57th CONFERENCE OF
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ASIA AND PACIFIC REGIONS

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AGENDA ITEM 3:   AVIATION SAFETY

DEVELOPING THE COMPLIANCE QUESTIONNAIRES (CQ)
FOR AIR OPERATOR CERTIFICATE AUDIT

Presented by Malaysia

SUMMARY

Civil Aviation Authority of Malaysia (CAAM) carry-out regular Air Operator Certificate (AOC) safety and renewal audits on operators under its authority. The outcome of the audit is used to improve the auditee documents or manuals, processes, procedures and implementation in ensuring compliance to standards and recommended practices set by CAAM.

In pursuing the digital transformation plan, CAAM is currently developing the online digital audit checklist named the AOC Compliance Questionnaires (CQ). This Working Paper will detail the background, structures, implementation and challenges.

DEVELOPING THE COMPLIANCE QUESTIONNAIRES (CQ) FOR AIR OPERATOR CERTIFICATE AUDIT

1.   INTRODUCTION

1.1   The development of CQ was inspired by one of the ICAO audit tools which is the Protocol Questionnaires (PQ) usually used by the Contracting States to conduct their own self-assessment. Using the same concept, the CQ is an audit checklist developed using web-based spreadsheet program that enables the auditee and auditor to access the CQ online. This program will enable real-time online collaboration between the two parties and provide opportunities for the operator to conduct their own assessment before an onsite audit. The CQ will also enable data compilation for records keeping and audit data analysis for the risk-based surveillance.

1.2   The series of questionnaires in the CQ are derived from the current Malaysian Civil Aviation Regulations (MCAR) and Civil Aviation Directives (CAD). Each Standards requirements in these documents are constructed in questionnaire style. Each CQ is given a unique number and specific reference to Standards in the CAD. Each CQ is categorised in several protocols covering the AOC certification phases and audit scope.

2.   DISCUSSION

2.1   Example of a CQ derived from the CAD;

> *The operator shall establish, implement and maintain a management system that includes organisation structure acceptable to the CAAM with defined lines of responsibility and accountability throughout the operator, including a direct safety accountability of the Accountable Manager (AM).*

The requirement above is constructed as CQ02.001:

> *Has the operator established, implemented and maintained a management system that includes the organisation structure acceptable to the CAAM with defined lines of responsibility and accountability throughout the operator, including a direct safety accountability of the Accountable Manager (AM)?*

2.2   The CQs are divided into nine (09) protocols in accordance with certification phases and scope of the AOC audit. Each protocol will address different compliance requirements for the AOC such as Initial (INIT), Organisation (ORG), Safety Management System (SMS), Operational Control and Dispatch (OCD), Flight Operations (FLT), Maintenance (MNT), Cabin Operations (CBN), Ground Handling Operation (GHO) and Security (SEC).

> a) Protocol 0 (INIT) is used for the initial application and certification of an AOC, which include the whole procedures, processes, documentation and audit. Protocol 0 is further expanded to the following:
> (i)   Protocol 0.1 (PRE) – Pre-Application;
> (ii)   Protocol 0.2 (FOR) – Formal Application;
> (iii)   Protocol 0.3 (DOC) – Document Evaluation;
> (iv)   Protocol 0.4 (DEMO) – Demonstration and inspection; and
> (v)   Protocol 0.5 (CER) – Certification.

b) Protocol 1 (ORG) addresses the organisation and management system of an operator for the purpose of ensuring the safety and security of aircraft operations.

c) Protocol 2 (SMS) addresses the safety management function related to, or in direct support of, the safe operation of aircraft.

d) Protocol 3 (OCD) addresses the requirements for operational control of flights based on the operational system in use, the manner in which authority is delegated by the operator, and the responsibilities, functions, duties or tasks assigned to the personnel involved.

e) Protocol 4 (FLT) addresses safety and security requirements for flight operations to conduct passenger flights with or without cabin crew and cargo flights with or without the carriage of passengers.

f) Protocol 5 (MNT) addresses aircraft engineering and maintenance functions relevant to the airworthiness of the aircraft, engines and components.

g) Protocol 6 (CBN) addresses the safety and security requirements associated with the aircraft passenger cabin.

h) Protocol 7 (GHO) addresses functions within the scope of ground handling operations and is applicable to an operator that conducts passenger, cargo and/or combi (combined cargo and passenger) aircraft operations.

i) Protocol 8 (SEC) addresses the management of operational security in accordance with requirements of the National Civil Aviation Security Program (NCASP).

2.3   Since the implementation of the AOC CQ in 2021, 29 successful AOC audits have been conducted using this digital audit checklist. In general, this AOC CQ has been able to capture more findings and observations as compared to the previous way of conducting audit. More audit's data have been compiled digitally and basic analysis have been able to be done such as total compliancy percentage, findings/observation analysis for each protocols and data collection such as operational complexity, population data which can be used for the risk-based surveillance.

2.4   The AOC CQ still at its infancy stage and being develop from time to time based on the operator's and inspector's feedback. To date, the responses have been positive with suggestion for improvement and application for other audit activities such as the approved training organization (ATO) audit etc.

2.5   **CONCLUSION**

2.5.1   CAAM is embracing the digital transformation and the AOC CQ will be one of the many initiatives currently being develop. One of the future plans is to have its own Audit Management System which will be a good platform for the AOC CQ framework to be integrated with.

2.5.2   The AOC CQ will be able to enhance the capabilities of CAAM by effectively implementing the safety oversight on the aviation industry by using a comprehensive digital audit checklist and ensuring the objective of the audit can be achieved successfully.

3.   ACTION BY THE CONFERENCE

3.1   The Conference is invited to:

a)   Note the information contained in this paper;

b)   Encourage member States to provide technical input to strengthen this checklist;

c)   Encourage member States to consider using Compliance Questionnaire Checklist for standardization; and

d)   Provide a strong basis and datum for States to consider for adoption; and discuss any relevant matters as appropriate.

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