



SAFETY MANAGEMENT SYSTEM MANUAL

FOR

**GALAXY AEROSPACE (M) SDN BHD
AMO/2016/02**

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SAFETY MANAGEMENT SYSTEM MANUAL

Manual Ref. No: GAM/CAAM/SMS

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PART 0.0
PRELIMINARY



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0.2 MANUAL DISTRIBUTION LIST

COPY NUMBER	HOLDER	DOCUMENT TYPE
01	Civil Aviation Authority of Malaysia	Hard copy
02	Safety Manager (Master copy)	Hard copy
03	Accountable Executive and GAM employees	Soft copy


- a. Copy issued in distribution list are considered as a controlled copy and copy to any other than reflected in distribution list or any personnel are considered as uncontrolled copy.
- b. Soft copy is available via Galaxy Aerospace Management System (GAMS) portal.

0.3 LIST OF EFFECTIVE PAGES

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APPROVAL PAGES

<p>PREPARED BY:</p> <p>GALAXY AEROSPACE (M) SDN.BHD.</p> <p>SAFETY MANAGER</p>  <p>.....</p> <p>(Wan Izahan Zameree Ishak)</p>	<p>DATE</p> <p>1 December 2023</p>
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<p>ACCEPTED BY:</p> <p>CIVIL AVIATION AUTHORITY MALAYSIA (CAAM)</p> <p>.....</p>	<p>DATE</p>
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0.5 ACRONYMS AND DEFINITION

AE	Accountable Executive
AAIB	Air Accident Investigation Bureau
ALARP	As Low as Reasonably Practicable
ALoSP	Acceptable Level of Safety Performance
AM	Accountable Manager
AML	Aircraft Maintenance License
AMO	Approved Maintenance Organization
ARS	Airworthiness Review Staff
CAAM	Civil Aviation Authority of Malaysia
CAD	Civil Aviation Directive
CAD 19 SM	Civil Aviation Directive 19 - Safety Management
CAGM	Civil Aviation Guidance Material
CAMO	Continuous Airworthiness Management Organization
CE	Chief Engineer
DOA	Design Organization Approvals
EC	Engineer Controller
EIC	Engineer in Charge
EMP	Engineering Maintenance Procedure
ENC	Engineering Controller
ERP	Emergency Response Plan
GAM	Galaxy Aerospace (M) Sdn Bhd
HIRM	Hazard Identification and Risk Management
HOD	Head of Department
HR	Human Resources
IATA	International Air Transport Association
IC	Incident Commander
ICAO	International Civil Aviation Organization
IMO	Independent Monitoring Officer
IT	Information Technology
LAE	License Aircraft Engineer
LEP	List of Effective Pages
MCAR	Malaysia Civil Aviation Regulation
MD	Managing Director
MOC	Management of Change
MOE	Maintenance Organization Exposition
MOR	Mandatory Occurrence Report
NCR	Non-Compliance Report
NOP	Notice of Prohibition
NPH	Nominated Post Holder
PDF	Protected Data File
PIC	Person in Charge

QA	Quality Assurance
QAM	Quality Assurance Manager
QPM	Quality Procedure Manual
Rev.	Revision
SAG	Safety Action Group
SAN	Safety Advisory Notice
SC	Safer Card
SCM	Safety Committee Meeting
SMS	Safety Management System
SPI	Safety Performance Indicator
SPT	Safety Performance Targets
SRM	Safety Risk Mitigation
TP	Technical Publication
TR	Technical Record
TS	Technical Services

0.6 DEFINITION OF TERMS

TERMS	DEFINITION
<p>ACCIDENT</p>	<p>An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:</p> <ul style="list-style-type: none"> i. A person is fatally or seriously injured because of. <ul style="list-style-type: none"> ● Being in the aircraft, or ● Direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or ● Direct exposure to jet blast and helicopter rotor hazard, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew: or ii. The aircraft sustains damage or structural failure which: <ul style="list-style-type: none"> ● Adversely affects the structural strength, performance, or flight characteristics of the aircraft, and ● would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); ● or the aircraft is missing or is completely inaccessible. <p>Note 1: For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.</p> <p>Note 2: An aircraft is missing when the official search has been terminated and the wreckage has not been located.</p> <p>Note 3: The type of unmanned aircraft system to be investigated is addressed in 5.1 of ICAO Annex 13.</p> <p>Note 4: Guidance for the determination of aircraft damage can be found in Attachment E of ICAO Annex 13.</p>

ALERT	An established level or criteria value that serves as the primary trigger for an evaluation, adjustment or remedial action related to the particular indicator.
AUDIT	A systematic, independent, and documented process for obtaining evidence and evaluating it objectively to determine the extent to which requirements are complied with.
ACCEPTABLE LEVEL OF SAFETY	Expressed the safety goals of the oversight authority, an operator or service provider. From the perspective of the relationship between oversight authorities and operators/services providers, provide the minimum safety objective(s) acceptable to the oversight authority to the achieved by the operators/services providers while conducting their core business functions”. (ICAO Annex19, Attachment E).
BARRIER (PREVENTIVE/PRO ACTIVE CONTROLS)	Physical or procedural measures that have been instituted within the company business process to prevent the threats from releasing the hazard and causing harm.
CONSEQUENCE	The harm that results from the release of the hazard that causes ill health or injury, damage to property, plant, products or the environment, production losses, increased liabilities and /or negative impression of the organization. Can be simplified as “the potential outcomes of the hazard.
CONTINUAL IMPROVEMENT	A process of enhancing the Safety Management System to achieve improvement in overall safety performance, in-line with corporate safety commitment and policy.
DEFICIENCY	Is the conduct of a person, whether there are procedures covering this misconduct, which could lead to an unsafe practice.
ERRORS	An action or inaction by an operational person that leads to deviations from organizational or the operational person’s intentions or expectations.
HAZARD	A condition or an object with the potential to cause or contribute to an aircraft incident or accident.
HIGH-CONSEQUENCE INDICATORS	Safety performance indicators pertaining to the monitoring and measurement of high consequence occurrences, such as accidents or serious incidents. High-consequence indicators are sometimes referred to as reactive indicators.

HIRM	Hazard Identification, Risk Assessment and Risk Mitigation and Management is an integration tool to identify, assess/measure and to control hazard and risk of any workplace and its activities. By strictly implementing it, it will eliminate, reduce/control the possibility for any accidents to occur.
INSPECTION	An independent documented conformity evaluation by observation and judgement accompanied as appropriate by measurement, testing or gauging, to verify compliance with applicable requirements (incl. procedures, work instruction standards, etc.).
INCIDENT	An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.
JUST CULTURE	Refers to a values-supportive model of shared accountability. It's a culture that holds organizations accountable for the systems they design and for how they respond to staff behavior fairly and justly.
LIKELIHOOD	Likelihood is used in this manual as a synonym of probability. It is a measure of how likely something is to happen. <i>*Note: In the ICAO Doc 9859 AN/474 Safety Management Manual, 4th Edition, safety risk probability is defined as the likelihood or frequency that a safety consequence or outcome might occur.</i>
MANAGEMENT OF CHANGE	A formal process to manage changes within an organization in a systematic manner, so that changes which may impact identified hazards and risk mitigation strategies are accounted for, before the implementation of such changes.
MITIGATION	Measures to eliminate the potential hazard or to reduce the risk probability or severity
PROBABILITY	Likelihood that a situation of danger may occur.
RISK	The combination of occurrence likelihood and severity.
RISK MATRIX	A matrix (or table) combining Risk Likelihood and Risk Severity.
SAFETY	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 ASSESSMENT	A term used in other ICAO documents to refer to hazard identification and safety risk mitigation process.
SAFETY OBJECTIVE	A brief, high-level statement of safety achievement or desired outcome to be accomplished by the service provider's safety management systems.

SAFETY MANAGEMENT SYSTEM	A systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies, and procedures. (Civil Aviation Directive – 19, Safety Management, Civil Aviation Authority of Malaysia, Issue 01, Revision 00-17 th December 2021).
SAFETY PERFORMANCE	This means a state or a service provider’s safety achievement as defined by its safety performance targets and safety performance indicators.
SAFETY PERFORMANCE INDICATOR (SPI)	Is a data-based parameter used for monitoring and assessing safety performance.

SAFETY PERFORMANCE TARGET (SPT)	Is defined as the State or service provider’s planned or intended target for a safety performance indicator over a given period that aligns with the safety objectives.
SAFETY RISK	The predicted probability and severity of the consequences or outcomes of a hazard.
SAFETY RISK VALUE OR RISK INDEX VALUE	Values in the cells of risk tolerability allow differentiation of risk level for the purpose of risk analysis, assessment, and mitigation.
SERIOUS INJURY	Means an injury which is sustained by a person in an accident and which: <ul style="list-style-type: none"> ● requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or ● results in a fracture of any bone (except simple fractures of fingers, toes, or nose); or ● involves lacerations which cause severe hemorrhage, nerve, muscle, or tendon damage; or ● involves injury to any internal organ; or ● involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface; or ● involves verified exposure to infectious substances or injurious radiation.
SEVERITY	The possible consequence of a situation of taking as a reference that worst foreseeable situation.
VIOLATION	A deliberate act can lead to a failure of the systems and can result in a hazardous situation.

0.7 MANUAL INTRODUCTIONS AND DECLARATION OF CORPORATE COMMITMENT BY ACCOUNTABLE EXECUTIVE

SMS manual (document reference GAM/CAAM/SMS) serves to lay down the policies, organization structural, responsibilities and procedures of GAM Safety Management System.

SMS Manual Part 0.0 to 16.0 covers the policies of how SMS shall be operated and managed for an approved maintenance organization as per CAAM requirement consist of the following:

Part 0.0	Preliminary
Part 1.0	Document Control
Part 2.0	SMS Regulatory Requirement
Part 3.0	Scope and Integration of the Safety Management System
Part 4.0	Safety Policy
Part 5.0	Safety Objective
Part 6.0	Safety Responsibilities and Accountabilities
Part 7.0	Non-Punitive Reporting Policy
Part 8.0	Safety Reporting
Part 9.0	Hazard Identification and Risk Management
Part 10.0	Safety Performance Monitoring and Measurement
Part 11.0	Safety Investigation
Part 12.0	Safety Training and Communication
Part 13.0	Continuous Improvement and SMS Audit
Part 14.0	SMS Data and Record Management
Part 15.0	Management of Change (MOC)
Part 16.0	Emergency Respond Plan

SMS Manual is the Level 1 document that shows the overall framework on how the safety system is managed within the organization. It is the stand-alone manual that shall be made available and/or accessible for all employees, including GAM’s client, vendors, and contractors.

As a waiver, nothing contained in this manual is meant to supersede any standard, order, instruction, or recommendation issued by CAAM.

In any event of discrepancies found in this manual as compared to any publication by CAAM, it is advised to the reader to highlight it and notify the editor or authority stated in this manual.

0.8 CONDITION OF THE MANUAL

This manual is the property of GALAXY AEROSPACE (M) SDN BHD. The content of this manual shall not be copied or communicated in part or to any person not employed in the company without the express written consent of the Accountable Executive and Safety Manager.

AUTHORIZATION

This SMS Manual is hereby approved by the Accountable Executive of GALAXY AEROSPACE (M) SDN. BHD. to ensure that policies, objectives, procedures, and instructions contained herein are adhered to by all personnel assigned in the execution of their duties and responsibilities.

The Safety Manager is responsible for the issuance and administration of this GAM SMS Manual. Any amendment or revision to this manual shall be maintained by the Safety Department and requires the Accountable Executive approval and handwritten amendments are not permitted. Hard copy and controlled electronic media (softcopy) and distribution list as per Part 0.2 (Manual Distribution List).



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Amendment No. 0

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PART 1.0

DOCUMENT CONTROL

	SAFETY MANAGEMENT SYSTEM	
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PART 1.0 DOCUMENT CONTROL

1.1 OBJECTIVE

Document controls provide the guideline to keep the manual up to date and to ensure all the GAM approved maintenance organization personnel have the most current version. It involves a process for the review, revision, distribution, and accessibility of the SMS Manual.

1.2 THE CORRELATION OF THIS MANUAL WITH THE UPDATES TO OTHER DOCUMENTATION.

Where there is the update to other GAM documentation such as MOE (doc reference GAM/CAAM/MOE) and departmental manual, involving changes of the management personnel and operational of organization, the changes shall be documented through the Management of Change process. Amendment or revision of SMS manual is subject from result of manual annual review or as instructed by the CAAM or whenever deemed necessary.

1.3 MANUAL REVIEW

The manual shall be subject to a periodic review, not exceeded once year, or as and when required to ensure that the manual remain relevant, appropriated for the organisation, and comply with any amendment of the applicable CAAM regulations.

The manual shall be reviewed at least at one of the following platforms:

- a) Safety Action Group Meeting
- b) Safety Committee/ Safety Review Board Meeting

The outcome from the review shall be documented and any required amendments to the manual arising from the meeting shall be included. The amended manual shall be documented to through Management of Change and shall be approved by Accountable Executive.

1.4 MANUAL IMPROVEMENT

GAM encourages all staff to propose improvements to the SMS manual through Management of Change (MOC) process in GAMS Portal. The Safety Manager shall evaluate improvement suggestions to this manual before presenting it to the Accountable Executive. Please refer to the Management of Change (MOC) in Chapter 15.

The Safety Manager shall be responsible for initiating a review of the SMS manual once a year to ensure that the manual reflects the latest information or whenever the need arise collectively through the Safety Committee Meeting and/ or Safety Action Group. The Accountable Executive shall approve any amendment to the manual before submitting to CAAM for their acceptance.

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1.5 ADMINISTRATION, APPROVAL AND ACCEPTANCE BY CAAM

When updating this manual with revisions, accepted amendments by CAAM will be incorporated in the SMS Manual by the Safety Manager.

The Safety Department is responsible for the establishment, review, updating, and submission of the SMS Manual to CAAM for their acceptance. The updated and approved manual needs to be uploaded into the GAMS Portal.

The manual needs to be approved by the Accountable Executive after the amendment resulting from the review process, improvement suggestions, feedback from the authority/ client and changes of the legal requirements.

The approved manual needs to be submitted by the Safety Manager to CAAM for their approval and any input/ feedback from the authority needs to be addressed accordingly to get the manual accepted.

1.6 IDENTIFICATION OF REVISIONS

A dark vertical line running along the left-hand side of the page, highlighting a revised portion of the text shall indicate the amendments to this manual.

A List of Effective Pages (LEP) is provided for all copies of the manual. Each page bears the effective date of issue. The LEP is to be revised and reissued at the time of each revision so that each manual may be checked and be kept current.

1.7 ACCESSIBILITY TO THE MANUAL

Copies of this manual and revisions to it are accessible to the registered manual holders as mentioned in Part 0.2 (Manual Distribution List) in the hard copy format and available electronically through GAM's Portal, accessible to all the employees. For any additional request of controlled hard copy of this manual shall be made in writing to the Safety Manager.

<https://gams.galaxyaerospace.my>

Cross-reference document:

Maintenance Organization Exposition (GAM/CAAM/MOE)

GAM group entities that require a copy of this document and do not have access to the above-mentioned intranet/internet sites, will be provided with an uncontrolled copy in Protected Data File (PDF) format, which is current at the date of distribution.



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PART 2.0

SMS REGULATORY REQUIREMENTS

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PART 2.0 SMS REGULATORY REQUIREMENTS

2.1 INTRODUCTION TO REGULATION

Safety Management Systems (SMS) is incorporated in GAM as mandated by Annex 19 to the convention on International Civil Aviation. The SMS requirements for Engineering & Maintenance as a CAAM Approved Maintenance Organization (AMO) can be found in MCAR 2016, Regulation 167 and its regulatory information is address in CAAM Civil Aviation Directive (CAD 19).

This SMS manual complies to make references and being guided by the following documents:

- ICAO Annex 19, Safety Management
- ICAO Safety Management Manual (Doc 9859-Edition 4)
- Malaysian Civil Aviation Regulations 2016
- CAAM Civil Aviation Directive 19 – Safety Management (CAD 19 - SM)
- CAAM Civil Aviation Guidance Material 1902 – Safety Management System (CAGM –1902)

Civil Aviation Directive 19 – Safety Management (CAD 19 – SM)

- These directives are the Civil Aviation Directives 19 – Safety Management (CAD 19 – SM) and come into operation on 17th December 2021. This CAD 19 – Safety Management will remain current until withdrawn or superseded.
- This CAD applies to all service providers as defined in Regulation 167 of Civil Aviation Regulation 2016 and Regulation 15 of Civil Aviation (Aerodrome Operations) Regulation 2016.
- The Standards contained in this CAD shall be applicable to safety management functions related to, or in direct support of, the safe operation of aircraft.
- An approved maintenance organization provides services to the holder of air operator certificate issued by the Authority.
- Civil Aviation Guidance Material – 1902 Issue 01, Revision 00 – 17th December 2021, Safety Management System is to provide guidance in implementing effectiveness Safety Management System (SMS), in respect of compliance with CAD 19 - SM.

Other regulatory requirements are also used as references to the SMS implementation in GAM:

- CAD 8601 - Maintenance Organization Approval (CAAM Part 145)
- CAGM 8601 - Maintenance Organization Approval (CAAM Part 145)
- CAGM 8503 - Mandatory Occurrence Report - Airworthiness Aspect
- CAD 1900 – Safety Reporting System

SMS applies to the aviation activities of a GAM AMO related to the safe operation of aircraft. Corporate activities such as finance, human resources and legal activities would have implications on SMS, and therefore should facilitate the effective implementation of SMS.



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PART 3.0

SCOPE AND INTEGRATION OF SMS

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PART 3.0 SCOPE AND INTEGRATION OF SMS

3.1 OBJECTIVE & SCOPE

GAM is the CAAM approved maintenance organization in accordance with CAGM 8601 with capability to perform Base and Line Maintenance of aircraft which include assembly and servicing of specifically GAM services. GAM is also involved in maintenance of aircraft components as described in Capability List reference GAM/CAAM/MOE.

SMS shall apply to the identified facilities, equipment, work scope, capabilities but not limited to the item listed below: -

- Aircraft and component maintenance facilities (maintenance hangar/component workshop) describes in GAM/CAAM/MOE.
- Equipment used to facilitate aircraft and component maintenance activities.
- Capability and work scope as described in GAM/CAAM/MOE. The relevant processes, operations and equipment which are deemed to be eligible for the safety risk management processes which has been identified and based on the above current conditions GAM SMS scope shall cover the following elements:
 - The means of identifying, locating, and eliminating or controlling all potential hazards known to exist in GAM operational activity as described above.
 - The means of establishing and maintaining employee's competencies in handling specific safety hazard exposure.
 - The hazards and risks associated with the overhaul, repair, or replacement of customers' aircraft and/or its components.
 - General compliance with CAAM SMS requirement and other related control/management systems within the organization to identify their relevant integration (where applicable) within the GAM SMS.

SMS may be integrated with other management systems such as quality, and human factor and error management systems. Possible areas of integration include having:

- HIRM team with personnel from the various disciplines,
- consolidated hazards/HIRM registers,
- integrated SMS/Human Factor training,
- integrated incident/accident report or
- coordinated communication and promotion efforts.

Cross-reference document:

Maintenance Organization Exposition (GAM/CAAM/MOE)



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PART 4.0

SAFETY POLICY

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PART 4.0 SAFETY POLICY

The primary purpose of the GAM Safety Policy is to ensure we have the structure processes and clear direction to sustain a safe and risk aware workplace while preserving and improving operational capability. GAM reinforces the commitment to the implementation, promotion and continuation of safety and healthy workplace, whenever we may work.

GAM Safety policy shall be reviewed to ensure that the commitments are achievable, able to be demonstrated and shall be tabled during the Safety Committee Meeting (SCM) meeting. The policy shall be **reviewed annually** or whenever required.

The GAM Safety Policy must be approved and signed by the Accountable Executive and shall be made available to all GAM facilities throughout the organization.

Contents of the policy should be explained and communicated to every employee through his/her immediate superior. For new employees, contracted staff, and third-party organizations, the policy shall be explained to them as part of the induction training.

Management will continually promote the safety policy to all personnel and demonstrate their commitment to it.

4.1 SAFETY, HEALTH, AND ENVIRONMENT POLICY

Galaxy Aerospace (M) Sdn. Bhd. are committed to be a leader in Maintenance Repair & Overhaul (MRO) industry and shall continuously improve to maintain a positive and sustainable Safety, Health, and Environment (SHE) culture.

We shall also continuously:

Strive to improve the level of safety, health, and environment performance.

Comply with all applicable legal and other regulatory requirements.

Providing the necessary resources for the implementation of safety, health, and environment policy and to deliver a safe product/ service.

Ensuring safety, health, and environment is a primary accountability and responsibility of all management and staff including implementing the effective Safety Management System (SMS) and its component at all levels.

Encourage a culture of fair reporting of all safety hazards in which management will not initiate disciplinary action against any personnel, who in good faith, due to unintentional conduct, disclose a hazard or safety incident.

Refer to the Safety, Health, And Environment Policy as per Appendix 2.



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4.2 DRUG AND ALCOHOL POLICY

GAM aims to provide a healthy and safe work environment for its personnel to work productively and with respect for the safety of others. It is the obligation to all GAM personnel at all levels to ensure a safe and conducive working environment always practice.

Few strategies introduced are meant to reduce and control the risk that may occur. In conjunction with the Safety Policy, it is the company encouragement for all staff to give their utmost support ensuring the success of the objectives.

The intention of this policy is to ensure all GAM personnel in duty or discharge from all duties are free from drug and alcohol influence which can be endangered to person, assets, aircraft, or reputation.

Any personnel should report through superior or safety representative or Safer Card for any doubts or concern about co-worker's ability to work safely.

Refer to the Drug and Alcohol Policy as per Appendix 10.



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PART 5.0

SAFETY OBJECTIVES

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PART 5.0 SAFETY OBJECTIVES

GAM Safety Objectives are set in place to facilitate the establishment of safety goals, or desired targets which intent to achieve; eliminate the potential hazards and risks from the relevant aspects of organization that affecting safety, causing personnel injury, and damage to the environment or property resulting from accidents and incidents to a point that is as low as reasonably practicable. These shall cover the necessary human and financial resources to achieve safety vision, senior management commitments, realistic safety milestones and desired outcomes.

Safety Manager and Safety Committee Members are responsible for developing, maintaining, and reviewing the safety objectives and targets. Contents of the safety objective should be explained to every employee through his / her immediate superior.

Management will continually promote the safety objective to all personnel and demonstrate their commitment to it. Safety Objectives should be **reviewed annually** to ensure that they remain relevant to the operations with the aim of continual improvement.

GAM Safety Objectives are measured by the SPIs and SPT as below:

- 5% reduction of MOR monthly incident average rate per 10,000 hours maintenance over previous year rate.
- 5% reduction of CAMO Aircraft Review Report (ARR) & audit finding average rate per 10,000 hours maintenance over previous year rate.
- 5% reduction of AMO audit finding average rate per 10,000 hours maintenance over previous year rate.
- 4% improvement of training attendance average rate per 10,000 hours maintenance over previous year rate.
- 2% improvement of voluntary safety reporting average rate per 10,000 hours maintenance over previous year rate.

The monitoring and measurement of the safety performance in chapter 10.0 in this manual.



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PART 6.0
SAFETY RESPONSIBILITIES AND
ACCOUNTABILITIES

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PART 6.0 SAFETY RESPONSIBILITIES AND ACCOUNTABILITIES

Responsibilities and accountabilities are closely connected to each other to ensure an effective SMS. While all GAM personnel are responsible for their actions as stipulated in this manual, they are also accountable to the manager and their supervisors for the safe performance of their functions and may be called on to justify their actions.

Accountable Executive (AE) or also known as Accountable Manager (AM) / Managing Director (MD) is the Nominated Post Holder (NPH) for Aircraft Maintenance Organization (AMO) Part 145 and accountable to CAAM.

The roles, responsibilities, and accountabilities of each individual/position in the SMS are defined as follows:

- The Accountable Executive is responsible for ensuring the safety management system is implemented and performing the requirement in all areas of the organization.
- An appropriate Safety Manager, Safety Committee or Safety Action Groups have been appointed.
- Safety authorities, responsibilities, and accountabilities of personnel at all levels of the organization are defined and documented.
- Safety authorities, responsibilities and accountabilities are promulgated to all personnel in key documentation and communication media.
- All personnel understand their authorities, responsibilities, and accountabilities regarding all safety management processes, decision, and action.
- A SMS organizational accountabilities diagram is available.

6.1 ACCOUNTABLE EXECUTIVE OR HIS/HER REPRESENTATIVE

The Accountable Executive is accountable for the overall safety management of the company including the services provided by GAM and has the final responsibility for all safety issues. The Accountable Executive has direct responsibility for the conduct of the organization's affairs and has full control over the financial and all other resources in the company required for the execution of SMS.

The Accountable Executive is responsible to:

- Ultimate responsibility for all safety issues. And ultimate overall responsibility for the implementation and maintenance of the SMS in the organization.
- Lead and direct the company in accordance with the company business strategy with safety management as core function.
- Ensure that the safety management system is properly implemented and performs through requirements in all areas.
- Chair the Safety Committee Meetings (SCM).
- Approve and review the SMS Manual, Policy, and Objectives.
- Ensure that safety risks in the business have been identified and appropriate controls have been incorporated to manage these risks to ALARP (As Low as Reasonably

Practicable).

- Ensure as far as practicable the safety, health, and welfare at work of all his employees and interested parties and.
- Ensure that the necessary resources, including financial resources are allocated for the purpose of the SMS implementation.
- Ensure compliance with state legislation, including Occupational Safety and Health legislation.

6.2 SAFETY MANAGER

The Safety Manager is accountable to:

- Report the SMS performance and status of the SMS periodically to the Accountable Executive.
- Provide independent advice on safety matters to the senior management.
- Establish industry liaison on safety matters to CAAM and others authority where applicable.

The Safety Manager is responsible to:

- Assessing various risks of GAM, in a reactive, proactive, and predictive manner.
- To ensure MD (AE) / CAAM is updated regarding the measured safety performance indicators, targets, and alerts with recommendations for improvements to continuously raise the level of operational safety.
- Developing and implementing overall SMS program and safety related activities for maintenance organization on behalf of AE.
- Coordinate and communicate (on behalf of the Accountable Executive) with the CAAM and other State authorities as necessary on issues related to safety.
- Develop the Maintenance Organization Emergency Response Coordination and review annually.
- Maintain SMS documentation and records.
- Provide independent advice on safety matters.
- Plan and organize staff safety training.
- Monitor safety concerns in the aviation industry and their perceived impact on the organization's operations.
- Ensure investigation related to aircraft accidents and incidents conducted and corrective action takes place in a timely manner.
- Ensuring safety- related information, including organizational safety Policy and Objectives, are made available to all personnel through communication processes.
- Participate in interface with the safety systems of any external organizations that contribute to the safe delivery of their product or services.
- Coordinate the implementation of any actions related to safety risk controls and ensure that actions are taken promptly. Review the effectiveness of safety risk controls.
- Send the update of SPI, SPT and mitigation action to CAAM.
- Advice to the AE on risk tolerability and to stop operation or activity.

6.3 MANAGERS/ HOD/ PIC/ EIC

The respective Managers/ Head of Department/ Person in Charge/ Engineer in Charge are responsible for the following SMS responsibility and safety accountabilities but not limited to:

- Responsible and accountable for the execution of safety policy and remedies associated with the activities of their department/area.
- Ensure that the safety performance of all activities associated with their operations complies fully with the legislation, including the management and renewal of any operating licenses that are required and development of appropriate procedures.
- Effectively communicate the hazards to workers and keep abreast of current safety and health legislation and information.
- Identify, assess, and eliminate hazards and control risks at work.
- Ensure that all operations follow procedures stated in the company Safety Management System Manual, Maintenance Manuals, etc.
- Monitor the safety performance of areas under his/ her custody.
- Respond to safety initiatives from Safety Department, safety committee or advice from government officials.
- Ensure that adequate manpower, resources, and budgets are provided and available to meet the safety performance of his/her department.
- Ensure that staff receives adequate training to meet the standard of safety performance.
- Ensure safety finding been addressed, closed, and monitored accordingly within the time frame.

6.4 ALL EMPLOYEES

The Employees are responsible for the following safety accountabilities:

- Take reasonable care for the safety and health of themselves and others who may be affected by their actions or omissions at work.
- Cooperate with the employers or superiors to enable compliance with relevant statutory requirements, the Company Safety Management Plan, and all other relevant safety procedures.
- Shall not intentionally or recklessly interfere with or misuse anything provided for safety, health, or welfare under the relevant statutory provisions.
- Wear or use the appropriate safety equipment or clothing and use the safety devices or apparatus, whenever necessary.
- Be familiar with relevant safety requirements and if in doubt, advice from superior should be sought before proceeding with work.
- Report any hazard, accidents/ incident and damage to property or equipment to immediate superior.
- Make suggestions to improve safety and health to immediate superior.
- To attend safety-training courses as required by the management.

6.5 MEMBER OF SAFETY COMMITTEE

Members of the Safety Committee accountable to the Safety to discuss and report safety issues related to the company and review the effectiveness of safety in the respective areas. The purpose will be to assess current safety performance, identify opportunities for improvement and determine the need for any changes.

The items to be reviewed may include any of the following but not limited to:

- Safety performance against the organization’s safety policy and objectives (at least in one of the SCM meetings or follow the criteria for review.).
- Review unresolved significant issues from SAG,
- Necessary corrective action to be taken in a timely manner.
- Safety performance indicators and set safety performance goals for the company,
- Effectiveness of the Safety supervision of subcontracted operations.
- Emergency response coordination and preparedness.
- Appropriate resources allocated to achieve safety performance beyond that required by regulatory compliance.
- Strategic direction to the AMO Safety Action Group (SAG).
- Review the safety risk and hazards categorized as Extreme high risk from safety reports, and HIRM.

The Committee Meeting must be conducted at intervals not exceeding four months and chaired by the Accountable Executive. The Accountable Executive may delegate this function to his subordinate to conduct the meeting on his behalf.

Members of the safety committee shall consist of the Accountable Executive, Safety Manager and its representative, other members of senior management team at least one personnel from every department within GAM and representative from the Safety Action Group.

6.6 SAFETY ACTION GROUP (SAG)

The Safety Action Group (SAG) is accountable to the Safety Manager for the implementation of the SMS programs. Managers/HOD or his/her representative and supervisors from each base or department with accordance a given functional area with include safety coordinator from GAM Safety Department would be a member of the SAG meeting of that area and would take strategic directions and communicate the safety issue arising from their respective area and any discrepancies or unsolved issue will be forwarded in Safety Committee Meeting.

The Safety Action Group (SAG) is responsible to:

- To discuss unsafe conditions, unsafe acts, near miss incidents with recommendations for corrective actions and to bring unresolved issues to Safety Committee meeting.
- To evaluate the SMS Implementation in each base as required.
- Contribute ideas, suggestions and implementing mitigation to improve safety towards a safer work area.
- Execute Safety Programs as directed by the Safety Manager.

- Ensure they are trained, qualified and competent to execute their safety-related obligations.
- Assist in any work associated with safety promotions.
- Head of Department or his appointed coordinators to function as the safety Accountable Person for SAG to facilitate the department's SMS activities.
- Head of Department or representative to chair the SAG meeting.
- Meeting must be conducted in **four months interval** prior the Safety Committee meeting and
- Minutes of meeting to be submitted to Safety Department prior to the Safety Committee meeting.

6.7 SMS ORGANISATION CHART

Refer to Appendix 11- Safety Committee Organization Chart

Refer to Appendix 12- Safety Action Group (SAG) Organization Chart



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PART 7.0

NON-PUNITIVE REPORTING POLICY

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PART 7.0 NON-PUNITIVE REPORTING POLICY

GAM promotes a safe and conducive working environment for all its personnel to report dangerous occurrences, safety hazards and maintenance errors without fear of any punitive action taken by the company towards the reporter. Confidentiality of the report is guaranteed, and no names shall be revealed in case the report needs to be disclosed to the public.

This commitment also ensures that the primary objective of any investigation of the report is to examine not just what happened, but why it happened so that the root cause can be determined, and suitable preventive action can be planned. GAM is also committed to ensuring that all personnel are aware of the investigation results to ensure that situational awareness is enhanced amongst the workforces.

7.1 JUST CULTURE

As stated in Safety Policy, non-punitive reporting policy is to ensure that the culture of reporting dangerous occurrence, safety hazards and maintenance errors flourishes in GAM staff. However, to have a settled sense of justice within GAM, its disciplinary policies need to be clear on what type of behavior will lead to disciplinary action.

When an investigation indicates an inadvertent lapse on the employee, GAM management shall act reasonably with the intention of NOT using it for punitive actions or to point fingers. In the context of managing human error, any unpremeditated or inadvertent lapse shall NOT result in any punitive action.

7.2 INTENTIONAL NON – COMPLIANCE WITH STANDARDS

GAM management is committed to identifying deviations from standards and taking immediate corrective action. Corrective action can include counselling, training, discipline, suspension, or removal. Corrective action must be consistent and fair.

GAM management policies make a clear distinction between honest mistakes and intentional non-compliance with standards. Honest mistakes occur, and they should be addressed through counselling and training. Organization policy agrees with the following conclusions:

Nature of the behaviour involved	System or Task Design Action	Employee Action
Proactive Voluntary Report	Modify the system	Recognise and Reward
Human Error	Modify the system	Console and Train
At-Risk Behaviour	Modify the system	Coach
Reckless or Illegal Behaviour		Appropriate Action Taken



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PART 8.0

SAFETY REPORTING

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PART 8.0 SAFETY REPORTING

8.1 INTRODUCTION OF SAFETY REPORTING

GAM safety reporting system establishes as a systematic process to ensure that accidents are properly reported in a timely manner, all causes (direct and contributory) are thoroughly identified and that the appropriate corrective actions are taken. It is also to determine the underlying causes of the incidences for remedial actions to be taken to prevent similar occurrences in the future.

The two types of reporting system which are adopted by the company are as follows:

- Reactive reporting system – Accident/incident and occurrences report.
- Proactive reporting system – Hazard report.

Reactive. This methodology involves analysis of past outcomes or events. Hazard is identified through investigation of safety occurrences. Incidents and accidents are an indication of system deficiencies and therefore can be used to determine which hazard(s) contributed to the event.


Reactive method	Database
Mandatory Occurrence Report (MOR) / Aircraft accident or incident	Safer Card (SC) - GAM Portal
Incident/ Accident of product	Safer Card (SC) - GAM Portal

Proactive. This methodology involves collecting safety data of lower consequence events or process performance and analyzing the safety information or frequency of occurrence to determine if a hazard could lead to an accident or incident.

Proactive method	Database
Voluntary report (Hazard Identification)	Safer Card (SC) - GAM Portal
New Operations/New base/New Capabilities	MOC - GAM Portal

Hazards can also be identified through safety data analysis which identifies adverse trends and makes predictions about emerging hazards, etc.

Safety reporting should be confidential, requiring that any identifying information about the reporter is known only to the custodian to allow for follow-up action. The role of custodian should be kept to a few individuals, typically restricted to the safety manager and personnel involved in the safety investigation. Maintaining confidentiality will help to encourage personnel to raise reports and facilitate the disclosure of hazards leading to human error, without fear of retribution or embarrassment.

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8.2 SAFETY REPORTING STRATEGIES

Voluntary Reporting

Voluntary safety reporting systems should be established to collect safety data and safety information not captured by the mandatory safety reporting system. These reports go beyond typical incident reporting. Voluntary reports tend to illuminate latent conditions, such as inappropriate safety procedures or regulations, human error, unsafe act, unsafe condition etc.

A hazard report is a sample of voluntary safety report, any employee observing what is believed to be a hazardous situation that could affect safety of aircraft and personnel are encouraged to report that matter. Genuine hazard reporting is a highly encouraged activity. If the reporter believes a safety hazard exists and possible consequence of risk to aircraft operation or staff, it very likely does.

Reports regarding hazards will be collated by GAM SMS Department for trend analysis as well as to initiate SCM to mitigate the risk of any safety issues arising from these reports.

GAM staff are required to raise Voluntary Safety report via SAFER CARD as soon as possible for further action as required.

Mandatory Occurrence Reporting (MOR) and Voluntary Occurrence Reports (VOR)

The Civil Aviation Authority of Malaysia has taken systemic approach of reporting of aviation occurrences to maintain safety and prevent future accidents. As such, CAAM has taken steps to enhance and make it easier for aviation personnel to report both mandatory and voluntary occurrences.

CAAM has established a centralized reporting system that is specifically dedicated to receiving and processing Mandatory Occurrence Reports (MOR) and Voluntary Occurrence Reports (VOR). CAAM Aviation Safety Reporting Systems – CARES is designed to make the reporting process more streamlined and user-friendly for aviation personnel, so that the reports can quickly and easily be submitted. MOR must be dispatched within 48 hours of the event unless exceptional circumstances prevent this.

Safety Reporting Portal can be accessed through this link <https://safetyreporting.caam.gov.my/>.

8.3 SAFETY REPORTING PROCESS

All GAM personnel are encouraged to raise Safer Card for any incident, accident, hazard, and any safety concern via GAM’s Portal and reference as per Appendix 3.

Once done, it is automatically generated in Portal System that only can be viewed by Safety Department and authorized personnel (confidential).

All safety reports and information will be gathered and processed by the SMS Department. Hazard Master List shall be used to record all the identified hazard.

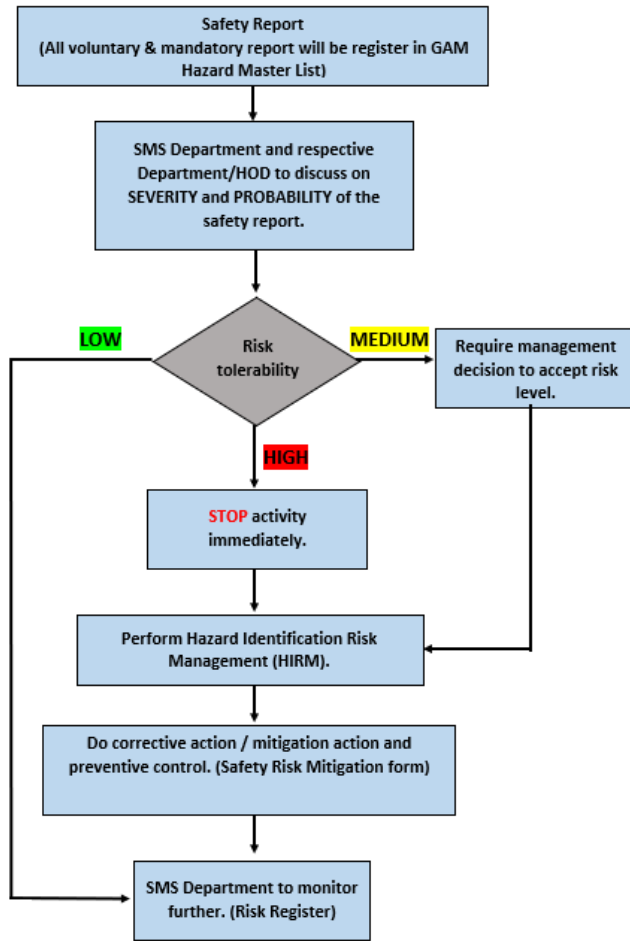
The report shall be sent to respective HOD’s for Root Cause, Corrective Action, Mitigation Action, and Preventive Control if required.

Report with high-risk index level shall be discussed and investigated through Crisis Management Meeting. Stop activity is required if no mitigation action can be done. Hazard Identification Risk Management (HIRM) shall be carried out as soon as possible to resolve the issue.

Medium and low-level risk shall be monitored to maintain in tolerable region by the GAM Safety Department. Mitigation action shall be monitored and unresolved issued to be escalated to SCM chaired by Accountable Executive.

All the recommended mitigation action must be agreed by AE and all top management to reduce the risk level to ALARP.

Process on raising reports via GAM’s Portal may refer to Appendix 4.



Cross-reference document:

MOE Part 2.18 (Reporting of defect to CAAM/Operator/Manufacture)
<https://gams.galaxy aerospace.my>



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PART 9.0

HAZARD IDENTIFICATION, SAFETY RISK

ASSESSMENT AND SAFETY RISK

MITIGATION

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PART 9.0 HAZARD IDENTIFICATION, RISK ASSESSMENT, RISK MITIGATION AND MANAGEMENT (HIRM)

9.1 INTRODUCTION OF RISK MANAGEMENT

Risk management comprises these essential elements: hazard identification, risk assessment, risk mitigation/control and risk monitoring. These essential elements are crucial to understanding the practical threats to safe operations that may exist in the organization. It is essential that these elements are part of our organization’s SMS so that maximum increases in safety may be achieved.

Risk Management can be defined as the identification, analysis, and elimination (and/or mitigation to an acceptable or tolerable level) of those hazards, as well as the subsequent risks, that threaten the viability of an organization. In other words, risk management facilitates the balancing act between assessed risks and viable risk mitigation.

Risk management is an integral component of safety management. It involves a logical process of objective analysis, particularly in the evaluation of the risks. GAM is having a safety risk assessment and mitigation program as a part of its Risk Management Program that includes processes implemented and integrated throughout the organization to ensure:

- Hazards are analyzed to determine the existing and potential safety risks to aircraft operations.
- Safety risks are assessed to determine the requirement for risk mitigation action(s).
- Risk mitigation actions are developed and implemented in operations where required.

GAM will maintain a formal risk management process that ensures the analysis, assessment, and mitigation of risks of consequences of hazards to an acceptable level. The risks of the consequences of each hazard identified through the hazard identification processes shall be analyzed in terms of probability and severity of occurrence and assessed for their tolerability. This Risk Management process shall define the levels of management with authority to make safety risk tolerability decisions and safety controls for each risk assessed as tolerable.

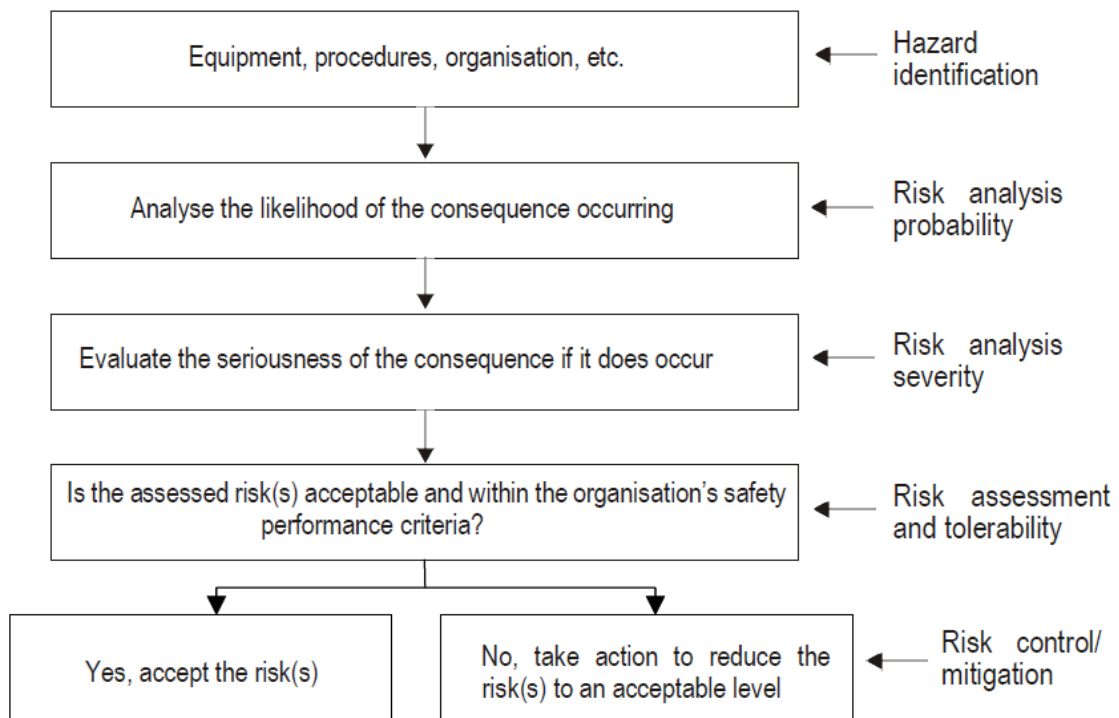
Risk management processes are implemented in all areas associated with the conduct of GAM operations and maintenance activities for the purpose of addressing conditions, activities or areas of non-compliance that have been identified with the potential to pose risk to operational safety.

Safety concerns and mitigating strategies will be communicated to all personnel and subsidiaries, thereby further promoting a process of continuous improvement.

Completed safety assessment and mitigation action will be reviewed and discussed during the SCM for safety assessment and to be approved by appropriate level of management.

The following are the basic overall steps in Hazard Identification and Risk Management process applied in GAM and references as per Appendix 4:

- Hazard identification.
- Risk analysis probability.
- Risk analysis severity.
- Risk assessment and tolerability.
- Implement Risk control and risk mitigation.
- Review effectiveness of control.



9.2 HAZARD IDENTIFICATION

Aviation can coexist with hazards so long as they are controlled. Hazard identification is the first step in the Risk Management process. It precedes a safety risk assessment and requires a clear understanding of hazards and their related consequences.

All hazards that have been identified in GAM organization shall be collected and monitored by the Safety Department. The hazard identification process considers all possible hazards that may exist within the scope of the aviation activities including interfaces with other systems. Once hazards are identified, their consequences (i.e., any specific events or outcomes) should be determined.

GAM has developed and maintained formal means for effectively collecting, recording, acting on and generating feedback about hazards in operations, which combine reactive, proactive, and predictive method of safety data collection that include mandatory and voluntary reporting systems. In practice, reactive, proactive, and predictive data collection processes provide an effective means of identifying hazards.

9.3 HAZARD IDENTIFICATION CLASSIFICATION

Safety data should ideally be categorized using classification and supporting definitions so that the data can be captured and stored using meaningful terms. Common classification and definitions establish a standard language, improving the quality of information and communication. The aviation community's capacity to focus on safety issues is greatly enhanced by sharing a common language. Classification enables analysis and facilitates information sharing and exchange. Some examples of classification include:

- Aircraft model: The organization can build a database with all models certified to operate.
- Airport: The organization may use ICAO or International Air Transport Association (IATA) codes to identify airports.
- Type of occurrence: An organization may use taxonomies developed by ICAO and other international organizations to classify occurrences.

Typical example of hazard classification system provided in Appendix 5.

Hazard classification is especially important. Identification of a hazard is often the first step in the risk management process. Commencing with a commonly recognized language makes the safety data more meaningful, easier to classify and simpler to process. The structure of a hazard classification may include a generic and specific component.

9.4 GATHERING OF HAZARD INFORMATION IN GAM

The table below shows the sources of information for hazard identification and the method of their collection.

- Internal Source

No.	Source of Hazard Identification	Source of Data / Department
1.	Normal operation & monitoring (Surveillance report)	Safety Department surveillance report data to be reviewed upon completion of surveillance report and acknowledged.
2.	Safety Audits	
3.	Voluntary & mandatory safety reporting systems.	Data from SC/MOR/MOC raised by GAM Operations.
4.	Safety investigations	Data was gathered from investigations by Safety and QA Department.
8.	Internal meeting (SAG, SCM)	Minutes of meeting

- External Sources

No.	Source of Hazard Identification	Source of Data / Department
1.	Aviation accident reports	Information from other aviation company
2.	MOR/Voluntary safety reports	MOR/Voluntary report from external/third party reports
3.	Safety oversight audit/Third party	CAAM audit reports being reviewed by SMS Department and discuss with HODs

9.5 HAZARD REGISTER AND PRIORITIZATION

All identified safety hazards shall be documented in GAM Hazard Master List, even if they are to be controlled to an acceptable level. In addition, hazards identified from incidents should also be included.

Risk assessment meeting/workshop shall be conducted to create the HIRM and should consider all safety hazards within GAM AMO operations and capabilities, relating to locations, activities, equipment, and workshops. Identification of new risks or changes to existing risks may occur at any time and may be triggered by any of the following events:

- Design factors, such as equipment and task design
- Procedures and operating practices, such as documentation and checklists
- Communications, such as language proficiency and terminology
- Organizational factors, such as company policies for recruitment, training, remuneration and allocation of resources
- Work environment factors, such as ambient noise and vibration, temperature, lighting, protective equipment, and clothing

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- Defenses, such as detection and warning systems and the extent to which the equipment is resilient against errors and failures.
- Human factors, such as medical conditions, circadian rhythms, and physical limitations
- Regulatory factors, such as the applicability of regulations and the certification of the equipment, personnel, and procedures

Safety risk assessments are prioritized in adopting safety risk controls in the decision. Below is the guide, should find the prioritization process:

- Assesses and controls highest safety risk.
- Allocates resources to highest safety risks.
- Effectively maintains or improves safety.
- Achieves the stated and agreed safety objectives and SPTs.
- Satisfies the requirements of the state's regulations with regards to control of risks.

9.6 RISK ASSESSMENT PROCESS

Risk management is the identification of analysis and mitigation of risks associated with hazards of an organization's operations. Risk assessment uses the conventional breakdown of risk into two components:

- Probability of occurrence; and
- Severity of the projected risk should it occur.

Acceptability of a defined risk is based on the use of a risk index matrix and its corresponding acceptability/decision criteria. Risk management is a key component of SMS. It is a data-driven approach to Safety Management resource allocation where priority is accorded to activities based on their risk index.

Risk assessment is the degree of risk based on the risk probability of the damage or harm that will result from the hazard and the severity of the consequences.

9.7 RISK SEVERITY

Risk severity measures the possible consequences of a situation of danger/risk, taking as reference the worst foreseeable situation to aircraft operations, personnel and/or equipment if nothing is done to correct the situation. Having determined the Risk Severity of occurrence, the nature of the adverse consequences if the event does occur must be assessed.

The potential consequences govern the degree of urgency attached to the safety action required. If there is a significant risk of catastrophic consequences, or if the risk of serious injury, property or environmental damage is high, urgent follow-up action is warranted.

In assessing the severity of the consequences of occurrence, the following types of questions could apply:

- How many lives are at risk? (Employees, passengers, bystanders, and the public).
- What is the likely extent of the property or financial damage? (Direct property loss, damage to aviation infrastructure, third party collateral damage, financial impact and economic impact);
- What is the likelihood of environmental impact? (Spill of fuel or other hazardous product, and physical disruption of natural habitat); and
- What are the likely political implications and/or media interest?

Table below shows the Risk Severity Table used by GAM:

SEVERITY/IMPACT/CONSEQUENCE OF OCCURRENCES		
Severity	Potential Harm	Nature of Injury
A	Catastrophic	<ul style="list-style-type: none"> ● Aircraft/ Hull Loss ● Complete destruction of facility/ equipment. ● Multiple deaths. ● Catastrophic damage to the asset ● International implication to the corporate reputation.
B	Major	<ul style="list-style-type: none"> ● Complete failure of significant/ major aircraft systems or result in emergency F/Operations procedure application. ● Single fatality. ● Major damage to the asset ● National implication to the corporate reputation.
C	Moderate	<ul style="list-style-type: none"> ● Partial loss of significant/ major aircraft systems ● A significant reduction in safety margins, a reduction in the ability of the operators to cope with adverse operating conditions because of an increase in workload, or because of conditions impairing their efficiency. ● Serious injury. ● Substantial damage to the asset ● Regional implication to the corporate reputation
D	Minor	<ul style="list-style-type: none"> ● Nuisance. ● Degrade or affect normal aircraft operational procedure or performance. ● Operating limitations. ● Use of alternate procedures. ● Minor injury ● Limited localized implication to corporate reputation.
E	Insignificant /Negligible	<ul style="list-style-type: none"> ● No injury ● No damage ● No significance to operational safety. ● No effect on the corporate reputation

9.8 RISK PROBABILITY

Once Severity of the risk has been identified, then assess the Probability, Safety risk probability or known as the likelihood that a safety consequence or outcome will occur. It is important to consider different scenarios so that all potential consequences are considered.

The table below shows the Risk Probability Table used by GAM:

PROBABILITY/LIKELIHOOD OF OCCURRENCE		
Value	Meaning (in aviation context)	Definition
5	<ul style="list-style-type: none"> Is expected to occur in most situations (occur in the majority of scenarios). 80% of the time. Once in a month Likely to occur many times (has occurred frequently). 	Frequent
4	<ul style="list-style-type: none"> Might occur quite frequently (relatively certain). 50 – 80% of the time. Once in 3 months. 	Occasional
3	<ul style="list-style-type: none"> Will probably occur in most situations (unusual but possible). 30 – 60% of the time. Once in 8 months. 	Remote
2	<ul style="list-style-type: none"> May occur infrequently (not known to have occurred). < 10 - 30% of the time. Once a year. 	Improbable
1	<ul style="list-style-type: none"> May occur only in exceptional circumstances (remotely possible). < 10% of the time. Not likely to happen in a year Almost inconceivable that the event will occur. 	Extremely Improbable

9.9 RISK INDEX MATRIX

Once the risk Probability (likelihood) and risk Severity (Consequences) values are determined, they will (together) constitute the ‘Risk Index’ for that occurrence of identified hazard. The table below will be used for establishing the risk rating according to the relationship between risk Probability and risk Severity values as described above.

Therefore, the resultant risk index will be:

SEVERITY		LIKELIHOOD				
		Catastrophic A	Major B	Moderate C	Minor D	Negligible E
Certain/ frequent	5	5 (A)	5 (B)	5 (C)	5(D)	5(E)
Likely/ occasional	4	4 (A)	4 (B)	4 (C)	4(D)	4(E)
Possible/ remote	3	3 (A)	3 (B)	3 (C)	3 (D)	3(E)
Unlikely/ improbable	2	2 (A)	2 (B)	2 (C)	2(D)	2(E)
Exceptional/ impossible	1	1 (A)	1 (B)	1 (C)	1(D)	1(E)

9.10 RISK TOLERABILITY

Based on the risk assessment, the risk can be prioritized relative to other, unresolved safety hazards. This is critical in making a rational decision to allocate limited resources against those hazards posing the greatest risks to the organization.

Having used a risk matrix to assign values to risks, a range of values are assigned to categorize risks is intolerable, tolerable, and acceptable.

The terms are explained below:

Risk Index Description (Likelihood x Severity)		Risk Index	Risk Level	Risk Tolerability / Action (Guidance)
Likelihood	Severity			
Possible/ remote (3)	Catastrophic (A)	3A	High Risk	Take immediate action to mitigate the risk or stop the activity. Perform priority safety risk mitigation to ensure additional or enhanced preventative controls are in place to bring down the safety risk index to tolerable.
Likely/ occasional (4)	Catastrophic (A)	4A		
Likely/ occasional (4)	Major (B)	4B		
Certain/ frequent (5)	Catastrophic (A)	5A		
Certain/ frequent (5)	Major (B)	5B		
Certain/ frequent (5)	Moderate (C)	5C		
Exceptional/ impossible (1)	Catastrophic (A)	1A	Moderate Risk	Can be tolerated based on the safety risk mitigation. It may require management decision to accept the risk.
Unlikely/ improbable (2)	Catastrophic (A)	2A		
Unlikely/ improbable (2)	Major (B)	2B		
Unlikely/ improbable (2)	Moderate (C)	2C		
Possible/ remote (3)	Major (B)	3B		
Possible/ remote (3)	Moderate (C)	3C		
Possible/ remote (3)	Minor (D)	3D		
Likely/ occasional (4)	Moderate (C)	4C		
Likely/ occasional (4)	Minor (D)	4D		
Likely/ occasional (4)	Negligible (E)	4E		
Certain/ frequent (5)	Minor (D)	5D		
Certain/ frequent (5)	Negligible (E)	5E		
Exceptional/ impossible (1)	Major (B)	1B	Negligible Risk	Acceptable as is. No further safety risk mitigation required.
Exceptional/ impossible (1)	Moderate (C)	1C		
Exceptional/ impossible (1)	Minor (D)	1D		
Exceptional/ impossible (1)	Negligible (E)	1E		
Unlikely/ improbable (2)	Moderate (C)	2C		
Unlikely/ improbable (2)	Negligible (E)	2E		
Possible/ remote (3)	Negligible (E)	3E		

9.11 RISK MITIGATION CONTROL & STRATEGIES

Risk mitigation is the process of implementing actions or defenses to eliminate or reduce the probability or severity of risk associated with hazards. Treating risk involves identifying and assessing a range of possible options to identify the most appropriate, effective, and cost-efficient method of dealing with the risk. Risk should be managed to As Low as Reasonably Practicable (ALARP).

When the acceptability of the risk has been found to be Undesirable or Unacceptable, control measures need to be introduced — the higher the risk, the greater the urgency.

The level of risk can be lowered by reducing the severity of the potential consequences, by reducing the likelihood of occurrence or by reducing the exposure to that risk. These mitigation options can be used.

RISK MITIGATION STRATEGIES

Safety risk mitigations are actions that often result in changes to operating procedures, equipment, or infrastructure. Safety risk mitigation strategies fall into three categories:

- *Avoidance*: The operation or activity is canceled or avoided because the safety risk exceeds the benefits of continuing the activity, thereby eliminating the safety risk entirely.
- *Reduction*: The frequency of the operation or activity is reduced, or action is taken to reduce the magnitude of the consequences of the safety risk.
- *Segregation*: Action is taken to isolate the effects of the consequences of the safety risk or build in redundancy to protect against them.

In treating the risk, consideration should be given to the following critical elements:

- Competent and trained personnel.
- Suitable environment.
- Adequate and suitable materials and equipment.
- Adequate information, policies, procedures, and processes.

Risk mitigation and control options can include, but are not limited to:

- Reducing the likelihood of the risk occurring.
- Reducing the consequences, spreading, minimizing, or diluting the risk.
- Transferring the risk to a third party.
- Avoiding the activity entirely to reduce the risk; and accepting the risk as it stands.

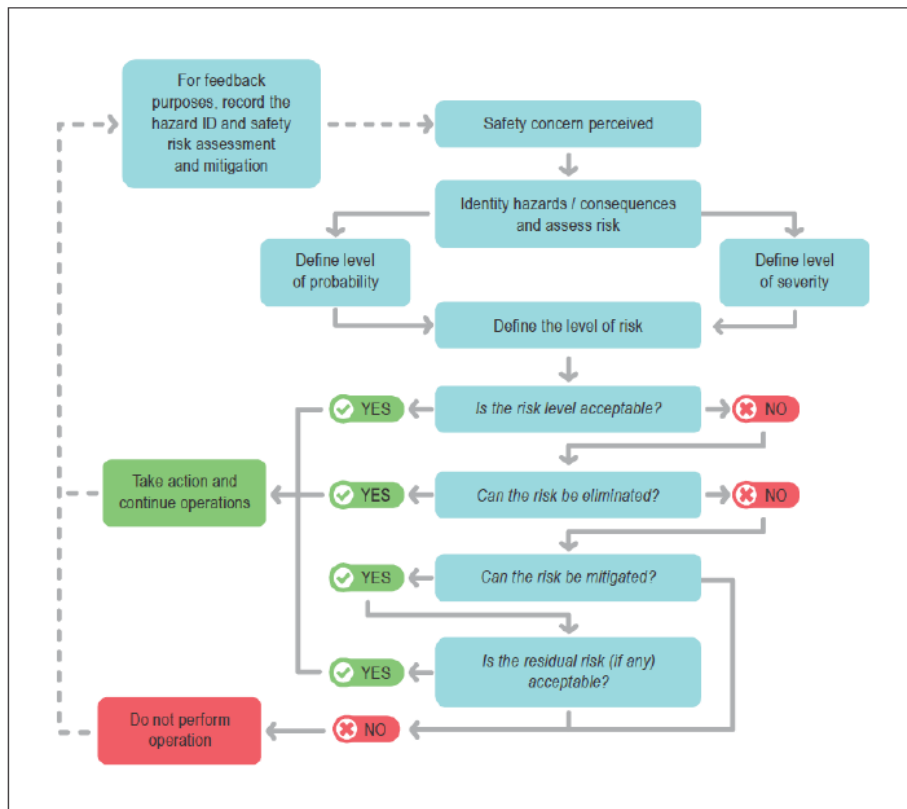
The ways in which Risks can be mitigated and controlled include:

- Developing plans or taking immediate action.
- Modifying or taking new approaches with procedures.
- Changing the environment within which the risk exists.
- Looking at ways to eliminate the circumstances that permit the risk.
- Develop and implement contingency plans where a high degree of risk or impact exists.

The consideration of human factors is an integral part of identifying effective mitigations because humans are required to apply, or contribute to, the mitigation or corrective actions. For example, mitigations may include the use of processes or procedures. This important human factor perspective results in more comprehensive and effective mitigations.

A safety risk mitigation strategy may involve one of the approaches described above or may include multiple approaches. It is important to consider the full range of possible control measures to find an optimal solution.

Safety risk decision-making tools and processes can be used to improve the repeatability and justification of decisions taken by organizational safety decision-makers. An example of a safety risk decision aid is provided below,





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The effectiveness of each alternative strategy must be evaluated before a decision is made. Each proposed safety risk mitigation alternative should be examined from the following perspectives:

- **Effectiveness.** The extent to which the alternatives reduce or eliminate the safety risks. Effectiveness can be determined in terms of the technical, training, and regulatory defenses that can reduce or eliminate safety risks.
- **Cost/benefit.** The extent to which the perceived benefits of the mitigation outweigh the costs.
- **Practicality.** The extent to which mitigation can be implemented and how appropriate it is in terms of available technology, financial and administrative resources, legislation, political will, operational realities, etc.
- **Acceptability.** The extent to which the alternative is acceptable to those people that will be expected to apply it.
- **Enforceability.** The extent to which compliance with new rules, regulations or operating procedures can be monitored.
- **Durability.** The extent to which the mitigation will be sustainable and effective.

Corrective action should consider any existing defenses and their (in) ability to achieve an acceptable level of safety risk. This may result in a review of previous safety risk assessments that may have been impacted by the corrective action. Safety risk mitigations and controls will need to be verified/audited to ensure that they are effective. Another way to monitor the effectiveness of mitigations is using SPIs.

RISK MITIGATION CONTROLS

Risk mitigation is the process of implementing actions or defenses to eliminate or reduce the likelihood or severity, or both, of risks associated with hazards.

Risk analyses should concentrate not only on assigning levels of severity and likelihood but also on determining why these levels were selected. This is often referred to as root cause analysis, which is the first step in formulating mitigation actions. Several analytical models are available to perform root cause analysis.

However, in many cases, simple brainstorming sessions among the staff or subject matter experts are the most effective and affordable method of finding ways to reduce risk. This also has the advantage of involving employees who will ultimately be required to implement the controls developed.

CORRECTIVE ACTION

Action taken to eliminate the cause of non-conformities to prevent them from recurrence.

PREVENTIVE CONTROL

A mitigating action or defense to block or prevent a hazard/ threat from escalating into an unsafe event.

RECOVERY MEASURE

A mitigating action, barrier, or defense to block or prevent an unsafe event from escalating into an accident.

9.12 RISK MANAGEMENT DOCUMENTATION & EFFECTIVENESS

Once the mitigation has been approved and implemented, any associated impact on safety performance provides feedback to the organisation's safety assurance process. The risk index of all hazard identification, risk control and mitigation action will be reviewed in Safety Action Group (SAG) and/ or Safety Committee Meeting (SCM) at least on biannually basis. This is necessary to ensure integrity, efficiency, and effectiveness of the control measures of existing risk or the new operational conditions risk. This is also to allows the management to be aware of the tolerable and unacceptable risk that needs to be addressed accordingly and will have visibility on the mitigation and controls. It is important to consider the full range of possible control measures to find an optimal solution. Completed Safety HIRM to be accepted and approved by an appropriate level of management using Safety Risk Mitigation (SRM) form and properly controlled and will be reviewed annually by GAM Safety Department by using Risk Register.

The platform to evaluate the effectiveness of the corrective, preventive and recovery measures for the risk are as follows:

- Conduct periodic reviews to assess the ongoing effectiveness of the measures through Safety Action Group and Safety Committee Meeting.
- Conduct internal audits and safety surveillance to ensure that the implemented measures comply with relevant standards and regulations. This helps ensure that the organization remains in compliance while maintaining effective risk management.
- Gather feedback from relevant stakeholders, including authority, client, staff, and management. Their perspectives can provide valuable insights into the real-world impact of the measures which can be gathered during meetings and discussion.
- Perform data analysis on incidents or any recurrence to understand the root causes and to further improve the effectiveness of the measures taken.



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PART 10.0

SAFETY PERFORMANCE MONITORING

AND MEASUREMENT

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PART 10 SAFETY PERFORMANCE MONITORING AND MEASUREMENT

10.1 INTRODUCTION TO SAFETY PERFORMANCE INDICATORS AND TARGETS

Safety performance management is central to the SMS activity to identify the top hazards on the company. Safety Performance Indicators (SPIs) is to determine whether Galaxy Aerospace (M) business activities and processes are working effectively to achieve its safety objectives.

Safety performance shall be verified in reference to the safety performance indicators (SPI) and safety performance targets of the SMS in support of the organization's safety objectives.

Safety performance indicators are generally data-based expressions of the frequency of occurrence of some events, incidents, or reports. The Safety Performance of an SMS is expressed by two measures or metrics as below:

- Safety Performance Indicator (SPI).
- Safety Performance Target (SPT).

GAM Safety Performance Indicator (SPI) and Target (SPT) are **reviewed yearly** based on safety performance of the company and audit findings.

10.2 SAFETY PERFORMANCE INDICATORS

Safety performance indicators are means to verify the safety performance of maintenance operations and to validate the effectiveness of risk controls. The indicator(s) chosen should correspond to the relevant safety goals. GAM's safety indicators would be as follows:

- High-consequence indicators to the monitoring and measurement of high consequence occurrences, such as accidents or serious incidents. High consequence indicators are sometimes referred to as reactive indicators. Any significant abnormal trend or breach of the target for any of Acceptable Level of Safety Performance (ALoSP) indicators would warrant appropriate investigation into potential hazards or risks associated with such deviation.
- Lower-consequence indicators to the monitoring and measurement of lower consequence occurrences, events, or activities such as voluntary reporting, non-conformance findings or deviations. Lower-consequence indicators are sometimes referred to as proactive indicators.

10.3 SAFETY TARGET

The Accountable Executive in consultation with the Safety Manager defines the safety performance indicators and targets. These targets must then be agreed and concurred by the CAA Malaysia. GAM’s safety targets would be as follows:

- 5% reduction of MOR monthly incident rate per 10,000 hours maintenance from previous year average rate.
- 5% reduction of CAMO ARR & audit finding rate per 10,000 hours maintenance from previous year average rate.
- 5% reduction of AMO audit finding rate per 10,000 hours maintenance from previous year average rate.
- 4% improvement of training attendance rate per 10,000 hours maintenance from previous year average rate.
- 2% improvement of voluntary safety reporting rate per 10,000 hours maintenance from previous year average rate.

10.4 SAFETY PERFORMANCE MONITORING

Safety performance monitoring is the process whereby the SPIs are reviewed in relation to safety management policies and objectives. Such monitoring shall be done at the committee level with respect to its pre-established safety target (desired level). This performance monitoring process includes:

- Safety reporting.
- Safety assessment.
- Safety reviews including trending of data and
- Safety audits.
- Surveys.

10.5 ACCEPTABLE LEVEL OF SAFETY PERFORMANCE (ALoSP)

Acceptable Level of Safety Performance (ALoSP) is the expression of an organization’s minimum acceptable safety performance level(s) associated with a set of pre-established safety indicators. They are the minimum safety performance that GAM should achieve while conducting their maintenance functions.

The relationship between acceptable level of safety, safety performance indicators, safety performance targets and safety requirements are as follows:

- An acceptable level of safety is the overarching concept.
- Safety performance indicators are the measures or metrics to determine if the

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acceptable level of safety has been achieved.

- Safety performance targets are the quantified objectives pertinent to the acceptable level of safety.
- Safety requirements are the tools or means required to achieve the safety performance targets.
- Corrective action shall be taken when target is not achieved and /or alert levels are breached. This includes new target and completion dates.

10.6 DEVELOPING OF SPI

In GAM, SPIs are being developed by the Safety Manager based on the GAM entire operations. This includes, but not limited to AMO, Quality, CAMO, Safety and MTO Department. The safety performance indicators and safety performance target of the SMS will be reviewed in the Safety Action Group & Safety Committee Meeting. Safety performance shall be acknowledged in reference to the safety performance indicators (SPI) and safety performance targets (SPT) of the SMS to be fully supported by all relevant heads of department in GAM.

SPIs are monitored via performance chart. The acquired data such as incident / accident report and other high/low consequences outcomes, monthly man hours utilization, numbers of hazard reporting and numbers of NCR raised are collected from the relevant department.

The collected data analyzed and presented in chart form. Monthly submission of the collective data to CAAM purposely for continued engagement between the heads of department (Post Holders) and the CAAM representative.

SPIs are used to measure GAM operational safety performance and company SMS performance. SPIs rely on the monitoring of data and information from various sources including but not limited to from top management, department i.e., AMO, QA, CAMO, MTO, and safety department. Several factors have been considered during developing the SPIs i.e., data availability, common industry SPI, reliability of the data and determining the correct indicators.

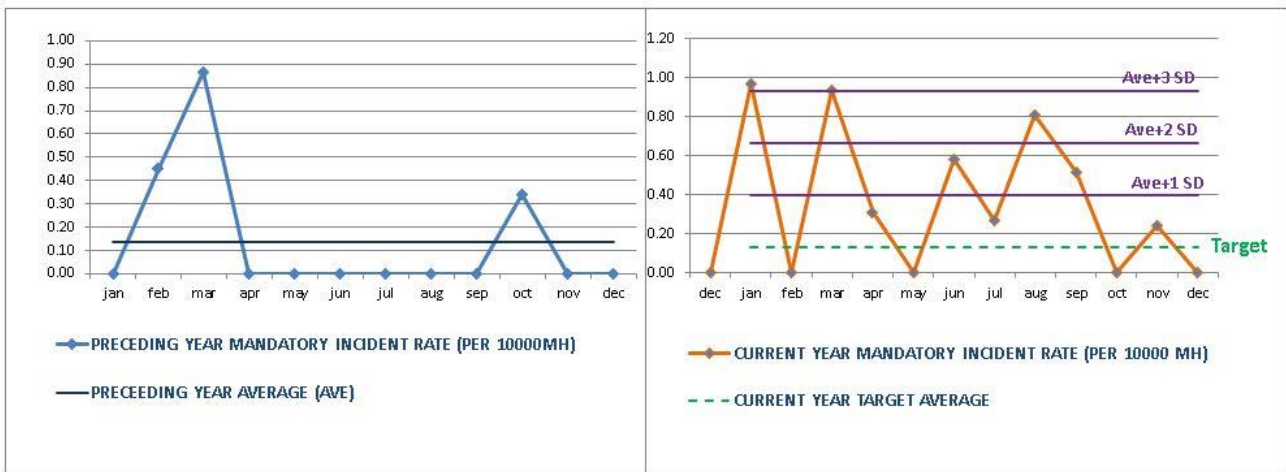
The development of SPIs should be linked to the safety objectives and be based on the analysis of data that is available or obtainable. The establishment of SPI shall get the approval from all relevant HOD during the Safety Committee Meeting (SCM). After SPIs have been established, GAM will ensure it is appropriate to the SPTs and alert levels. The monitoring and measurement process of selected safety performance indicators, corresponding SPTs and safety triggers will be updated during the SCM by the Safety Department.

10.7 SPI ALERT TRIGGER

Besides setting SPI, GAM has also established alerts in the SPI chart to define the abnormal or unacceptable event occurrence rate. The alert level setting will effectively serve as the demarcation line between an acceptable trend and an unacceptable trend for a safety indicator. If the event occurrence rate has not breached the alert level criteria, the performance is deemed to be acceptable and has achieved its target.

Alert Level Trigger

An alert (abnormal/unacceptable trend) is indicated if ANY of the condition below are met for the current monitoring period (current year)



- Any single point is above the 3 SD line/value.
- 2 consecutive points are above the 2 SD line/value.
- 3 consecutive points are above the 1 SD line/value.

When an alert is triggered (potential high risk or out-of-control situation), appropriate follow-up action is expected, which may require further analysis to determine the source and root cause of the abnormal incident rate and any necessary action to address the unacceptable trend. The alert level setting is based on the SD basic calculation. To calculating the SD, the formula is:

$$\sigma = \sqrt{\frac{\sum (x - \mu)^2}{N}}$$

x is the value of each data point
μ is the average value of all the data points.
N is the number of data points and

Breached target or alerts shall be presented in the management meeting to be analyzed prior to submission to the authority. The issue will be disseminated to Safety Committee Meeting (SCM) and Safety Action Group (SAG) in purpose of continuous of safety information flow throughout the organization.



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PART 11.0

SAFETY INVESTIGATIONS

PART 11 SAFETY INVESTIGATIONS

Investigation shall be carried out for all reported accidents, through safer card or occurrence report (OR). This is crucial to identify the contributing factors or root cause the accidents.

The investigator, or team of investigators must be technically competent and either possess or have access to background information so that facts and events are interpreted accurately. The investigator should have the confidence of staff and the investigation process should be a search to understand how the mishap happened, not a hunt for someone to blame.

The safety investigation should focus on the identified hazards and safety risks and opportunities for improvement, not on blame or punishment. The way the investigation is conducted, and most importantly, how the report is written, will influence the likely safety impact, the future safety culture of the organization, and the effectiveness of future safety initiatives.

Effective safety management depends on quality investigations to analyze safety occurrences and safety hazards, and report findings and recommendations to improve safety in the operating environment. There is a clear distinction between accident and incident investigations under Annex 13 and GAM safety investigations. Investigation of accidents and serious incidents under Annex 13 are the responsibility of the Air Accident Investigation Bureau (AAIB). This type of information is essential to disseminate lessons learned from accidents and incidents.

Safety investigations are conducted by GAM as part of our SMS to support hazard identification and risk assessment processes. There are many safety occurrences that fall outside of Annex 13 that could provide a valuable source of hazard identification or identify weaknesses in risk controls. These problems might be revealed and remedied by a safety investigation conducted by GAM. The primary objective of the GAM safety investigation is to understand what happened, and how to prevent similar situations from occurring in the future by eliminating or mitigating safety deficiencies. This is achieved through careful and methodical examination of the event and by applying the lessons learned to reduce the probability and/or consequence of future recurrences. GAM safety investigations are an integral part of the service provider's SMS.

Investigations of safety occurrences and hazards are an essential activity of the overall risk management process in aviation. The benefits of conducting a safety investigation include:

- a) gaining a better understanding of the events leading up to the occurrence.
- b) identifying contributing human, technical and organisational factors.
- c) identifying hazards and conducting risk assessments.
- d) making recommendations to reduce or eliminate unacceptable risks; and
- e) identifying lessons learned that should be shared with the appropriate members of the aviation community.

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11.1 INVESTIGATION PROCESS

Safety investigation is a process conducted for the purpose of accident prevention, which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and, when appropriate, the making of safety recommendations. The main objective of safety investigation is:

- To establish the events leading to the accident.
- To identify the most probable root cause(s) of the accident.
- To recommend appropriate corrective actions to prevent recurrence of such accident.

All incidents, accidents, events, and equipment damage must be reported to the Safety Department via Safer Card in GAMS online portal and to email to Quality Department using Occurrence Report (OR). The Safety Department shall investigate the report or when the need arises; assemble specialists or a team of specialist (SAG) to assist in investigation. Investigation shall be carried out for all reported incidents and accidents that impact the organization's safety. This is crucial to identify the contributing factors or root cause to the unsafe event.

The investigator, or team of investigators must be technically competent and either possess or have access to background information so that facts and events are interpreted accurately. The investigator should have confidence in the investigation process. Results of the investigation including the root causes, corrective and preventive actions shall be documented.

Corrective or preventive actions will be reviewed for updating any existing safety risk assessment or need to initiate a safety risk assessment for newly uncovered hazards or risks. Feedback on the investigation should be notified to the originator that their reports have been received and share the results of analysis with the originator.

GAM safety investigation is triggered by a notification (report) submitted through the safety reporting system i.e., Safer Card in GAMS online portal or Occurrence Report via email to Quality Department. Crisis Management Meeting (CMM) will be held should it fall under category of Mandatory Occurrence Report (MOR) that required for reporting to CAA Malaysia (CAAM). CMM is a GAM platform to establish the initial information on the occurrence for report submission to CAAM.

If an investigation is to commence, the first action will be to appoint an investigator or where the resources are available, an investigation team with the required skills and expertise. The size of the team and the expertise profile of its members depend on the nature and severity of the occurrence being investigated. The investigating team may require the assistance of other specialists. A team of investigation consist of independent department i.e., Quality & Safety Department is assigned to carry out an internal investigation, with support from the appointed subject matter experts. GAM safety investigators must be independent from the area associated with the occurrence or identified hazard to ensure the impartiality. The investigators would ideally be chosen for the role because of their knowledge, skills, and character traits, which should include integrity, objectivity, logical thinking, pragmatism, and lateral thinking.

11.2 CRISIS MANAGEMENT

Crisis Management is also part of the initial investigation that has been carried out in GAM. This Crisis Management plan is ensuring that in the event of a crisis the management in GAM will be well prepared to deal with the procedural elements in the crisis and be able to communicate quickly and efficiently with its key audiences and show that it took all possible measures to prevent the crisis. This procedure applies to the following situations:

- Interruption of the normal operations or conduct of the business.
- Requirement for an immediate coordinated management response.
- When a situation has the potential to quickly focus news media and public attention on the business.

The procedure ensures that in the event of a crisis, the management will be well prepared to deal with the procedural elements of the crisis and be able to communicate quickly and efficiently with relevant key audiences and show that all possible measures were taken to prevent the crisis.

In the event of a crisis, people inside and outside the group will be assured that all possible action is being taken to rectify the situation and that the group is dealing with those involved in a humane and caring way and that steps are being taken to prevent recurrence of the incident.

The crisis management procedure is divided into the following sections:

- Preventing a crisis.
- Responsibility and procedures.
- Setting up of crisis management team.
- Arrangement of crisis control, immediate action, and mitigation.
- Analyze impact and improvement toward organizational operation.

The most effective way to prevent a crisis is to take all possible measures to avoid one happening. The following systems have been documented at GAM to ensure good management practices, to help prevent a crisis from occurring and to detail action to be taken in the event of certain incidents:

- GAM Safety Management Systems (SMS).
- GAM Maintenance Organization Exposition (MOE).
- GAM Engineering Procedure Manual (EMP).
- GAM Human Resources Procedure.

11.3 SAFETY INVESTIGATION REPORT

The output of all investigations will be a written report. This will follow the format defined as per GAM Safety Investigation Report Form. Investigators are to ensure that applicable information is inserted into all the applicable fields.

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Copies of all investigation working documents, data and other evidence will be securely stored to prevent misinterpretation and/or misuse of the information. The following indicates the stages that may occur in the reporting process, depending upon the size and severity of an occurrence.

GAM is responsible to develop and implement any corrective actions and ensure relevant department manage a proper effective closure to all findings. Any reports raised through safer card, mandatory occurrence report (MOR) or crisis management meeting (CMM), completed Hazard Identification Risk Mitigation (HIRM) form will be attached with the investigation report as part of documentation submission to CAAM through CAAM Aviation Reporting System (CAREs) which can be accessed through this link <https://safetyreporting.caam.gov.my/>. The report will be shared internally through the SAG and SCM meeting as well.

11.4 SAFETY RECOMMENDATION

When an investigation identifies hazards or unmitigated risks, safety action is required. The need for action must be communicated by means of safety recommendations to those with the authority to expend the necessary resources. Failure to make appropriate safety recommendations may leave the risk unattended.

Formal written safety recommendations ensure that the recommendations are not misunderstood and provide the necessary baseline for evaluating the effectiveness of implementation. However, it is important to remember that safety recommendations are only effective if they are implemented.

As with the investigation of accidents and serious incidents, the investigation of minor internal occurrences results in a report that is communicated to relevant operational managers for analysis and the possible development of corrective or preventive action.

11.5 INCIDENT FOLLOW-UP

Immediate circumstances of the incident, and the underlying SMS weaknesses which caused the incident, shall be identified to enable judgments to be made for authorizing the necessary follow-up action.

Safety Department shall disseminate throughout GAM the Lesson-learnt from accidents, incidents, and near-miss incidents investigated by the company. Lesson-learnt is a medium of communication for all GAM personnel to see the result of the company's investigative efforts and to furnish personnel with knowledge and information that will aid in preventing similar events from re-occurring in the future. Lessons learnt from the incident shall be reviewed by the Safety Committee.

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11.6 DISCIPLINARY INQUIRY AND ACTIONS

The safety investigation should focus on the identified hazards and safety risks and opportunities for improvement, not on blame or punishment. The way the investigation is conducted, and most importantly, how the report is written, will influence the likely safety impact, the future safety culture of the organization, and the effectiveness of future safety initiatives.

The disciplinary inquiry procedure at GAM is outlined to address actions associated with the outcomes of investigation reports. This process involves:

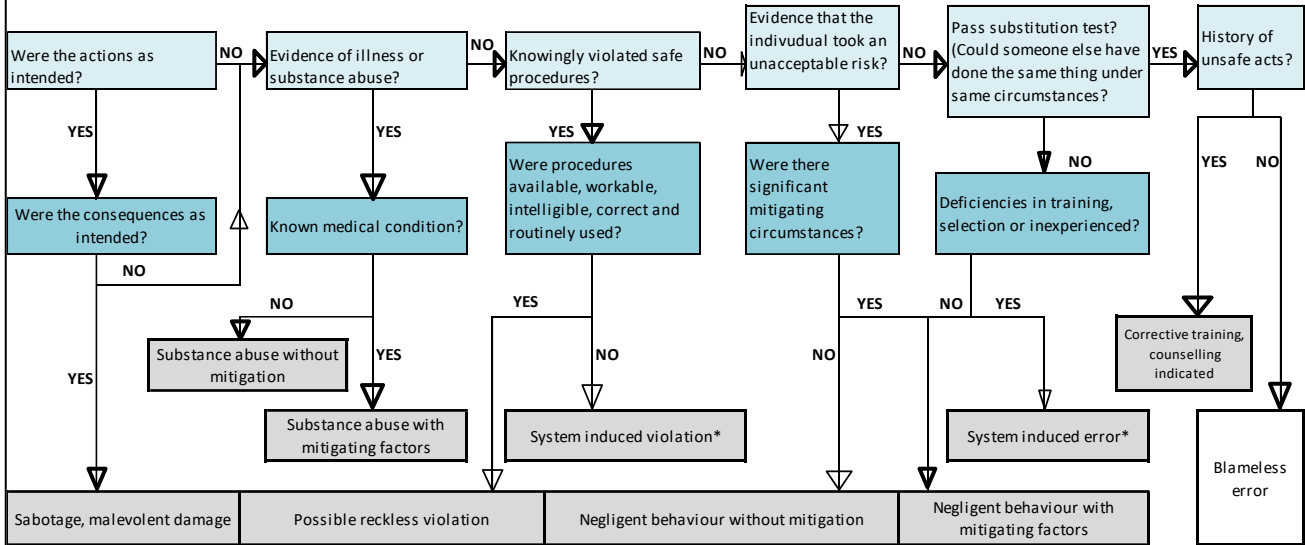
- a) Clearly defining the steps and protocols for initiating a disciplinary inquiry based on the investigation findings.
- b) Establishing a fair and impartial mechanism for conducting the inquiry, ensuring representation for all involved parties.
- c) Outlining the potential disciplinary actions that may be taken in response to identified misconduct or negligence.
- d) Ensuring that the disciplinary actions are commensurate with the severity of the findings and aligned with the company's policies and regulations.
- e) Incorporating a feedback loop to continuously improve the disciplinary process based on lessons learned from previous inquiries.

It is essential that this disciplinary inquiry process is transparent, fair, and adheres to legal and ethical standards, contributing to a robust and accountable organizational culture at GAM.

GAM will determine whether an error or rule breaking has occurred through the CMM and the outcome from the investigation report, so that it can establish whether any disciplinary action should be taken. To ensure the fair treatment of persons involved, it is essential that those responsible for making that determination have the necessary technical expertise so that the context of the event may be fully considered.

Personnel who report are treated fairly and justly, without punitive action from GAM, EXCEPT in the case of known reckless disregard for regulations and standards, or repeated substandard performance, which punitive disciplinary action would be considered. The “Just Culture Disciplinary Process” shown on the next diagram is used when deciding if disciplinary action is appropriate.

Just Culture Disciplinary Process



Administrative actions:

Wilful Violation/ Gross Negligence			Violation / Non-compliance			Error / Mistake			
Licence / Approval Withdrawal	Licence / Approval Suspension – Up to 12 months	Licence / Approval Suspension – Up to 6 months	Licence / Approval Suspension – Up to 3 months	Licence / Approval Suspension – Up to 30 days	Licence / Approval Suspension – Up to 7 days	Letter of Warning	Letter of Advice/ Caution	Verbal Advise / Caution	No Action



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PART 12.0
SAFETY TRAINING AND
COMMUNICATION

PART 12 SAFETY TRAINING AND COMMUNICATION

12.1 SAFETY MANAGEMENT SYSTEM TRAINING

The main purpose of the safety training program is to ensure that personnel, at all levels of the organization, maintain their competence to fulfil their safety roles; therefore, competencies of personnel should be reviewed on a regular basis.

All AMO staff are required to attend Initial SMS Training. This initial training will be due in two years (24 months) from date of completion and will be refreshed with SMS Recurrent Training. Non-AMO staff required to attend SMS Awareness Training during Induction Training.

SMS Training Assessment will be conducted at the end of initial and recurrent training. The assessment is a questionnaire to evaluate individual competence and to take appropriate remedial action when necessary.

SMS Training Records for all staff are available on GAM SMS Training Database controlled by the Safety Department.

The Safety Department is responsible for reviewing the training syllabus as per the SMS compliance. SMS Initial and Recurrent trainings are reviewed periodically, at least once in two years or whenever deemed necessary to review as per the following criteria.

- Changes to the regulations,
- Changes to Company Policies,
- Serious or major accident which caused high severity.
- Changes in SMS functions or processes which have impact on safety training.

Initial and recurrent SMS training package will be approved by the SMS Manager. SMS Trainers to be briefed on the changes to the syllabus by SMS Manager.

Training feedback form to be reviewed for improvements and to improve on subsequent training. This includes the trainer’s competency, training materials and course improvements.

To ensure the competence level of SMS trainers, all personnel to be qualified as instructors are competent and proficient with qualification before qualified as instructor as per Quality Assurance Manual (QPM).

TRAINING	PERSONNEL	VALIDITY
SMS Initial Training	AMO Staff	2 Years
SMS Recurrent Training	AMO Staff	2 Years



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SMS training shall include but not limited to the following information:

- Basic principles of SMS.
- Relevant national regulations.
- GAM commitment to safety.
- GAM Safety Policy and Objective
- Organization, roles, and responsibilities of staff in relation to safety.
- Process of reporting incident/accident/hazard (Safer cards, accident/incident report).
- Safety programs.
- Communication methods for the dissemination of safety information.
- Safety promotion.
- Applicable Emergency Response procedures

12.2 SMS COMMUNICATION AND PROMOTION

Safety communication is another essential foundation for safety promotion and the development and maintenance of an adequate safety culture. SMS objectives and procedures should be communicated to all GAM staff and relevant contracted services.

Safety communication aims to:

- Ensure that staff are fully aware of the SMS; this is a good way of promoting the organization's safety policy and safety objectives.
- Convey safety-critical information; Safety critical information is specific information related to safety issues and safety risks that could expose the organization to safety risk. This could be from safety information gathered from internal or external sources such as lessons learnt or related to safety risk controls. The Safety Department to determine what information is considered safety critical and the timeliness of its communication.
- Raise awareness of new safety risk controls and corrective actions; The safety risks faced by the organization will change over time and whether this is a new safety risk that has been identified or changes to safety risk controls these changes will need to be communicated to the appropriate personnel.
- Provide information on new or amended safety procedures; when safety procedures are updated it is important that the appropriate people are made aware of these changes.
- Promote a positive safety culture and encourage personnel to identify and report hazards; safety communication is two-way. It is important that all personnel communicate safety issues to the organization through the safety reporting system.

The Safety Department aims to share the lessons learned from investigations and case histories or experiences, both internally and from other organizations, are distributed widely. The modes of communication on safety promotion may include any of the following lists:

- Safety Policy, Objectives, and procedures.
- Memo, circulars, Safety Alerts or Safety Bulletins.
- Safety Video.
- Toolbox talk/Workplace briefing.
- Safety Noticeboards.
- Safety Campaign.

Safety promotion is linked closely with safety training, the dissemination of safety information and the underlying safety culture. Safety promotion is a mechanism to communicate lessons learned from safety occurrences and other safety related activities are made known to all employees, thereby advancing overall safety competence of the organization.

Safety promotion also provides a means of encouraging the development of a positive culture and ensuring that, once established, the safety culture is maintained.




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PART 13.0
CONTINUOUS IMPROVEMENT AND SMS
AUDIT

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PART 13 CONTINUOUS IMPROVEMENT AND SMS AUDIT

The safety assurance and internal audit processes contribute to the ability to continuously improve its safety performance. Ongoing monitoring of the SMS, its related safety risk controls and support systems assures that safety management processes achieve the desired safety performance objectives.

Safety assurance involves continuous monitoring of all aspects of the Company's operations. On the surface safety assurance demonstrates compliance with CAAM requirements, international standards and Company's rules, regulations, standards, and procedures.

Monitoring for assurance provides another avenue for proactive hazard identification, validation of the effectiveness of safety actions taken, and the continuing evaluation of safety performance. Through regular reviews and evaluation, the Company can pursue continuous improvements in safety and ensures that the SMS remains effective and relevant to its operations. The continuous improvement is to review the SMS functions and processes for overall effectiveness.

13.1 SAFETY ASSURANCE

Safety assurance consists of processes and activities to determine whether the SMS is operating according to expectations and requirements in accordance with the regulatory requirement.

The process is to continuously 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.

SMS effectiveness is supported by safety assurance activities that include the verification and follow up of actions and the internal audit processes. It should be recognized that maintaining and continuously improving SMS is an ongoing journey as the organization itself and the operational environment will be constantly changing.

SMS effectiveness should not be based solely on SPIs; there are variety of methods to determine its effectiveness, measure outputs as well as outcomes of the processes, and assess the information gathered through these activities. Such methods may include:

- *Audits*: includes internal audits and audits carried out by other organizations.
- *Assessments*: includes assessments of safety culture and SMS effectiveness.
- *Monitoring of occurrences*: monitor the recurrence of safety events including accidents and incidents as well as errors and rule-breaking situations.
- *Safety surveys*: including cultural surveys providing useful feedback on staff engagement with the SMS. It may also provide an indicator of the safety culture of the organization.

- *Management reviews*: examine whether the safety objectives are being achieved by the organization and are an opportunity to look at all the available safety performance information to identify overall trends. It is important that senior management review the effectiveness of the SMS. This may be carried out as one of the functions of the highest-level safety committee.
- *Evaluation of SPIs and SPTs*; which is part of the SCM. It considers trends and when appropriate data is available, adequate, and effective. Safety Performance Indicators to ensure continuing stability. To evaluate whether the risk mitigations and controls are implemented and effective.

13.2 INTERNAL AUDIT

The internal audit function includes evaluation of all the safety management functions throughout the organization. Internal audits involve assessment of the aviation activities that can provide information useful to the organization's decision-making processes.

SMS audits are also carried out to evaluate the Safety Performance which identifies the risk or hazards and reviewing existing controls for effectiveness. To verify and evaluate whether the risk mitigations and controls which were implemented are effective by monitoring the subsequent safety performance trends.

Safety reports reviewed the effectiveness of closure. Ensure mitigation actions are monitored and closed in a timely manner. Hazard and risk of the safety reports evaluated for proper preventive actions.

The periodic audit will be planned by the Safety Department as per the Annual Audit Plan for internal departments. The audits are to maintain continuously maintain and improve the overall effectiveness of the SMS.

All non-compliances / discrepancies findings related to safety issue found during the audit (planned / surveillance) shall be recorded using NCR to the responsible personnel. The non-compliances will be classified as follows:

LEVEL	TARGET DATE		DESCRIPTION
	Corrective	Preventive	
Level 1 Major	Immediate (not more than 7 days)	Within 2 (two) weeks	<ul style="list-style-type: none"> • Major threat to. <ul style="list-style-type: none"> ○ aircraft / equipment destroyed. ○ fatality • Affect ERP procedure. • Legal incompliance / Violation to CAR (Part 145)
Level 2 Moderate	Within 2 (two) weeks	Within 3(three) months	<ul style="list-style-type: none"> • A large reduction in safety margins, physical distress, or workload such that the operators/customers cannot be relied upon to perform their tasks accurately or completely. • Moderate / minor threat to: <ul style="list-style-type: none"> ○ Aircraft/equipment damage ○ operation limitation ○ serious / minor injury ○ minor incident • Nuisance
Observation	For observation / information		<ul style="list-style-type: none"> • Not a threat to aircraft, people, property and/ or environment • Finding may improve the working environment
Repetitive	Repetitive finding. Refer to the level of the finding		<ul style="list-style-type: none"> • Findings are found repetitive for the last 2 audits.

13.3 AUDIT FOLLOW UP

The auditor is responsible for monitoring the follow-up of his/her audits. He/she shall ensure the record of corrective actions and he/she checks the appropriateness of proposed corrective/preventive actions regarding the non-conformity.

If the proposed corrective/preventive action is accepted, the auditor will close the non-conformity. The auditor may plan a verification of the effectiveness of the corrective/preventive action, and he/she will advise the Department accordingly and they will mutually agree on the date for the on-site verification. If the corrective action is not in accordance with the cause of the non-conformity, the auditor must advise the Department for further analysis. The audit report complete with auditee corrective action implementation remarks shall be passed to the Safety Department for review and comment.

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13.4 SAFETY SURVEILLANCE

This involves continuously monitoring its processes as well as its operating environment to detect changes or deviations that may introduce emerging safety risks or the degradation of existing safety risk controls. Such changes or deviations may then be addressed through the SRM process or mitigation actions from SPI, MOC or safety reports.

Safety Investigation reports identify probable and contributory factors leading to a mishap. Safety Department shall review external investigation reports for similarity to GAM operating environment and procedures and, as a part of safety assurance to adopt and implement the lessons learned in these occurrences to prevent the development of similar deficiencies in GAM. The corrective actions from the investigation’s reports taken into consideration during the safety surveillance.

Proactive evaluation of facilities, equipment, documentation, procedures, and substandard safety performance for implications to safety through safety reviews, hazard surveys.

Perhaps the simplest form of safety assurance involves carrying out informal ‘walkaround’ of all operational areas of the organization. Talking to workers and supervisors, witnessing actual work practices, etc., in a non-structured way provides valuable insights into safety performance.

The resulting feedback should help to fine-tune the SMS. This method of assurance is particularly effective when significant changes in the operating environment have occurred, or major procedural changes have been implemented. No recording of safety inspection is required as it is regarded as an informal exchange of information.

Hazard surveys are an inexpensive way to systematically examine organizational elements or processes used to perform a specific operation. They are SMS is regularly assessed or audited to ensure that the structure of the SMS is maintained. It is also a formal process to ensure continuous improvement and effectiveness of the SMS. Internal SMS Audit shall be carried out annually.

During hazard survey, if any advisory action required, Safety Advisory Notice (SAN) and Notice of Prohibition (NOP) with reference as per Appendix 6 and Appendix 7 will be issued by the Safety Department and later recorded in Master Hazard List for statistical purpose. If the trend and culture significantly show, it is a norm practice and hazardous to operation. All SAN and NOP to be saved in Safety Database.

Significant trends and lessons learnt to be disseminated to staff via SMS Bulletin, SMS trainings or briefings.



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PART 14.0

SMS DATA AND RECORD MANAGEMENT

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Part 14.0 SMS DATA AND RECORD MANAGEMENT

Operating the SMS generates a significant amount of data, documents, and records. Proper management and record keeping of such data is crucial for sustaining an effective SMS. Documents or files which are considered as SMS related records and methods of storing the SMS documents and records are elaborated further.

14.1 SAFETY RECORDS

GAM maintains a systematic record of all measures taken to fulfil the objectives and activities of the SMS. Examples of such records includes the following but not limited to:

- Mandatory Occurrence Report (MOR) – CAAM Copy.
- Safer Card (SC)
- Occurrence Investigation
- Management of Change (MOC) Control
- Internal & External Audit Reports
- Surveillance Check List
- Safety Advisory Notice (SAN)
- Notice to Prohibition (NOP)
- Minutes of Safety Meetings (SAG/SRB)
- Hazard Identification Risk Management (HIRM) & Risk Register Control.
- Safety related training records (i.e., Training for Investigators, SMS Trainers records, and Syllabus.
- CAAM – SPI, monthly statistic, related charts, Target/Alert Notice, and ALoSP.
- SMS Staff and SMS Trainers personnel training records.
- Emergency Response Coordination – Debrief minute/records.

Safety Forms for the task stated above are stored in drive. Hard copy records are to be maintained in sufficient detail to ensure appropriate identification, legibility, storage, protection, archiving, retrieval, retention time, and traceability of all safety related decisions.

To prevent tempering of records, access to the safety documents shall only be permitted to Safety Department Personnel. All records, data relating to the SMS shall be maintained by the Safety Department for a minimum period of 36 months (3 years) from the date the record was filed.

Hard copies are to be disposed of accordingly after 5 years. Preferably to be shredded. To save cost, it is recommended to use electronic copies unless requires formal signatures. Electronic records to be maintained in SMS database server for 5 years. Later the copy copies to be stored in achieve folder for 10 years. After 10 years, the soft copy records to be deleted accordingly. The Safety Department is responsible for maintaining the GAM electronic reporting system. Electronic reporting system records are to be maintained. Records should be traceable for all elements of the SMS and be accessible for routine administration of the SMS as well as audits purposes.



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PART 15.0

MANAGEMENT OF CHANGE (MOC)

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PART 15 MANAGEMENT OF CHANGE (MOC)

15.1 INTRODUCTION

GAM will experience change over time due to expansion, contraction; changes to existing systems, equipment, programs, products, and services; and introduction of new equipment or procedures. Hazards may inadvertently be introduced into an operation whenever change occurs. Safety management practices require that hazards that are a by-product of change be systematically and proactively identified and appropriate measures to manage the safety risks of the consequences of hazards be identified, implemented, and subsequently evaluated.

Therefore, the Management of Change is a critical procedure that is used to plan and control changes that have a safety impact whenever there is a change. MOC Report can be raised by anybody in GAM via GAMS Portal through MOC module to justify the changes.

Safety risk assessment shall be performed to assess the new arrangements/changes by using a HIRM to previously risk mitigation as applicable prior to the implementation. Assessment shall be in accordance with **Part 9.0** in this manual.

GAM continually changing, in response to changes process and the need to improve service and quality to the company itself. The quality of GAM must be preserved in responding to these changes and changes must be properly planned and implemented so that service and quality level continue to be achieved. The primary objectives of MOC are:

- To manage and control changes made to the GAM environment.
- To minimize disruptions to the business and service that may be related to changes.
- To minimize the occurrence and impact of changes-related problems.

15.2 MANAGEMENT OF CHANGE (MOC) PROCESS

This systematic approach in managing and monitoring organizational change should be disclosed through a process by section in sequence as below:

- **Section A** – MOC Details.
- **Section B** – Supervisor/Head of Department Approval.
- **Section C** – Accountable Manager Approval.
- **Section D** – Safety Management System Section.
- **Section E** – Quality Assurance Department Section.
- **Section F** – Implementation and Review.

GAM management of change incorporated together with the Quality Department's MOC to ensure a comprehensive management when there are any changes in the company.

15.3 CLASSIFICATION OF CHANGE

Safety should be enhanced as the result of such changes Caution must be adequately addressed to ensure that safety is not degraded during or because of changes in the system. A systematic approach to managing and monitoring organizational change is part of the risk management process. Procedures are established and maintained to manage safety risks associated with changes in the system. Safety issues associated with change are identified and standards associated with change are maintained during the change process. Changes that are likely to trigger formal change management include:

- Changes or new technology, process, or equipment.
- Changes/additional in the operating environment.
- Changes of key/nominated personnel.
- Significant changes in staffing levels.
- Changes in safety regulatory requirements.
- Changes to aviation products.
- Changes to aircraft system or its operating procedures.
- Significant restructuring of the organization.
- Physical changes / Expansion (facility or base, aerodrome layout changes etc.).

15.4 MOC RESPONSIBILITIES AND DETAIL PROCESS

Requestor

The requestor filling up the form must be entitled as an official staff for GAM, with appropriate staff identification and permission access to GAMS system using GAMS portal and with reference as per Appendix 9. The requestor will be filling up the form in a:

- **Part A:** MOC Details

Head of Department

- To ensure all required data furnished with, to review, to analyze and to approve for the proposed changes to be analyzed in the next level.
- To ensure MOC forms are properly filled up and completed by the requestor in accordance with MOC form procedure latest revision and review of all its content to ensure compliance.
- To ensure all requirements and procedures are met and in compliance with GAM MOE and SMS manual latest revision.
- To raise HIRM if required or suggested by Safety Manager.
- To approve and comments in the **Part B:** Supervisor/Head of Department Approval.

Accountable Manager

- To review proposed changes and gives management support and commitment.
- To ensure all processes and procedure within the MOE and SMS are adhered to.
- To give approval, decision, and comments on the management section in **Part C**: Accountable Manager Approval.

Safety Manager

- To decide if safety assessment is required and to delegate and nominate the person in charge of assessment if the task can't be carried out by the Safety Manager itself.
- To carry out management of change process as per SMS manual latest revision.
- To review HIRM if required for each MOC raised.
- To ensure MOC report completed in accordance with procedures laid down in SMS manual latest revision, controlled and monitored for the purpose of records and audit.
- To approve and comments at Safety Management Section in the **Part D** : Safety Management System Section.

Quality Assurance Manager

- To carry out or delegate assessment or audit and issue audit report if required.
- To classify all proposed MOC in accordance with procedure laid down in Para 5.0 with justification.
- To approve non-significant change after all the mentioned requirements are met.
- To liaise and recommend CAAM for approval of Significant change and provide all necessary assistance required related for the submitted changes in **Part E**: Quality Assurance Department Section.

Part F: Implementation review

- The implementation section is for tracking and evaluation of MOC process.
- This is to update the status/ progress of the changes and to determine if any additional action is needed. Quality Assurance Manager (QAM) will consider certain action that required such as the communication of the change and to conduct the audit during and after the changes to wrap up the MOC process.

Cross-reference document:
QAN 001.R3



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PART 16.0
COORDINATION OF EMERGENCY
RESPONSE PLAN

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PART 16 EMERGENCY RESPONSE PLAN

An Emergency Response Plan (ERP) is an integral part of SMS and shall commence if any major accident, incident, or crisis that affects aircraft or aircraft component during maintenance. GAM establishes and maintains an emergency response coordination plan to ensure that the emergency response plan is properly coordinated.

This coordination interface with the CAAM, Local Authorities and relevant internal and external organization for recovery and for the business to be back to normal operations. It is also outlined by official notification to respective authorities, customers, contractor, and sub-contractor in the event of service contingency plan. An official notification shall be channeled via Safety Manager with the acknowledgement from Accountable Executive.

Coordination of ERP is to ensure safe continuation of operations and the return to normal operations as soon as possible. This should ensure an orderly and efficient transition from normal to emergency operations, including assignment of emergency responsibilities and delegation of duties.

The ERP identifies actions to be taken by responsible personnel during an emergency. Most emergencies will require coordinated action between different organizations, possibly with other external organizations such as non-aviation related emergency services. Each departmental key personnel have specific functionalities and responsibilities to ensure that the individual / departmental reaction is quick and effective coordination of emergency response.

16.1 COORDINATION WITH CAAM - AIRWORTHINESS, GOVERNMENT AGENCY AND RELEVANT/EXTERNAL AUTHORITIES.

GAM Quality Assurance (QA) Department to send notification to CAAM Airworthiness. Ensure investigations preliminary report and final reports documented and disseminated to CAAM in a timely manner as per Mandatory Occurrence Reporting (MOR) scheme requirement.

GAM Safety Department to notify and coordinate with Aircraft Accident Incident Investigation Bureau (AAIB) under Ministry of Transport (MOT), external Governments, Regulators, & Airport Authorities to assist on investigation and ensure aircraft recovery on timely manner if required.

16.2 ROLES AND RESPONSIBILITIES

Certain areas/personnel have pre-designated roles during an emergency. Some areas/personnel may have pre-assigned duties based on specific response plans or established procedures. To achieve this purpose, they shall undergo appropriate training to ensure competency in handling emergency cases. The following is the basic outline of duties and responsibilities. The duties may be assisted by the SMS Manager or delegated to the other HOD's in AMO operations.

This is to comprehend and understand their involvement, roles, and responsibilities. It is the responsibility of all departments in GAM AMO to be familiar with the functions or accountabilities in the procedures for emergency response coordination.

Duties and responsibilities of GAM AMO, as member of SAG are described below. Duties and responsibilities for other HOD's are described in the 'Deployment Process' below.

Incident Commander (IC)

GAM ERP adopts a management system widely known as the Incident Command (IC). IC can also be summarized as a "first-on-scene" structure, where the first responder of a scene has charge of the scene until the incident has been declared resolved, a more qualified responder arrives on scene and receives command, or the Incident Commander appoints another individual Incident Commander. The IC provides an organizational structure capable of responding to all levels of emergencies from simple to complex. It also provides the flexibility to respond to an incident as it escalates in severity.

On any emergency incident, the first arriving emergency responder (GAM personnel) will establish incident command. They will continue to exercise Incident Command authority until relieved by the senior official having legal or assigned responsibility for the type of incident occurring. The Incident Command has the authority to request operational area resources to help mitigate on-site emergencies. These resources would typically be the police, fire, medical and hazardous materials responders. (Will be represented by EIC/PIC at each base).

First Responder

GAM shall establish notification to nominated personnel as indicated above and where necessary they shall act as the Incident Commander until relieved by a senior person or the person legally responsible for the emergency. (Will be represented by GAM Staff at each base).

Fire / Spillage Emergency Warden

Shall assist in personnel evacuation and additional duties that shall be assigned by the Incident Commander. (Will be nominated from Safety Committee Members and Safety Action Group at each base).

First Aider

Shall assist with first aid response to affected personnel. (Will be nominated from Safety Committee Members and Safety Action Group at each base).

Safety & Health Officer

Shall act as the Incident Commander taking over from the first responders where applicable. (Will be represented by Safety Department).

Facility Manager

Provide technical information on the facility to aid during the ERP. (Will be represented by Departmental Head / EC/ CE).

16.3 ERP SCENARIOS

The type of emergency crisis related to GAM AMO are as follow but not limited to:

- Aircraft accident or incident which caused damage during base and line maintenance.
- Major fuel or hazardous chemicals fluids leakage.
- Injuries to maintenance crew during maintenance task.
- Aircraft/engine caught fire during maintenance.

16.4 DETERMINATION OF FIRE RISK

The responsible officer must, in determining the degree of risk, consider the following factors as well as those peculiar to the area, operation, or process.

- The possibility of injury to personnel, including the effect of poisonous gases or fumes resulting from heat.
- The probable extent and cost of damage and production losses if a fire occurs.
- The efficiency of existing fire prevention and protection measures.
- The ignition risk or production of heat and their nearness to flammable materials, vapors, gases, fumes, or dusts.
- The type, quantity and flash point of flammable materials present Chemical/Trade name materials versus Flash Points and the instructions covering specific materials in Material Safety Data Sheet (MSDS)

16.5 EMERGENCY PROCEDURE WHEN FIRE / SPILLAGE IS DISCOVERED

This subject covers the procedures which must be followed whenever a fire is discovered. The section that will be affected is in the Maintenance Area. The action taken in the first two minutes will decide the size of the fire and the extent of the damage.

In the event of a serious incident, the EC shall immediately stop all work and ordered in sequential manner except for completion of any work that requires continuity to prevent future problems.

The Department Head shall implement an immediate systematic safety check/risk assessment of the entire work area. This check will be monitored and audited by the EC. The objective of this check is to ensure that all work areas are safe and that there is no risk of a repetitive or similar accident. Any unsafe condition/acts shall be remedied immediately.

Work shall not resume until the HODs have signed off the work area, sector by sector, as being in all respects safe. This sign-off shall be countersigned by the EC who will authorize a resumption of work, sector by sector if necessary.

I. FIRE ORDERS

Action in the event of fire.

a. Raise the alarm.

- Activate the nearest fire alarm OR shout ‘FIRE, FIRE, FIRE’.
- Report fire location to EC or respective HOD’s.
- Contact the respective emergency contact number.

b. Attempt to save the aircraft or product.

- If fire was discovered in the maintenance hangar the aircraft should be towed out where possible to the safe areas e.g., relocate the aircraft to apron area.
- If the aircraft is on jack, please allocate a fire guard if possible.
- **WARNING:** The hangar fire suppression and protection systems will be triggered automatically in the degree or level of fire. Please close the aircraft doors, if possible, to protect from further damage to the aircraft or its component from the extinguishing agent.

c. Attempt to extinguish the fire.

- If it is safe to do so, attempt to extinguish the fire using the nearest fire extinguisher. Do not put yourself at risk.
- If the fire is not extinguished or it starts to spread, evacuate, closing any doors behind you.
- If cannot contain the fire or situation, please evacuate immediately as per the evacuation diagram at your respective area.

d. Emergency contact details

- The emergency contact details are in the Emergency Contact Number in respective areas.

EVACUATION PROCEDURE

- Do not panic.
- Do not use the lift.
- Leave the building immediately by using the nearest emergency exit.
- Leave the building in an orderly manner.
- Give assistance to the people that need help.
- Avoid carrying bulky items that may obstruct smooth flow of evacuation.
- Assemble at designed point.
- Report your present to the floor representative doing the head count.
- Do not re-enter the building unless authorized by the Fire Warden.
- Remain at the assemble point until the situation is declared safe by the Fire Warden.

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All personnel in maintenance area with Safety Department are responsible for monitoring fire safety standards in their area. The Fire Committee, in conjunction with the Safety Manager is responsible for the following:

- Establishing courses in basic firefighting and, where necessary, in specific fire-fighting techniques.
- Overall assessment of fire prevention, fire protection and fire-fighting policies.
- Investigation of fires.

The Safety Manager will nominate the AMO members of the Fire Committee. Fire Drill Exercise should be performed at least once every 2 years.

II. SPILLAGE OF FUELS AND OTHER HAZARDOUS LIQUID

This subject covers general workshop and hangar/ maintenance area when spillages of fuel or flammable liquids occur. It does not cover the fueling or de-fueling of aircraft. Any spillage of flammable liquids, (e.g., fuel, solvents, thinners) increases the risk of fire or explosion. This hazard is preventable if suitable precautions are taken by supervisors and the people doing the work.

SPILLAGE ORDERS

Action in the event of spillage.

THE FIRST ACTION IS TO STOP THE FLOW. If the risk of ignition is high e.g., in the vicinity of aircraft, especially at the departure base or if the flammable fluid has entered a drain, sewer or under floor area carry out the following instructions.

- Telephone the respective emergency contact number immediately.
- Stop the spill from spreading.
- Allow only essential personnel and vehicles to enter the area.

Before resuming normal operations allow the residue to evaporate. Wash area taking care that no overflow is allowed to enter drains, etc. The fire guard must remain in position until the area is declared safe by the EC. Small spills normally require no emergency action except immediate mopping up.

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16.6 BACK TO NORMAL OPERATIONS AFTER EMERGENCY

After the facilities has been declared as safe by the EC, the following process shall be adhered to by the Department Heads:

- In the event of a serious incident, the EC shall immediately stop the work area in an ordered and sequential manner except for completion of any work that requires continuity to prevent future problems.
- The Department Head shall execute an immediate systematic safety check/risk assessment of the entire work area. This check will be monitored and audited by the EC. The objective of this check is to ensure that all work areas are safe and that there is no risk of a repetitive or similar accident. Any unsafe condition/acts shall be remedied immediately.
- Work shall not resume until the HODs have signed off the work area, sector by sector, as being in all respects safe. This sign-off shall be countersigned by the EC who will authorize a resumption of work sector by sector if necessary.
- All tasks that were being performed prior to the fire evacuation/work stoppage shall be reviewed before a task is continued.
- A report shall be sent to the customer for recommendation and approval.
- A product in an acceptable condition will be re-processed from the beginning after approval is received from the customer.
- The unserviceable product will be sent back to the customer for the scrapping process. The affected product shall be accompanied by an unserviceable tag.

16.7 EMERGENCY MODE OPERATION

An emergency is a sudden, unplanned situation or event requiring immediate action. Coordination of emergency response planning refers to planning for activities that take place within a limited period during an unplanned aviation operational emergency. Emergency Mode Operation is important for delivering and supporting an effective and efficient response team during an unforeseen event. The agreed and documented objectives provide a point of reference to check implementation and operational decisions and activities for managing the event of Accidents or Incidents. The procedure in this Part is to ensure safe continuation of operation and return to normal operations during emergency and contingency as per cited in QAN-014.

During this critical situation, staff involved in the Emergency Response Coordination are to be isolated from the other day-to-day tasks of their respective department. If possible, the staff to be isolated in a separate room (i.e., meeting room, briefing room or HOD’s room) temporarily till recovery of the crisis.

Communication mediums such as email, voice calls, and any kind of social media application is recommended to be used as a mode to communicate during an emergency crisis. Office premises to be secured to protect from the media and external parties interfering in the operations.

Termination of the emergency will be declared by AE or assigned to SM, EM, QAM for AMO-related crises. Staff involved in the emergency crisis will return to normal operations. If the staff is stressed or traumatized, counseling and rest period to be given for rehabilitation of the staff.

Once aircraft return to airworthy condition and back to operations, AMO Operation to monitor closely if any residual effect or another impact from the accident or incident may cause the aircraft and related system defects.

16.8 EMERGENCY NOTIFICATION

The following individuals will be notified during any threshold incident. Any additional necessary notifications will be determined as per the emergency contact number at each base.

Primary Contact List:

NAME	POSITION	CONTACT NUMBER
Dato' Shamsul Kamar bin Samsudin	Accountable Executive	013-9310581
Wan Izahan Zameree bin Ishak	Safety Manager	012-6817902
Ismail bin Sulaiman	Chief Operation Officer	017-3615181
Omar bin Ahmad	Quality Assurance Manager	013-3639578
Syafrul Yamani bin Safruddin	Engineering Manager	019-6647415

16.9 RECORD OF ACTIVITIES

It is important that all activities are recorded so that lessons can be learn and the processes improved. The Safety Manager and the Head of Department of the area concerned shall record all activities, including timings. These should be handed over to the Safety Manager for revision of the processes.

16.10 REVIEW OF EMERGENCY RESPONSE PLAN (ERP)

The Safety Committee shall review the ERP procedure annually and where necessary, revise the ERP to include the corrective and preventive actions to be taken. Circumstances that lead to this review includes, but not limited to the followings:

- After periodic testing of ERP.
- After accidents or emergency.
- Significant changes in the company's premises, activities, or structure.
- Any statutory changes in the fire safety requirement.

16.11 INVESTIGATION RESPONSIBILITIES

GAM safety investigation is triggered by a notification (report) submitted through the safety reporting system i.e., Safer Card in GAMS online portal or Occurrence Report via email to Safety and Quality Department respectively. The Crisis Management Meeting (CMM) will be held should it fall under the category of Mandatory Occurrence Report (MOR) that required for

reporting to CAAM through CAAM Aviation Reporting System (CAREs). CMM is a GAM platform to establish the initial information on the occurrence for report submission to CAAM.

If an investigation is to commence, the first action will be to appoint an investigator or where the resources are available, an investigation team with the required skills and expertise. The size of the team and the expertise profile of its members depend on the nature and severity of the occurrence. A team of investigation consist of independent department i.e., Quality & Safety Department is assigned to conduct an internal investigation, with support from the appointed subject matter experts/ specialist. GAM safety investigators are independent from the area associated with the occurrence or identified hazard to ensure the impartiality.

16.12 EVIDENCE PRESERVATION AND MANDATORY REPORTING

Relevant evidence/ document/ equipment needs to be preserve/ quarantine and locked at the designated room under responsibility of Accountable Manager or Quality Assurance Manager. The master list of the evidence will be prepared for submission to the authority.

The incident affected in area need to be cordon and secure accordingly to prevent access to the incident area before been handed over to the authority i.e., AAIB/ CAAM/ Police. The Mandatory Occurrence Report (MOR) is required to be reported to CAAM through CAREs accordingly. CAAM safety reporting portal can be accessed through this link <https://safetyreporting.caam.gov.my/>.

16.13 EMERGENCY PREPAREDNESS AND RESPONSE (EPR) TRAINING

The Safety Department to arrange/ conduct Emergency Preparedness & Response (EPR) training for base/ office Emergency Response Team (ERT). The proper training needs to be provided to ERT to ensure they will carry out their roles and responsibilities effectively and safely in the event of any emergencies. Engineer-In-Charge (EIC)/ Person-In-Charge is responsible to ensure that their ERT member are attending the training accordingly. EPR training needs to be conducted at least once in 2 years for every base/ office and need to be recorded accordingly.

16.14 DISABLED AIRCRAFT AND EQUIPMENT EVACUATION

GAM will actively engage will all relevant stakeholders i.e., aircraft/equipment owners, aerodrome operators or other relevant authorities/ agencies with regards to the arrangement for disabled aircraft or equipment evacuation plan as follow.

- a. Evacuation of personnel from the aircraft/ equipment to safe area.
- b. Notification to relevant authorities/ owner/ aerodrome operators i.e., Bomba/ Police/ Hospital/ CAAM/ AAIB etc.

- c. Clearance from Bomba to ensure no fire/ explosion risk at the incident area.
- d. Cordon and secure the incident area to prevent access before been handed over to the authority i.e., AAIB/ CAAM/ Police etc.
- e. Clearance written/ verbal from authority i.e., AAIB/ CAAM for aircraft/ equipment recovery.
- f. Consultation and agreement with aircraft/ equipment owners/ aerodrome operator for a recovery process to designated area/ location.
- g. Sampling of aircraft/ equipment fuel and lubricants by authority.
- h. Quarantine the aircraft/ equipment at designated area for further action and instruction by authorities.



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Amendment No. 0


APPENDIXES

Appendix 1- SAFETY PUBLICATION DISCREPANCIES / AMENDMENT REQUEST

SAFETY PUBLICATION DISCREPANCIES/AMENDMENT REQUEST			
Pub. Ref.:	<input type="text"/>	Issue:	<input type="text"/>
Publisher:	<input type="text"/>	Date:	<input type="text"/>
		Page:	<input type="text"/>
			
ITEM	CHAPTER/PAGE	REQUIREMENT FOR CHANGE	ACTION TAKEN
APPROVAL OF AMENDMENT			
CLASSIFICATION	Minor: Typographical error, to be approved by SM/Safety Dept.		<input type="checkbox"/>
	Major: Other than typographical error, to be approved by CAAM		<input type="checkbox"/>
RAISED BY:	Name	Sign.	Date.
REVIEWED & ACCEPTED BY: (Safety Manager)	Name and stamp	Sign.	Date.
APPROVED BY: (Accountable Executive)	Name and stamp	Sign.	Date.
GAM/SMS/AR-003-07/21			



Appendix 2- SAFETY POLICY




Galaxy Aerospace
maintenance . repair . overhaul

SAFETY, HEALTH & ENVIRONMENT POLICY

Galaxy Aerospace (M) Sdn. Bhd. are committed to be a leader in Maintenance Repair & Overhaul (MRO) industry and shall continuously improve to maintain a positive and sustainable Safety, Health, and Environment (SHE) culture.

We shall also continuously:

- ☒ **S**trive to improve the level of safety, health, and environment performance.
- ☒ **C**omply with all applicable legal and other regulatory requirements.
- ☒ **P**roviding the necessary resources for the implementation of safety, health, and environment policy and to deliver a safe product/ service.
- ☒ **E**nsuring safety, health, and environment is a primary accountability and responsibility of all management and staff including implementing the effective Safety Management System (SMS) and its component at all levels.
- ☒ **E**ncourage a culture of fair reporting of all safety hazards in which management will not initiate disciplinary action against any personnel, who in good faith, due to unintentional conduct, disclose a hazard or safety incident.




Name : Dato' Shamsul Kamar Bin Samsudin
 Designation : Managing Director/ Accountable Executive
 Date : 13th February 2023



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Amendment No. 0

Appendix 3- SAFER CARD: GAM/SMS/01A REV.0 (16)

SAFER CARD			
Name:		Report No.:	
Location:		Date:	
Report Type:			
Unsafe Act		Personal (PPE)	
		Improper Used	
		Location	
		Tools	
		Procedures	
		Not Comply	
		Others (Specify)	
Remarks for specify:			
Brief Description:			
Improvement / Suggestion:			
Process:			
	HOD		
	SM		
	FILE		
SMS Dept. Remarks:			
SMS Updated Dept. Remarks:			
26 April 2021			
GAM/SMS/01A REV.0(16)			



Appendix 4- RAISING REPORT THROUGH GAM'S PORTAL

1. Login to your own GAM's Portal

2. Select "Safety" > New SC (Safer Card)

3. Fill up all the details of safety event / hazard identified / accident or incident or any safety concern

4. Attached photos /any related document / evidence for that report

5. Click "Save"



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Appendix 5- HIRM FORM: GAM/SMS/HRC-003-01/21R1

Sht 4 Hazard Identification & Risk Mitigation (HIRM) Worksheet																														17 Mar '23																													
HIRARC REFERENCE NUMBER: GAM.SMS.H-006(23)																																																											
1. AREA / OPERATION / EQUIPMENT: GAS / Maintenance / 9M-GAS (EC120B)																																																											
2. HAZARD / THREAT (H/T): Main Gearbox (MGB) Part Number: C632A0201052 Serial Number: M303 due for overhaul.																																																											
3. TOP EVENT (TE): Main Gearbox (MGB) Part Number: C632A0201052 Serial Number: M303 spare not available within 27 months.																																																											
4. CONSEQUENCE (C): Aircraft Unserviceable (U/S).																																																											
Date Conducted: 17-March-2023										Conducted by: Amir (DCAMM), Zukmaen (CAMO), Izuddin (QAI), Akmal (AMO), Mustaqim (SE)										Approved by: Dato' Shamsul Kamar (AM)																																							
Revision: 01										Received by: Safety Department										Document Control Number: GAM/SMS/HRC-003-01/21R1																																							
Ultimate Consequence Mitigation																																																											
Top Event Mitigation															Ultimate Consequence Mitigation																																												
New Preventive Controls (N-PC)															Existing Recovery Measures (E-RM)															New Recovery Measures (N-RM)																													
Description of Existing Preventive Controls (E-PC)															Description of New Preventive Controls (N-PC)															Description of Existing Recovery Measures (E-RM)															Description of New Recovery Measures (N-RM)														
<p>E-PC1: Schedule maintenance MGB Part Number: C632A0201052 Serial Number: M303 overhaul carried out at 3750 FH/288M. Reg 01 - 3750FH/288M TBO MSM 05-10-00 63/22/00/000/000/620.</p> <p>E-PC2: MGB Part Number: C632A0201052 Serial Number: M303 replacement spare quotation issued by OEM AIRBUS Helicopters Malaysia dated 3rd Jan 2023. Reg 02 - ANM Order No. 21266228.</p> <p>E-PC3: Monthly follow up with ANM by Procurement.</p>															<p>N-PC1: Tolerance allowed by OEM for MGB Part Number: C632A0201052 Serial Number: M303 overhaul carried out at 3750 FH/288M. Reg 01 - 3000FH/1800 MARGIN TBO MSM 05-10-00 63/22/00/000/000/620.</p>															<p>E-RM1: Replace MGB Part Number: C632A0201052 Serial Number: M303. Reg 01 - 3750FH/288M TBO MSM 05-10-00 63/22/00/000/000/620.</p> <p>E-RM2: Notify CAAM regarding the AMP variation. Submit application for AMP variation approval together with all supporting documents for tolerance allowed by AN as per MSM 05-10-00 63/22/00/000/000/620.</p> <p>E-RM3: Aircraft declare grounded.</p>															<p>N-RM1: To monitor new next due replacement in Account as per Tolerance limit approved by CAAM.</p> <p>N-RM2: Communicate with operator through email with regards to the concession applied.</p> <p>N-RM3: Logistic to have MGB floating spares.</p>														
BSV: 5															BSV: 5															BSV: 5																													
E-PC4: MGB Part Number: C632A0201052 Serial Number: M303 replacement spare quotation issued by OEM AIRBUS Helicopters Malaysia dated 3rd Jan 2023. Reg 02 - ANM Order No. 21266228.															N-PC2:															E-RM4:															N-RM4:														
E-PC5: Monthly follow up with ANM by Procurement.															E-PC6:															E-RM5:															N-RM5:														
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Appendix 6- HAZARD CLASSIFICATION SYSTEMS

ORGANISATION

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aerodrome, Air Navigation Service Provider, Air Operation, Maintenance Organization, Design & Manufacturing Organization	Regulator	Lack of, poor or ineffective legislation and/or regulations
	Lack of or ineffective accident investigation capability	
	Inadequate oversight capability	
	Management	Limited or lack of management commitment – Management do not demonstrate support for the activity
	Lack of or incomplete description of roles, accountabilities and responsibilities	
	Limited or lack of resource availability or planning, including staffing	
	Lack of or ineffective policies	
	Incorrect or incomplete procedures including instructions	
	Lack of or poor management and labor relationships	
	Lack of or ineffective organizational structure	
	Poor organizational safety culture	
	Lack of or ineffective safety management processes (including risk management, safety assurance, auditing, training and resource allocation)	
	Lack or ineffective audit procedures	
Lack of or limited resource allocation		



ORGANISATION

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards	
Aerodrome, Air Navigation Service Provider, Air Operation, Maintenance Organization, Design & Manufacturing Organization (continued)	Management (continued)	Incorrect or incomplete or lack of training and knowledge transfer. <i>Note: Training should reflect the needs of the organization. Accidents have shown that inadequate training is a hazard and may even lead to accidents.</i>	
		Unofficial organizational structures <i>Note: These structures may be of a benefit but also may lead to a hazard.</i>	
		Growth, strikes, recession or organizational financial distress	
		Mergers or acquisition	
		Changes, upgrades or new tools, equipment, processes or facilities	
		Incorrect or ineffective shift/crew member change over procedures	
		Changes or turnover in management or employees	
		Informal processes (Standard Operating Procedures)	
		Lack of or poor or inappropriate materials/equipment acquisition decisions	
		Lack of, poor staffing recruitment/assignment <i>Note: Staff should be hired or assigned according to organizational needs but also according to their skills, qualifications and abilities. An employee with the wrong skill set can be a hazard. This includes management.</i>	
		Documentation, Processes and Procedures	Incorrect, poor or lack of internal and external communication including language barriers
			Lack of, incorrect or incomplete manuals, or operating procedures (including maintenance)
			Lack of, incorrect or incomplete employee duty descriptions
			Lack of, incorrect, incomplete or complicated document update processes
Lack of, incorrect or incomplete reports and records			
Lack of, incorrect or incomplete control of necessary documents for personnel (licenses, ratings, and certificates)			

ENVIRONMENTAL

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aerodrome, Air Navigation Service Provider, Air Operation, Maintenance Organization (Effects may not be all encompassing)	Weather/Natural Disasters	Thunderstorms and lightning
		Hail
		Heavy rain
		Fog (reduced visibility)
		Wind shear
		Sand storm
		Snow or ice storms
		Excessive or cross winds
		Hurricane, Tsunami, or tomado
		Floods
		Ash (including volcanic or forest fire)
		Earthquake
	Extreme temperatures	
	Icing conditions (Impact on aircraft surfaces)	
	Geography	Mountains or bodies of water
Altitude at the aerodrome		
Wildlife	Wildlife on airfield	
	Flying wildlife	

HUMAN

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aerodrome, Air Navigation Service Provider, Air Operation, Maintenance Organization, Design & Manufacturing Organization	Sudden Incapacitation	Heart attack, Stroke, Kidney stone, Seizure
	Subtle Incapacitation/ Impairment	Nausea, Diarrhea, Carbon monoxide, Medication, Fatigue
	Illness	Influenza, Upper Respiratory Tract Infection (TI), Urinary TI
	Static Limitations	Color vision, Visual field limitations, Mobility limitations, Colostomy bag, Hearing loss
	Self-Imposed Stresses	Fatigue (lack of sleep), Alcohol and substance abuse, Medications, Complacency

HUMAN

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aerodrome, Air Navigation Service Provider, Air Operation, Maintenance Organization, Design & Manufacturing Organization (continued)	Psycho-Social Stresses	Financial, Birth of child, Divorce, Bereavement, Challenging timelines, Inadequate resources
	Trauma	Inflight turbulence cabin crew injury, injury caused to personnel during ground aircraft operations or luggage handling
	Environmental/ Occupational	Jet lag, Paint shop, Solvents, Chemical/Biological exposures, Noise, Vibrations, Distractions
	Latent Failures Related to Man/ Machine/ Process Interface	Human factors related to design, manufacturing, maintenance and operations.
	Cognitive Capacity	Excessive number of aircraft in a controller's area; Varying multi-tasking actions; Over saturation of digital information

TECHNICAL – AIR OPERATION & MAINTENANCE

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Air Operation	Facilities	Faulty electrical power supply systems on airport or navigational aids (radars, satellites, VOR, ADS-B, etc)
		Faulty, incorrect or incomplete airfield markings and lighting
		Faulty, incorrect, or incomplete approach lighting
		Taxiway and runway system complexity
		Inadequate airfield drainage
		Insufficient equipment, radios, infrastructure, or personnel
		Lack of, limited or incorrect type of aircraft parking
		Poor HVAC (heating, ventilation, and air conditioning)
		Noisy environment
		Lack of or poor Lighting
	Poor facilities (inadequate space)	
	Preflight Preparation	Lack of or poor airworthiness verification
Lack of or poor verification of equipment and instruments necessary to a particular flight or operation		



TECHNICAL – AIR OPERATION & MAINTENANCE

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Air Operation (continued)	Preflight Preparation (continued)	Lack of, incorrect or incomplete aircraft performance limitations verification
		Lack of, incorrect or incomplete flight planning
		Poor fueling processes
		Lack of or poor aircraft dispatch or release
		Lack of or poor maintenance release
	Aircraft Loading	Incorrect cargo loading and distribution
		Improper or unauthorized hazardous materials carriage
		Poor cargo and baggage stowage
		Incorrect information on cargo or baggage loaded
		Improper stowage of carry-on baggage
		Improper weight and balance calculations
	Flight Operation	Use of obsolete documents
		Absence of or incorrect flight and cabin crew manuals or charts on board
		Improper response to flight route changes
		Lack of, or poor crew resource management
		Lack of or poor flight following
		Improper execution of procedures in all flight phases (including taxiing and parking)
		Inadequate or complicated procedures
		Equipment and instruments necessary for a particular flight or operation not available or malfunctioning
Lack of, or poor communication (ATC, ramp, maintenance, flight Ops, cabin, dispatch, etc)		
Language barriers (Multiple languages)		
Maintenance	Facilities	Poor HVAC (heating, ventilation, and air conditioning)
		Noisy work environment
		Lack of, or poor Lighting
		Poor facilities (inadequate space, equipment or infrastructure)
	Maintenance Activity	Lack of, or poor maintenance release
		Lack of, or poor maintenance programs (Including imprecise maintenance data or transcription errors when creating job-cards)



TECHNICAL – AIR OPERATION & MAINTENANCE

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Maintenance (continued)	Maintenance activity (continued)	SUPS (Suspected Unapproved Parts)
		Maintenance movement of aircraft/run-ups
		Lack of, or poor communication (ATC, ramp, flight Ops, cabin, dispatch, etc)
		Language barriers in maintenance teams (Multiple languages)
		Poor control of outsourced maintenance (any maintenance completed outside the maintenance facility or organization including third party maintenance)
		Lack of or, inappropriate specialized processes (including NDT, plating, welding, composite repairs etc...)
		Lack of or, improper Airworthiness Directive Control
		Ineffective or lack of procedures to ensure materials, parts, or assemblies are worked or fabricated through a series of precisely controlled steps, and that undergo physical, chemical, or metallurgical transformation (some examples are heat-treating, brazing, welding, and processing of composite materials).
		Lack of or, inadequate reliability program
	Tooling	Lack of, or poor tool accountability (Including traceability or registration)
		Lack of or unsafe or unreliable equipment, tools, and safety equipment;
		Inappropriate layout of controls or displays
		Mis-calibrated tools
		Inappropriate or incorrect use of tools for the task
		Lack of, or inadequate instructions for equipment, tools, and safety equipment
	Maintainability	Complex design (Difficult fault isolation, multiple similar connections, etc)
		Inaccessible component/area
		Aircraft configuration variability (Similar parts on different models)



TECHNICAL – AIRODROME

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aerodrome	Runway Operations	Construction, vehicles and people on movement area
		Poor aerodrome design (Intersecting runways; Obstacle clearance; Taxiway crossing runways)
		Distracting lights
		Lack of coordination with Air Traffic Control (ATC)
		Improper, inadequate, or lack of Notices to Airmen (NOTAMs) issuance
		Laser beams
	Runway Condition	Poor condition or improper runway surface
		Inadequate runway length
		Lack of, or inadequate runway protected areas



TECHNICAL – AIRODROME

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aerodrome (continued)	Airfield Apron Operation Airfield Apron Operation (continued)	Jet blast
		Lack of, limited or incorrect type of aircraft parking
		Improper marshaling
		Lack of, or insufficient protective pylons around aircraft
		Lack of, or inadequate chalks when aircraft parks
		Lack of, or improper foreign object debris (FOD) control
		Lack of, or improper ramp control tie down procedures
		Improper fuel or hazardous material spill containment and cleanup
		Poor refueling procedures
	Airsides Vehicle Operations	Vehicle failure during aerodrome services
		Poor mechanical condition
		Poor radio or communication equipment condition
		Oil spills on apron and/or in passenger areas
		Lack of vehicle maintenance
		Poor Emergency Responses Planning
		Erratic driving or not complying with flight line driving regulations
		Driving too fast
		Improper parking
		Failure to chalk vehicles
		Leaving engine running while vehicle is unattended
	Action of Individuals	Pedestrians on apron areas
		Ignoring aircraft hazard beacons
		Improper checking around aircraft during departure marshaling
		Misinterpreting apron markings
		Smoking on the apron
		Passenger failure to follow guidance



TECHNICAL – AIRODROME

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aerodrome (continued)	Action of Individuals (continued)	Use of cell phone within 15 meters of a refueling operation
		Littering on ramp
		Running on apron
	Facilities	Faulty electrical power supply systems on airport or navigational aids (radars, satellites, very high frequency (VHF) omni-directional radio range (VOR), Automatic Dependent Surveillance - Broadcast (ADS-B), etc.)
		Faulty, incorrect or incomplete airfield markings (especially in movement areas)
		Faulty, incorrect, or incomplete airfield lighting (especially in movement areas)
		Faulty, incorrect, or incomplete approach lighting
		Poor condition or inappropriate runway surface
		Poor condition or inappropriate apron surface
		Taxiway and runway system complexity
		Inadequate airfield or terrain drainage
		Insufficient equipment, radios, infrastructure, or personnel
		Issues that attract wildlife (high grass, proximity of landfills, nearby water bodies)
		Inadequate or inappropriate firefighting equipment
		Lack of or limited parking areas
Lack of safety protective equipment		



TECHNICAL – AIR NAVIGATION SERVICE PROVIDER (ANSP)

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
ANSP	Traffic Pattern	Traffic complexity (mixture of aircraft type)
		Excessive aircraft in pattern or given airspace
		Ineffective design and flow of traffic pattern
		Runway incursions by aircraft or vehicles
		Unauthorized flights entering into traffic pattern
		Unauthorized procedures by aircraft
		Similar sounding or confusing call signs
		Lack of or poor procedures for aircraft in distress.
	Airspace	Insufficient airspace for typical traffic
		Improperly distributed airspace
		Airspace combined during excessive traffic
		Confusing labeling of fixes or way points
		Improperly developed instrument procedures
		Aircraft incorrectly performing missed approach procedures
		Intermingling of ICAO and national instrument procedure criteria
	Controller Actions	Incomplete clearances
		Misidentification of aircraft or targets (radar)
		Improper reading of clearance instructions
		Loss of separation between aircraft
		Loss of separation between aircraft and terrain or obstacles
Misinterpretation of pilot desires		
Incorrect judgment of aircraft characteristics		
Communications	Incorrect, confusing, or incomplete communications between ATC and aerodrome personnel	
	Incorrect, confusing, or incomplete communications between ATC and aircraft	
	Incorrect, confusing, or incomplete coordination between or within ATC facilities	
	Radio/Frequency failures or anomalies	
	Navigational aid (radars, satellites, VOR, ADS-B, etc) failures or anomalies	



TECHNICAL – AIR NAVIGATION SERVICE PROVIDER (ANSP)

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
ANSP (continued)	Communications (continued)	Differences in ICAO and national Air Traffic Control phraseology
		Not using the standard international aviation language
		Language barriers (Multiple languages)
		Lack of, or wrong aeronautical information
	Facilities	Faulty electrical power supply systems on airport or navigational aids (radars, satellites, VOR, ADS-B, etc)
		Faulty, incorrect or incomplete airfield markings or lighting
		Faulty, incorrect, or incomplete approach lighting
		Taxiway and runway system complexity
		Inadequate airfield or terrain drainage
		Insufficient equipment, radios, infrastructure, or personnel



TECHNICAL – DESIGN & MANUFACTURING

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aircraft Design	Safety Requirements Capture	Non compliance with applicable regulations (For example FAA 14 CFR part 23, 25, 27, 29, 33).
		Inadequate Functional Hazard Assessment.
		Inadequate structural static and dynamic loads analysis.
		Inadequate Preliminary System Safety Assessment.
		Inadequate common cause analysis.
	Safety Requirements Validation	Incomplete or ineffective design reviews, analysis, simulator, wind tunnel, and flight testing.
		Ineffective or incomplete structural external, internal, and elemental loads analysis.
	Safety Requirement Verification	Incomplete structures loads verification, such as static load tests, ground vibration tests, and flight tests.
		Inadequate System Safety Assessments (SSA) process including lack of, or improper verifying of, failure effects using failure performance testing.
		Inadequate verification of software and complex hardware
	Aircraft Integration	Inadequate requirements traceability.
		Inadequate design requirements control.
		Inadequate verification of system/system and system/structure unintended functions and physical interference, such as lack of Bench/Sim/Airplane Testing and inadequate zonal inspections
	Continued Operational Safety	Ineffective in-service monitoring methods such as lack of failure reporting and tracking.
Inadequate or no root cause analysis, risk analysis, corrective action development, corrective action validation, and incorporation of corrective action and lessons learned into Design Process		
Design Control	Lack of methods for approving, controlling, and documenting initial designs and design changes.	
	Inadequate planning and integration of the facility's procedures for continuously maintaining the integrity of design data, drawings, part lists, and specifications necessary to define the configuration and the design features of the product.	
Aircraft Manufacturing	Manufacturing Processes	Lack of processes for the control of materials, parts, or assemblies, how they are accepted, worked or fabricated, tested, inspected, stored, and prepared for shipment.



TECHNICAL – DESIGN & MANUFACTURING

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aircraft Manufacturing (continued)	Manufacturing Processes (continued)	Problems with special manufacturing processes and specific functions and operations necessary for the fabrication and inspection of parts and assemblies (some examples are machining, riveting, and assembling).
		Ineffective or lack of procedures to ensure materials, parts, or assemblies are worked or fabricated through a series of precisely controlled steps, and that undergo physical, chemical, or metallurgical transformation (some examples are heat-treating, brazing, welding, and processing of composite materials).
		Inadequate methods used to accept and protect raw materials, parts, subassemblies, assemblies, and completed products during receipt, manufacture, inspection, test, storage, and preparation for shipment.
		Inadequate Airworthiness Determination, which is the function that provides for evaluation of completed products/parts thereof, and related documentation, to determine conformity to approved design data and their condition for safe operation.
	Manufacturing Controls	Ineffective methods that are used by the Production Approval Holder to control product quality by statistical methods, and that may be used for continuous improvement and/or product acceptance. Statistical Quality Control includes techniques such as statistical sampling, PRE-control, and statistical process control.
		Ineffective control of precision measuring devices (for example, tools, scales, gauges, fixtures, instruments, and automated measuring machines) used in fabrication, special processing, inspection, test of detail parts, assemblies, and completed products to determine conformity to approved design.
		Lack of functions that provide for static, destructive, and functional tests of production products/parts thereof to ensure conformity to approved design.
		Ineffective methods of controlling, evaluating, and dispositioning of any product/part thereof that does not conform to approved design.
	Supplier Control	Ineffective methods by which the production facility ensures supplier materials, parts, and services conform to approved design. The term “supplier” includes distributors.

Appendix 7- SAFETY ADVISORY NOTICE (SAN)

Date / Time	Department	Location
Event Description:		
Signature: Name: Date:		
ADVISORY / CORRECTIVE ACTION		
Action Taken / Action Planned:		
Safer Card Ref No:		
ACKNOWLEDGEMENT / ISSUED BY SMS OFFICER / EXECUTIVE		
Signature: Name: Date:		
REVIEW BY SMS MANAGER		
Signature:		

Issue No. 3

Amendment No. 0

Appendix 8- NOTICE OF PROHIBITION (NOP)

EQUIPMENT'S/TOOL'S DESCRIPTION:

P/N: S/N:

AREA:

REASON OF PROHIBITION/SUSPENSION:

1. THIS EQUIPMENT/TOOL IS PROHIBITED FROM BEING USED BY ANY PARTIES OF WHATSOEVER REASON WITH NOT COMPLIANCES AND MEET A SAFETY REQUIREMENT AS PER CITED IN GALAXY'S MOE Part 2.4 (Acceptance of Tool and Equipment) Part 2.5 (Calibrated of Tool and Equipment) Part 2.6 (Use of Tooling and Equipment by staff) SMS MANUAL Part 9.0 (Hazard Identification and Risk Management) AND OCCUPATIONAL SAFETY & HEALTH ACT SECTION 4 & 48.
2. A PERSON OR GAM'S PERSONNEL WHO INTENTIONALLY, RECKLESSLY OR NEGLIGENTLY INTERFERES OR MISUSES OF THE SAID EQUIPMENT/TOOL SHALL BE GUILTY OF AN OFFENCE TO OCCUPATIONAL SAFETY & HEALTH ACT SECTION 25 AND DISCIPLINARY ACTION.
3. NOTE: NOP WILL BE WITHDRAWN UNTIL AN IMMEDIATE AND MITIGATION ACTION HAS BEEN CARRIED OUT AND MEET A REQUIREMENT AND SAFETY MEASURE UNDER THE AUTHORISATION FROM SAFETY DEPARTMENT.

REMARK:

STAMP: DATE:

RECEIVED AND ACKNOWLEDGED BY:


NAME:

DESIGNATION:

DEPARTMENT:

SIGN: DATE:

Appendix 9- MANAGEMENT OF CHANGE (MOC)

		Management of Change		
		MOC ref. no.:		
		Date Raised:		
A MOC DETAILS (to be completed by requestor)				
1.	MOC title			
2.	Type of MOC			
3.	Category			
4.	Priority			
5.	Doc. affected	MOE	SMSM	CAME
		DOM	2nd level manual	Others
6.	Doc. reference			
7.	Requestor	i. Name		
		ii. Department		
		iii. Staff no.		
B DESCRIPTION AND SCOPE OF CHANGES				
1.	Description :			
2.	Justification for changes :			

3.	Maintenance Data / Publications / Manual :
4.	Test equipment and tooling requirement :
5.	Hangar / Workshop accommodation / facilities :
6.	Qualified / authorized personnel for task :
7.	Training :

Issue No. 3

Amendment No. 0

8.	Name		Signature	Date
	Requestor:			
	Head of Department:			
9.	Comments by requestor Head of Department :			
10.	Note: Complete section A & B and then email it along with supporting document to Quality Assurance Department and Safety Department			
C SAFETY MANAGEMENT SYSTEM SECTION				
1.	HIRARC		Not required	
			Reference No.:	
2.	Comments			
3.	Name		Signature	Date
D ACCOUNTABLE MANAGER APPROVAL (to be completed by Accountable Manager)				
1.	Approval		Approved by 2nd Level	
	Comments			
3.	Name		Signature	Date
4.	Note: If approved, section E to be completed			



Issue No. 3


Amendment No. 0

E QUALITY ASSURANCE DEPARTMENT SECTION		
1.	Date Received	
2.	Classification	
3.	Audit Needed	
4.	Audit performed by	
5.	Audit reference no.	
6.	Justification for classification	
7.	Comments / Remarks	
8.	DCAM / CAAM Approval Section	
	Date Submission	
	Approval ref. no.	
9.	Approval from Quality Assurance Manager	
	Name	Signature
		Date
F IMPLEMENTATION REVIEW		
1.	Status	
2.	Comments / Remarks	
3.	Date closed	
4.	Closed by	



Issue No.	3
Amendment No.	0

Appendix 10- DRUG AND ALCOHOL POLICY




DRUG AND ALCOHOL POLICY

Galaxy Aerospace (M) Sdn. Bhd. will ensure, as far as practicable, the safety, health, and welfare at work of all our employees and strives to provide a safe work environment and encourage personal health of our employees. Drug and alcohol use can pose a major risk to employees' safety, health, and welfare; therefore, we will take measures to eliminate or minimise the risk and take every reasonable step to prevent and respond to drug and alcohol use.

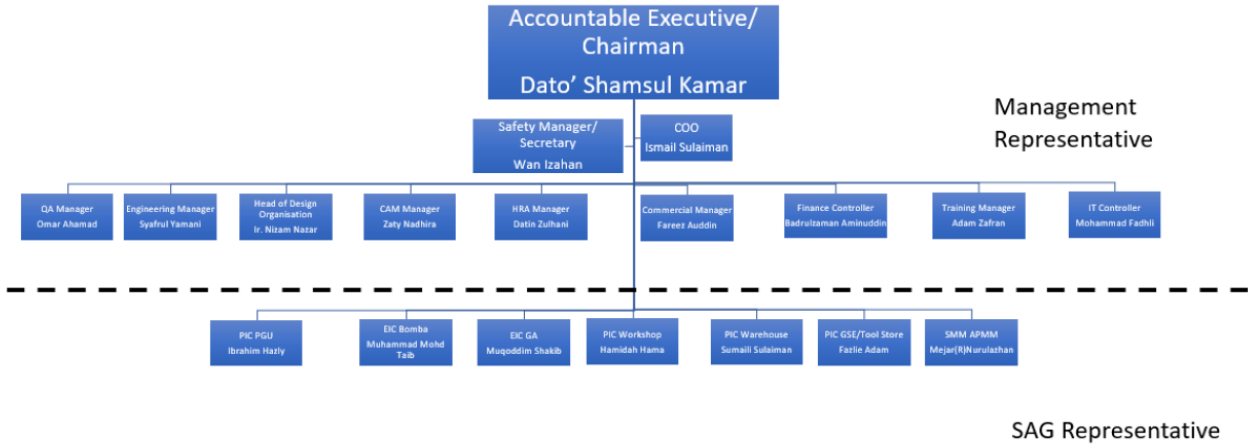
Employees need to take reasonable care for their own safety and the safety of other people who may be affected by their actions or omissions at work due to drug and alcohol use. Employees should avoid risks from drug use and should cooperate with employers in the removal of such risks in the workplace. If an employee is aware of another individual who cannot work safely due to impairment by drugs or alcohol, he/she should immediately report this hazard to the employer.

It is company policy that employees, who use, possess, distribute, or sell illicit of non-prescribed drugs during work hour; consumed, possess, distribute alcoholic beverages during work hours; and are intoxicated for duties due to the influence of drug or alcohol during work hour will be subject to disciplinary action includes termination of employment.

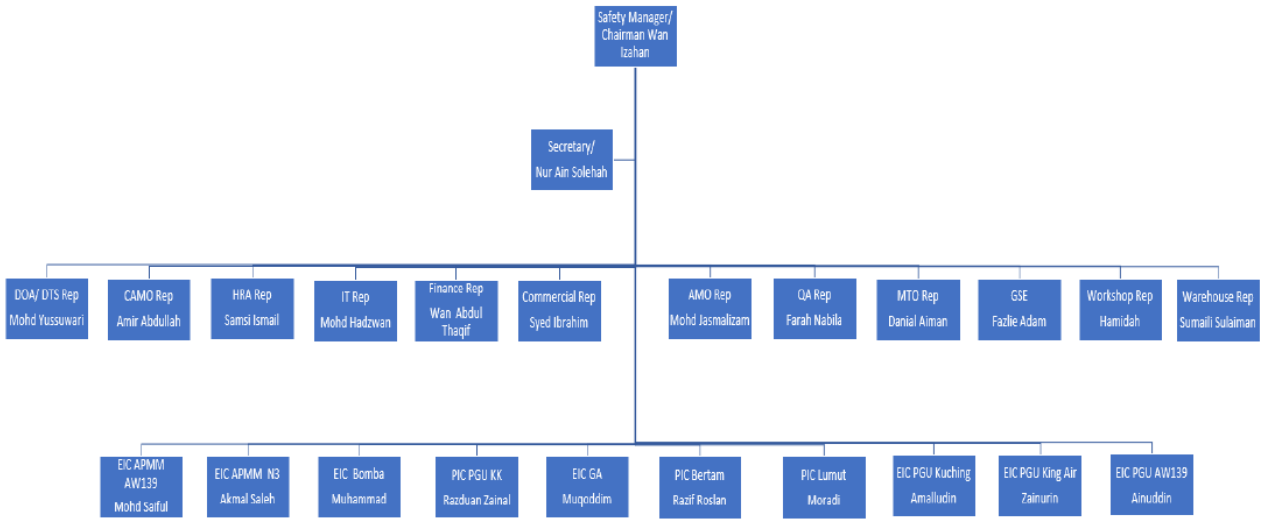


Name : Dato' Shamsul Kamar Bin Samsudin
 Designation : Managing Director/ Accountable Executive
 Date : 13th February 2023

Appendix 11- SAFETY COMMITTEE ORGANISATION CHART



Appendix 12- SAFETY ACTION GROUP (SAG) ORGANISATION CHART





Issue No.

3

Amendment No.

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