SAFETY MANAGEMENT SYSTEM (SMS)

1. INTRODUCTION

1.1 This AIC is issued in the exercise of the powers conferred under Part IX Regulation 86 of the Civil Aviation Regulations 2006 (as amended).

1.2 Pursuant to ICAO Annex 11 Para 2.27.3, States shall require, as part of their safety programme, that an air traffic service provider implements a safety management system acceptable to the State.

1.3 Pursuant to ICAO Annex 14 Volume I, Para 1.5.3, States shall require, as part of their safety programme, that a certified aerodrome operator implements a safety management system acceptable to the State.

1.4 Department of Civil Aviation is in the process of revising Brunei Aviation Requirements (BAR) on Safety Management Systems (SMS) and expected to be completed by January 2008.

1.5 This AIC sets forth the means complying with such requirements, in a manner that would be acceptable to DCA.

2. SAFETY POLICY AND OBJECTIVES

2.1 Management Commitment and Responsibility

2.1.1 The SMS shall ensure that, senior management develop a safety policy signed by the accountable executive. The safety policy must include a commitment to:

i. Achieve the highest safety standards.

ii. Observe all applicable legal requirements and international standards, and best effective practices.

iii. Provide appropriate human and financial resources.

iv. Enforce safety as some primary responsibility of all managers.

v. Ensure that the policy is understood, implemented and maintained at all levels.
2.1.2 The SMS shall ensure that, senior management communicate, with visible endorsement, the safety policy to all staff.

2.1.3 The SMS shall ensure that, senior management establish safety objectives and performance standards for the SMS. The safety objectives and performance standards should be linked to the safety performance indicators, safety performance targets and safety requirements of the SMS.

2.1.4 The SMS shall ensure that, the senior management identify the accountable executive who is fully responsible for the organisation’s SMS.

The accountable executive must have:

i. Full authority for human resources issues.
ii. Authority for major financial issues.
iii. Direct responsibilities for the conduct of the organisation’s affairs.
iv. Final authority over operations under certificate.
v. Final responsibility for all safety issues.

2.2 Safety Accountabilities of Managers

2.2.1 The SMS shall ensure that Managers:

i. Responsible for the SMS in their organisation.
ii. Identify safety responsibilities of key personnel.

2.3 Appointment of Key Safety Personnel

2.3.1 The SMS shall ensure that, senior management establish a Safety Office with corporate functions such as:

i. Advising senior management on safety matters.
ii. Assisting Managers on safety issues.
iii. Oversee hazard identification systems.

2.3.2 The SMS shall ensure that, senior management appoint a Safety Manager who is a responsible individual and the focal point for the development and maintenance of an effective SMS.

The Safety Manager’s functions are:

i. Manages the SMS Implementation Plan on behalf of the accountable executive.
ii. Facilitates hazard identification and risk analysis and management.
iii. Monitor corrective actions to ensure their accomplishment.
iv. Provides periodic reports on safety performance.
v. Maintains safety documentation.
vi. Plans and organizes staff safety training.
vii. Provides independent advice on safety measures.
2.3.3 The SMS shall ensure that, senior management appoint a Safety Review Board (SRB) or Safety Committee (SC) whose responsibilities will include monitoring:

i. Safety performance against safety policy and objectives;
ii. Effectiveness of the SMS Implementation Plan;
iii. Effectiveness of safety supervision of sub-contracted operations;

SRB or SC ensures that appropriate resources are allocated to achieve the established safety performance, and give strategic direction to the Safety Action Group (SAG).

2.3.4 The SMS shall ensure that, senior management appoint a Safety Action Group(s) (SAG) who reports to SRB and takes strategic direction from SRG.

The SAG is responsible:

i. Overseeing operational safety within the functional area.
ii. Resolving identified risks.
iii. Assessing the impact on safety of operational changes.
iv. Implements corrective action plans.
v. Ensures that corrective action is taken in a timely manner.
vi. Review the effectiveness of previous safety recommendations.
vii. Effective safety promotion.

2.4 SMS Implementation Plan

2.4.1 The SMS shall ensure that, the senior management appoint a planning group whose responsibilities will include:

i. Development of a realistic strategy for the implementation of an SMS that will meet the organization’s safety needs.
ii. Define an approach the organization will adopt for managing safety.

SMS implementation plan will includes:

i. Safety policy.
ii. Safety planning, objectives and goals.
iii. System description.
iv. Gap analysis.
v. SMS components.
vi. Safety roles and responsibilities.
vii. Safety reporting policy.
viii. Means of employee involvement.
ix. Safety communication.

2.4.2 The SMS shall ensure that, the senior management endorse the SMS implementation plan and review the safety performance.
2.5 **Coordination of the Emergency Response Planning (ERP)**

2.5.1 The SMS shall ensure that the purpose of the ERP is met as follows:

i. Orderly and efficient transition from normal to emergency operations.
ii. Designation of emergency authority.
iii. Assignment of emergency responsibilities.
iv. Authorisation by key personnel for actions contained in the plan.
v. Coordination of efforts to cope with the emergency.
vi. Safe continuation of operations, or return to normal operation as soon as possible.

2.6 **Documentation**

2.6.1 The SMS shall ensure that, the senior management develop a Safety Management Manual (SMM) that documents all aspects of the SMS, including safety policy, objectives, procedures and individual safety accountabilities.

SMM shall be the key instrument for communicating the organisation’s approach on safety to the whole organisation;

The Safety Management Manual, at minimum, shall contain:

i. Scope of the safety management system.
ii. The safety policy and objectives.
iii. Safety accountabilities.
iv. Key safety personnel.
v. Documentation control procedures.
vi. Hazard identification and risk management schemes.
vii. Safety performance monitoring.
viii. Emergency response planning.
ix. Management change.
x. Safety auditing.
xi. Safety promotion.

3. **SAFETY HAZARD AND RISK MANAGEMENT**

3.1 **Hazard Identification Processes**

3.1.1 The SMS shall ensure that, senior management develop a formal means of collecting, recording, acting on and generating feedback about hazards and risks in operation through reactive, proactive and predictive methods.

3.1.2 The SMS shall ensure that, senior management develop hazard identification processes which may include the following reporting systems:

i. Mandatory reporting systems.
ii. Voluntary reporting systems.
iii. Confidential reporting systems.
3.1.3 The SMS shall ensure that, senior management develop hazard identification processes which may include the following steps for action:

i. Reporting hazards, events or safety concerns,
ii. Collecting and storing of data,
iii. Analyzing reports.
iv. Distributing the information distilled from the analysis.

3.2 Risk Assessment and Mitigation Processes

3.2.1 The SMS shall ensure that, senior management develop risk assessment and mitigation processes that include:

i. The identification, analysis and elimination and/or mitigation to an acceptable level of risks that threaten the capabilities of an organization.
ii. The risk assessment matrix.

4. SAFETY ASSURANCE

4.1 Safety Performance Monitoring and Measurement

4.1.1 The SMS shall ensure that, senior management develop the process by which the safety performance of the organization is verified in comparison to the approved safety policies and objectives that include:

i. Safety Reporting.
ii. Safety Audits.
iii. Safety Studies.
iv. Safety Reviews.
v. Safety Surveys.
vi. Internal Safety Investigation.

4.1.2 The SMS shall ensure that, senior management develop Safety Audits to ensure that the structure of SMS is sound in terms of:

i. Levels of staff.
ii. Compliance with approved procedures and instructions.
iii. Level of competency and training to operate equipment, facilities and maintain their levels of performance.

4.1.3 The SMS shall ensure that, senior management develop Safety Surveys to examine particular elements or processes of a specific operation such as:

i. Problem areas in daily operation.
ii. Perceptions and opinions of operational personnel.
iii. Area of dissent or confusion.

4.1.4 The SMS shall ensure that, senior management develop Internal Safety Investigations to include occurrences that are not required to be investigated or reported to state such as, but not limited, to the following:

i. Failure of Equipment.
ii. Ramp vehicle operations.
iii. Frequency congestion.
4.2 The Management of Change

4.2.1 The SMS shall ensure that, senior management in the management of change due to expansion, introduction of new equipment or procedures, ensure that the following to be addressed:

i. Inevitable introduction of new hazards.
ii. Impact on the appropriateness of risk mitigation.
iii. Impact on the effectiveness of risk mitigation.

4.2.2 The SMS shall ensure that, senior management in the management of change, ensure that the following external and internal changes to be addressed:

i. Changes to regulatory requirements.
ii. Security.
iii. Re-ordering of air traffic control equipment.
iv. Management changes.
v. New equipment.
vi. New procedures.

4.2.3 The SMS shall ensure that, senior management in the formal management of change the following process are addressed:

i. Identify changes within the organization which may effect established processes and services.
ii. Prior to implementing changes describe the arrangements to ensure safety performance.

4.3 Continuous Improvement of the Safety Management System

4.3.1 The SMS shall ensure that, senior management identify continuing improvement and this is achieved through:

i. Determining the immediate causes of areas which are under performing and their implications in the operation of the SMS.
ii. Rectifying situations involving situations under standard identified through other safety assurance activities.
iii. Proactive evaluation of facilities, equipment, documentation and procedures through audits and surveys.
iv. Proactive evaluation of individuals’ performance, to verify the fulfilment of their safety responsibilities.
iv. Reactive evaluations in order to verify the effectiveness of the system for control and mitigation of risks.

5. SAFETY PROMOTION

5.1 Training and Education

5.1.1 The SMS shall ensure that, the Safety Manager in conjunction with the Human Resources Department or Personnel Department, review the job descriptions of all staff, and identify those positions that have safety responsibilities.
5.1.2 The SMS shall ensure that, the Safety Manager shall ensure that the following management and staff are trained as follows:

i. Accountable Manager in the awareness of SMS roles and responsibilities, safety policy, SMS standards and safety assurance.

ii. Senior Managers in organisational safety standards and national regulations, management commitment and responsibilities and safety assurance.

iii. Managers and Supervisors in the safety process, management commitment and responsibilities, hazard identification and risk management and the management of change.

iv. Operational Personnel in the SMS fundamentals, organizational safety policy, organisational SMS overview and management commitment and responsibilities.

5.2 Safety Communication

5.2.1 The SMS shall ensure that, senior management develop safety communication aims to:

i. Ensure that all staffs are fully aware of the SMS.

ii. Convey safety critical information.

iii. Explain why particular actions are taken.

iv. Explain why safety procedures are introduced or changed.

v. Convey ‘nice-to-know’ information.

6. IMPLEMENTATION

6.1 This AIC will come into force on 1 June 2009 for Air Operator Certificate (AOC) holders and Approved Maintenance Organisations (AMO).

6.2 As indicated above Air Traffic Service Provider and Certified Aerodrome Operator shall comply with these regulations in the provision of services.