certificate, including the number and expiration date, if such certificates are issued;
- v. initial training, including dangerous goods, general indoctrination and aircraft emergency procedures training; and



- vi. recurrent training, including dangerous goods, emergency and evacuation procedures training on specific aircraft.

*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:

- i. full name;
- ii. license and validity;
- iii. aircraft qualifications;
- iv. route or area qualification;
- v. maintenance of competency; and
- vi. duty time records (if required by State regulations).

*Flight time, duty period, flight duty period and rest period records for flight and cabin crewmembers*

The proposals for keeping these records should permit 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 makes use of discretion to extend duty or reduce rest periods.

*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:

- i. an operational flight plan will be completed and retained;
- ii. the operational flight plan provides for all of the information required by the operations manual;
- iii. flight preparation forms will be completed and recorded; and
- iv. oil and fuel records will be kept.

*Operational control records*

The proposals for operational control system records should be checked to ensure that:

- i. an operational control log will be maintained and that all watch-keeping will be adequately documented; and
- ii. 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.



### *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 DG SCAA.

## **5.4 Flight operations inspection**

### **5.4.1 General**

Following the ground operations phase of the inspection program prior to certification, it is necessary 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.

5.4.2 All demonstration flights are to be conducted using the methods and procedures proposed by the applicant in the formal application package.

### **5.4.3 Planning:**

The applicant and the SCAA Certification Team should plan well in advance for the conduct of the flight operations inspection program. 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;
- c) the support provided by the operational control system to the flight crew;
- 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.

### **5.4.4 Pre-flight inspection:**

The pre-flight procedures followed by the flight crew and the assistance rendered by the ground organization during the pre-flight 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:





- i. *airworthiness of the aircraft, including the maintenance release, and use of the minimum equipment list (MEL) and, if available, the configuration deviation list (CDL);*
  - ii. *complement of instruments and equipment required to be on board;*
  - iii. *preparation of the operational flight plan;*
  - iv. *fuel required and the fuel and oil on board the aircraft;*
  - v. *mass of the aircraft and the centre of gravity location;*
  - vi. *capability to comply with the aircraft mass and performance limitations, climb gradient and obstacle clearance requirements;*
  - vii. *correct calculation of critical speeds (V1, VR, V2, etc.) appropriate to the runway and takeoff conditions;*
  - viii. *security of the load and its correct distribution;*
  - ix. *information concerning dangerous goods;*
  - x. *completion and signing of the operational flight plan and the aircraft mass and balance form;*
  - xi. *carriage of the required publications and manuals, e.g. aircraft operating manual, aircraft flight manual, route guide, minimum equipment list, configuration deviation list (if available), etc., and their correct amendment; and*
  - xii. *carriage on board of required documents or appropriate copies of documents, e.g. certificate of registration, certificate of airworthiness, crew licenses, aircraft radio station license, 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).*
- f) boarding of all crew including supernumerary personnel 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 co-ordination.

#### 5.4.5 *In-flight inspection*

Prior to takeoff, the SCAA inspector should observe the following:

- a) procedures preparatory to starting engines;
- b) engine start-up procedures;
- c) proper communication and co-ordination with the ground crew regarding:
  - i. *engine start-up procedures;*
  - ii. *removal of chocks; and*





- w) flight crew management of the flight, including 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
- z) conduct of approach and landing procedures, after landing procedures, taxi and shut-down procedures and use of appropriate checklists.

5.4.7 All of the foregoing checks should be conducted without interfering with crew duties and vigilance in flight. In some cases, it may be necessary for the CAA inspector to complete the check during the post-flight phase.

#### 5.4.8 *Cabin crew*

5.4.8.1 During the in-flight inspection, the SCAA inspector 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.

5.4.8.2 The SCAA inspector should note that cabin crew members are provided with, and occupy, for takeoff 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.

5.4.8.3 Cabin crew should be questioned regarding their familiarity with the location and use of various types of emergency equipment, i.e. life rafts, emergency locator transmitter, medical kits, first aid kits, etc., and with their specific duties in the event of an emergency such as a ditching or an emergency evacuation.

5.4.8.4 This discussion with the cabin crewmembers provides an opportunity for the SCAA inspector 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 fulfillment of their responsibilities for requiring passengers to comply with their instructions and the applicable regulations.

#### 5.4.9 *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;



- c) 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.

#### 5.4.10 *Flight inspection deficiencies*

Unsatisfactory conditions noted by the SCAA inspector, 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 SCAA certification team and the DG SCAA prior to the inauguration of commercial service. Some examples of deficiencies requiring corrective action are:

- a) flight crew member not properly trained, e.g. assistance from applicant supervisors or a SCAA inspector 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
- h) improper aircraft servicing and ground handling procedures.

### 5.5 **Maintenance inspection**

5.5.1 The applicant/operator shall ensure that an organization including the necessary qualified staff, workshops, equipment and facilities is provided to maintain the aircraft in airworthy condition.

5.5.2 The Certification Team (Airworthiness and maintenance) should determine that the structure of the applicant's maintenance organization is set forth clearly delineating duties and responsibilities for all key personnel including the managers for engineering and maintenance and the chief maintenance inspector.

#### 5.5.3 *Maintenance organization*

5.5.3.1 The Certification Team should determine that the structure of the applicant's Continuing Airworthiness Management Organization and Maintenance Organization



maintenance organization is set forth, clearly delineating duties and responsibilities for all key personnel including the manager(s) for maintenance and quality.

5.5.3.2 The names of all incumbents should be listed. The details of the organizational structure should be included as a part of the Continuing Airworthiness Management Organization Exposition Manual and Maintenance Organization Exposition Manual and, if necessary, also promulgated separately.

#### 5.5.4 *Maintenance management exposition manual (MME) (Maintenance Manual)*

5.5.4.1 The Certification Team should ensure the availability of detailed maintenance manual for the use and guidance of maintenance organization personnel acceptable to the SCAA (Document review).

5.5.4.2 The manual should be revised as necessary to keep the information contained therein up to date.

5.5.4.3 The Certification Team should conduct thorough analysis of the maintenance manual, the correction of any discrepancies to determine that the major provisions of the maintenance manual are being followed in practice.

5.5.4.4 The use of checklist is advised to verify that the maintenance manual meets requirements and provides clear instructions and procedures covering:

- a) Details of the maintenance organization including organizational charts;
- b) Personnel duties, responsibilities and authorities relating to maintenance, inspection and servicing;
- c) Details of the maintenance system to be followed, including procedures for performing routine and non-routine maintenance inspections, alterations, repairs and servicing;
- d) Airworthiness certification and inspection, standards and procedures for aircraft, parts and components;
- e) Details of reliability – quality control – program;
- f) Procedures for preparing the maintenance release, the circumstances under which this release is issued and the personnel authorized to sign it;
- g) Methods, technique and practices for accomplishing preventive maintenance and alterations;
- h) Procedures to ensure that required maintenance or inspections are handled by appropriately trained, qualified and licensed personnel;
- i) Methods for designating critical items requiring inspection procedures to assess the cause and any potentially hazardous effects of defects or combination of defects and to analyze occurrences in order to initiate any necessary further investigation and analysis;
- j) Mandatory occurrence reporting to SCAA;
- k) Procedures to prevent the personnel who performed maintenance work on aircraft from also conducting required inspections of such work;
- l) Procedures to ensure that work interruptions do not adversely affect required inspections;
- m) Procedures to ensure that inspections are completed satisfactorily before aircraft are released for flight;



- n) Procedures for refueling and defueling aircraft;
- o) Procedures for preventing or eliminating fuel contamination;
- p) Fire precaution systems during refueling and defueling of aircraft;
- q) The responsibilities, authority and names of personnel who have been duly appointed by the chief of maintenance to conduct inspections;
- r) Methods for servicing and maintenance prescribed by, or requiring the prior approval of, the chief of maintenance;
- s) Procedures for incorporating airworthiness, maintenance or inspection information issued by the organization responsible for the type design;
- t) Procedures for ensuring that the organization responsible for type design, usually the manufacturer, received adequate reports of occurrences to that type so that it can issue appropriate service instructions and recommendations to all operators;
- u) Procedures for ensuring that the organization responsible for type design, usually the manufacturer, received adequate reports of occurrences to that type so that it can issue appropriate service instructions and recommendations to all operators;
- v) Methods, technique and practices for accomplishing preventive maintenance and alterations;
- w) Procedures to ensure that required maintenance or inspections are handled by appropriately trained, qualified and licensed personnel;
- x) Methods for designating critical items requiring inspection;
- y) Procedures to assess the cause and any potentially hazardous effects of defects or combination of defects and to analyze occurrences in order to initiate any necessary further investigation and analysis;
- z) Mandatory occurrence reporting to SCAA;
- aa) Procedures to prevent the personnel who performed maintenance work on aircraft from also conducting required inspections of such work;
- bb) Procedures to ensure that work interruptions do not adversely affect required inspections;
- cc) Procedures to ensure that inspections are completed satisfactorily before aircraft are released for flight;
- dd) Procedures for refueling and defueling aircraft;
- ee) Procedures for preventing or eliminating fuel contamination;
- ff) Fire precaution systems during refueling and defueling of aircraft;
- gg) The responsibilities, authority and names of personnel who have been duly appointed by the chief of maintenance to conduct inspections;
- hh) Methods for servicing and maintenance prescribed by, or requiring the prior approval of, the chief of maintenance;
- ii) Procedures for incorporating airworthiness, maintenance or inspection information issued by the organization responsible for the type design;
- jj) Procedures for ensuring that the organization responsible for type design, usually the manufacturer, received adequate reports of occurrences to that type so that it can issue appropriate service instructions and recommendations to all operators;
- kk) Methods, technique and practices for accomplishing preventive maintenance and alterations;



- ll) Procedures to ensure that required maintenance or inspections are handled by appropriately trained, qualified and licensed personnel;
  - mm) Methods for designating critical items requiring inspection;
  - nn) Procedures to assess the cause and any potentially hazardous effects of defects or combination of defects and to analyze occurrences in order to initiate any necessary further investigation and analysis.
- 5.5.5 The Airworthiness members of the Certification Team should check the Continuing Airworthiness Management Organization Exposition Manual and Maintenance Organization maintenance Exposition Manual to ensure that it is complete and up to date and distributed to those who require it.
- 5.5.6 The Certification Team 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.
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## CHAPTER 6 CERTIFICATION PHASE

*This is the last phase in the certification process and after reviewing the assessment and inspection report submitted by the Chief Certification Officer through the Director of SSMO, the AOC Committee will determine that the applicant is either properly equipped and capable in all respects of conducting the proposed operation safely, efficiently and reliably in accordance with the SCAA rules and regulations; or is not, or not yet (pending correction of specified deficiencies), capable of conducting the proposed operation in acceptable manner. The AOC Committee will then recommend to the Director General based on its determination of the applicant's ability to conduct safe, efficient and regular air transport service.*

### 6.1 Decision on certification

- 6.1.1 At this stage, a decision has to be reached whether to award AOC to the applicant or not based on the report of the Chief Certification Officer.
- 6.1.2 As part of his overall report on the completed certification process to the AOC Committee, the Chief Certification Inspector would present his conclusion whether the applicant has fulfilled technical, safety and regulatory requirements for the issuance of an AOC (**Appendix-4**).
- 6.1.3 The certification process would have provided specific information related to:
- a) The scope of the applicant's proposed operation;
  - b) The adequacy of the organization and resources;
  - c) The adequacy and effectiveness of company policies, directives, operating instruction and procedures prescribed by the applicant to be followed by personnel in the conduct of the operation; and
  - d) The applicant's willingness and ability to implement SCAA's operating regulation and rules applicable to the proposed operation.
- 6.1.4 The process would have also revealed any deficiencies related to the operation and provide opportunities during the assessment and inspection phases for the applicant to remedy any such deficiencies to the satisfaction of the Chief Certification Inspector.
- 6.1.5 Following the completion of the assessment and inspection process, the CCO would be in a position to recommend to the Air operator certification committee that the applicant:
- is properly equipped and capable in all respect of conducting the proposed operation safely, efficiently and reliably in accordance with the AOC's operations specifications or limitations, or*
- following the completion of the assessment and inspection process, the CCO would be in a position to recommend to the AOC Committee that the applicant:
- is not, or is not yet (pending correction of specified deficiencies), capable of conducting the proposed operation in an acceptable manner.*
- 6.1.6 Should the AOC Committee consider that the applicant is not, or not yet, capable of conducting the proposed operation in the required manner, an AOC will not be issued and the applicant should be so advised, indicating the reasons for the lack of approval.





- 6.1.7 Should the AOC Committee consider that the applicant is capable of conducting the operations as required by the SUCARs, it will instruct the SSMO to complete the process and the CCO and prepare the necessary documents for the approval and signature of the Director General.
- 6.1.8 SUCAR Part 6 requires that the operations specification and limitation applicable to an AOC be issued in conjunction with the issue of the certificate. These operating specification and limitations normally referred to as “operations specification” is utilized to supplement the general provisions of the basic certificate.
- 6.1.9 Operations Specification should list authorization and limitations not specifically covered by the SUCARs and facilitate the administrative procedures. The combined issuance of the AOC and the Operations Specification constitutes SCAA’s approval of the operation.
- 6.1.5 Operations Specification (**Appendix-5**) is divided into seven parts and normally contain:

*Part A – General provisions*

Specify the make and model of aircraft authorized for use, the maximum passenger seating capacity authorized by the state , authorized system of flight following and any other general authorizations or limitations not covered by the other parts.

*Part B – En-route authorization and limitations*

Specify the routes or route segments which may be used by the operator ,the conditions under which deviations from such routes are authorized , minimum en –route altitudes, conditions under which operations under VFR and operations within minimum navigations performance specifications (MNPS) airspace.

*Part C – Aerodrome authorization and limitations*

Specify destination and alternate aerodromes authorized for use , instrument approach procedures , aerodrome (or heliport)| operating minima authorized including takeoff minima and any special operating limitation in respect of minima.

*Part D – Maintenance*

Specify all special maintenance authorizations on inspections, overhauls and rework of components.

*Part E – Mass and balance*

Specify all authorizations of standard mass quantities and mass and balance control.

*Part F – Interchange of equipment operations*

Specify the authorization interchange of aircraft between the operator and other operators, the type of equipment to be used, the crews to be utilized, the route and aerodromes to be used, the operations manual and aircraft operating manual to be utilized (i.e. which operator's manual) and applicable aerodrome (or heliport) operating minima.

*Part G – Aircraft leasing operation*

Specify the parties to the agreement and the duration thereof; the type of lease (i.e. wet or dry); in the case where two operators are involved, the operator



responsible for operational control; the routes, area of operation and aerodromes (or heliports) involved; the type and registration numbers of the aircraft involved; the party responsible for maintenance; and reference to States' approval letter/order of the lease.

- 6.1.11 The SCAA, if it finds it to be necessary can also add on additional part – Part H, specifying any other requirements, limitations or exemptions, the SCAA may deem necessary (*see Appendix 5*).
- 6.1.12 Once the Operations Specifications are developed and provided that the AOC Committee is satisfied with the report of the CCO and SSMO, the Director General approves issuance of the AOC and the associated Operations Specifications.
- 6.1.13 Before the approval of the DG, the AOC Committee should be satisfied that there is no economic or legal bar to the proposed operation.
- 6.1.14 The AOC should, in general, specify the conditions under which the certificate is issued and items to be shown in the AOC include:
- Operator's identification (name and location);
  - Date of issue and period of validity;
  - Description of types of operations authorized;
  - The type(s) of aircraft authorized for use; and
  - Authorized areas of operation or routes
- 6.1.15 When the AOC is issued, the operator should be provided with officially authenticated copies of the approved operations specifications. The operator should also be advised of the procedure for preparing and processing future amendments of operations specifications and SCAA's responsibilities for the surveillance of the operation.
- 6.1.16 Commercial operations can only commence once the AOC and the approved Operations Specifications have been received. Thereafter, the operator is responsible for conducting all operations in full compliance with these authorization and applicable civil aviation regulations
- 6.1.17 From that moment on, a continuing surveillance of the operator to ensure standards of operation are maintained shall be implemented

## **6.2 Duration of certificate**

- 6.2.1 An Air Operator certificate issued by SCAA is valid for a period of one fiscal year unless it is surrendered, suspended or revoked.
- 6.2.2 SCAA may suspend or revoke a certificate for any cause that at time of suspension or revocation would have been grounds for denying an application for a certificate.
- 6.2.3 If SCAA suspends or revokes a certificate or it is otherwise terminated, the holder of that certificate shall return it to the SCAA.
- 6.2.4 Continued validity of AOC shall depend on compliance of all the conditions by the operator under which it was issued. Non-compliance with operating conditions or failure to maintain an adequate standard shall result in the suspension or revocation of the AOC.



### **6.3 Variation in AOC**

- 6.3.1 The holder of an AOC shall, at all times, comply with the conditions contained in his air operator certificate and the requirements stipulated in the relevant SUCARs and this Manual including and any amendments made to the said documents. The holder of an AOC must notify SCAA as soon as practicable of any changes to the information submitted in accordance with Chapter 3 at any time.
- 6.3.2 If the holder of the AOC wishes to apply for any variation of its certificates and associated operations specifications, he must file an application addressed to Director General, SCAA giving full details of the amendment proposed, 30 days prior to the date proposed by the applicant for the amendment to become effective.
- 6.3.3 The amendments presented shall be assessed by the SCAA and if found acceptable to the SCAA and are approved by the appropriate authority, the amendment shall be effective from the date of such approval.

### **6.4 Renewal of AOC**

- 6.4.1 The Air Operator Certificate and the associated Operations Specifications are issued for an initial period of 12 months as of the date of issue and shall be renewed on request by the holder. The application for the renewal along with the specified fee must be submitted at least 30 days prior to the expiry date of the certificate.
- 6.4.2 An Air Operator Certificate issued by SCAA shall be terminated if it is not renewed as per the Sudan Civil Aviation Regulation 2011.
- 6.4.3 An AOC renewal request shall be submitted to the SCAA and shall include a financial statement required to ensure the sustainability of the organization.
- 6.4.4 The AOC holder shall submit a copy of its internal safety audit report and internal surveillance report carried out by its Safety Manger and the Quality Manager along with action taken to resolve any deficiency that may have been identified. These reports shall be submitted to the SCAA, at least 30 days prior to the expiry of the AOC.
- 6.4.6 The AOC holder must submit copies of current insurance policy of the aircraft fleet.
- 6.4.7 The AOC holder shall submit a valid copy or written memorandum of the terms of existing and continuing lease arrangements, if applicable.
- 6.4.8 The AOC holder shall demonstrate continued capability to conduct the operations authorized under the AOC and its associated Operations Specifications.
- 6.4.9 The AOC holder shall submit any other documents or information required by the SCAA for the renewal of the AOC.

### **6.5 General Responsibility of an AOC holder**

- 6.5.1 A Sudanese AOC holder shall carry out operations in accordance with the scope of the Air Operator Certificate and associated Operations Specifications.
- 6.5.2 An AOC holder shall keep its employees informed of the provisions of its operations specifications that apply to the individual employee's duties and responsibilities.
- 6.5.3 An AOC holder shall make its operating certificate and operations specifications available for inspection by SCAA inspectors at its principal operation base. Photocopies of the same shall be carried on board aircraft(s) at all times.



- 6.5.4 An AOC shall not be transferable. Any change made within the Board of Directors or Chairman/CEO at any time shall be submitted to the SCAA along with detailed information of the new Board member, Chairman/CEO or Director.
- 6.5.5 An AOC holder shall regularly submit to the SCAA, information relating to the operational, technical, commercial and financial performance of the organization.
- 6.5.6 An AOC holder shall regularly submit to the SCAA the statistical data regarding its operation such as passengers carried, aircraft hours flown, cargo carried etc., as required by SCAA on monthly basis.
- 6.5.7 An AOC holder shall get its flight schedule approved by SCAA at least 30 days in advance and operate services in accordance with the flight scheduled so approved.
- 6.5.8 An AOC holder shall comply with new rules and regulations promulgated by SCAA from time-to-time for commercial air transport services.
- 6.5.9 An AOC holder shall maintain a current insurance for an amount adequate to cover its liabilities towards passengers and their baggage, crew, cargo, hull loss and third party risks in compliance with the SCAA requirements or any other applicable law.
- 6.5.10 An AOC holder shall allow duly authorized SCAA inspectors, at any time or place to make any inspections or tests to determine its compliance with SCAA rules and regulations, its operating certificate and operations specifications, or its eligibility to continue to hold its certificate.
- 6.5.11 Tariffs to be charged by the operator for transportation of passengers, freight and mail shall be those approved by the Government of the Republic of Sudan.

## **6.6 Compliance with the provisions of regulatory requirements**

- 6.6.1 This Air Operator Certificate may be suspended, revoked or terminated by the Sudan Civil Aviation Authority in case of non-compliance of the provisions made under the Sudan Civil Aviation Act 2011, Sudan Civil Aviation Safety Act 2011, Sudan Civil Aviation Regulations 2011, related Directives, Instructions and Procedures and the subsequent amendments made to all regulatory documents. This shall also include any commitment that may have been made by the AOC holder to the SCAA, including any other terms/conditions/limitations and instructions issued by the Director General of the SCAA or his authorized Directors.
- 6.6.2 Any conduct that, in the opinion of the SCAA is deemed to jeopardize the safety of air transport shall result in the suspension, withdrawal or revocation of the AOC granted.
- 6.6.3 If the AOC holder does not wish to conduct an operation for which it has been authorized in its operations specifications continuously for more than 90 days, it shall advise the SCAA of this condition.
- 6.6.4 Should the AOC holder wish to re-start the operation it had terminated, it shall not do so unless it advises SCAA of its wish to conduct the specific operation and gets an approval from the SCAA. The SCAA may approve the restart of the specific operation on the strength of evidence presented to it or may decide to conduct a full inspection to determine whether the certificate holder remains properly and adequately equipped and able to conduct the specific operation. In this case, the AOC holder shall make itself available and accessible for the conduct of inspection by SCAA personnel and permission may be accorded by SCAA if satisfied with the results.



- 6.6.5 An operator who is unable to conduct operation continuously for 180 days in a calendar year, for which the operator is authorized in its operations specifications, the operator must inform the SCAA.
- 6.6.6 Failure of not informing the SCAA of voluntary suspension of air transport services by the AOC holder may result in the suspension, revocation or termination of the AOC. The AOC holder shall normally be given one-month prior notice to present its case to the SCAA for reconsideration before such action is taken by the SCAA.
- 6.6.7 Degradation of the operator's capability in his performance respecting the safety of air operation or breach of any of the rules and regulations of SCAA and any other applicable rules shall render the operating permit liable to alteration, suspension or cancellation.
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