



AIRWORTHINESS NOTICE

NOTICE 2101

Issue 1

1 November 2019

SAFETY MANAGEMENT SYSTEM

IN exercise of the powers conferred by section 24O of the Civil Aviation Act 1969 [Act 3], the Chief Executive Officer makes this Airworthiness Notice ("Notice") – *Safety Management System*.

This Notice provides the requirement pertaining to the *Safety Management System* for specified organisation.

This Notice is published by the Chief Executive Officer under section 24O of the Civil Aviation Act 1969 [Act 3] and come into operation on 15 November 2019.

Non-compliance with this Notice

Any person who contravenes any provision in this Notice commits an offence and shall on conviction be liable to the punishment under section 24O of the Civil Aviation Act 1969 [Act 3].

A handwritten signature in blue ink, consisting of a stylized 'A' followed by a vertical line and a horizontal stroke.

(Ahmad Nizar Zolfakar)
Chief Executive Officer
Civil Aviation Authority of Malaysia
1 November 2019

CIVIL AVIATION ACT 1969 AIRWORTHINESS NOTICE – SAFETY MANAGEMENT SYSTEM

1.0 CITATION

This Notice may be cited as the Airworthiness Notice – Safety Management System [**Notice 2101**].

2.0 APPLICATION

2.1 This Notice shall be applicable to—

- (a) an approved training organisation which holds a certificate of approval under regulation 31 of the Civil Aviation Regulations 2016, that is exposed to safety risks related to aircraft operations during the provision of its training services;
- (b) an approved maintenance organisation providing services to the holder of air operator certificate issued by the Authority;
- (c) an approved maintenance organisation providing services for the operator of an aeroplane registered in Malaysia with a maximum certificated take-off mass exceeding 5,700 kilogrammes or equipped with one or more turbojet engines used in any international general aviation operations;
- (d) an approved organisation responsible for the type design or manufacture of aircraft; or
- (e) an applicant for the approved organisation under paragraphs 2.1(a), (b), (c) and (d) of this Notice.

3.0 INTERPRETATION

In this Notice, unless the context otherwise requires—

“accident” and “incident” have the meaning assigned to them in Annex 19 of the Chicago Convention;

“accountable executive” who is also the accountable manager of the organisation means a single, identifiable person having ultimate responsibility for the effective and efficient performance of the organisation’s SMS including responsibility to provide the resources essential to its implementation and maintenance;

“Authority” means the Civil Aviation Authority of Malaysia;

“hazard” means a condition or an object with the potential to cause or contribute to an aircraft incident or accident;

“safety” means the state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level;

“safety management system” or “SMS” means a systematic approach to manage safety, including the necessary organizational structures, accountabilities, policies and procedures;

“safety performance” means the organisation’s safety achievement as defined by its safety performance targets and its safety performance indicators;

“safety performance indicator” means a data based parameter used for monitoring and assessing Safety Performance;

“safety performance target” means the planned or intended target for a safety performance indicator over a given period that aligns with the safety objectives; and

“safety risk” means the predicted probability and severity of the consequences or outcomes of a hazard.

4.0 APPLICATION FOR OF SAFETY MANAGEMENT SYSTEM (SMS)

4.1 Applicant for initial acceptance SMS shall submit—

- (a) an official letter for the application for acceptance of SMS;
- (b) SMS Manual;
- (c) nomination of a safety manager;
- (d) SMS Assessment Checklist and;
- (e) SMS implementation plan including proposed safety performance indicator.

4.2 Application for the continue of acceptance of SMS shall submit —

- (a) an official letter for the application for the renewal acceptance of SMS not less than 30 days prior to the expiry date of the acceptance.
- (b) The Authority may continue acceptability of the SMS if the Authority is satisfied that the holder of a SMS acceptance has fulfilled all applicable requirements under this Notice.

5.0 ISSUANCE OF INITIAL AND CONTINUED ACCEPTABILITY OF SMS

- 5.1 The Authority may initially accept the SMS if the Authority is satisfied that the applicant complies with the applicable requirements under this Notice
- 5.2 Initial acceptance SMS organisation may implement the SMS in accordance with the conditions as specified in the initial acceptance letter.
- 5.3 Organisation's SMS which has been accepted may continue the acceptance of SMS if the Authority is satisfied that it has fulfilled the applicable requirements under this Notice.

6.0 SMS FRAMEWORK

- 6.1 The SMS of an organisation shall be commensurate with the size of the organisation and the complexity of its aviation products or services; and
- 6.2 The SMS framework shall comprise at least the following four (4) components and twelve (12) elements—

COMPONENT		ELEMENT	
1	Safety policy and objectives	1.1	Management commitment
		1.2	Safety accountabilities and responsibilities
		1.3	Appointment of key safety personnel
		1.4	Coordination of emergency response planning
		1.5	SMS documentation
2	Safety risk management	2.1	Hazard identification
		2.2	Safety risk assessment and mitigation
3	Safety assurance	3.1	Safety performance monitoring and measurement
		3.2	The management of change
		3.3	Continuous improvement of the SMS
4	Safety promotion	4.1	Training and education
		4.2	Safety communication

7.0 SAFETY POLICY AND OBJECTIVES (COMPONENT 1)

Safety policy outlines the principles, processes and methods of the organisation's SMS to achieve the desired safety outcomes. The policy establishes senior management's commitment to incorporate and continually improve safety in all aspects of its activities. Senior management develops measureable and attainable organisation wide safety objectives to be achieved.

7.1 Management commitment (Element 1.1)

- (a) The organisation shall define its safety policy. The safety policy shall—
- (i) reflect organisational commitment regarding safety, including the promotions of a positive safety culture;
 - (ii) include a clear statement in relation to the provision of the necessary resources for the implementation of the safety policy;
 - (iii) include safety reporting procedures;
 - (iv) clearly indicate which types of behaviours are unacceptable related to the organisation's aviation activities and include the circumstances under which disciplinary action would not apply;
 - (v) be signed by the accountable executive of the organisation;
 - (vi) be communicated, with visible endorsement, throughout the organisation; and
 - (vii) be periodically reviewed to ensure it remains relevant and appropriate to the organisation.
- (b) Taking due account of its safety policy, the organisation shall define safety objectives. The safety objectives shall—
- (i) form the basis for safety performance monitoring and measurement as required by paragraph 9.1(b) of this Notice;
 - (ii) reflect the organisation's commitment to maintain or continuously improve the overall effectiveness of the SMS;
 - (iii) be communicated throughout the organisation; and
 - (iv) be periodically reviewed to ensure they remain relevant and appropriate to the organisation.

7.2 Safety Accountabilities and Responsibilities (Element 1.2)

- (a) The organisation shall—
- (i) identify and nominate the accountable executive who, irrespective of other functions, is accountable on behalf of the

organisation, for the implementation and maintenance of the SMS;

- (ii) clearly define lines of safety accountability throughout the organisation, including a direct accountability for safety on the part of senior management;
- (iii) identify the responsibilities of all members of management, irrespective of other functions, as well as of employees, with respect to the safety performance of the organisation;
- (iv) document and communicate safety responsibilities, accountabilities and authorities throughout the organisation; and
- (v) define the levels of management with authority to make decisions regarding safety risk tolerability.

7.3 **Appointment of Key Safety Personnel** **(Element 1.3)**

The organisation shall nominate a safety manager who is responsible for the implementation and maintenance of the SMS.

7.4 **Coordination of Emergency Response Planning** **(Element 1.4)**

The organisation required to establish and maintain an emergency response plan for accidents and incidents in aircraft operations and other aviation emergencies shall ensure that the emergency response plan is properly coordinated with the emergency response plans of those organisations it must interface with during the provision of its products and services.

7.5 **SMS Documentation** **(Element 1.5)**

- (a) The organisation shall develop and maintain an SMS manual that describe its—
 - (i) safety policy and safety objectives;
 - (ii) reference to any applicable regulatory SMS requirements;
 - (iii) system description;
 - (iv) safety accountabilities and key safety personnel;
 - (v) voluntary and mandatory safety reporting system processes and procedures;
 - (vi) hazard identification and safety risk assessment processes and procedures;
 - (vii) safety investigation procedures;
 - (viii) procedures for establishing and monitoring safety performance indicators;
 - (ix) SMS training processes and procedures and communication;
 - (x) Safety communication processes and procedures;
 - (xi) internal audit procedures;

- (xii) management of change procedures;
 - (xiii) SMS documentation management procedures; and
 - (xiv) where applicable, coordination of emergency response planning.
- (b) The organisation shall develop and maintain an SMS operational records as part of its SMS documentation.

8.0 SAFETY RISK MANAGEMENT (COMPONENT 2)

The organisation shall ensure that the safety risks encountered in aviation activities are controlled in order to achieve their safety performance targets. This process is known as safety risk management and includes hazard identification, safety risk assessment and the implementation of appropriate remediation measures.

8.1 Hazard identification (Element 2.1)

- (a) The organisation shall develop and maintain a process to identify hazards associated with its aviation products or services.
- (b) Hazard identification shall be based on a combination of reactive and proactive methods.

8.2 Safety Risk Assessment and Mitigation (Element 2.2)

- (a) The organisation shall develop and maintain a process that ensures analysis, assessment and control of the safety risks associated with identified hazards.
- (b) The process may include predictive methods of safety data analysis.

9.0 SAFETY ASSURANCE (COMPONENT 3)

Safety assurance consists of processes and activities undertaken by the organisation to determine whether the SMS is operating according to expectations and requirements. The organisation shall continually monitor its internal processes as well as its operating environment to detect changes or deviations that may introduce emerging safety risks or the degradation of existing risk controls. Such changes or deviations may then be addressed together with the safety risk management process.

9.1 Safety performance monitoring and measurement (Element 3.1)

- (a) The organisation shall develop and maintain the means to verify the Safety Performance of the organisation and to validate the effectiveness of safety risk controls.

- (b) The organisation's safety performance shall be verified in reference to the safety performance indicators (SPI) and safety performance targets of the SMS in support of the organisation's safety objectives.
- (c) The organisation shall provide the Authority the actual SPIs, safety performance target and alert level at least once a year.
- (d) If an organisation fail to achieve the setting of alert level or target level as agreed between the Authority and the organisation, the organisation shall immediately report to the Authority and submit a corrective plan accordingly.
- (e) The organisation shall periodically review each SPIs, alert levels and target levels to ensure they remain effective, relevant and appropriate to the organisation.
- (f) Any necessary adjustments to previously agreed SPIs, target or alert settings shall be substantiated by appropriate safety data and be documented as appropriate.

9.2 The Management of Change (Element 3.2)

The organisation shall develop and maintain a process to identify changes which may affect the level of safety risk associated with its aviation products or services and to identify and manage the safety risks that may arise from those changes.

9.3 Continuous Improvement of the SMS (Element 3.3)

The organisation shall monitor and assess its SMS processes to maintain or continuously improve the overall effectiveness of the SMS.

10.0 SAFETY PROMOTION (COMPONENT 4)

Safety promotion encourages a positive safety culture and creates an environment that is conducive to the achievement of the organisation's safety objectives. A positive safety culture is characterised by values, attitudes and behaviour that are committed to the organisation's safety efforts. This is achieved through the combination of technical competence that is continually enhanced through training and education, effective communications and information sharing. Senior management provides the leadership to promote the safety culture throughout an organisation.

10.1 Training and education (Element 4.1)

- (a) The organisation shall develop and maintain a safety training programme that ensures that personnel are trained and competent to perform their SMS duties.

- (b) The scope of the safety training programme shall be appropriate to each individual's involvement in the SMS.

10.2 **Safety communication** **(Element 4.2)**

The organisation shall develop and maintain a formal means for safety communication that—

- (a) ensures personnel are aware of the SMS to a degree commensurate with their positions;
- (b) convey safety-critical information;
- (c) explain why particular safety actions are taken; and
- (d) explain why safety procedures are introduced or changed.

11.0 **SURVEILLANCE AND ASSESSMENT OF SMS**

11.1 The SMS maturity of individual organisation may be periodically assessed by the Authority to ensure that they remain relevant and appropriate to support the continuous improvement towards excellence.

11.2 Assessment of the SMS maturity may include review on the hazard identification, safety risk management processes, safety performance indicator, alert level and target level to ensure the organisation follows the established regulatory requirements and that safety risk controls are appropriately integrated into the organisation's SMS.

12.0 **CONTINUED VALIDITY OF ACCEPTANCE**

12.1 The acceptance of SMS under this Notice shall be subject to suspension, revocation and variation under regulation 193 of the MCAR.

13.0 **REVOCACTION**

This Notice revokes Airworthiness Notice No. 101 Issue 1 dated 14 March 2008.