DEVELOPMENT OF AN
ACCEPTABLE QUALITY ASSURANCE SYSTEM

SECTION 1   GENERAL

1.1   PURPOSE

This Advisory Circular (AC) provides guidance to organizations desiring to implement a quality assurance system, either stand-alone or as a part of a safety management system.

1.2   STATUS OF THIS ADVISORY CIRCULAR

This is an original issuance of this AC.

1.3   BACKGROUND

A. ICAO Standards require a quality assurance system for certain approved organizations. These Standards have been incorporated into the pertinent Philippine civil aviation regulations.

B. The applicable organizations include, but are not limited to—

1) Air operators;

2) Approved training organizations, and

3) Approved maintenance organizations; and

4) Where incorporated into a safety management system, aerodrome operators.

1.4   APPLICABILITY

The guidance in this AC is applicable aerodrome operators, air operators and approved training and maintenance organizations, whether as a stand-alone system or incorporated into a safety management system.

1.4.1   DEFINITIONS & ACRONYMS

The following acronyms are used in this advisory circular—

1) **AC** – Advisory Circular

2) **CAAP** – Civil Aviation Authority of Philippines

3) **PCAR** – Philippine Civil Aviation Regulation

- Advisory Circulars are intended to provide advice and guidance to illustrate a means, but not necessarily the only means, of complying with the regulations, or to explain certain regulatory requirements by providing informative, interpretative and explanatory material.
- Where a regulation contains the words "prescribed by the Authority," the AC may be considered to "prescribe" a viable method of compliance, but status of that "prescription" is always "guidance" (never regulation).

1.5   Related Regulations

The following regulations are directly applicable to this advisory circular—

- Part 3, ATO Certification and Administration
- Part 6, AMO Certification and Administration
- Part 9, AOC Certification and Administration

1.6   Related Publications

For further information on this topic, organizations are advised to review the following publications and regulatory requirements—

1) Civil Aviation Authority

    ♦ AC 01-004, Acceptable Safety
      Management Systems

> Copies may be obtained from the CAAP-FSIS.

Section 2   Getting Started

2.1   Types of Quality Assurance Systems

A. The concept of quality assurance systems, auditing of key functions, analysis of findings and prompt corrective actions is required by mature civil aviation oversight programs around the world.

B. The actual titles of such programs include—

- Quality system
- Internal Evaluation Program
- Continuing Analysis & Surveillance
- Process Measurement

> The consistent concepts of each of these programs is that they are on-going scheduled audits, by qualified auditors, resulting in findings which are corrected and feedback is provided to the participants.

2.2   Quality Policy & Strategy

A. The organization shall describe how the organization formulates, deploys, and reviews its policy and strategy and turns it into plans and actions applicable to all levels of the organization.

B. A formal written quality policy statement should be established that is a commitment by the head of the organization, as to what the quality assurance system is intended to achieve.

C. The quality policy should reflect the achievement and continued compliance with Philippine civil aviation regulations.

D. The accountable manager of the organization will have overall responsibility for the quality assurance system including—

1) The frequency, format and structure of the internal management review and analysis activities; and

2) May delegate the responsibility for the tasks, assigned to a quality (or safety) manager.

2.3   Quality Manager

A. The primary role of the quality manager is to verify, by monitoring activities in the key functions of the organization, that the standards as established by the organization and any additional requirements of the CAAP are being carried out properly.

B. The quality manager should be responsible for ensuring that the quality assurance system is properly implemented, maintained and continuously reviewed and improved.

C. The quality manager should have—

1) Direct access to the accountable manager; and

2) Access to all parts of the organization.

D. The quality manager should be responsible for ensuring that personnel training relating to the quality assurance system is conducted.

SECTION 3   QUALITY ASSURANCE SYSTEM

3.1   GENERAL STRUCTURE

A. The quality assurance system of the organization should ensure compliance with requirements, conformance to standards and adequacy of key functions conducted.

B. Every process that assists the organization to achieve its results should be identified and the activities and procedures documented.

C. The organization should specify the basic structure of the quality assurance system applicable to all key functions conducted.

3.2   FEEDBACK SYSTEM

A. The quality assurance system should include a feedback system to ensure that corrective actions are both identified and promptly addressed.

B. The feedback system should also specify who is required to rectify discrepancies and non-conformance in each particular case, and the procedure to be followed if corrective action is not completed within an appropriate timescale.

3.3   DOCUMENTATION

A. Relevant documentation includes the relevant part(s) of the policy and procedure manual of the organization, which may be included in a separate quality manual.

B. In addition, relevant documentation should also include the following—

1) Quality policy;

2) Terminology;

3) Specified standards;

4) A description of the organization;

5) The allocation of duties and responsibilities; and

6) Training procedures to ensure regulatory compliance.

7) The quality assurance audit program, reflecting:

(a) Schedule of the monitoring process;

(b) Audit procedures;

(c) Reporting procedures;

(d) Follow-up and corrective action procedures;

(e) Recording system; and

(f) Document control.

3.4   QUALITY ASSURANCE AUDIT PROGRAM

The quality assurance audit program should include all planned and systematic actions necessary to provide confidence that all key functions are conducted in accordance with all applicable requirements, standards and procedures.

3.5   QUALITY AUDITS

A. The primary purpose of a quality audit is to observe a particular event/action/document etc., in order to verify whether established key functions procedures and requirements are followed during the accomplishment of that event and whether the required standard is achieved.

B. Typical subject areas for a quality audit could be:—

1) Actual flight and ground training;

2) Maintenance;

3) Technical standards; and

4) Standards for key functions.

SECTION 4   THE AUDIT

4.1   GENERAL

A. An audit is a systematic, and independent comparison of the way in which a key function is being conducted against the way in which the published procedures say it should be conducted.

B. Audits should include at least the following quality procedures and processes—

1) An explanation of the scope of the audit;

2) Planning and preparation;

3) Gathering and recording evidence; and

4) Analysis of the evidence.

C. The various techniques that make up an effective audit are—

1) Interviews or discussions with personnel;

2) A review of published documents;

3) The examination of an adequate sample of records;

4) The witnessing of the activities which make up the key functions; and

5) The preservation of documents and the recording of observations.

4.2   AUDITORS

A. The organization should decide, depending on the complexity of the key functions, whether to make use of a dedicated audit team or a single auditor. In any event, the auditor or audit team should have relevant qualifications and/or operational experience.

B. The responsibilities of the auditors should be clearly defined in the relevant documentation.

4.3 AUDITOR'S INDEPENDENCE

A. Auditors should not have any day-to-day involvement in the area of the operation or maintenance activity that is to be audited.

> An organization 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..

B. An organization whose structure and size does not justify the establishment of full-time auditors, may undertake the audit function—

   1) By the use of part-time personnel from within its own organization; or

   2) From an external source under the terms of an agreement acceptable to the CAAP.

C. In all cases the organization 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 key functions the organization.

D. The quality assurance audit program of the organization should identify the persons within the company who have the experience, responsibility and authority to—

   1) Perform quality inspections and audits as part of ongoing quality assurance;

   2) Identify and record any concerns or findings, and the evidence necessary to substantiate such concerns or findings;

   3) Initiate or recommend solutions to concerns or findings through designated reporting channels;

   4) Verify the implementation of solutions within specific time scales; and

   5) Report directly to the quality manager.

4.4 AUDIT SCHEDULING

A. A quality assurance audit program should include a defined audit schedule and a periodic review cycle.

> - 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 organization should establish a schedule of audits to be completed during a specific calendar period.

   - All aspects of the key functions should be reviewed within a period of twelve months in accordance with the program.

C. When an organization defines the audit schedule, significant changes to the management, organization, training, or technologies should be considered, as well as changes to the standards and requirements.

SECTION 5 MONITORING & CORRECTIVE ACTION

A. The aim of monitoring within the quality system is primarily to investigate and judge its effectiveness and thereby to ensure that defined policy and standards for the key functions are continuously complied with.

   - Monitoring activity is based upon quality inspections, audits, corrective action and follow-up

   - The organization should establish and publish a quality procedure to monitor compliance with requirements and conformance to standards on a continuing basis.

- This monitoring activity should be aimed at eliminating the causes of unsatisfactory performance.

B. Any non-conformance identified should be communicated to the manager responsible for taking corrective action or, if appropriate, the head of the organization.

- Such non-conformance should be recorded, for the purpose of further investigation, in order to determine the cause and to enable the recommendation of appropriate corrective and preventive action.

C. The quality assurance audit program should include procedures to ensure that corrective and preventive actions are developed in response to findings.

> The head of the organization will have the ultimate responsibility for ensuring, through the quality manager(s), that—
> - Corrective action has re-established conformance with the standard required by the organization and
> - Any additional requirements established by the CAAP or the organization.

- These quality procedures should monitor such actions to verify their effectiveness and that they have been completed.

- Organizational responsibility and accountability for the implementation of corrective action resides with the department where the finding was identified.

D. The organization should identify internal and external customers, and monitor their satisfaction by measuring and analysis of feedback.

5.1   MANAGEMENT REVIEW & ANALYSIS

A. Management should accomplish a comprehensive, systematic documented review and analysis of the quality assurance system, policies, and procedures, and should consider—

1) The results of quality inspections, audits and any other indicators;

2) The overall effectiveness of the management organization in achieving stated objectives; and

3) Correcting trends, and preventing, where applicable, future non-conformities.

B. Conclusions and recommendations made as a result of the review and analysis should be submitted in writing to the responsible manager for action.

> The head of the organization should decide upon the frequency, format, and structure of internal review and critical analysis meetings.

- The responsible manager should be an individual who has the authority to resolve issues and take action.

SECTION 6   RECORDING

A. Accurate, complete and readily accessible records documenting the result of the quality assurance audit program should be maintained by the organization.

- Records are essential data to enable an organization to analyze and determine the root causes of non-conformity, so that areas of non-compliance can be identified and subsequently addressed.

B. The following records should be retained at least for the period that may be required by national requirement. In the absence of such requirements, a period of three years is recommended—

1) Audit schedules;

2) Quality inspection and audit reports;

3) Responses to findings;

4) Corrective and preventive action reports;

5) Follow-up and closure reports; and

6) Management review and analysis reports.

SECTION 7 QUALITY ASSURANCE AUDITING OF SERVICE PROVIDERS

7.1 EXTERNAL ORGANIZATIONS & SERVICE PROVIDERS

A. An organization may decide to sub-contract certain activities to external organizations subject to the approval of the CAAP.

B. The ultimate responsibility for the key functions provided by the service providers always remains with the organization.

- A written agreement should exist between the organization and the service provider clearly defining the safety-related services and quality to be provided.

C. The service provider's safety-related activities relevant to the agreement should be included in the organization's quality assurance audit program.

D. The organization should ensure that the service provider has the necessary authorization/ approval when required, and commands the resources and competence to undertake the task. If the organization requires the service provider to conduct activity that exceeds the service provider's authorization/approval, the organization is responsible for ensuring that the service provider's quality assurance takes account of such additional requirements.

7.2 QUALITY ASSURANCE SYSTEM TRAINING

A. Correct and thorough training is essential to optimize quality in every organization. In order to achieve significant outcomes of such training the organization should ensure that all staff understands the objectives as laid down in the quality manual.

B. Those responsible for managing the quality assurance system should receive training covering—

1) An introduction to the concept of quality assurance system;

2) Quality management;

3) Concept of quality assurance;

4) Quality manuals;

5) Audit techniques; and

6) Reporting and recording.

7.3 FUNCTIONING OF AN ORGANIZATION'S QUALITY ASSURANCE SYSTEM

A. Time should be provided to train every individual involved in quality assurance and for briefing the remainder of the employees.

B. The allocation of time and resources should be governed by the size and complexity of the operation concerned.

7.4 SOURCES OF PERSONNEL TRAINING

A. Quality assurance courses are available from the various national or international standards institutions, and an organization should consider whether to offer such courses to those likely to be involved in the management of the Quality Assurance System.

B. Organizations with sufficient appropriately qualified staff should consider whether to carry out in-house training.

End of Advisory Circular

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