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ADVISORY CIRCULAR

Flight Operations No. 08

Subject: Operator's Quality System

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Initiated by: ASRD

I. GENERAL.

This Advisory Circular (AC) (FO-04) provides information and guidance. To show compliance with GARs 9.2.2.3, an operator should establish its Quality System in accordance with the instructions and information contained in the following paragraphs. The procedures and practices outlined may be applied to the flight operations, and security aspects of a prospective Air Operator Certificate (AOC) holder's operation. The International Organization for Standardization (ISO) 9000 series and the Guyana Aviation Requirements (GARs) establish the framework for the quality management system standards provided herein. ISO 9000 does not place restrictions on how a Quality System should be structured. Operators shall use appropriate civil aviation regulations and this AC for Quality System development guidance.

II. ALL POLICY AND PROCEDURES MANUALS.

GARs 9.2.2.4 prescribe construction requirements for all policy and procedures manuals submitted to the GCAA for review. Therefore, an operator's Quality Manual shall:

1. Contain instructions and information to allow the personnel concerned to perform their duties with a high degree of safety.
2. Be easy to revise.
3. Allow personnel to determine the current revision status.
4. Have the date of the last revision on each page.
5. Not be contrary to any applicable civil aviation regulation or the certificate holder's Operations Specifications (OPS.SPECS).
6. Reference appropriate GARs.

III. CONTENT OF A QUALITY MANUAL.

A. Terminology. The following key terms and phrases are defined to ensure a standard interpretation and understanding of the elements of a Quality System. An operator's Quality Manual should include similar terminology for the same reason. These terms and definitions when used in the context of this AC have the following meanings:

1. *Accountable Manager.* The person acceptable to the GCAA who has corporate authority for ensuring that all operations and maintenance activities can be financed and carried out to the standard required by the GCAA, and any additional requirements defined by the operator.

2. *Concern.* A concern is a conclusion by the operator's audit personnel, supported by objective evidence that does not demonstrate a finding, but rather a condition that may become a finding.

   Example: Through its use of quality inspections and audits, an operator found that it had not been scheduling aircraft for Airworthiness Directive (AD) accomplishment until ADs came within 10 aircraft cycles of being due. While this procedure had not resulted in any findings, a review of scheduling material showed that some aircraft had been flown to within one cycle before performing AD work and that maintenance planners often had to "frantically" reshuffle aircraft schedules to ensure timely AD accomplishment. The quality audit team believed these circumstances had the potential of becoming a finding in the future and documented their analysis as a concern in their report to the Quality Manager.

3. *Corrective Action.* An audit or inspection may uncover areas where the system is not functioning in accordance with management's objectives or in regard to the quality standard. The corrective action process will identify the discrepancy, assist in developing a timetable with the responsible unit, evaluate the proposed action, and will record the actions taken. The corrective action process and its implementation is a highly visible part of the total quality system, and management shall ensure that its actions demonstrate its commitment to the operator's improvement objectives.

4. *Documents.* Are causative, and generally consist of permanent documentation describing or defining systems, processes, procedures, and products. Examples include product specifications and quality manuals.

5. *Evidence.* A documented statement of fact, prepared by an operator that may be quantitative or qualitative and is based on observations, measurements, or tests that can be verified. For the purpose of compliance monitoring, evidence should generally be in the form of written documentation or reports that support a quality auditor's or GCAA inspector's analysis and review. These data are necessary to substantiate findings and/or concerns and to enable management or evaluators to determine the root causes of any reported findings. Objective evidence generally comes from the following four elements:

   a. Documents Or Manuals Reviewed.
   b. Equipment Examined.
   c. Activities Observed.
   d. Interview Data.

6. *Feedback Process.* Information obtained through an effective mechanism that can provide subjective data that supports objective data

7. *Finding.* A finding is a conclusion by the operator's audit personnel that demonstrates non-compliance with a specific standard.

   Example 1. An evaluation of "Powerplant AD current status records" led the operator's personnel to conclude that an inadequate method of compliance information existed for two applicable ADs. Evidence to support the conclusion included copies of the actual ADs and referenced service bulletins to substantiate the conclusion that the method of compliance could not be ascertained from the current status records. This would be an example of a finding that demonstrates non-compliance with the appropriate civil aviation regulation.

   Example 2. Quality inspections and audits can also produce conclusions that are considered findings by the operator, but findings that are not out of compliance with civil aviation regulations. For example, an operator may have a procedure that requires an AD applicability determination to be reviewed and signed off by quality assurance, engineering, and the vice president of maintenance. A periodic quality audit of the AD system discovers that, for five newly applicable ADs, there is neither a record of the review nor a sign off by the vice president of maintenance. This would be an example of a finding that demonstrates non-compliance with a company procedure rather than a civil aviation regulation.

8. *Non-Compliance.* Non-compliance is a condition, supported by objective evidence that demonstrates nonconformity with a specific requirement.

9. *Issue:* An "issue" is any audit detail collected and categorised as a safety hazard, finding, concern or observation.

10. *Operator.* As used herein means the holder, or prospective holder, of an Air Operator Certificate (AOC).

11. *Preventive Actions.* The requirements related go well beyond deciding what to do with a non-conforming product. It requires a through investigation and analysis of the current and potential problems to determine root causes, and actions to be taken.

12. *Quality Assurance.* That part of quality management involving planned and systematic actions necessary to provide adequate confidence that operational and maintenance practices *will* satisfy given requirements. Quality Assurance includes all those systematic measures needed in order to ensure that an operation is well planned, organized, developed, operated, maintained and supported in accordance with appropriate regulations and the operator's own requirements. Quality Audits are Quality Assurance functions.

13. *Quality Audit.* A systematic and independent comparison of the way an operator's activity is being conducted against the way the published procedure says it should be conducted. A Quality Audit is also used to confirm that policies, structures, facilities, resources and procedures remain relevant to the AOC holder's operation and are effective in maintaining standards.

14. *Quality Controls.* The operational techniques and activities that are used to fulfil requirements for quality. Quality Controls are the key procedures, responsibilities, and decision-making positions within an organisation, department, division, or functional area. As part of a quality evaluation, the controls should be verified and tested. In some instances, personnel performing the quality evaluations may have to first determine the features of a control.

    Example: The manner in which a certificate holder that owns, operates, or maintains aircraft, engines, or appliances determines AD applicability is considered a control of the AD compliance system. The design of this control is critical when developing an effective AD compliance system.

    Continuing with the above example, personnel responsible for conducting quality inspections and audits may have to determine first how the certificate holder verifies AD applicability before proceeding with an evaluation of AD accomplishment and records. In particular, the evaluation would focus on procedures that would minimize the risk of a simple human error or oversight.

15. *Quality Inspections.* That part of quality management involving quality control. In other words, inspections accomplished to observe events/actions/documents etc., in order to verify whether established operational procedures and requirements *are* fulfilled during the accomplishment of the event or action, and whether the required standard is achieved. Pilot Proficiency Checks are Quality Inspections, and they are also Quality Control functions.

16. *Quality System.* The organisational structure, procedures, processes and resources needed to implement a Quality Management System.

17. *Quality Management System.* The documented internal activities and management functions of an operator's Quality System that determine quality policy, objectives and responsibilities and their implementation through quality planning, quality control, quality assurance and quality improvement. The certificate holder's Quality Management System structure is based on the size, type of operation and complexity of the organization.

18. *Quality Manager.* The manager acceptable to the GCAA that is responsible for the management of the Quality System, monitoring function and corrective actions. A Quality Manager has overall responsibility for the certificate holders Quality System including the frequency, format and structure of the internal management evaluation activities as outlined under the Quality Assurance Programme, described in section V.

19. *Quality Manual.* A Quality Manual is the point of reference required to operate all aspects of an organization to consistent quality levels. It is the document that describes the operator's quality system and should be at the top of the organization's documentation system. A Quality Manual documents and states the certificate holder's policy on, and commitment to, quality. Often, the Quality Manual serves as a starting point in auditing, reviewing and evaluating an operator's quality system.

20. *Quality Policy (mission statement).* The certificate holder's Quality Policy (statement) should clearly define the purpose, structure, principal and objectives and all of the services rendered by the certificate holder. A good quality policy statement is short, to the point, and contains measurable standards. Quality policy should express the overall intentions and direction of the organization with regards to quality, and is formally expressed by senior management in the operator's Quality Manual.

21. *Quality Procedures.* Operational control of an organization is established by means of a network of associated procedures and processes that allows an organisation to function. Think of Quality Procedures as clear concise instructions that describe activities typically at the department level, and their relation to the organization as a whole. Procedures are necessary whenever their absence would adversely affect the quality of an operation. The certificate holder shall plan and develop procedures as necessary to be consistent and compliant with the requirements of a quality management system. Quality procedures will be found and described in an operator's Quality Manual. The typical quality procedures development sequence is: purpose/objective, scope, responsibilities, references, definitions, procedure and documentation. Flowcharting can greatly assist in the development of, or enhancement of this process.

22. *Quality Records.* Quality Records provide current and historic evidence of activities conducted. They provide evidence of conformance to regulations and the effective operation of the quality system. The certificate holder shall maintain quality records such as charts, inspections and testing records, records confirming traceability, evidence of verification, preventive and corrective actions, audit results, etc.

23. *Quality (Assurance) Unit.* May be established (depending on the size of the operator) with the primary purpose of unifying the Quality Assurance Programme activities within an operation. An operator should establish one Quality System and designate one Quality Manager to monitor compliance with, and the adequacy of, procedures required to ensure safe operations. The GCAA may accept an operator's nomination of two Quality Managers, one for operations and one for maintenance. Under GAR 9.2.2.3, two Quality Managers may be appointed within a single Quality Unit [under a single manager].

24. *Relevant Documentation.* Documents are causative, and generally consist of permanent documentation describing or defining systems, processes, procedures, etc. Documents include relevant parts of the Operations Manual and the Operator's Maintenance Control Manual, which may be included in a separate Quality Manual.

25. S*hall.* Means that the application of a rule or procedure or provision is mandatory ("Must" is used as an alternative to "Shall").

26. *Should.* Means that the application of a procedure or provision is recommended.

27. *May.* Means that the application, procedure, or provision is optional.

B. Quality Policy.

1. An operator should establish in its Quality Manual a formal written Quality Policy Statement, also known as a Mission Statement, from the Accountable Manager explaining what the Quality System is intended to achieve. The Quality Policy should reflect achievement and continued compliance with Civil Aviation Regulations together with any additional standards specified by the operator. It should:

    a. Be easy to understand
    b. Be ambitious, yet achievable
    c. Relate objectives to performance
    d. Emphasize prevention
    e. Indicate the method to be used and the criteria to be met
    f. Be periodically reviewed for continuing suitability.

2. The Accountable Manager is the principal position in an AOC holder's management organisation. The term 'Accountable Manager' is intended to mean the Chief Executive / President / Managing Director / Director General / General Manager etc. of the operator's organisation, who by virtue of their position have overall responsibility (including financial) for managing the organisation.

3. The Accountable Manager will have overall responsibility for the AOC holders Quality System including the frequency; format and structure of the internal management evaluation activities as prescribed in Section V, paragraph D.

C. Purpose Of An Operator's Quality System. The Quality System should enable the operator to monitor compliance with relevant Civil Aviation Regulations, the Operations Manual, the Operator's Maintenance Control Manual, and any other standards specified by that operator, or the Authority, to ensure safe operations and airworthy aircraft.

D. Quality Manager.

1. The function of the Quality Manager to monitor compliance with and the adequacy of procedures required to ensure safe operational practices and airworthy aeroplanes may be carried out by more than one person by means of different, but complementary, Quality Assurance Programmes. See GAR 9.2.2.3 (e).

2. The primary role of the Quality Manager is to verify by monitoring activity in the fields of flight operations, maintenance, crew training and ground operations that the standards required by the GCAA and any additional requirements defined by the operator are being carried out under the supervision of the relevant manager.

3. The Quality Manager is responsible for ensuring the Quality Assurance Programme is properly established, implemented and maintained.

4. The Quality Manager should:

    a. Have direct access to the Accountable Manager;
    b. Not be one of the line managers; and
    c. Have access to all parts of the operator's and, as necessary, any sub-contractor's organisation.

5. In the case of small/very small operators, the positions of the Accountable Manager and the Quality Manager may be combined. However, in this event, independent personnel should conduct quality audits. The Accountable Manager may not be one of the line managers.

IV. QUALITY SYSTEM.

A. Introduction. The operator's Quality System should ensure compliance with and adequacy of its operational and maintenance activities requirements, standards and operational procedures.

1. The operator should specify the structure of the Quality System, as it is applicable to its operation.

2. The Quality System should be structured according to the size and complexity of the operation to be monitored ('small operators' see Section VIII, Paragraphs A and B).

3. Typically, information documented in an operator's Quality Manual controls the quality system, its description and procedural references and other information needed by the certificate holder affecting the quality and compliance of its operation. Operators must take into account compliance with GAR 9.2.2.4 during construction of their Quality Manual. Where appropriate, operators shall incorporate the following safety attributes into their policies, procedures and processes:

    a. Authority (Is there a clearly identifiable, qualified and knowledgeable person with the authority to establish or modify a process?)
    b. Responsibility (Is there a clearly identifiable, qualified and knowledgeable person who is accountable for the quality of a process?)
    c. Procedures (Are methods for accomplishing processes documented?)
    d. Controls (Are there checks and restraints designed into the operator's processes that assure the desired result?)
    e. Process Measurements (Are methods identified that compel the operator to measure and assess its processes for the purpose of identifying and correcting problems or potential problems?)
    f. Interfaces (Do the operator's policies and procedures identify how it manages the interactions between processes?)

B. Scope.

1. Relevant Documentation. GAR 9.2.2.3 (d) requires AOC holders to describe their Quality System in relevant documentation. Operators develop a Quality Manual for this purpose, which may include quality policy and procedures derived from relevant parts of the Operations and Maintenance Control Manual. The Quality Manual, which describes the scope of the operator's Quality System, should address at least the following:

    a. Terminology
    b. A description of the organisation including the operator's organisational structure
    c. Relevant provisions of Civil Aviation Regulations of the user's State;
    d. The operator's quality policy (Mission Statement);
    e. The operator's standards and operating procedures in addition to those required by regulation.
    f. Identification of those persons responsible for the development, establishment and management of the Quality System including a description of their duties and responsibilities;
    g. Relevant operations and maintenance manuals, reports and records, which contain operational procedures for ensuring regulatory compliance, including a distribution list of all controlled copies;
    h. Accident Prevention and Flight Safety Programme quality procedures;
    i. The Quality Assurance Programme, reflecting:

        i. Schedule of the monitoring process;
        ii. Audit procedures;
        iii. Reporting procedures;
        iv. Follow-up and corrective action procedures;
        v. Recording system;
        vi. The required financial, material, and human resources

    j. The training syllabus; and
    k. Document control.

2. Feedback System. GAR 9.2.2.3 (a) requires a feedback system to the Accountable Manager to ensure that corrective actions are both identified and promptly addressed. The feedback system should also specify who is required to rectify discrepancies and non-compliance in each particular case, and the procedure to be followed if corrective action is not completed within specified time limits.

3. Records. Each document defined within the structure of the operator's Quality System shall be subject to document control. Procedures will ensure the documents are:

    a. Authorised
    b. Adequate
    c. Security classified
    d. In a standardised form when completed
    e. Revised and amended when required
    f. Appropriately distributed
    g. Stored
    h. Periodically reviewed
    i. Appropriately disposed

V. QUALITY ASSURANCE PROGRAMME.

A. Introduction. The Quality Assurance Programme required by GAR 9.2.2.3 (b), and described in the Quality Manual, should include all planned and systematic actions necessary to provide confidence that operations and maintenance is conducted in accordance with all applicable requirements, standards and operational procedures. Quality Inspections, Quality Audits and Management Evaluations are the principal components of a Quality Assurance Programme.

B. Quality Inspections. The primary purpose of a quality inspection is to observe a *particular event/action/document* etc., in order to verify whether established operational procedures and requirements are followed during the accomplishment of that event and whether the required standard is achieved. Check-Pilots, Check-Airman, Maintenance Inspectors and Supervisors are examples of personnel that conduct quality inspections in the performance of their duties. Quality Inspections are referred to as *"quality control processes"*. Typical subject areas for quality inspections are:

1. Actual flight operations;
2. Ground De-icing/Anti-icing;
3. Flight Support Services;
4. Load Control;
5. Maintenance;
6. Technical Standards; and
7. Training Standards.

C. Quality Audits. An audit differs from a quality inspection in that it is a systematic, and *independent* comparison of the way in which *an operation* is being conducted against the way in which the published operational procedures say it should be conducted. Quality Audits are referred to as *"quality assurance processes"*. Quality Audits should include at least the following quality procedures and processes:

- A statement explaining the scope of the audit;
- Planning and preparation;
- Gathering and recording evidence; and
- Analysis of the evidence.

Audit Techniques that contribute to an effective audit are:

- A review of published documents;
- Interviews or discussions with personnel;
- The examination of an adequate sample of records;
- The witnessing of the activities which make up the operation; and
- The preservation of documents and the recording of observations.

1. *Auditors*. An operator should decide, depending on the complexity of the operation, whether to make use of a dedicated audit team or a single auditor. In any event, the auditor or audit team should have relevant operational and/or maintenance experience. The responsibilities of the auditors should be clearly defined in the relevant documentation.

2. *Auditor's Independence*. Unlike quality inspectors, auditors *should not* have any day-to-day involvement in the *area of the operation and/or maintenance activity* that is to be audited. An operator may, in addition to using the services of full-time dedicated personnel belonging to a separate quality department, undertake the monitoring of specific areas or activities by the use of part-time auditors. Operators, whose structure and size does not justify the establishment of full-time auditors, may undertake the audit function by the use of part-time personnel from within their own organisation or from an external source under the terms of an agreement acceptable to the GCAA. In all cases the operator should develop suitable procedures to ensure that persons directly responsible for the activities to be audited, are not selected as part of the auditing team. Where external auditors are used, it is essential that any external specialist is familiar with the type of operation and/or maintenance conducted by the operator. The operator's Quality Assurance Programme should identify the persons within the company who have the experience, responsibility and authority to:

    a. Perform quality inspections, and to perform audits, as part of ongoing Quality Assurance;
    b. Identify and record any concerns or findings, and the evidence necessary to substantiate such issues (i.e., concerns, findings, observations, and hazards);
    c. Initiate or recommend solutions to concerns or findings through designated reporting channels;
    d. Verify the implementation of solutions within specific timescales;
    e. Report directly to the Quality Manager.

3. *Audit Scope*. Operators are required to monitor compliance with the operational procedures they have designed to ensure safe operations, airworthy aircraft and the serviceability of both operational and safety equipment. In doing so they should as a minimum, and where appropriate, monitor:

a. Organisation;
b. Plans and Company objectives;
c. Operational Procedures;
d. Flight Safety;
e. Operator certification (AOC/Operations specification);
f. Supervision;
g. Aircraft Performance;
h. All Weather Operations;
i. Communications and Navigational Equipment and Practices;
j. Mass, Balance and Aircraft Loading;
k. Instruments and Safety Equipment;
l. Manuals, Logs, and Records;
m. Flight and Duty Time Limitations, Rest Requirements, and Scheduling;
n. Aircraft Maintenance/Operations interface;
o. Use of the MEL;
p. Maintenance Programmes and Continued Airworthiness;
q. Airworthiness Directives management;
r. Maintenance Accomplishment;
s. Defect Deferral;
t. Flight Crew;
u. Cabin Crew;
v. Dangerous Goods;
w. Security;
x. Training.

4. *Audit Scheduling.*

a. A Quality Assurance Programme should include a defined audit schedule and a periodic review cycle area by area. The schedule should be flexible, and allow unscheduled audits when trends are identified. Follow-up audits should be scheduled when necessary to verify that corrective action was carried out and that it was effective.

b. An operator should establish a schedule of audits to be completed during a specified calendar period. All aspects of the operation should be reviewed within every period of 12 months in accordance with the programme unless the GCAA office supervising the operator's certificate accepts an extension to the audit period. An operator may increase the frequency of audits at its discretion but should not decrease the frequency without the agreement of the GCAA. It is considered unlikely that an interval between audits greater than 24 months would be acceptable for any audit topic.

c. When an operator defines the audit schedule, significant changes to the management, organisation, operation, or technologies should be considered as well as changes to the regulatory requirements.

5. *Monitoring (Auditing and Inspecting) and Corrective Action.*

   a. The aim of monitoring within the Quality System is to investigate and judge its effectiveness and thereby to ensure that defined policy, operational, and maintenance standards are continuously complied with. Monitoring and corrective action functions fall under the responsibility of the Quality Manager/s. Monitoring activity is based upon quality inspections, audits, corrective action and follow-up. The operator should establish and publish procedures in its Quality Manual to monitor regulatory compliance on a continuing basis. This monitoring activity should be aimed at eliminating the causes of unsatisfactory performance.

   b. Any non-compliance identified as a result of monitoring should be communicated by the Quality Manager to the *manager responsible for taking corrective action* or, if appropriate, to the *Accountable Manager*. Such non-compliance should be recorded, for the purpose of further investigation, in order to determine the cause and to enable the recommendation of appropriate corrective action.

   c. The Quality Assurance Programme should include procedures to ensure that corrective actions are taken in response to issues. These actions should be monitored to verify their effectiveness and to ensure they have been completed. Organisational responsibility and accountability for the implementation of corrective action resides with the department cited in the report identifying the issue. The Accountable Manager will have the ultimate responsibility for resourcing the corrective action and ensuring, through the Quality Manager, that the corrective action has re-established compliance with the standard required by the Authority, and any additional requirements defined by the operator.

6. *Corrective action*.

   a. Following the quality inspection/audit, the operator should establish:

      1. The seriousness of any findings and any need for immediate corrective action;
      2. The origin of the finding;
      3. What corrective actions are required to ensure that the non-compliance does not recur;
      4. A schedule for corrective action;
      5. The identification of individuals or departments responsible for implementing corrective action;
      6. Allocation of resources by the Accountable Manager, where appropriate.

b. The Quality Manager should:

1. Verify that the responsible manager in response to any finding of non-
compliance takes corrective action,
2. Verify that corrective action includes the elements outlined in paragraph 6. a. above;
3. Monitor the implementation and completion of corrective action;
4. Provide management with an independent assessment report of corrective action, implementation and completion;
5. Evaluate the effectiveness of corrective action through the follow-up process.

D. Management Evaluations. A management evaluation is a comprehensive, systematic, documented review by the management of the quality system of operational policies and procedures, and should consider the results of *quality inspections, audits and any other indicators*, and the overall effectiveness of the management organisation in achieving stated objectives.

1. A management evaluation should identify and correct trends, and prevent, where possible, future non-conformities. Conclusions and recommendations made as a result of an evaluation should be submitted in writing to the responsible manager for action. The responsible manager should be an individual who has the authority to resolve issues and take action.

2. The Accountable Manager should decide upon the frequency, format, and structure of internal management evaluation activities.

E. Recording. The operator should maintain accurate, complete, and readily accessible records documenting the results of the Quality Assurance Programme. Records are essential data to enable an operator to analyse and determine the root causes of non-conformity, so that areas of non-compliance can be identified and addressed.

1. The following records should be retained for a period of 5 years:

a. Audit Schedules;
b. Quality inspections and Audit reports;
c. Responses to findings;
d. Corrective action reports;
e. Follow-up and closure reports; and
f. Management Evaluation reports.

VI. QUALITY ASSURANCE RESPONSIBILITIES FOR SUB-CONTRACTORS.

A. Sub-Contractors.

1. Operators may decide to sub-contract out certain activities to external agencies for the provision of services related to areas such as:

    a. Ground De-icing/Anti-icing;
    b. Maintenance;
    c. Ground handling;
    d. Flight Support (including Performance calculations, flight planning, navigation database and dispatch);
    e. Training;
    f. Manual preparation.

2. The ultimate responsibility for the product or service provided by the sub-contractor always remains with the operator. A written agreement should exist between the operator and the sub-contractor clearly defining the safety related services and quality to be provided. The sub-contractor's safety related activities relevant to the agreement should be included in the operator's Quality Assurance Programme.

3. The operator should ensure that the sub-contractor has the necessary authorisation/approval when required and commands the resources and competence necessary to undertake the task. If the operator requires the sub-contractor to conduct an activity that exceeds the sub-contractor's authorisation/approval, the operator is responsible for ensuring that the sub-contractor's quality assurance takes account of such additional requirements.

VII. QUALITY SYSTEM TRAINING.

A. General. An operator should establish an effective, well-planned and resourced quality-related briefing for all personnel.

1. Those responsible for managing the Quality System should receive training covering the following topics:

    a. An introduction to the concept of the Quality System;
    b. Quality management;
    c. The concept of Quality Assurance;
    d. Quality manuals;
    e. Audit techniques;
    f. Reporting and recording; and
    g. The way in which the Quality System will function in the company.

2. Time should be provided to train every individual involved in quality management and for briefing the remainder of the employees. The allocation of time and resources should be governed by the size and complexity of the operation concerned.

3. Sources of Training. Quality management courses are available from the various International Standards Institutions, and an operator should consider whether to offer such courses to those likely to be involved in the management of Quality Systems. Operators with sufficient appropriately qualified staff should consider whether to carry out in-house training.

VIII. ORGANISATIONS WITH 20 OR LESS FULL TIME EMPLOYEES.

A. Introduction. The requirement to establish and document a Quality System, and to employ a Quality Manager applies to all operators. In the context of quality systems, operators should be categorised according to the number of full time staff employees.

1. Scale of Operation. Operators who employ 5 or less full time staff are considered to be 'very small' while those employing between 6 and 20 full time employees are regarded as 'small' operators as far as quality systems are concerned. Full-time in this context means employed for not less than 35 hours per week excluding vacation periods.

2. Complex quality systems could be inappropriate for small or very small operators and the clerical effort required to draw-up manuals and quality procedures for a complex system may stretch their resources. It is therefore accepted that such operators should tailor their quality systems to suit the size and complexity of their operation and allocate resources accordingly.

B. Quality Systems for Small/Very Small Operators.

1. For small and very small operators it may be appropriate to develop a Quality Assurance Programme that employs a checklist. The checklist should have a supporting schedule that requires completion of all checklist items within a specified timescale, together with a statement acknowledging completion of a periodic review by top management. An occasional independent overview of the checklist content and achievement of the Quality Assurance should be undertaken.

2. The 'small' operator may decide to use internal or external auditors or a combination of the two. In these circumstances it would be acceptable for external specialists and/or qualified organisations to perform the quality audits on behalf of the Quality Manager.

3. If external auditors are conducting the independent quality audit function, the audit schedule should be shown in the relevant documentation.

4. Whatever arrangements are made, the operator retains the ultimate responsibility for the quality system and especially the completion and follow-up of corrective actions.

Z.Mohamed
Interim Director General

ATTACHMENT A

Example of a GARs 9.2.2.3 compliant quality manual outline

I. ADMINISTRATION AND CONTROL OF THE QUALITY MANUAL

A Record of Revisions
B List of Effective Pages
C Distribution
    (1) Authorised Holders
    (2) Distribution List
D Manual Structure
E Table of Contents
F Abbreviations and Acronyms

II. GENERAL ORGANISATION

A Foreword
B (Name of Company/Operator)
(1) Brief History Of The Company
(2) Company Resources[1]
    (a) Human Resources
    (b) Fleet Composition
C Company Organisational Structure
D Key Personnel Locator

III. REGULATORY REFERENCES[2]

A Compliance Statement

IV. DEFINITIONS AND TERMINOLOGY[3]

V. QUALITY MANAGEMENT SYSTEM[4]

A Purpose and Scope[5]
B Quality Policy
C (Company/Operator) Management Responsibility[6]
D Quality Assurance Programme

(1) *Quality Assurance Organisational Structure*

(2) *Quality Unit*

(a) Quality Manager/s
(1) Operations Quality Manager
(2) Maintenance Quality Manager
(3) Commitment to Apply Uniform Quality System

[1] **Resource management:** A section of the ISO 9001: 2000 standard for quality.
[2] **Regulatory references:** Referred to as the *normative reference* section of the ISO 9001:2000 standard for quality.
[3] **Terms and definitions:** A section of the ISO 9001: 2000 standard for quality.
[4] **Quality management system:** A section of the ISO 9001: 2000 standard for quality.
[5] **Scope**: A section of ISO 9001: 2000 standard for quality
[6] **Management responsibility:** A section of the ISO 9001: 2000 standard for quality.

(b) Quality Auditors
(1) Auditor's Independence
(2) Authorised Internal Quality Auditors

(c) Quality Unit Facilities

(3) *Monitoring System*

(a) Scope Of The Monitoring System

(b) Inspections/ Checks and Supervision
(1) Inspections / Checking and Supervision Procedures and Techniques
(2) Inspectors / Check Pilots/Airman and Supervisors

(c) Quality Auditing
(1) External Auditing

(4) *Quality Audit Procedures*

(a) Quality Audit-Annual Schedule

(b) Quality Audit Planning
(1) Quality Audit Scope
(2) Quality Audit Timetable
(3) Quality Audit Team
(4) Special Audit Requirements

(c) Pre-Audit Briefing

(d) Auditing
(1) Auditing Techniques
(2) Audit Report

(e) Quality Audit-Corrective Action Request
(1) Findings Analysis and Classification
(2) Designation of Responsible Manager for Corrective Action Implementation

(f) Post-Audit Briefing

(g) Corrective Action
(1) Corrective Action Plan
(2) Time Limit Definition

(h) Corrective Action Follow-Up and Closure

(i) Audit Closure Report
(1) Unscheduled Audits
(2) Quality Audit Records

E Accident Prevention and Flight Safety Programme

(1) *Scope of the Accident Prevention and Flight Safety Programme*

(2) *Accident Prevention and Flight Safety Organisation*
(a) Flight Safety Officer (FSO)
(1) FSO's Main Accident Prevention and Flight Safety Tools

(b) Safety/Security Committee

(c) Security Manager

(d) Flight Security Officer

(e) Flight Operations Quality Assurance (FOQA) Evaluation Team (For Operators Using A FOQA Programme)

F Operator's Security Programme

(1) *Information Promulgation System*

(a) Operator's Requirements Base Structure and Hierarchy

(b) Allocation of Editorial Responsibilities

G Document Control Procedures

(1) *Authorisation*

(2) *Adequacy Check*

(3) *Security Classification*

(4) *Document Standard Form*
(a) Operations Documents Standard Form

(b) Maintenance Standard Document Set-Up

(c) Revision and Amendment Control
(1) Record of Revisions
(2) List of Effective Pages
(3) Tracking of Changes

(5) *Distribution*

(6) *Storage*
(a) Operations Documents Storage

(b) Maintenance Documents Storage

(7) *Subsequent Periodic Review*

(8) *Disposition of Obsolete Documents*

H Operator's Management Evaluation[7]
(1) *Management Evaluation Report*[8]

I Quality System Training

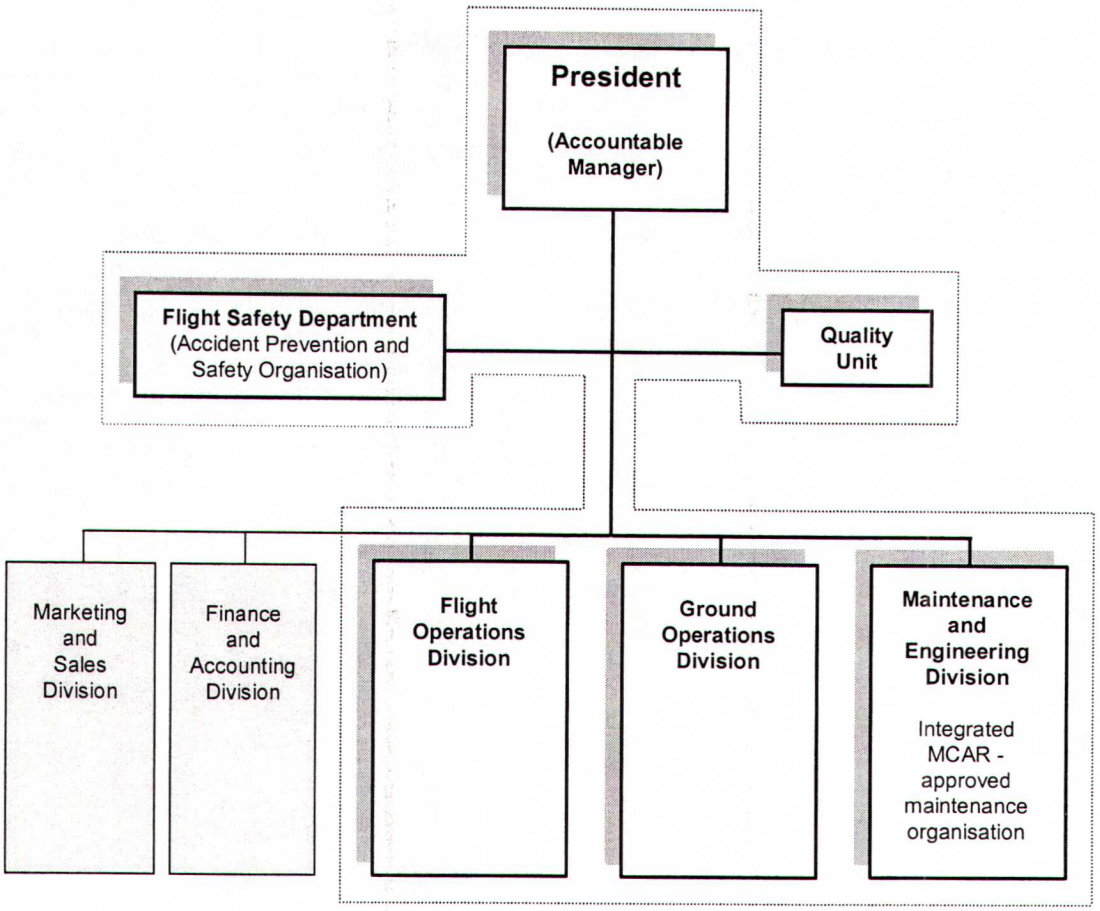
J Quality System Records
(1) *Records Maintenance*

(2) *Storage Period*

[7] **Operator's management evaluation:** Referred to as the *measurement, analysis and improvement* section of the ISO9001:2000 standard for quality.
[8] **Management evaluation report:** Referred to as the *product realisation* section of the ISO 9001:2000 standard for quality.

ATTACHMENT B

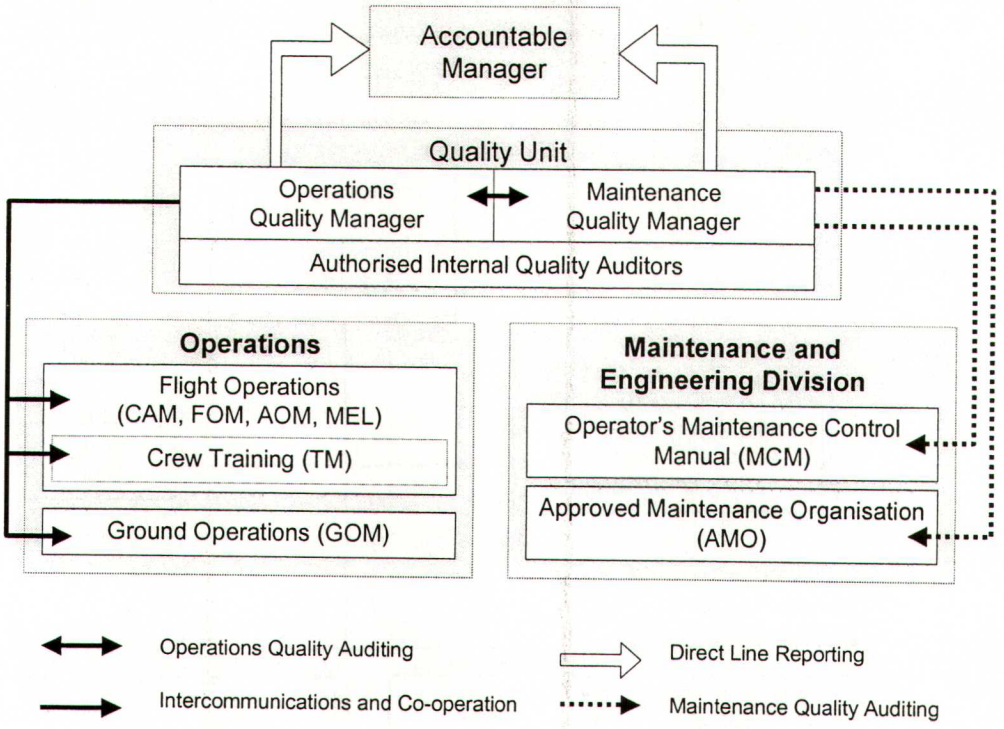
Sample organisational chart showing the position of the quality unit in an air operator's organisation. This position should reflect both the independence of the quality unit within the organisation and its straight-line reporting responsibility to top management.



Note: An organisation may choose to integrate the Flight Safety Department with the Quality Unit.

ATTACHMENT C

Example quality unit within the AOC holder's organisation when the AOC holder also holds an AMO certificate issued under part 6 of the GARs.



ATTACHMENT D

Example of an acceptable operator-developed quality system training outline

Certain operator training requirements may appear vague as stated in the GARs. For example, GAR 9.3.1.3 (a) requires each AOC holder to ensure that all operations personnel are properly instructed in their duties and responsibilities and the relationship of those duties to the operation as a whole. AOC holders are required under GARs 9.2.2.3 and 9.4.1.6 to establish a Quality System; however, *the operator will determine* under GAR 9.3.1.3 (a) which Quality System training subjects support the various duties and responsibilities of its employees. The operator then develops a Quality System Training Programme and, after its *review by the GCAA,* conducts the training. Operators may also sub-contract out for Quality System Training.

Name Of Operator _____

Quality System Training Outline

Required For All Supervisory Staff *

1. Training Subjects:

1.1 Quality Management

1.2 Introduction To The Concept Of A Quality System

1.3 How The Company's Quality System Will Function

1.4 The Concept Of Quality Assurance

1.5 Quality Manuals

1.6 Audit Techniques

1.7 Reporting And Recording

Required For All Non-Supervisory Staff *

2. Employee Briefing:

2.1 Topic: Introduction To The Concept Of A Quality System** _____

2.2 Topic: How The Company's Quality System Will Function** _____

2.3 Topic: _____

2.4 Topic: _____

* A written or oral test will be conducted following the completion of training.

** Required briefing topics; other topics optional.

ATTACHMENT E

Example document certifying training received

Operators must document the training given to their employees to substantiate compliance with relevant regulatory requirements and their own training requirements. This is (see next page) an example of the type of record an operator having a Quality System might use to document training given to its employees. The form certifies that persons requiring training by the operator have received the training specified, and the signature blocks ensure that all parties attest to the training received by the employee, the form serves as an operator reference document and is made part of the employee's record. Properly trained employees ensure consistency with regulatory requirements and operator requirements when they perform assigned tasks.

ATTACHMENT E (Continued)

Example document certifying training received

Name Of Operator _____

CERTIFICATION OF TRAINING

Type of Training: _____ **Tracking No.**_____

Employee Name: _____ **Position/Assignment:** _____

Position/Assignment Entry Date: _____ **Specialty:** _____

Instructor's Name: _____ **Name of Employee's Supervisor:**_____

Instructions:

COMPLETION OF TRAINING: Instructor signs and dates this block. An examination of key topics from each area is given to personnel as a means for determining assignment readiness and competency. This examination is administered by the Instructor and maintained in company's confidential files.

Verified by (signature & date): _____ _____

Date

Comments:

SELF-CERTIFICATION OF UNDERSTANDING: Employee certifies in this block that he or she has a full understanding of the training module.

Self-Certification (signature & date): _____ _____

Date

Comments:

CERTIFICATION TO BEGIN: Employee's supervisor signs and dates this block to show that the training is complete and that this employee is eligible to begin work.

Certification (signature & date): _____ _____

Date

Comments:

ATTACHMENT F

Example of a checklist that might be used to develop a quality audit plan

Name Of Operator: _____

QUALITY AUDIT PLANNING CHECKLIST

Area of Focus _____ **Audit Reference No.** _____
Location/s _____
_____

	Date-If Applicable	Remarks
Audit Preparation		
Purpose of audit		
Intent		
Scope		
Priority (high/medium/low)		
Methodologies selected		
Analysis of previous audit data		
Document review (manuals)		
On site document examination		
On-site interviews and observations		
Telephone interviews		
Surveys		
Questionnaires		
Job aids		
Other (describe)		
Time management		
Pre-audit preparation		
Begin audit		
Conclude audit		
Complete audit report		
Support data		
Identification of relevant civil aviation regulations (GARs)		
Identification of relevant directives (MDs)		
Identification of relevant advisory Material (ACs)		
Identification of relevant company policy and standards (relevant sections of the ops. /maint. manual)		
Contact Information		
Identification of the department head/supervisor/manager responsible for corrective actions		
Identification of assigned liaison		
Phone number/s		
FAX number		

ATTACHMENT F (Continued)

Example of a checklist that might be used to develop a quality audit plan

	Date-If Applicable	Remarks
E-mail address		
Audit Team		
Team leader		
Team members		
Observers		
Resource Requirements		
Specialised experience or qualifications needed		
Transportation fees		
Lodging fees		
Lap-top computers/printers		
Digital camera		

Notes:

ATTACHMENT G

Example quality audit notification

Name Of Operator: _____

Date:

From: **Quality Manager**
To: **Manager, (organisation/department/unit)**
Subject: **Quality Audit**

This is to notify (organisation/department/unit) of an upcoming audit and to provide the details of the audit. (fill in number of auditors) authorised internal auditors from the quality unit will conduct the audit.

Audit name and tracking code:

-

Date, hour and place of pre-audit briefing:

-

Planned sequence of audit/examinations with specific (organisation/ department/ unit) sub-units:

-
-
-

The following members of your staff are requested to be present:

-
-
-

The audit will generally include three phases: data gathering and review, on-sight audit/examination, and an analysis of the data and issuance of a corrective action request to (the responsible manager of the organisation/department/unit) should analysis indicate that corrective action is warranted.

Date, hour and place of post-audit briefing:

-

Please provide the auditors any assistance they may require while at your location. A member of the quality unit will contact you to confirm or amend the above arrangements. Thank you in advance for your cooperation. Should you require further information regarding this quality audit please contact the quality unit at (telephone number).

Sincerely,

(Name)

ATTACHMENT H

Example of an operator- developed audit/examination report

Name of operator: _____

AUDIT/EXAMINATION REPORT

Organisation/Department/Unit Audited:	Audit Date:
Area Of Focus:	Auditor:
	Responsible Manager:

☐ ISSUES SEE BELOW ☐ FULLY COMPLIANT – NIL ISSUES

Issue: _____

Where Found: _____

Against What
Standard Measured: _____

Issue: _____

Where Found: _____

Against What
Standard Measured: _____

Issue: _____

Where Found: _____

Against What
Standard Measured: _____

Page:

ATTACHMENT I

Example of an operator- developed Corrective Action Request

Name of operator: _____

QUALITY AUDIT CORRECTIVE ACTION REQUEST

Part A - Summary Of Audit/Examination Issues

Organisation/Department/Unit Audited:	Audit Date:
Area Of Focus:	Audit Team Leader:
	Manager Responsible For Correction:

		Analysis And Classification			
#	Issue/s	Safety Hazard	Finding	Concern	Observation
	Total This Page				

Page 1

(Use a copy of this form to document additional issues)

Example of an operator- developed Corrective Action Request

Name of operator: _____

QUALITY AUDIT CORRECTIVE ACTION REQUEST

Part B Corrective Action Plan
(Return to audit team leader within 7 days of receipt)

Organisation/Department/Unit Audited:	**Audit Date:**
Area Of Focus:	**Issue:**
	Standard/s Referenced:
	Corrective Action Time Limit:

Issue Classification (Check Box): ☐ Safety Hazard ☐ Finding ☐ Concern ☐ Observation

Root-Cause Of Issue:

Description Of Corrective Action Needed To Re-Establish Compliance:

Description Of AOC System Alterations That Would Prevent Recurrence:

Audit Team Leader:	**Date:**
Manager Responsible For Correction:	**Date:**

Page 2

(Use a copy of this form to address each additional issue)

Example of an operator- developed Corrective Action Request

Name of operator: _____

QUALITY AUDIT CORRECTIVE ACTION REQUEST

Part C - Follow-Up Audit

Organisation/Department/Unit Audited:	Original Audit Date:	Follow-up Audit Date:
Area Of Focus:	Auditor - Same as original audit? ☐ Yes ☐ No	
	Manager Responsible For Correction:	

EVALUATION

Was Corrective Action Completed And Implemented As Described In the *QUALITY AUDIT CORRECTIVE ACTION REQUEST - Part B Corrective Action Plan?* ☐ Yes ☐ No

Remarks: _____

_____

Was Corrective Action effective *IN RESTORING THE ISSUE TO COMPLIANCE WITH INTERNATIONAL AIR QUALITY POLICY?* ☐ Yes ☐ No

Remarks: _____

_____

Does Corrective Action Provide Acceptable Assurance That *ORIGINAL OR SIMILAR ISSUES WILL NOT RECUR?* ☐ Yes ☐ No

Remarks: _____

_____

Reviewed by Quality Manager: ☐ Operations ☐ Maintenance	Date:
Closed-Out By Quality Manager: ☐ Yes ☐ No	Date:

Page 3

ATTACHMENT J

Example of an operator- developed quality feedback transmittal

Name of operator: _____

QUALITY FEEDBACK TRANSMITTAL

DATE: _____

SOURCE *(Completed by Initiator)*: _____ **TRACKING No.**_____

☐ **INTERNAL** *(Employee Name):* _____ **DEPARTMENT:** _____

☐ **EXTERNAL** *(Please Specify):* ☐ Customer ☐ Other

ISSUE: _____

DESCRIPTION OF THE ISSUE AND IT'S POSSIBLE CONSEQUENCES* *(Completed by Initiator)*:

SUGGESTED SHORT-TERM ACTION* *(Completed by Initiator)*:
If short-term action is not appropriate, enter N/A and forward to Quality Manager

SUGGESTED CORRECTIVE ACTION* *(Completed by Initiator)*:
If corrective action is not appropriate, enter N/A and forward to Quality Manager

FORWARDED TO QUALITY MANAGER: Date_____ Method: _____

DISPOSITION OF FEEDBACK *(To be completed by Quality Manager):*

☐ Initiate corrective action: ☐ Immediately ☐ within 15 days ☐ within 30 days ☐ within 60 days
☐ No action will be initiated.
☐ Provide feedback to source.
☐ Name of responsible manager/supervisor/department head: _____

COMMENTS* *(Completed by Quality Manager)*

QUALITY MANGER' S SIGNATURE: _____ Date: _____

FORWARDED TO ACCOUNTABLE MANAGER: Date _____ Method: _____