

SAFETY MANAGEMENT SYSTEM (SMS)

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Written in compliance of

General Authority of Civil Aviation (GACA) Part 5 and Part 125



This manual is a controlled document, prepared to meet GACAR's requirements and based on GACA if any conflict in the content of this manual with GACA requirements, GACA requirements shall be fulfilled and revision to the manual must be made without hindrance.

Mukamalah Aviation Company

SMS Manual

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MUKAMALAH AVIATION COMPANY
SAFETY MANAGEMENT SYSTEM MANUAL


FRONT MATTER

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This manual is a controlled document is based and prepared to in accordance with GACAR requirements.

If there is any conflict in the content of this manual with GACA requirements, GACA requirements shall be fulfilled and a revision to the manual must be made without hindrance.

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REVISION HIGHLIGHTS

Entire Manual

Revised company name to Mukamalah Aviation Company with updates to each section to be in compliance with GACAR Part 5.

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SECTION 0: ADMINISTRATION AND CONTROL

0.1 Introduction

0.1.1 General Requirement

- A. Mukamalah Aviation Company Limited's (references as The Company, Company, or MAC) Safety Management System (SMS) has been developed from guidance contained in:
- General Authority of Civil Aviation Regulations (GACAR) Part 5 – Safety Management Systems;
 - ICAO Annex 19, Safety Management
 - International Civil Aviation Organization (ICAO) Doc. 9859 Standards and Recommended Practices.
- B. The Company has established, implemented, maintains and adheres to the SMS as described herein to:
- Provide benchmarking on Safety Performance Indicators (SPI) in Flight Operations.
 - Identify the scope of all Flight Departmental processes and equipment which are deemed to be eligible for the Company's Hazard Register.
 - Determine the functional responsibilities of all staff to ensure the clarity of roles and authority and accountability of work.
 - Provide essential procedures and guidelines to regulate the activities of all operational departments within manageable limits as per the policy of the Company.
 - Establish essential rules and regulations for maintaining good discipline, administrative controls, and the working environment within the Flight Department.
 - Identify equipment, facilities, work scope, capabilities, and other company resources where safety will be impacted.
- C. It is not the intention of this manual to contradict the requirements of the Civil Aviation Authority requirements in any way. If any discrepancies occur, GACA requirements takes precedence.

0.1.2 SMS Appropriate to Size, Scope and Complexity

- A. The Company's SMS has been designed and configured to match the size, scope, and complexity of operations throughout the entire organization, including home base and managed outstations. The system supports the Company's efforts to provide the highest reasonable level of safety by identifying and minimizing risks which could contribute to accidents, incidents, or injury to persons. The Company provides both safety and quality management covering the complete scope and life cycle of all systems and functional process areas, including:
- Organization / Management
 - Flight Operations
 - Flight operations (fixed wing and helicopter)
 - Operational control (dispatch / flight following)
 - Maintenance and inspection
 - Cabin safety
 - Ground handling and servicing
 - Cargo handling
 - Training

- Maintenance and inspection (MRO)
 - Parts/materials
 - Resource management (tools and equipment, personnel, and facilities)
 - Technical data
 - Quality Control
 - Records management
 - Contract maintenance
 - Training
- Aerodromes
 - Operations including all weather operations
 - Runway safety
 - Ground handling and servicing
 - Maintenance and inspection
 - Construction

- B. Within each of these systems, operational processes are documented, monitored, measured and analyzed. The Company provides all personnel and managers with procedures, instructions, guidance and training in order to perform these operational processes with the highest degree of safety.

0.1.3 SMS Manual and Supporting Programs

This SMS Manual sets forth instructions and guidance to all personnel regarding their responsibilities, authorities and the proper performance of duties as they pertain to the Company's Safety Management System. Additional programs which support the SMS are hereby incorporated by reference, and are maintained and revised under separate cover:

- Emergency Response Plan
- Internal Audit Program
- Health, Safety, and Environmental Manual
- Security Manual
- Flight Operations Quality Assurance Manual
- Helicopter Flight Data Monitoring Manual
- Appendices: Forms, checklists, plans/programs and records.

- C. The Operational Manuals (OM) make reference to the SMS manual to ensure Safety is aligned and following MAC standards.

0.1.4 Applicability

- A. Mukamalah Aviation Company Limited is an aviation service provider holding the following approvals/permits/licenses:
- GACA Part 125 Non-Commercial Operations under Certificate OP-055
 - GACA Accepted Part 125 General Maintenance
 - Operator of an aerodrome(s)

0.1.5 Applicable Laws & Regulations

- A. The following documents and information sources specify applicable regulations with which MAC must comply:
- **Manual System** - Contains references to regulations and standards;
 - **Operations Specifications** - Require full compliance as regulatory requirements;
 - **Compliance Statement** – Lists all mandatory specific regulatory requirements;
 - **Foreign Licensing Requirements** - Regulations applicable to the State(s) or countries into which flight operations are conducted;
 - **Contractual Requirements** –Minimum standards for contractual operations, in addition to regulatory requirements;
 - **Occupational Health and Safety Requirements** - Occupational health and safety requirements are used as the Company's minimum standards for worker safety and facility requirements.

0.1.6 Format

- A. This manual is maintained in electronic format within WebManuals and ShareK document library for access by all staff members. Paper copies may be distributed to selected members in accordance with the distribution list, and referenced as a backup.

0.2 SMS Overview

0.2.1 Structure

- A. Section titles and numbers of this SMS Manual correspond to the SMS components of GACA's Safety Management System Framework. This SMS Manual contains a Table of Contents which is hyperlinked to all sections and paragraphs. Such links permit rapid retrieval of information when the document is published in electronic format.

0.2.2 SMS Components

- A. SMS processes are performed under a framework which consists of four components and twelve key elements. The four components and twelve elements addressed within this SMS Manual include:
- *Component 1: Safety Policy and Objectives*
 - Element 1.1 - Safety Policy
 - Element 1.2 - Management commitment and safety accountability
 - Element 1.3 - Key safety personnel
 - Element 1.4 - Emergency preparedness and response
 - Element 1.5 - SMS documentation and records
 - *Component 2: Safety Risk Management (SRM)*
 - Element 2.1 - Hazard identification and analysis
 - Element 2.2 - Risk assessment and control
 - *Component 3: Safety Assurance (SA)*
 - Element 3.1 - Safety performance monitoring and measurement
 - Element 3.2 - The management of change
 - Element 3.3 - Continuous improvement
 - *Component 4: Safety Promotion*
 - Element 4.1 - Competencies and training
 - Element 4.1 - Communication and awareness
- B. Twelve key elements are provided within the four sections above, in other sections of this manual, or within the Safety and Quality Reporting application.

0.2.3 SMS Acceptance

- A. Acceptance of the current revision of the Company's Safety Management System is indicated by GACA's acceptance signature and/or stamp on the second page of this manual.

0.3 SMS Operational Records

0.3.1 Safety Risk Management Process Records

- A. Safety risk management processes produce outputs of:
- Identified hazards risk acceptance.
 - Associated likelihood and consequence (risk severity) of each risk.
 - Any controls or mitigations.
 - These records will be retained as long as the control remains relevant to Company operations.
 - Records are maintained within Company servers or the Safety and Quality Reporting web application.

0.3.2 Safety Assurance Process Records

- A. Safety assurance processes produce outputs of:
- Records of audits completed.
 - Audits of GACA 125 flight operation, GACA 145 MRO, and Ground Services Operation, and their findings.
 - Investigations of incidents, accidents, and potential non-compliance with regulatory standards and other safety risk controls that the Company has implemented.
 - Reports from the Safety and Quality Reporting system.
 - Analyses of flight data.
 - Safety compliance.
- B. Safety Assurance records will be retained for a minimum of 5 years.

0.3.3 SMS Training Records

- A. The Company maintains individual records of SMS training for the following personnel:
- The Management Team;
 - All members of within each Department;
 - All personnel who perform in safety-sensitive positions.
- B. Each individual's training record must be retained for as long as the individual is employed by the Company.

0.3.4 Safety Communications Records

- A. Records of all required safety communications must be retained for no less than 24 calendar months after the communication was issued.

0.4 Safety and Quality Reporting Web Application

- A. Some safety risk management and safety assurance processes are performed using the Company's Safety and Quality reporting web application. Taxonomies and the reporting interface are configured to suit the scope and complexity of the aviation activities, and adapt risk management methodologies to available resources.
- B. The web application allows managers to record and manage safety and quality issues discovered from reactive, proactive, and predictive safety management activities. The web application also serves as a confidential reporting system for the reporting of occurrences, hazards, and other safety and quality concerns.
- C. The web application is used to record, track and manage hazards identified through system analysis. Responsible managers analyze, assess, control and manage safety risks (including substitute and residual risk), record responsibilities for the implementation of risk controls, and manage internal / external audit findings.

0.5 System of Revision

0.5.1 Manual System

- A. Company manuals contain regulatory requirements, policies, and procedures. Technical data such as manufacturers' manuals and other aeronautical information may also be incorporated into the manual system by reference. Department Directors are responsible to complete their respective portions of the Company manuals, as specified in each Director's duties and responsibilities.

0.5.2 Method of Revision

- A. The SMS Manual is issued by the Company and approved by GACA. The SMS Manual is administered by the Director of Safety.
- B. Review and revision to this manual shall be completed (at a minimum) every 12 months or as needed or required by the Director of Safety and Quality or Accountable Executive.
- C. This Manual (and ERP Manual) will be updated in accordance with the most current GACA_AVS_SRM_CL-5-100 checklist version and noted in the revision.
- D. All revisions and amendments will be completed in WebManuals for individual replacement pages. Handwritten amendments are not permitted. Each page of the manual will show the date of issue. Vertical margin bars will indicate a changed or revised portion of the text.
- E. Each revision will be accompanied by a revised List of Effective Pages, with their dates of issue. A record of revision is then forwarded by the Director of Safety and Quality (or delegate) to the appropriate Director for review and approval.
- F. The record of Effective Pages shows a revision date for each page. Whenever a change is made to a page, the amendment will show the new date.
- G. This issue of the manual shall be initially approved by GACA.
- H. Obsolete documents and forms shall be removed from service and destroyed to prevent unintentional use.

0.5.3 Revision Control

- A. Controlled documents are revised and verified for currency through use of each document's list of effective pages (LEP) and revision number / date on each page. Obsolete documents and forms are removed from service and destroyed, to prevent unintentional use.

0.5.4 Review Period

- A. A review of this manual shall be completed not exceeding one year, or where there is a need to change any part of the safety policy or guidance.

0.5.5 Source of Revisions

- A. The SMS Manual is a document that is continuously evolving and should be updated in the following cases:
- When affected regulations are changed.
 - When client standards are changed and requires a MAC policy change.
 - Following a higher management review (new requirements laid down by management).
 - After any new accident or major incident requirement the SMS process to be revised.
 - After any major changes in Company activities.
 - With a view to improve safety management.

- B. Amendments may also be suggested by any Company personnel. Amendments may be prompted by the identification of inadequacies or deficiencies or a change to Company procedures that they feel require a change of procedure.
- C. Amendments to the SMS Manual are made exclusively by the Director of Safety and Quality, who is the SMS Post Holder, and approved by the Accountable Executive.

0.5.6 Distribution

- A. The SMS Manual or its applicable parts including the necessary revision are distributed to the authorized users through WebManuals or through ShareK Company website and must be replaced expeditiously after the approval of GACA.
- B. Details of revisions which may be urgently required in the interest of flight safety, airworthiness, or which are supplementary to the SMS Manual, will be issued as Safety Bulletins. Those of a temporary nature will be cancelled as soon as they are no longer relevant. Those of long-term application will be incorporated into the manual when it is next amended.

0.5.7 Safety Bulletin (SB)

- A. Urgent information may be required in the interest of flight safety, HSE, or Security, may be released as a Safety Bulletin (SB). The issue of the SB is to address issues which is immediate in nature. SB's are under the authority of the Director of Safety and Quality.
- B. SB's may be more stringent than the current processes/procedures in the SMS Manual. If this is the case, prior approval from GACA is required. When an approval from GACA is required, the proposed SB shall be submitted in advance.
- C. Internal distribution of the SB will be issued through WebManuals and ShareK, in addition to email. Control and distribution will be under the responsibility of the Director of Safety and Quality.
- D. During SMS Manual review, all active SB's will be revisited and may be included in the revised SMS manual if applicable. Those SB's which are temporary in nature will be cancelled and removed accordingly.

0.6 External Providers

- A. The Company relies on the help and services provided by external providers for staffing, continued education, safety, training, audits, research, technical and/or instructional assistance, and standardization-related services.

Services include but not limited to:

- Consulting
 - Independent external audits
 - Manual production / guidance
 - Emergency response
 - Flight data monitoring
 - Gap analysis services
 - Manpower services
- B. Before contracting or obtaining a safety-critical product or service from an external provider, the department manager who is responsible for the contracted product or service shall ensure the provider has a safety reporting system commensurate with its size and complexity that facilitates the early identification of hazards and systemic failures of concern to the Company.
- C. All approved external providers shall have a safety induction presentation conducted by the responsible department who contracted the product or service. This induction shall cover (at a minimum) the Company's SMS and ERP standards and they must agree to the following:
- Understand how our safety management system operates;
 - Aware of the role they play in our safety management system;
 - Understand the aim of our safety management system which is to provide security, quality, safety and regulatory compliance.

0.7 Safety Culture

- A. Safety culture is the enduring value and priority placed on workers and public safety by each person in every group at every level of an organization. It refers to the extent to which individuals and organizations:
- Commit to the responsibility for safety.
 - Act to preserve, enhance and communicate safety concerns.
 - Strive to actively learn, adapt and modify behavior (both individually and organizationally based on lessons learned from mistakes); and Safety Culture Component.
 - Ultimately be rewarded in a manner consistent with these values.
- B. A mature safety culture is comprised of several subcultures. These subcultures are integral components and work interdependently to create the whole of a healthy organizational safety culture.

0.7.1 Just culture

- A. A just culture creates an atmosphere of trust in which people are encouraged (even rewarded) to communicate essential safety-related information, where they are also to be clear about where the line must be drawn between acceptable and unacceptable behavior.
- B. Just culture refers to a way of safety thinking that promotes a questioning attitude, is resistant to complacency, is committed to excellence, and fosters both personal accountability and corporate self-regulation in safety matters.
- C. Just culture, is both attitudinal as well as structural. Personal attitudes and corporate style may enable or facilitate the unsafe acts and conditions that are the precursors to accidents and incidents. Safety management system prediction, pro-action, and reaction regarding such precursors require the organization to not only actively identify safety issues, but also to respond with appropriate action.

0.7.2 Reporting culture

- A. If an organization has a reporting culture, a climate exists in which personnel are prepared to report observed hazards, errors, mistakes, safety occurrences, and near occurrences.
- B. Personnel are also encouraged to be open and constructive with their thoughts. They are to feel comfortable introducing suggestions, ideas, and recommendations to the organizational management utilizing established communication procedures.

0.7.3 Learning culture

- A. An organization that incorporates a learning culture, possesses the willingness and the competence to draw the right conclusions from its safety information system. It will make changes and institute reforms in order to promote continuous organizational improvement.

0.7.4 Flexible culture

- A. An organization that is able to reconfigure itself, at least temporarily, in the face of high tempo operations or certain kinds of danger- often shifting from the conventional hierarchical mode to a mode possessing a flexible culture.

0.7.5 An informed culture

- A. Those who manage and operate the system have current knowledge about the human, technical, organizational, environmental, and cultural factors that influence and determine the safety of the system as a whole. An organization with an informed culture utilizes and applies this knowledge from a systemic perspective.

0.8 Glossary

Term	Definition
Accident	An unplanned event or series of events that results in death, injury, occupational illness, damage to or loss of equipment, property or damage to the environment.
Accountable Executive	Accountable Executive means a person designated by an aviation organization as having responsibility for the effective and efficient performance of the aviation organization's safety management system.
Aircraft Accident	<p>Aircraft accident means an occurrence associated with the operation of an aircraft which (in the case of a manned aircraft) takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or (in the case of an unmanned aircraft) takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:</p> <ol style="list-style-type: none">1. A person is fatally or seriously injured as a result of:<ol style="list-style-type: none">a. Being in the aircraft.b. Direct contact with any part of the aircraft including parts which have become detached from the aircraft or had direct exposure to jet blast.Exceptions are when the injuries are from natural causes, self-inflicted, inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew.2. The aircraft sustains damage or structural failure which:<ol style="list-style-type: none">a. Adversely affects the structural strength, performance or flight characteristics of the aircraft.b. Would normally require major repair or replacement of the affected component.Exceptions would be 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), minor damages to main rotor blades, tail rotor blades, landing gear, and damage resulting from hail or bird strikes (including holes in the radome).3. The aircraft is missing or is completely inaccessible.
ALARP – As Low as Reasonably Practicable	Risk is controlled low enough that any further risk reduction is either not practical, or grossly outweighed by the cost.
Analysis	The process of identifying a question or issue to be addressed, modeling the issue, investigating model results, interpreting the results, and possibly making a recommendation. Analysis typically involves using scientific or mathematical methods for evaluation.
Assessment	Process of measuring or judging the value or level of something.

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ADMINISTRATION AND CONTROL

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Term	Definition
Attributes	System Attributes, or the inherent characteristics of a system, are present in any well-defined organization and apply to an effective SMS. While the six system attributes were first applied with the FAA's Air Transportation Oversight System (ATOS), there are conceptual differences when applied to SMS.
Audit	Scheduled, formal reviews and verifications to evaluate compliance with policy, standards and/or contractual requirements. The starting point for an audit is the management and operations of the organization and it moves outward to the organization's activities and products/services. Internal audit – An audit conducted by or on behalf of the organization being audited. External audit – An audit conducted by an entity outside of the organization being audited.
Authority	Who can direct, control, or change the process, as well as who can make key decisions such as risk acceptance. This attribute also includes the concept of empowerment.
Aviation system	The functional operation/production system used by the service provider to produce the product/service.
Best Practices	Policies, procedures, methods and processes that represent the most effective way of achieving a specific objective or desired results, proven to work well by industry, and thus recommended as a model.
Change Management	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.
Complete	Nothing has been omitted and the attributes stated are essential and appropriate to the level of detail.
Conformity	Fulfilling or complying with a requirement [ref. ISO 9001-2000]; this includes but is not limited to complying with Federal regulations. It also includes complying with company requirements, requirements of operator-developed risk controls, or operator policies and procedures.
Continuous Monitoring	Uninterrupted (constant) watchfulness (checks, audits, etc.) over a system.
Controls	Controls are elements of the system, including hardware, software, special procedures or procedural steps, and supervisory practices designed to keep processes on track to achieve their intended results. Organizational process controls are typically defined in terms of special procedures, supervisory and management practices, and processes. Many controls are inherent features of the SMS Framework. Practices such as continuous monitoring, internal audits, internal evaluations, and management reviews (all parts of the safety assurance component) are identified as controls within the design expectations. Additionally, other practices such as documentation, process reviews, and data tracking are identified as controls within specific elements and processes.
Correct	Accurately reflects the item with an absence of ambiguity or error in its attributes.
Corrective Action	Action to eliminate or mitigate the cause or reduce the effects of a detected non-conformity or other undesirable situation.

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Term	Definition
Documentation	Information or meaningful data and its supporting medium (e.g., paper, electronic, etc.). In this context, it is distinct from records because it is the written description of policies, processes, procedures, objectives, requirements, authorities, responsibilities, or work instructions.
Emergency	A state of sudden, pressing necessity requiring immediate response.
Emergency Response Plan (ERP)	The documented procedure that the organization will follow in case of an accident or incident.
Event	An error, irregularity, mishap, near-miss, near-accident or other occurrence which may be classified as an incident or accident (depending on the severity of outcome(s)).
Evaluation	An independent review of company policies, procedures, and systems. If accomplished by the company itself, the evaluation should be done by a person or organization in the company other than the one performing the function being evaluated. The evaluation process builds on the concepts of auditing and inspection. An evaluation is an anticipatory process designed to identify and correct potential problems before they happen. An evaluation is synonymous with the term “systems audit.”
External Audit	An audit conducted by an entity outside of the organization being audited (e.g., the flight operations division audits the flight training department).
Factor	A type of hazard that is expressed in ‘negative’ terms (e.g., inadequate; incorrect; erroneous; poor; improper; unavailable; unreliable; breakdown; ignored; wrong). Factors are used during event investigation to understand how and why system failures have occurred.
Factors, Causal	Deficiencies which, if corrected, would likely have prevented or mitigated damage and/or injury.
Fatigue Risk Management	Activities designed to identify and control factors (environmental, organizational, regulatory, and individual) that contribute to fatigue.
Finding	A conclusion reached after examination or investigation. For audits and evaluations, evidence of non-conformance with policy / procedures / standards / contractual requirements, or non-compliance with regulations.
Functional	The term “function” refers to “what” is expected to be incorporated into each process (e.g., human tasks, software, hardware, procedures, etc.) rather than “how” the function is accomplished by the system. This makes for a more performance-based system and allows for a broad range of techniques to be used to accomplish the performance objectives. This, in turn, maximizes scalability while preserving standardization of results across the aviation organization communities.
GACA / GACAR	General Authority of Civil Aviation / General Authority of Civil Aviation Regulations
Gap Analysis	An analysis of the safety arrangements already existing within the organization as compared to those necessary for SMS function.
Hazard	Any existing or potential condition that can lead to injury, illness or death to people; damage to or loss of a system, equipment or property, or damage to the environment. A hazard is a condition that is a prerequisite to an accident or incident.
HFACS Framework	(Human Factors Analysis and Classification System) A framework of causal human factors that can lead to an accident.

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Human Factors	Factors dependent on individual human judgment, response, or performance which could contribute to the possibility of, or were found to contribute to, the occurrence of an incident or accident.
Incident	It is a near-miss episode with minor consequences that could have resulted in greater loss, or an unplanned event that could have resulted in an accident or did result in minor damage. An incident indicates that a hazard or hazardous condition exists, though it may not identify what that hazard or hazardous condition is.
Interfaces	This aspect includes examining such things as lines of authority between departments, lines of communication between employees, consistency of procedures, and clearly delineating lines of responsibility between organizations, work units, and employees. Interfaces are the “Inputs” and “Outputs” of a process.
Interfaces in Safety Risk Management and Safety Assurance	Safety Risk Management (SRM) and Safety Assurance (SA) are the key processes of the SMS. They are also highly interactive, especially in the input-output relationships between the activities in the processes. This is especially important where interfaces between processes involve interactions between different departments, contractors, etc. Assessments of these relationships should pay special attention to flow of authority, responsibility, and communication, as well as procedures and documentation.
Internal Audit	An audit conducted by, or on behalf of, the organization being audited (e.g., the flight training department audits the flight training department).
Investigation	A structured, detailed and systematic inquiry and examination into an event (such as an accident, incident or injury) that attempts to reveal causes and contributing factors, including organizational or systemic deficiencies, which are also known as latent conditions.
Just Culture	A culture in which personnel are not punished for actions, omissions or decisions taken by them which are commensurate with their experience and training, but where gross negligence, willful violations and destructive acts are not tolerated.
Lessons Learned	Knowledge or understanding gained by experience, which may be positive, such as a successful test or mission or negative, such as a mishap or failure. Lessons learned should be developed from information obtained from within, as well as outside of the organization and/or industry.
Likelihood	The estimated probability or frequency, in quantitative or qualitative terms, of an occurrence related to the hazard.
Non-conformity	Non-fulfillment of a requirement (ref. ISO 9000). This includes but is not limited to non-compliance with Federal regulations. It also includes company requirements, requirements of operator developed risk controls or operator specified policies and procedures.
Objective	The desired state or performance target of a process. Usually it is the final state of a process and contains the results and outputs used to obtain the desired state or performance target.
Operational Life Cycle	Period of time spanning from implementation of a product/service until it is no longer in use
Organization	Indicates both certificated and non-certificated aviation organizations including air navigation service providers, air operators, repair stations, aerodromes, and flight schools and training organizations.

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Term	Definition
Outputs	The product or end result of a SMS process that can be recorded, monitored, measured, and analyzed. Outputs are the minimum expectation for the product of each process area and the input for the next process area in succession. Each of the outputs of a process should have a method of measurement specified by the organization. Measures need not be quantitative where this is not practical; however, some method of providing objective evidence of the attainment of the expected output is necessary.
Oversight	A function that ensures the effective declaration and implementation of the safety-related standards, requirements, regulations and associated procedures. Safety oversight also ensures that the acceptable level of safety risk is not exceeded in the air transportation system. Safety oversight in the context of the safety management system will be conducted in accordance with the GACA's Safety Management System.
Preventative Action	Action taken to eliminate and/or mitigate the cause, to reduce the effects of a potential non-conformity or undesirable situation or hazard.
Procedure	ISO-9001-2000 defines "procedure" as "a specified way to carry out an activity or a process." Procedures translate the "what" in goals and objectives into "how" in practical activities (things people do). Procedures are simply documented activities to accomplish processes (e.g., a way to perform a process). The organization should specify their own procedures for accomplishing processes in the context of their unique operational environment, organizational structure, and management objectives.
Process	Set of interrelated or interacting activities that transform inputs into outputs.
Process Measures	Ways to provide feedback to responsible parties that required actions are taking place, required outputs are being produced, and expected outcomes are being achieved. A basic principle of safety assurance is that fundamental processes be measured so that management decisions can be data-driven. The general expectations for Component 1, Policy, specify that SMS outputs be measured and analyzed. These measurements and analyses are accomplished in Component 3, Safety Assurance. Outputs of each process should, therefore, be identified during Component 3 activities. For example, these outputs should be the subjects of continuous monitoring, internal audits, and internal evaluation.
Product/service	Anything that might satisfy a want or need, which is offered or can be purchased in the air transportation system. In this context, administrative or licensing fees paid to the government do not constitute a purchase.
Product/service provider	Any entity that offers or sells a product/service to satisfy a want or need in the air transportation system. In this context, administrative or licensing fees paid to the government do not constitute a purchase. Examples of product/service providers include but are not limited to: <ul style="list-style-type: none"> • Aircraft and aircraft parts manufacturers • Aircraft operators • Maintainers of aircraft, avionics and air traffic control equipment • Educators in the air transportation system. <u>Note:</u> Any entity that is a direct consumer of air navigation services is included in this classification, including general aviation, military aviation and public use aircraft operators.

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Term	Definition
Records	Evidence of results achieved or activities performed. In this context, it is distinct from documentation because records are the documentation of SMS outputs.
Residual Safety Risk	The remaining safety risk that exists after all control techniques have been implemented or exhausted and all controls have been verified. Only verified controls can be used for the assessment of residual safety risk.
Responsibility	Who is accountable for management and overall quality of the process (planning, organizing, directing, controlling) and its ultimate accomplishment.
Risk	The composite of predicted severity (how bad) and likelihood (how probable) of the potential effect of a hazard in its worst credible (reasonable or believable) system state. The terms “risk” and “safety risk” are interchangeable.
Risk control / Mitigation	Steps taken to eliminate (remove) hazards or to mitigate (lessen) their effects by reducing the severity and/or likelihood of risk associated with those hazards. Synonymous with risk mitigation.
Risk Level	The composite of predicted severity and probability of the potential effect of a hazard, based on the most credible incident / accident outcome. Measured as High (unacceptable), Moderate (tolerable if mitigated), and Low (acceptable).
Root Cause	One or more basic initiating cause(s) of a causal chain which, either individually or combined, can lead to an undesirable outcome (such as an incident / accident or other event). A root cause is the most basic cause that can reasonably be identified, that management has control to fix and, when fixed, will prevent (or significantly reduce the probability of) recurrence of the undesirable outcome. See Causes.
Root Cause Analysis (RCA)	A systematic method of identifying the causes of events, in order to identify what behaviors, actions, inactions, or conditions need to be changed to prevent recurrence of similar events. Hazards and events are then identified as contributing factors and arranged into a time-line sequence of events that led up to the top-level event. Causal factors are then identified and root causes determined.
Safety	The state in which the possibility of harm to persons or of property damage is reduced to and maintained at or below an acceptable level through a continuing process of hazard identification and safety risk management.
Safety assurance (SA)	A formal management process within the SMS that systematically provides confidence that an organization’s products/services meet or exceed safety requirements. A Safety Assurance flow diagram (found in Volume 2, Chapter 4, Appendix A, SMS Assessment Guide, Component 2.0) includes the Framework element/process numbers and other notes to help the reader visualize the Framework in terms of a process flow (with interfaces), and understand the component/element/process expectations.
Safety and Quality Reporting web application	Part of the safety program where hazards and safety information is received from employees, mitigated and tracked.
Safety Culture	The product of individual and group values, attitudes, competencies and patterns of behavior that determine the commitment to, and the style and proficiency of the organization's management of safety. Organizations with a positive safety culture are characterized by communications founded on mutual trust by shared perceptions of the importance of safety and by confidence in the effectiveness of preventive measures.

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Term	Definition
Safety Director	The generic term “safety director” is used and refers to the function, not necessarily to the individual. The person carrying out the safety manager function is responsible to the Accountable Executive for the performance of the SMS and for the delivery of safety services to the other departments in the organization.
Safety Management Committee (SMC)	Typically includes managers, supervisors and staff from across the organization. The SMC holds quarterly meetings to review and assess (yellow) moderate-risk and (red) high-risk Reports and Issues.
Safety Management System (SMS)	The formal, top-down business-like approach to managing safety risk. It includes systematic procedures, practices, and policies for the management of safety (as described in this document it includes safety risk management, safety policy, safety assurance, and safety promotion).
Safety Planning	Part of the safety management focused on setting the safety objectives and specifying necessary operational processes and related resources to fulfill the quality objectives.
Safety Promotion	A combination of safety culture, training and data sharing activities that support the implementation and operation of an SMS in an organization.
Safety Risk	The composite of predicted severity (how bad) and likelihood (how probable) of the potential effect of a hazard in its worst credible (reasonable or believable) system state. The terms “safety risk” and “risk” are interchangeable.
Safety Risk Control	Anything that reduces or mitigates the safety risk of a hazard. Safety risk controls must be written in appropriate language, measurable, and monitored to ensure effectiveness.
Safety Risk Management (SRM)	A formal process within the SMS composed of describing the system, identifying the hazards, assessing the risk, analyzing the risk and controlling the risk. The SRM process is embedded in the processes used to provide the product/service - it is not a separate/distinct process.
Severity	The consequence or impact of a hazard in terms of degree of loss or harm.
SMART Principle	Specific, Measurable, Attainable, Relevant and Timely – A method of setting goals and/or recommendations to attain a valued output.
Substitute risk	Risk unintentionally created as a consequence of safety risk control(s).
System	An integrated set of integral elements that are combined in an operational or support environment to accomplish a defined objective. These elements include people, hardware, software, firmware, information, procedures, facilities, services and other support facets.
Top management	A person or group of people who direct and control an organization. For the purposes of this definition and in the context of this SMS, this term refers to the Mukamalah Aviation Company Accountable Executive.
Violation	A regulatory violation may occur concurrently with violation of company policy or procedures. Regulatory violations may be intentional or unintentional.

SECTION 1: SAFETY POLICY AND OBJECTIVES

1.1 Safety Policy

Mukamalah Aviation Company is committed to operating at the highest standards of safety by implementing and maintaining an active safety management system. Safety is a corporate value of this company and we believe in providing our employees and customers with a safe environment. To ensure this commitment is achieved, I support open reporting on all safety issues and encourage all personnel to report accidents, incidents, safety hazards and risks, concerns, and suggestions through any means available formal or informal. No employee shall be asked to compromise Company or industry safety standards for the sake of meeting a business objective or task.

I pledge that no action will be taken against any employee who discloses a safety concern through any means available, formal or informal unless such a disclosure reveals (beyond any reasonable doubt) an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures has been identified. If a person is in breach of this safety policy, either due to gross negligence or deliberate or willful disregard of regulations or procedures; the event will be handled in accordance with the Just Culture process.

Our highest safety objective is to proactively identify hazards and their associated risks with the full intent to minimize their potential negative affect to our people, assets, customers, and to the environment. To do this, Management is committed to the following:

- Identify, assess, and take necessary action on any safety risk that poses a hazard.
- Develop, implement, maintain and improve strategies and processes to ensure that all our activities take place under an appropriate allocation of organizational resources.
- Comply with and exceed (whenever possible) legislative, state regulatory and standard requirements to include the reporting of safety data and safety issues to the regulatory authority.
- Ensure that sufficiently skilled and trained human resources are available to implement safety strategies and processes.
- Ensure that all staff are provided with adequate appropriate aviation safety information, training, and tasks are allocated to match their skill set.
- Establish and measure our safety performance against realistic safety performance indicators and targets as set forth by our safety objectives.
- Improve our safety performance through continuous monitoring, measuring, and adjusting of safety objectives and targets.
- Identify measure and minimize the impact on the environment by utilizing nonrenewable resources responsibly.

The ultimate responsibility for safety in our Department rests with me as the Accountable Executive. Responsibility for making our operation safer lies with each and every one of us – from Department Managers to front-line personnel. Management personnel are responsible for implementing the safety management system in their respective areas of responsibility and will be held accountable to ensure that all reasonable steps are taken. Every employee has the authority to “stop work” if they witness an unsafe act or operation and I encourage you all to be vigilant, ensuring the safety of our Department.



Khalid H. Alnatour
CEO & Accountable Executive

1.2 Non-Punitive Reporting Policy

Safety shall be considered above all other factors in all company risk management processes. Only with full awareness can management rectify deficiencies in a timely manner.

Personnel at all levels are required to take preventative safety action, and to report any safety threat to themselves or others. All personnel are required to report accidents, incidents or safety hazards in accordance with the prescribed reporting procedures. No disciplinary action shall be taken against any personnel who act to prevent an injury or reports any accident, incident or hazard.

This policy assures employees that reporting unpremeditated or inadvertent errors shall not result in disciplinary or punitive action being taken against the reporter or other individuals involved unless, of course, such errors result from illegal activity, willful misconduct or other egregious actions. Employees are also assured that the identity or information leading to the identity, of any employee who reports an error under this policy, is never disclosed unless agreed to by the employee or required by law.

As such, we fully endorse non-punitive safety reporting within Mukamalah Aviation Company. This policy will foster a culture of mutual trust, in which we adopt a team approach to managing safety to prevent incidents and accidents.



Khalid H. Alnatour
CEO & Accountable Executive

1.3 Commitment to Safety

- A. Mukamalah Aviation Company is committed to ensuring that an accident / incident-free environment is a fundamental objective. The Company regards the safety of flight operations, crews, passengers and associated ground operations as the most important consideration, in all activities. To meet the objectives, the Company is dedicated to cultivating a positive, generative safety culture, by implementing, maintaining, and supporting an active SMS. This includes a commitment to:
- Document Company safety management priorities.
 - Continual improvement in the operational environment, the operation itself, and the level of safety therein.
 - Prescribe and document procedures for performing activities/processes.
 - Provide training to the staff to develop the necessary knowledge, skills and attitude.
 - The identification and management of safety risk to provide safety directives and controls to ensure compliance.
 - Procure suitable equipment and systems to support activities and ensure continuing serviceability.
 - Ensure that necessary resources are deployed to maximize our safety performance.
 - Complying with applicable regulatory requirements.
 - Encouraging employees to report safety issues without reprisal.
- B. This commitment to safety is made with the realization that risks must often be taken in the conduct of daily operations, and that all personnel must accept the inherent risks associated with flight operations, maintenance, and aviation in general. All personnel must remain devoted to quality, duty, good judgment, sound operational planning, and efficient use of available resources.

1.4 Safety Policy Review

- A. The Safety Policy is developed and endorsed by the Safety Review Board (SRB) which is made up of Senior Management. The safety policy is to be reviewed annually (12 months) to ensure it remains relevant and appropriate to the Company's products and services. This is typically accomplished during an SRB meeting and is then signed by the Accountable Executive.

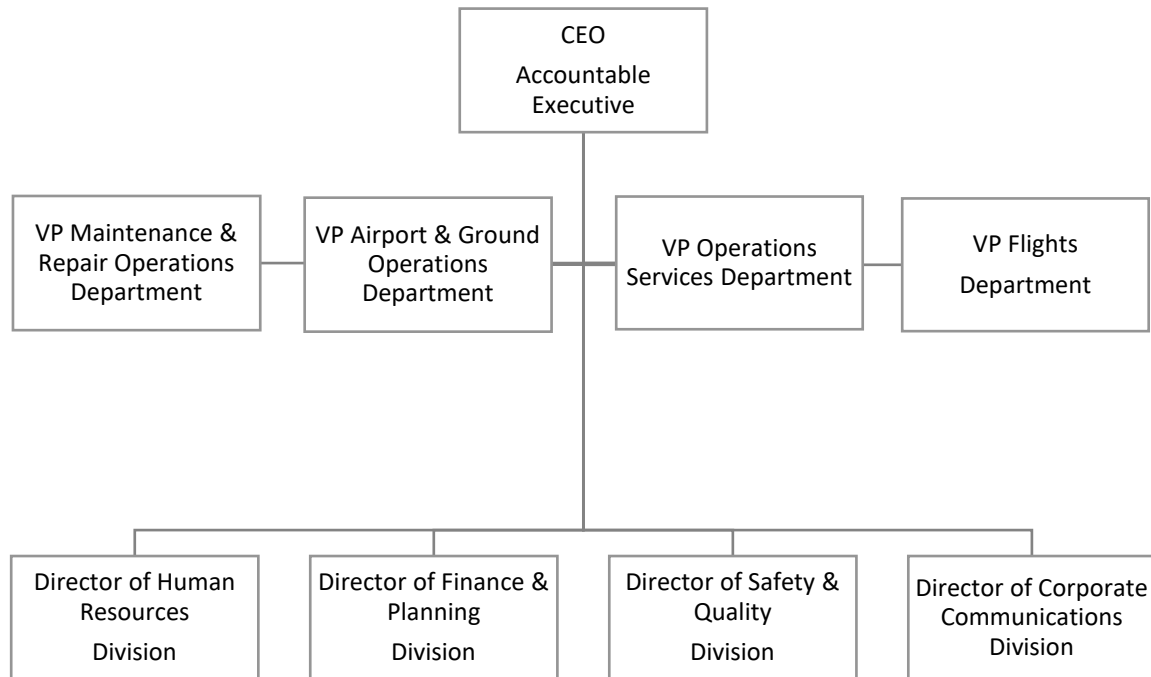
1.5 Safety Objectives

- A. The Company is committed to providing a work environment in which the health and safety of our employees, the safe operation and maintenance of our equipment, and the protection of our customers and their assets are all fundamental to our quest for continued success. It is our belief that all incidents are preventable.
- B. To support this, management at all levels shall demonstrate their pro-activeness in setting safety targets in their own Divisions which relate to the following objectives:
- Improve Safety of the Company operations across all sectors and reduce operational risks.
 - Strengthen the Company's safety oversight.
 - Develop and maintain an effective safety and quality program across the Company, aligned with regulatory requirements.
 - Enhance the Company's organization safety culture and expand collaboration on a corporate level.

- C. The Accountable Executive will provide guidance for setting and reviewing safety objectives, communicating to all employees and responsible parties, and determining individual safety performance.
- D. The policies and procedures established in this SMS shall be reviewed annually by the Director of Safety and Quality through the internal audit process to ensure they remain relevant and appropriate. In addition, safety objectives and goals will be reviewed annually and ensure that any updates are implemented.

1.6 Organizational Structure

1.6.1 Mukamalah Aviation Company



1.6.2 Safety & Quality Division



1.7 SMS Accountabilities and Responsibilities

- A. The Directors and officers of the Company are accountable for the continued support of the Safety Management System, and for providing the necessary resources in order to attain the strategic safety objectives set forth herein, and for the SMS to function effectively.

1.7.1 Accountable Executive

- A. The Accountable Executive is ultimately accountable for the SMS and shall provide resources essential to implement and maintain the SMS. The Accountable Executive is the final authority over all operations authorized to be conducted.

B. Qualifications

- Graduation from an accredited college or university with a Bachelor's degree or Certification of training in Aviation Safety Management.
- Minimum of 10 years in an aviation or airline environment.
- Holds an Airline Transport Pilot license under GACA or FAA.
- In-depth knowledge of GACAR regulations
- Full understanding of the certificate holder's operations specifications.
- Excellent communication and presentation skills.

C. Responsibilities

- Establishes and promotes the safety policy and safety objectives that instill safety as a core organizational value.
- Ensure that the SMS is properly implemented and performing in all areas of the Department.
- Develop, review and sign the safety policy.
- Has full control of resources, both financial and human.
- Responsible for ensuring appropriate actions are taken to address safety issues and safety risks.
- Ensure that the notification and reporting of aviation accidents, serious incidents and other aviation incidents are made to the required entities.
- Responsible for assigning appropriate personnel to respond to accidents and incidents.
- Regularly review the safety performance and direct actions necessary to address substandard safety performance.
- Accountable for the promotion of a positive safety culture that will reflect the safety performance of the Department.

D. Required Training

- SMS for Managers
- ERP - Incident Manager

1.7.2 Director of Safety & Quality

- A. The Director of Safety & Quality reports directly to the Accountable Executive and is responsible to manage the implementation of Safety and Quality policies and instilling the required safety culture throughout the Company and meeting GACA regulatory requirements.

B. Qualifications

- Graduation from an accredited college or university with a Bachelor's degree or Certification of training in Aviation Safety Management.
- Minimum of 10 years in an aviation or airline environment.

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- Holds an Airline Transport Pilot license under GACA or FAA (preferred)
- Certification of training in Aviation Safety Management.

C. Responsibilities

- Establish and enforce compliance with aviation regulations, both domestically and internationally.
- Develop and implement safety policies, procedures, and protocols in line with industry best practices.
- Reports to the Accountable Executive on the performance of the SMS and on any need for improvement.
- Maintain Company safety records for all safety activities.
- Coordinate with the Accountable Executive and Company management to ensure compliance with the Company safety policy.
- Provide leadership in promoting a culture of safety throughout the organization.
- Collaborate with regulatory authorities and industry stakeholders to stay updated on safety requirements.
- Develop and deliver safety training programs to enhance awareness and competence among the Company personnel.
- Investigate and analyze incidents and accidents to identify root causes and implement preventive measures.
- Continuously evaluate and improve safety management systems to mitigate risks and enhance safety performance.
- Ensure effective communication and reporting of safety-related matters to relevant regulatory authorities and stakeholders.
- Foster a proactive and transparent approach to safety, encouraging the reporting of near-misses and safety concerns
- Verify all incidents, accidents, and noncompliance items are reported in accordance with GACAR Part 4.
- Perform and manage investigations at the direction of the Accountable Executive.
- Ensure safety suggestions and recommendations are monitored, tracked, and evaluated.
- Manage the Company Safety Reporting System to include tracking of closure status, mitigations and the assignment of Safety and Quality Reports. This will be conducted through timely review (not less than quarterly) of all assigned and opened Safety and Quality Reports for acceptable closure.
- Maintain and track a safety information distribution system to management and line personnel.
- Maintain and ensure annual review and appropriate revisions of the SMS and ERP.
- Ensure at least one annual ERP drill is conducted.
- Ensure continuous availability of at least one-unit member who is trained for ERP response.
- Manage the Department Fatigue Risk Management System (FRMS) by providing expertise in human fatigue matters for all personnel serving the flight department including (but not limited to) flight crews, maintenance, dispatchers, hoist operators, flight attendants, ground service handlers, etc.
- Ensure Company General Instructions, Engineering Standards, Engineering Drawings, and other applicable company documents are in line with industry best practices and standards.

- Audit third party service providers world-wide that may provide services such as transporting company executives or other personnel by air, conducting maintenance activities on company aircraft, providing ground service and support to the department, etc.
- Administer external safety audits by a recognized aviation organization.

D. Required Training

- SMS for Managers
- ERP – with Incident Command course or similar
- Root cause analysis

1.7.3 Safety & Risk Management Manager

A. The Safety & Risk Management Manager reports directly to the Director of Safety and Quality and is responsible to implement and ensure the SMS, in conjunction with the Safety and Quality policies and instilling the required safety culture throughout the Company, meet GACA regulatory requirements.

B. Qualifications

- Graduation from an accredited college or university with a Bachelor's degree or Certification of training in Aviation Safety Management.
- Minimum of 10 years in an aviation environment.
- Holds an Airline Transport Pilot license under GACA or FAA (recommended).
- Certification of training in Safety Management.

C. Responsibilities

- Develop SMS policies, goals and responsibilities to establish appropriate guidelines for the company.
- Organize quarterly safety review board meetings (SRB) and perform the secretarial functions.
- Coordinate, control and maintain the procedures, associated documentation, including recognized SMS standards and procedures.
- Implement an effective reporting, closeout and information flow system to facilitate the SMS via a system designed specifically for this purpose.
- Implement and maintain conformance with the standard that meets the requirements, related to the Company's health hazards assessment.
- Facilitate, verify, and approve the hazard identification and risk assessment of activities, products and services identified by the respective department.
- Monitors external and in-house safety training.
- Set safety performance indicators (SPI).
- Issue safety alert bulletins as required to address general safety alerts to all staff.
- Coordinate and communicate (on behalf of the accountable executive) with GACA on issues relating to safety.
- Attend the ECC as necessary, exercising the authority of the Director of Safety & Quality as backup.

D. Required Training

- SMS for Managers

- ERP with Incident Command course or similar
- Root cause analysis

1.7.4 Quality Assurance Manager

A. The Quality Assurance Manager is responsible for overseeing and managing all aspects of Quality Assurance System within the Company, including implementation and continuous improvement to maintain a comprehensive and effective Quality Assurance System.

B. Qualifications

- Bachelor's degree in aviation management, engineering, or safety related field.
- 10 years of experience in aviation quality, safety, operation or maintenance.
- Thorough knowledgeable of GACA and FAA regulations.
- Knowledgeable in aviation internal/external audit programs.
- 10 years of supervisory experience.
- GACA / FAA A&P or ATP License.
- Audit Certification.

C. Responsibilities

- Performs all management and supervisory duties common to the unit heads as established by the Director, Safety & Quality.
- Establishes and administrates the Quality Assurance System to ensure compliance with Company standards, policies and procedures, FAA and GACA regulations.
- Establishes, monitors, and improves internal/external audit programs and procedures to ensure compliance with all relevant aviation regulation standard and certification.
- Responsible under the general direction of the Director of Safety & Quality for all aspects of the Quality Assurance System including compliance with policies, procedures, and authority regulations as required by MAC, FAA and GACAR Parts 121, 125, 133, 145, & 151 for both fixed wing and rotor wing operations.
- Manage and develop of quality system policies and procedures to identify non-compliance and areas for improvement.
- Responsible for the overall performance and compliance of the internal audit program and external vendor audits.
- Manage and review the annual plan for audits, AIP's, company manuals and document control, etc.
- Maintains a strong focus on continuous improvement in aviation and safety practices.
- Acts if required as the company rep during regulatory FAA or GACA audit visits to MAC facility
- Manage and analyzes trend analysis on audit items and approve recommendations
- Responsible for managing and compliance of Aircraft Inspection Programs (AIP), company manuals, documentation control and other related technical data. Ensures compliance with all relevant aviation regulations, standards, and certifications.
- Actively support the company's Safety Management System and assist the Director of Safety & Quality as assigned.

D. Required Training

- Leadership (min of 5 courses)

- Lead auditor or alternative
- Aviation Internal Audit
- IOSA Audit Training
- SMS for Managers
- ERP
- Root Cause Analysis

1.7.5 Health, Safety, Security, and Environment (HSSE) Manager

- A. The HSSE manager will ensure that the health, safety, environment and security program is established, implemented, and maintained in conformance with the standards and meets the requirements of the regulations, and implement SMS and quality assurance protocols.
- B. Qualifications
- Graduation from an accredited college or university with a Bachelor's degree.
 - Minimum of 5 years of experience in managing all HSSE matters.
 - Has experience in airports (aerodrome) industry or similar industry.
 - Additional certificates or qualifications in Health and Safety would be preferred.
 - Able to acquire the necessary security clearances.
 - NEBOSH , ISO, IOSH, or OSHA Certified (preferred).
- C. Responsibilities
- Oversee the coordination of the companies HSSE plan and activities.
 - Provide support and assistance to implement HSSE policy and regulatory requirements.
 - Ensure that HS ES is fully integrated with SMS.
 - Collaborate with Quality Assurance on HSSE issues.
 - Make provisions to support, assist, train, and develop the required safety culture.
 - Plan and coordinate regular H SES internal audits.
 - Control and distribute procedures and associated documentation, including recognized HSSE standards and procedures.
 - Verify hazard assessments, environmental aspects, impact of activities, products, and services identified by respective departments.
 - Monitor and communicate any changes or updates related to the company's health hazard assessment and environmental impact.
 - Report any recommendations from respective departments during management review meetings to ensure continuous improvement.
 - Ensure identified HSSE gaps are managed to ALARP and closed within the proposed time.
 - Plan and initiate emergency response and crisis management drills to for evaluation and monitor performance. Provide report to Director of Safety and Quality and Accountable Manager on gap closure plan.
 - Test Company crisis management for effectiveness and provide gap closure plans period.
- D. Required Training
- Leadership (min of 5 courses)
 - SMS for Managers
 - ERP

- Root Cause Analysis

1.7.6 Lead Investigator

- A. The Lead Investigator will have knowledge of and experience of civil aviation flight operations, maintenance and inspection of aircraft, and a strong working knowledge of aircraft accident investigation and aviation safety. Needs to be available on an on-call basis to respond to the scene of aircraft accidents, which may be located in inhospitable environments, anywhere across the Kingdom; possesses the ability to prioritize multiple high-priority tasks; and possess excellent written and verbal communication skills.
- B. Qualifications
- Graduation from an accredited college or university with a Bachelor's degree or Certification of training in Aviation Safety Management.
 - Minimum of 10 years working within aviation environment.
 - Preferred certification in:
 - Aircraft accident investigation
 - Root Cause analysis
 - Human Factors
 - Leading or participating in teams that provided investigative support to multiple technically complex aircraft accident and incident investigations involving a variety of causal factors. This experience might have been gained through participation as a party member or technical advisor to an aircraft accident/incident investigation led by the AIB or through the Company.
- C. Responsibilities
- Conducting technically complex accident/incident investigations of aircraft operated under GACA, involving Company aircraft.
 - Collecting and documenting factual information, data, and evidence relevant to aircraft accident/incident investigations.
 - Conducting investigative interviews.
 - Conducting on-scene collection, verification, analysis, and evaluation of accident data worldwide.
 - Preparing written reports of investigative activities in a timely manner and in accordance with Company and regulatory policy and procedures.
 - Researching and developing safety recommendations, corrective actions, and other necessary changes.
 - Briefing Company management of the facts and circumstances of an accident/incident.
 - May conduct special investigations or studies and presents the conclusions in a comprehensive written report.
 - Assisting with the investigation of major aircraft accidents and acting as a group chair in support of such investigations. May also participate in other large/complex technical review meetings.
- D. Required Training
- SMS
 - ERP
 - Root Cause Analysis

1.7.7 ERP Coordinator

- A. The ERP Coordinator designs, plans, and manages the Company's emergency preparedness and management activities at Company airports, including response, and recovery efforts; and performs related duties as required.
- B. Qualifications
- Graduation from an accredited college or university with a Bachelor's degree or Certification of training in Emergency Preparedness or Aviation Safety Management
 - Minimum 5 years in an aviation related position; or an equivalent combination of training and experience.
 - Experience running full scale emergency drill exercises including planning and conducting training.
- C. Responsibilities
- Develops, writes, and publishes the Emergency Response Plan manual(s), technical reports, training materials, and operational support documents.
 - Implements airport action plans and coordinates multi-agency efforts during emergencies and Disasters.
 - Conducts multi-situational drills and exercises for responses to include, but not limited to, such emergencies as air crash, air turbulence, air piracy, bomb threats, hazardous material spills, counter-terrorism, business operational interruptions, structural fire, and major natural disasters.
 - Conducts employee training sessions on emergency management plans and operations to train employees on the proper response techniques and procedures in the event of an emergency.
 - Coordinates with personnel and local emergency personnel to plan and design airport emergency and continuity response and plans.
 - The list of responsibilities is not intended to be inclusive; there may be other duties that are essential to this role.
- D. Required Training
- SMS
 - ERP
 - Root Cause Analysis

1.7.8 Flight Data Analysis Program Specialist

- A. Perform data analysis and identify abnormalities that exceed defined thresholds. Review Flight Data Monitoring triggers and events for accuracy. Update Safety Reports with input based on FDM reviews. Coordinate analysis of Safety Reports with hard data generated on FDM program.
- B. Qualifications
- Graduation from an accredited college or university with a Bachelor's degree or Aviation Safety Management.

- Minimum 5 years in an aviation related position; or an equivalent combination of training and experience.
- Excellent knowledge of safety management principles.
- Training in Flight Data Monitoring Systems and Safety Management System.
- Knowledge of FDM/FOQA/HFDM systems.

C. Responsibilities

- Maintain Company FDM policies and procedures in line with current regulations and industry best practice.
- Liaise with IT on all matters relating to the FDM program, ensuring data availability and capture.
- Obtain and process RAW Data with FDM/FOQA/HFDM system to ensure efficient running of FDM program.
- Perform data analysis and identify abnormalities that exceed defined thresholds. Review Flight Data Monitoring triggers and events for accuracy.
- Update Safety Reports with input based on FDM reviews. Coordinate analysis of Safety Reports with hard data generated on FDM program.
- Design software routines able to gather data required for special flight performance studies.
- Coordinate with SRMG to generate monthly and yearly FDM bulletins. Conduct activities pertaining to safety in operational areas including bulletins, events, seminars, etc.
- Generate all required statistics to facilitate FDA and maintain backups of all relevant Company's safety information generated from FDA.
- Develop classroom Safety Training materials and assist with preparation of Safety Performance Indicators for submission to GACA and in preparation of quarterly statistics and trends.
- Collate data and prepare presentations for quarterly Safety Action Group. Develop materials to aid safety promotion and communication throughout the organization.
- Conduct analysis and participate in investigations in collaboration with SRMG Group and Flight Operations, identify hazards and risks emanating from flight data and offer recommendations where required.
- Being an active member of the Safety Action Group, where meetings are held on a regular basis to address safety concerns, procedures and improvement.

D. Required Training

- SMS
- ERP
- Root Cause Analysis

1.7.9 Cabin Safety Specialist

- A. Manage day-to-day safety and perform investigations and safety assessments to identify root cause/causal factors and actions to mitigate reoccurrence related to Cabin Operations. They will conduct risk analysis, assign and track mitigation actions as per the established process, as well as assist the SRMG in understanding obligations concerning risk, mitigations and identifying and tracking operational hazards.

B. Qualifications

- Post-secondary education in a related field, or an equivalent level of education and experience.
- Minimum 5 years in an aviation related position; or an equivalent combination of training and experience.
- Flight Attendant background.
- Appropriate operational experience (Crew Resource Management, Cabin Crew) combined with expertise.
- Knowledge of GACA regulations and Flight Attendant procedures.

C. Responsibilities

- Contact cabin crew in the investigation and assessment process, in cooperation with SRMG.
- Conduct cabin safety assessments and research best industry practices and initiatives to address weak areas within cabin safety.
- Perform route-cause analyses on Safety Reports with reference to Cabin Crew safety procedures.
- Monitor and track all actions related to Cabin Safety (CAB) events for accident, incident, and other occurrence reports.
- Provide timely responses of cabin safety assessments and investigations.
- Monitor cabin safety-related activity to identify possible emerging safety issues or trends.
- Liaise with appropriate parties (In-Flight Service, Cabin Safety, Maintenance, etc.) for the investigation of cabin safety events.
- Coordinate, research, prepare and distribute Safety Event Review Summary to the SRMG, identifying SOP compliance and deviations based on review of reports.
- Manage the continuous review of reported cabin safety data to identify, analyze and understand hazards. This includes regular meetings with Cabin Crew Supervisor and Risk Manager.
- Research and prepare all documentation related to the conduct of safety meetings following cabin safety events (slide deployment, rapid deplanement, emergency landing, disruptive passengers, rejected take-offs, etc.) as directed.
- Facilitate risk assessments, monitor and track related mitigation actions as per the Risk Manager
- Develop well-written contributions that address safety hazards, threats and risks for IFS awareness and education.
- Participate in Safety Campaigns in order to address deficiencies in SOPs and prevent incidents.
- Participate in audits as required to ensure both regulatory and industry standards are maintained for the branch.
- Develop, establish and maintain business processes and procedures pertained to the position.
- Prepare reports for Safety Review Board meetings.

D. Required Training

- SMS
- ERP
- Root Cause Analysis

1.7.10 Airplane Safety Pilot

- A. To oversee and implement safety measures within the Company to minimize risk of accidents and incidents within the airplane flight department.

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B. Qualifications

- Graduation from an accredited college or university with a Bachelor's degree or Aviation Safety Management Program Certification.
- Hold an GACA or FAA Airline Transport Pilot (ATP) License.
- Minimum 5 years in an aviation related position; or an equivalent combination of training and experience.
- Thorough understanding of GACA Regulations.

C. Responsibilities

- Manage, coordinate and maintain safety management programs, policies, reports, and correspondence for the Company.
- Advise and maintain close relations with the SRMG on safety matters related to airplane operations.
- Assist in the management of the Safety Reporting System by ensuring the system conforms to international aviation standards and best practices; ensuring secure data collection, tracking / reporting closure status, accountability of corrective actions as appropriate, and providing appropriate closure.
- Maintain Company ERP readiness by staffing the response team in roles as outlined in the ERP.
- Go-Team Leader and/or Member, and Flight Department Representative.
- Activating and/or deactivating the ERP.
- Assist in the maintenance of the ERP document in conformance with international aviation standards and best practices.
- Assist in conducting ERP drills.
- Assist in the development and conduction of Company ERP training.
- Monitoring the on-call Safety phone.
- Provide technical support in all safety activities and procedures.
- Pilot Mukamalah aircraft in the purpose of line-oriented flights and inspections of airports as applicable.
- Assist in the management of the Department Fatigue Risk Management System (FRMS) by providing expertise in human fatigue matters for all personnel serving the flight department including flight crews, dispatchers, and flight attendants.
- Inspect and keep track of Company airports.
- Review and assist in the design of airports via design meetings both domestic and internationally.
- Ensure compliance with the latest SMS standards to maintain an internationally certified aviation SMS.
- Coordinate audits of outside entities such as IS-BAO, IS-BAH, LPD, OE, FAA, GACA, etc.
- Assist on investigations at the direction of the Lead Investigator.
- Assist the FDAP Specialist by advising on the FOQA matters.
- Evaluate safety suggestions and recommendations.
- Provide expertise to the Company on such matters as Passenger Safety and Dangerous Goods Carry.

D. Required Training

- SMS
- ERP
- Root Cause Analysis

1.7.11 Helicopter Safety Pilot

A. To oversee and implement safety measures within the Company to minimize risk of accidents and incidents within the helicopter flight department.

B. Qualifications

- Graduation from an accredited college or university with a Bachelor's degree or Aviation Safety Management Program Certification.
- Hold an GACA or FAA Airline Transport Pilot (ATP) License.
- Minimum 5 years in an aviation related position; or an equivalent combination of training and experience.
- Thorough understanding of GACA Regulations.

C. Responsibilities

- Assist in the maintaining of the safety management programs, policies, reports, and correspondence for the Company.
- Advise and maintain close relations with the SRMG on safety matters related to helicopter operations.
- Assist in the management of the Safety Reporting System by ensuring the system conforms to international aviation standards and best practices; ensuring secure data collection, tracking / reporting closure status, accountability of corrective actions as appropriate, and providing appropriate closure.
- Maintain Company ERP readiness by staffing the response team in roles as outlined in the ERP.
- Go-Team Leader and/or Member, and Flight Department Representative.
- Activating and/or deactivating the ERP.
- Assist in the maintenance of the ERP document in conformance with International aviation standards and best practices.
- Assist in conducting ERP drills.
- Assist in the development and conduction of Company ERP training.
- Monitoring the on-call Safety phone.
- Provide technical support in all safety activities and procedures.
- Pilot Mukamalah aircraft in the purpose of line-oriented flights and inspections of airports as applicable.
- Assist in the management of the Department Fatigue Risk Management System (FRMS) by providing expertise in human fatigue matters for all personnel serving the flight department including flight crews, dispatchers, and flight attendants.
- Ensure onshore and offshore helicopter landing facility standards are maintained in line with industry best practices and government regulations.
- Conduct periodic inspection and keep track of offshore and onshore helicopter landing facilities.
- Maintain and Track the status of onshore and offshore helicopter landing facilities.

- Review and assist in the design of offshore helidecks and onshore heliports via design meetings both domestic and internationally.
- Ensure compliance with the latest SMS standards to maintain an internationally certified aviation SMS.
- Coordinate audits of outside entities such as IS-BAO, IS-BAH, LPD, OE, FAA, GACA, etc.
- Assist on investigations at the direction of the Lead Investigator.
- Assist the FDAP Specialist by advising on the HFDM matters.
- Evaluate safety suggestions and recommendations.
- Provide expertise to the Company on such matters as Passenger Safety and Dangerous Goods Carry.
- Represent the Company on Helicopter Landing Officer (HLO) and Helicopter Underwater Escape Training (HUET) matters.

D. Required Training

- SMS
- ERP
- Root Cause Analysis

1.7.12 Risk Manager

A. The risk manager is responsible for all risk matters relating to safety, security and quality in the airport environment. This will be verified by monitoring of safety reports and internal audits, managing compliance against contractual and regulatory requirements along with the adequacy of procedures necessary for a safe and secure operation.

B. Qualifications

- Graduation from an accredited college or university with a Bachelor's degree or aviation Safety Management Program Certification.
- Qualitative and quantitative assessment of risk training and background.
- Working understanding of an integrated aviation risk management process (risk, cost and schedule) in a Safety Management Program.
- Have good planning and analytical skills.
- Have strong communication skills, both written and spoken and be able to communicate at a senior level.
- Have excellent interpersonal skills and the ability to be objective.
- PC literate and well versed in MS Office Suite office applications, proficiency in Microsoft Excel at expert level with sound knowledge generating statistics and graphics.
- Excellent knowledge of safety management principles.
- Thorough understanding of GACA Regulations.
- Working knowledge and good understanding of technical manuals, documents and regulations pertaining to a wide variety of operational areas.

C. Responsibilities

- Identification, assessment and prioritization of threats, opportunities and issues.
- Use risk data to inform operational planning.

- Identify and record appropriate management responses.
- Monitor overall risk exposure and assess against the Company established risk matrix.
- Manage the delivery of management responses to help deliver target positions.
- Produce risk reports and support the effective communication of threat & opportunity status.
- Conduct quantitative /qualitative risk assessment to inform Management of unidentified risks that may affect operations.

D. Required Training

- SMS
- ERP
- Root Cause Analysis
- Enterprise Risk Management (Aramco)

1.7.13 MOC Coordinator

- A. MOC Coordinator is to manage management of change initiatives, guiding their implementation. They assist in the design and execute strategies to facilitate adoption of workplace changes, such as overseeing the smooth transition of a new project or implementing new policies or procedures.

B. Qualifications

- Graduation from an accredited college or university with a Bachelor's degree or Aviation Safety Management Program Certification.
- Risk management training.
- Experience with and knowledge of change management principles, methodologies and tools.
- Exceptional communication skills, both written and verbal.
- Root cause analysis training
- Familiarity with project management approaches, tools and phases of the project lifecycle

C. Responsibility

- Apply a structured methodology and lead change management activities.
- Support communication efforts.
- Assess the change impact.
- Support training efforts.
- Complete change management assessments.
- Identify, analyze and prepare risk mitigation tactics.
- Identify and manage anticipated and persistent resistance.
- Support and engage senior leaders.
- Provide training on MOC processes.
- Support organizational design and definition of roles and responsibilities
- Coordinate efforts with Department SME's on new changes.
- Track, define, and measure success metrics and monitor change progress.
- Support change management at the organizational level.

D. Required Training

- SMS
- ERP

- Root Cause Analysis
- Management of Change (MOC 00008276 E-Learning)

1.7.14 SMS & ERP Trainers

A. Develop programs to deliver Safety Management System and Emergency Response training to benefit the organization and ensure Company personnel understand their roles within the Company under these programs.

B. Qualifications

- Graduation from an accredited college or university with a Bachelor's degree or Aviation Safety Management Program Certification.
- Practical experience and expertise in the application of aviation safety standards and safe operating practices.
- At least five (5) years relevant work experience of which at least two years should be from the aeronautical industry in an appropriate position.
- Experience in aviation safety in the capacity of an aviation safety investigator, safety/quality manager, safety risk manager, or ERP Coordinator.
- Experience implementing and/or managing an SMS or ERP.
- Experience in conducting safety/quality audits and inspections.
- Has completed at least the following training:
 - Safety management system (SMS)
 - Human factor and crew resources management
- Completed TTT (Train the Trainer) course as appropriate to the position.

C. Responsibility

- Provide detailed training on the concept of SMS and what it can deliver to the Company.
- Ensure that personnel understand the role of Safety Culture within an SMS Environment.
- Ensure that personnel understand how Safety Risks are Managed proactively and reactively.
- Track and measure success metrics and monitor training of SMS and ERP programs.
- Achieve the ability to fully engage with your organizations SMS Training Objectives.
- Be able to deliver Role Specific SMS Training throughout the Company.

D. Required Training

- SMS
- ERP

1.8 Personnel Behavior

- A. Management has established clear standards for acceptable professional personnel behavior. These standards are:
- All personnel are expected to participate in the SMS and take an active role in the identification of hazards and mitigation of risks.
 - Each employee is personally responsible to perform their duties in a way that gives primary concern to the safety of passengers, their own safety, the safety of fellow employees and the care of equipment / property entrusted to their care.
 - Individual responsibilities to the SMS are described in the Responsibility and Authority section. Line management will provide guidance for setting and reviewing safety objectives, communicating to all employees and responsible parties, and determining individual safety performance.
 - The policies and procedures established in the SMS will be reviewed periodically to ensure they remain relevant and appropriate; all components of the SMS will be documented.

1.9 Safety Review Board (SRB)

- A. The Company shall establish and maintain a safety management plan to meet the safety objectives described in its safety policy. Quarterly Safety Review Board (SRB) meetings (also known as Safety Management Committee (SMC) meetings) are conducted to address current safety issues and SMS safety objectives are discussed.
- B. The Safety Review Board will be comprised of the following permanent members:
- Accountable Executive - as the Chairman
 - Director of Safety and Quality - as the Secretary
 - Department Directors and Division Heads – panel members
- C. The Accountable Executive may elect other operational members to join accordingly. Optional panel members will be required to make themselves present at any meetings called upon, as the Director of Safety and Quality or Accountable Executive requires.

1.9.1 SRB Agenda

- A. The SRB will meet at least quarterly or when required by the Accountable Executive to discuss the following agenda:
- Review SMS Safety Performance Indicator (SPI)
 - Review of the Safety Action plan to include previous SRB actions.
 - Review safety and investigation reports, recommendations, and closure.
 - Review of safety processes by process owners.
 - Review of checklist updates for IS-BAO, IS-BAH, and ARGUS.
 - Review progress on closure of internal and third-party audit reports.
 - Effectiveness of the SMS process which supports:
 - The declared organizational priority of SMS.
 - Promotion of safety across the organization.
 - Review safety policies and effectiveness of safety promotion.
 - Review the progress of all required training.

- Any items issued by the Director of Safety and Quality or Accountable Executive related to the SMS, safety or quality.

1.10 Safety Review Team (SRT)

A. The Safety Review Team shall be comprised of Department Managers or personnel nominated by the Director of Safety and Quality or Accountable Executive as required. SRT members will assist the bases in managing safety issues which are considered high profile, high potential, and near miss incidents.

B. SRT Responsibilities

The Safety Review Team will meet at least monthly or as required to:

- Support the safety action group (SAG) in managing safety issues and escalates identified risks.
- Promote safety culture and provide guidance at main base facilities.
- Assign action group on mitigation and gap closure recommendations.
- Provide quarterly report to the SRB.
- Identify any risks and hazards from in any recommendation arising from safety reports, mitigation, and investigation reports.
- Conduct meetings to prepare agenda items prior to SRB meetings.
- Act as an investigation review board to initiate investigation and review incidents and accidents with record of the following:
 - Incident date and time
 - Detailed location and area to include photographs where possible
 - Description of event and severity assessment (risk assessment matrix)
 - Review statement of personnel
 - Apply immediate remedial action to correct the situation where applicable.
- Provide a report to the Director of Safety and Quality on all safety concerns.
- Review risk register on annual basis with base SAG and Risk Manager.

C. The SRB may (at the discretion of the Director of Safety and Quality or Accountable Executive) instruct the base to carry out an investigation, with or without the assistance from the SRT as he deems necessary.

D. An SRT member will join in base SAG meetings in person or via Skype as an observer to support if required. Base SAG members are to extend meeting invites to representative SRT reps.

1.11 Safety Action Group (SAG)

A. The Safety Action Group (SAG) will meet weekly and shall be comprised of individuals assigned by the respective SRT manager member.

B. The SAG is the representative of the SMS functions at a base level. A SAG group will be maintained at each of the following base locations:

- King Fahd International Airport
- Ras Tanura Airport
- Tanajib Airport

- C. For example, the AAD Chief Pilot assigns a member from the AAD Division, HAD Chief Pilot assigns a member from his Division at each of the bases, Ras Tanura and Tanajib, Facilities assigns a member from their Division for each of the three locations, etc.

D. SAG Responsibilities

The SAG team focus is:

- To initiate preliminary inquiry and investigation of an incident or accident.
 - To assist in carrying out an investigation as directed by the Lead Investigator.
 - Execute risk analysis and provide recommendations for improvement or identify new risks.
 - Review safety reports and provide first tier filtering within 3 days of the issued report.
 - Collectively provide recommendations on safety reports for closure.
 - Collectively provide recommendations on risk register review for new identified items for improvement on controls.
 - To monitor mandatory occurrence reporting completion and submission to GACA immediately and provide a copy to the SRMG Manager.
 - To promote safety culture within their own area.
 - To provide leadership on Safety to guide employees on work safety and culture at base level.
- E. The Base SAG's shall report to the SRT on significant issues and any work involving any investigation. This shall include preliminary reporting, progress report, recommendations on suspension or removal of employee from work or responsibility, investigation report closure and recommendations.

1.12 Regulatory Compliance

- A. Principal elements governing the conduct of all operations are safety, regulatory compliance and strict observance of all company policies, standards and recommended practices. Regulatory compliance provides only a minimum level of safety, while adherence to Company standards and recommended practices assures the quality of all operational processes. As a basic premise to safety, all activities conducted by flight, ground, and maintenance personnel shall be conducted in accordance with all applicable GACA regulations. Further, all personnel must comply with the laws, regulations and procedures of those States (foreign countries) in which Company operations are conducted. It is important for all personnel to view regulatory compliance as a minimum standard.

1.13 Standards and Recommended Practices

- A. Standards & recommended practices are policies, procedures, methods and processes that have been developed to establish and maintain the highest level of safety possible. These standards and accepted recommended practices are incorporated into written guidance (processes), and shall be treated by all personnel as mandates. All standards and recommended practices, in addition to regulatory compliance, shall be followed at all times (except when necessary to deviate in case of emergency), and are an essential component of safety. The Company will continue to investigate, pursue and adopt new safety standards and recommended practices that are commensurate with the highest levels of safety in the aviation industry.

1.14 Occupational Health, Safety, and Environmental Protection

- A. The Company will comply with all applicable governmental regulations concerning the safety and health of all personnel. Core SMS processes of safety risk management and safety assurance are applied equally to occupational, environmental and safety alike. The health and safety of all personnel, the public and our environment, will remain a continuing strategic objective of the Company.

1.15 Quality Management and Safety Assurance

- A. Department Directors shall ensure that the products, services, systems and technologies it uses, whether developed internally or acquired externally, meet appropriate and established standards. All quality management and assurance processes, including monitoring, compliance monitoring, vendor audits, follow-ups, internal evaluations, external audits and management reviews, shall remain consistent with the Company's objectives regarding quality and safety risk management, and shall assure that intended process outputs conform with all regulatory and safety standards and recommended practices. All safety and quality policies will be periodically reviewed to ensure they remain relevant and appropriate to the size, scope and types of activities conducted.

1.16 Safety Reporting

- A. Each employee is responsible to bring immediate attention of any action, conduct, event, observation, practice or operating principle that may lead to an unsafe condition to their supervisor. Company personnel will be acknowledged and rewarded when they bring these issues to the attention of management. This will permit the Company to systematically identify and eliminate or control hazards, thus ensuring the highest possible degree of safety, quality of service and public protection. Confidential (anonymous) reporting for safety reporting is available through the Safety and Quality reporting web application.
- B. Employees are encouraged to bring unsafe, unhealthy or adverse environmental conditions to the attention of management by submitting a Safety and Quality Report or by direct communication to their supervisor. Certain conditions trigger more in-depth investigation and more far-reaching hazard identification activities. These conditions may include:
- Instances where the organization experiences an unexplained increase in aviation safety-related events or regulatory non-compliance.
 - Significant operational changes, including anticipated changes to key personnel or other major systems components.
 - Significant organizational change, including anticipated growth and contraction.

1.16.1 QSMS Reporting Web Application

- A. The web application is accessible from any web-enabled device worldwide, and is not dependent on the Company intranet. The websites listed are dependent upon the Department in which the hazard or even originated:
- Flight Operations: mac-flt.wyvren.systems
 - Maintenance operations: mac-mx.wyvren.systems
 - Ground Operations: mac-grd.wyvren.systems
- B. In the absence of ability to utilize this primary method, employees may send an email to the safety team or their respective supervisor. When using an alternate method, copies of the report should be distributed by the reporter to the employee's direct supervisor and a member of the safety team.

- C. Safety and Quality Reports shall be completed as soon as possible. If the situation does not make this available, then the report must be completed within 24 hours. The report should document all significant events, discrepancies, irregularities or operational changes.
- D. Upon submission of the report, SQD and Base SAG shall receive email notification from QSMS and respective safety gatekeepers to process the report.
- E. This process will include the assignment of:
 - a. Responsible Department or Division
 - b. Occurrence classification
 - c. Risk assessment rating
 - d. Corrective and preventative action
- F. Where multiple reports are received for a similar occurrence or event, they are to be linked and only one assessment is applied to avoid duplication.
- G. In the event of a report being identified as an MOR, the event is to be categorized according to the ICAO taxonomy and attribute value.

1.16.1.1 Safety Gatekeeper

- A. The Safety Gatekeeper, how is a member of SQD and possible SAG member, will verify the report and either:
 - a. Accept: if the report is complete and valid.
 - b. Reject: if the report is incomplete and cannot be verified.
- B. It is important for the gate keeper to verify if the reports identified as a MOR when accepting the report. This is to ensure that the proper external report is completed if needed.

1.16.1.2 Safety Report Assignee

- A. The safety reports raised based on an occurrence will be assigned to the respective SAG group.
- B. It is the duty of the SAG members to manage the incident following the specific action related to the reports and provide action to close the report.

1.16.1.3 Safety Report Risk Assessment

- A. A risk assessment will be completed for each report based upon the established risk matrix by the Risk Manager. The risk assessment values are:
 - a. Intolerable: Prohibit/suspend the operation. Risk must be reduced at any cost by applying engineering controls. Continued operations must be approved by the Manager with interim measures.
 - b. Tolerable: ALARP. Risk level can be tolerated for the operation, providing that appropriate mitigation measures are in place.
 - c. Acceptable: Implement measures to maintain risks at this level. Improve through administrative measures and manage for continuous improvement.
- B. The target date of closure will be set based upon the severity of the risk assessment. These values are:

- a. Intolerable: Processing must be completed within 7 days
- b. Tolerable: Processing must be completed within 14 days.
- c. Acceptable: Processing to be completed within 30 days.

1.16.1.4 Safety Report Monitoring

- A. SRMG will monitor for any overdue responses and closure from the target date.

1.16.1.5 Safety Report Closure

- A. Upon completion of the actions issued for the safety report, the SRMG representative will review and assess the risk accordingly. When satisfied, the report may be closed in the QSMS system.

1.16.1 Mandatory Occurrence Reporting (MOR)

- A. The list below includes the majority of mandatory reportable occurrences. However, it is not exhaustive. Therefore, always file a safety report if safety is affected, even if the event is not listed here.
 - 1. Risk of inflight collision with another airplane, terrain, or other object, or an unsafe situation where avoidance action was required.
 - 2. Significant handling difficulties experience due to a system failure or malfunction.
 - 3. Damage inflicted to the airplane or other property or persons during ground movement.
 - 4. Any indication or suspected presence of fire, explosion, smoke, contaminated air, fumes, or if any smoke detectors are activated.
 - 5. Emergency (Mayday or Pan) declared.
 - 6. An event leading to an emergency evacuation.
 - 7. Defective or inadequate safety equipment or procedures, including all emergency exits and emergency lights.
 - 8. The use of any non-standard procedure by the flight or cabin crew to deal with an emergency.
 - 9. Event requiring the emergency use of oxygen by the flight crew.
 - 10. Depressurization.
 - 11. Loss of control (including partial or temporary) regardless of the cause.
 - 12. Occurrences close to or above V1 resulting from or producing a hazardous, or potentially hazardous situation (e.g. tail strike, engine power loss, etc.).
 - 13. Rejected takeoff executed after takeoff power is established.
 - 14. Loss of position awareness relative to actual position or to other aircraft.
 - 15. Breakdown in communication between flight crew (CRM) or between flight crew and other parties (e.g. cabin crew, ATC, engineering).
 - 16. Runway or taxiway incursion.
 - 17. Aircraft unintentionally departing from a paved surface.
 - 18. Takeoff or landing incidents; incidents such as undershooting, overrunning or departing the runway, or minimum obstacle separation being compromised; Landing or attempted landing on a closed or occupied runway.
 - 19. Exceedance of the limiting parameters for the aircraft configuration or significant unintentional speed changes (e.g. VMO/MMO, flaps, etc.).
 - 20. Exceedance of performance limitations, or if the aircraft fails to meet predicted performance.
 - 21. Loss of braking system effectiveness action.
 - 22. Airprox or TCAS RA event.

23. Wake turbulence encounter.
24. EGPWS/GPWS alert and/or warning occurs.
25. Significant turbulence, wind shear, or other severe weather encounter.
26. Lightning or hail strike that causes damage to the aircraft and/or loss or failure of any of its essential systems.
27. Foreign object damage to the aircraft and/or loss or failure of any of its essential systems.
28. Icing encounter resulting in handling difficulties, damage to the aircraft, or loss or malfunction of any essential service.
29. Bird hazard; Bird strike damage to the aircraft and/or loss or failure of any of its essential systems.
30. ATC incident (e.g. faulty ATC procedures, lack of compliance with applicable procedures by ATC or by the flight crew; failure of ATC services facilities).
31. Crew or passenger becomes seriously ill, are injured, or become incapacitated.
32. Sabotaged or vandalism of any part of the aircraft or its equipment.
33. Security procedures breached.
34. Unlawful interference with the aircraft including a bomb threat or hijack.
35. Inability to achieve the intended aircraft configuration for any phase of flight (e.g. landing gear and or gear doors, flaps, stabilizers, slats, etc.).
36. Any damage, failure, or loss of a structural element that could jeopardize the operation.
37. Asymmetry of flight controls (e.g. flaps, slats, spoilers, etc.).
38. Stability and flight control problems.
39. Hard landing, requiring a hard landing special inspection.
40. Blowout or structural failure of the tires or landing gear.
41. Leak of hydraulic fluids, fuel, oil, or other fluids which may produce a fire or the possibility of dangerous contamination of the aircraft structure, its systems, equipment, or present a danger for the passengers.
42. Landing with reserve fuel or less remaining.
43. Exceedance of fuel imbalance limits.
44. Significant spillage during fueling operations.
45. Loading of contaminated or incorrect type or quantity of fuel or other essential fluids (including oxygen and potable water).
46. Failure or deficiency of the fuel system with significant consequences in the feeding and/or distribution of fuel.
47. Experience of engine parameters.
48. Engine flameout, shutdown, and failure or malfunction of any part, inflight or on the ground (e.g. un-commanded thrust/power loss, inability to shut down or restart).
49. Abnormal vibration of the aircraft felt by the crew.
50. Failure or deficient performance of one or more aircraft systems that can seriously affect the operation and can result in the use of abnormal procedures.
51. Failures of more than one system in a redundancy system mandatory for flight control, guidance, and navigation.
52. Go-around due to, or producing, a dangerous or possibly dangerous situation.
53. Significant non-intentional deviation of speed or altitude (± 300 feet), regardless of the cause.
54. Navigation error involving a significant deviation from track, regardless of the cause.
55. Descent below minimums on an instrument approach without the required visual reference.

56. Alert of a primary warning system associated with an aircraft maneuver (e.g. configuration of warning, stall warning, overspeed warning, etc.).
57. Failure or deficiency of a warning system when this failure gives wrong information to the crew.
58. Incorrect input of an SSR Code or of an altimeter subscale (altimeter correction).
59. Program incorrect or incorrect input of data into the aircraft navigation/performance equipment, including errors in the database, which could lead to a dangerous or possibly dangerous situation.
60. Loss of communication.
61. Interference with the onboard communication/navigation systems by Personal Electronic Device.
62. Repetition of particular types of occurrences, which do not require mandatory communication when they occur in isolation, but due to their frequency, they may constitute a possible hazard.
63. Significant contamination of the aircraft structure, systems, or equipment, resulting from the transportation of cargo or baggage.
64. Loss of control of the crew seat adjustment mechanism.
65. Failure in the CVR and FDR devices.
66. Incorrect loading of passengers or baggage, likely to have a significant effect on the aircraft mass and/or balance.
67. Incorrect storage of baggage (including hand baggage) likely in any way to endanger the aircraft, its equipment, or occupants, or to impede emergency evacuation.
68. Failure or malfunction of any system or component which may endanger the aircraft or its passengers and crew, on board of the aircraft or on the ground.
69. A hazard or potential hazard which arises as a consequence of any deliberate simulation of failure conditions for system checks or training purposes.
70. Deficiencies identified in operating procedures, manuals, or navigational charts.
71. Carriage of undeclared or incorrectly declared dangerous goods.
72. Any type of occurrence related with the transportation of dangerous goods (declared, undeclared, or incorrectly declared), which jeopardizes or could jeopardize the aircraft or its occupants.
73. Any Human Factors issues that have an effect on the safe operation of the flight.
74. Any occurrence that may be attributed wholly or partially to fatigue.
75. Any situation where the flight or cabin crew feels unfit to fly due to fatigue level.
76. When the stabilization criteria are not met on the approach.
77. Suspected laser beam exposure.
78. Aircraft condition identified following the release from a Maintenance Service Center, which can impair the safe operation of the flight.

1.16.2 External Reporting of Incidents

- A. Depending on the severity of the safety even or an event is considered an accident or incident, additional reporting will be provided to the GACA President in accordance with GACAR Part 4. Under this part, persons reporting to the President are subject to the protections from disclosure provisions prescribed in GACAR Part 193 and immunity from punitive action provisions prescribed in GACAR Part 13. All reports issued to the GACA President shall be done so in accordance with GACAR Part 4 Section 4.5.

- B. Any incident applicable under GACAR Part 4 Section § 4.3 shall be reviewed by the Accountable Executive and provided to the controlling civil aviation authority within 7 calendar days as defined in GACAR Part 4 Section § 4.25 and § 4.27.
- C. The Company will not take disciplinary action against any person due to an event, or occurrence, properly reported through the Safety and Quality Reporting web application, as long as such an event or occurrence was unintentional, did not involve criminal activity, substance abuse, controlled substances, alcohol, intentional falsification, gross negligence, careless or reckless operation, and did not result in an aircraft incident or accident.

1.17 Deviations and Reporting Deviations

- A. Procedures are described in Company manuals enable personnel to respond correctly in most types of normal, emergency or abnormal situations. These procedures are developed over a period of time after careful study of the situation, and are tested to ensure that they do not result in unintended consequences. Where established procedures exist, they should be followed unless exceptional, overriding circumstances exist.
- B. Where an established procedure does not exist, personnel should not attempt to find a procedure which resembles the one sought; following a procedure which was not designed for the existing situation may have unexpected and undesirable results. In the absence of an established procedure, and with sufficient time, a risk assessment should be completed to assess the risk. If there is not enough time for this action, personnel should exercise their best judgement based on experience and knowledge, even though this may result in unintentional or an inappropriate action.
- C. When time allows, it may be possible to obtain assistance by reaching out to the applicable group within the Company to work through the issue.
- D. When a deviation against any Company or regulatory policy or procedure, a deviation report shall be submitted describing the deviation through the Safety and Quality reporting web application. For example, a deviation may be reported due to an employee duty period extension, rest requirements, training grace period extension, etc.
 - a. Deviation report should highlight any risks and assessed utilizing the risk assessment process.
- E. The Deviation process shall **NOT** be utilized to violate any regulatory requirements.

1.18 Safety Sensitive Positions

- A. Safety-sensitive position holders referred to in this document, refers to any employee holding one or more of the following positions within the Company:
 - Flight crew member
 - Cabin crew member
 - Ground support equipment operator
 - Aircraft maintenance technician

1.19 Psychoactive Substances

- A. The following policies and procedures govern Psychoactive Substances consumption. It contains policies and procedures pertaining to the Psychoactive Substances consumption by the safety-sensitive position holders within the Company as well as the actions taken by the Company in case a positive evidence is obtained. and to establish a program designed to help prevent accidents and injuries resulting from the use of psychoactive substances by employees who are in safety-related positions.

1.19.1 Policy

- A. The Company has adopted a zero-tolerance policy when considering the use of psychoactive substances in one's system. The zero-tolerance policy will assure operations are conducted safely and eliminates risks associated with impaired judgment resulting from the psychoactive substances consumption.
- B. No person may perform or attempt to perform a safety-sensitive position of a Company aircraft:
- Within 12 hours after the consumption of any alcoholic beverage;
 - While under the influence or while suffering from the effects of any Psychoactive substance;
 - While using any drug that affects the person's faculties in any way contrary to safety;
 - While having an alcohol concentration of more than 0 (ZERO) in a blood or breath specimen;
or
 - While under the influence of medical drugs that is not approved or prescribed by an Aviation Medical Examiner.

1.19.2 Random Psychoactive Substances Testing

- A. A team from JHAH has been assigned for the random psychoactive substances testing. Their role is to take blood/breath samples from the holders of any of the safety-sensitive positions. The testing place and time are random and will be based on the work location of the safety-sensitive position holder to assure maximum adherence to Company.

1.19.3 Refusal to Submit to Random Testing

- A. A refusal to submit to a random test to indicate the percentage or presence of any psychoactive substance when requested by the operations manager, is grounds for:
- Duty suspension until an official investigation is accomplished by SRMG.
 - Refusal to submit may constitute a positive test, in which case section 2.7.5 may be actioned.

1.19.4 Actions After Obtaining Positive Testing Evidence

- A. All tests results will be communicated by JHAH directly to the Company employee's Director for verification. The Director may delegate the verification to the respective Safety representative only.
- B. If, after revealing the test results, a safety-sensitive position holder is found to have a positive result of any psychoactive substance, then:
- The safety-sensitive position holder, with the positive result, will be removed from duty immediately.
 - A written report will be submitted to GACA/FAA for determination of the case to be either a rehabilitation or termination case.
 - A written report will be submitted to Company HR for plausible dismissal option.

- If all options to correct the case were exhausted, then Company CEO may elect to pursue the dismissal of the employee based upon a positive test result.

1.20 Procedures and Controls

- A. The Company shall establish and maintain procedures with measurable criteria to accomplish the objectives of the safety policy. Process controls will also be established and maintained to ensure procedures are followed for safety-related operations and activities.

The procedural control process is accomplished by completion of internal audits, company / staff surveillance, as well as external audits. Internal audits shall be accomplished annually per the Internal Evaluation Program (IEP). A survey will be completed on a regular basis to verify policies and procedures are effective as well as ensuring employee compliance is established.

1.21 Emergency Preparedness and Response (ERP)

- A. The Company has established procedures to perform the following:
- Identify the potential for accidents and incidents
 - Coordinate and plan the Company's response to accidents and incidents
 - Execute periodic exercises of the Company's response
- B. This information is detailed in the Emergency Response Plan (ERP) and is under the direct control and responsibility of the Director of Safety and Quality. The ERP shall be exercised annually at each main base of operations and will be based on established credible scenarios.

1.22 SMS Documentation and Records Management

- A. This SMS Manual and supporting programs describe the Company's Safety policy and SMS processes and procedures. The Company has established and will maintain information, in paper and in electronic form, to describe:
- Safety policies
 - Safety objective
 - SMS requirements
 - Safety-related procedures and processes
 - Responsibilities and authorities for safety-related procedures and processes
 - Interaction/interfaces between safety-related procedures and processes
 - SMS outputs
- B. All documentation and/or records, both in paper and electronic form, shall be legible, dated (with dates of revisions), readily identifiable, maintained in an orderly manner, and retained for one year as determined by the Mukamalah Aviation Company.
- C. Access to documentation and records shall be made available in either paper or electronic form, preferable in electronic form as to avoid damage or deterioration of the document. Documents and records will be centrally located on Company servers and Company cloud applications for ease of retrieval for all personnel.

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- D. The Mukamalah Aviation Company shall establish and maintain procedures for controlling all documents and/or records required by this Standard to ensure that they can be easily located, periodically reviewed and revised as necessary, and approved for adequacy by authorized personnel.
 - E. Upon the approval of a new issue or revision to a document, or after the applicable holding date, the previous issue or revision and/or records shall be disposed of from all sources, both electronic and paper, as to ensure it is not utilized.

SECTION 2: SAFETY RISK MANAGEMENT

2.1 Safety Risk Management (SRM)

- A. A hazard is a condition, event or circumstance that could lead to or contribute to an unplanned or undesired event. Risk is an expression of the impact of an undesired event in terms of event severity and event likelihood. Throughout this process, hazards are identified, related/relevant risks analyzed, assessed, prioritized and results documented for decision-making. The continuous loop process provides for validation of decisions and evaluation for desired results and/or the need for further action.
- B. Safety Risk Management (SRM) is comprised of the following focus areas:
- System and task analysis
 - Hazard identification
 - Safety risk analysis
 - Safety risk assessment
 - Safety risk control and mitigation

2.1.1 Scope of Safety Risk Management

- A. This SMS only addresses the assessment of aviation related safety risks. This does not mean that financial, legal, or economic aspects do not need to be considered in the risk assessment process. The Company must be able to identify all significant influences that may impact aviation safety, in particular when determining contributing factors for the analysis of consequences of a hazard, and deciding on risk mitigation measures.
- B. It is important that the SRM process be continually applied to all phases of operation at Mukamalah to include systems, processes and operational procedures. In support of this Company objective, the web-based safety reporting system has been implemented and is used across the company to address any flight safety, maintenance safety, ground safety, general safety and staff/passenger hazards and health issues that arise.

2.1.2 Safety Risk Profile

- A. Mukamalah Aviation Company has a variety of fleet types among the airplane and helicopter operation.
- a. A total of 16 airplanes which represent 5 types of fleets and 26 helicopters that represent 2 types.
 - b. Annually, MAC accumulate over 40,000 flown hours with over 550,000 passengers per year.
 - c. MAC has just under 500 personnel between employees and contractors.
- B. The Airplane Aircrew Division operates our fixed wing fleet throughout the Kingdom of Saudi Arabia and around the world. The Helicopter Aircrew Division operates our rotor wing fleet throughout the Kingdom of Saudi Arabia.
- C. MAC fleets operate day & night, in most weather, and in every type of airspace on a daily basis.
- a. Fixed wing flights take place in positive control airspace under an instrument flight rules or IFR flight plans.

- b. The Boeing fleet operation operates primarily in the Kingdom, over land, and is flight followed by the Dammam based Flight Operations Center (FOC) in conjunction with remote stations.
 - c. The “Special Flights” or ad-hoc VIP operation operates worldwide and is both flight-followed primarily by the Flight Operations Center.
 - d. Each fleet has access to weather and flight planning from our dispatch offices when in-Kingdom or Out-Of-Kingdom (OOK).
- D. The Helicopter Aircrew Division normally operates offshore KSA and limited operations overland KSA. Helicopters operate primarily in VFR class G airspace.
 - a. Saudi Aramco has VHF radio repeaters appropriately located to ensure reliable radio communications at our offshore locations for flight following.
 - b. Flight following is via either Ras Tanura or Tanajib based Flight Operations Center (FOC) and is mandatory to issue radio calls every 20 minutes. We currently utilize SKYTRAC which provides satellite communication (GPS) position reporting.
 - c. When we do operate in controlled airspace, we utilize Air Traffic Control for flight following. However, VHF radio communication with ATC is unreliable at low altitudes over land. Weather forecasts are issued from the FOC offices.
 - d. Most of our destinations are considered uncontrolled airports or helipads with very limited or no weather reporting. Flight Planning is a joint effort with FOC and the pilots of the aircraft.
- E. MAC performs its aircraft maintenance operation at 3 main bases:
 - a. King Fahad International Airport - Airplanes
 - b. Ras Tanura base - Helicopters
 - c. Tanajib base - Helicopters
- F. Director of Safety and Quality maintains an updated revision of the risk register.

2.1.3 Principles of SRM

- A. Four basic risk management principles are widely accepted and used in the Aviation community. Understand them and apply them before any anticipated job, task, or project is performed:
 - **Anticipate and manage risks by disciplined prior planning**
To effectively apply risk management, leaders at all levels must dedicate time and resources to incorporate risk management principles into the planning and execution phases of all operations. Integrating risk management into planning as early as possible provides the decision maker with the greatest opportunity to apply risk management principles.
 - **Accept No Unnecessary Risk**
“If you don’t need to do it, don’t do it.”

Unnecessary risk contributes no benefits to the safe accomplishment of a task. The most logical choices for accomplishing a mission are those that meet all the mission requirements while exposing personnel and resources to the lowest possible risk.
 - **Make risk decisions at the appropriate level**

Employees are empowered to make final risk decisions at or below what management has deemed acceptable. Making risk decisions at the appropriate level establishes clear accountability. Those accountable for the success or failure of a task must be included in the risk decision process. Supervisors at all levels must ensure their employees know how much risk they can accept and when they must elevate the decision to a higher level.

- **Accept risk when benefits outweigh costs**

Weighing risks against opportunities and benefits helps to maximize unit capability. Even high-risk endeavors may be undertaken when there is clear knowledge that the sum of the benefits exceeds the sum of the costs. This often requires the approval of management prior to an individual or team accepting the risk.

2.1.4 Safety Risk Management Methods

- A. Safety Risk Management (SRM) consists of policies, methods, and procedures for all personnel and at all levels of management, to manage the many safety risks inherent in aviation. SRM enhances operational effectiveness by anticipating hazards and reducing the potential for loss.
- B. There are three levels of Safety Risk Management are:
 - Time Critical – (minutes or seconds to act)
 - Deliberate – (within a few hours or days to plan and act)
 - Strategic – (several weeks or months to plan and act)

2.1.4.1 Time Critical SRM

- A. Time-critical risk management is a mental or verbal review of a situation using a basic risk management process without recording information. Personnel employ time-critical SRM when making decisions while performing routine tasks.
- B. This is the level at which personnel operate on a daily basis, both on and off duty. The time critical level is best described as being at the point of commencing or during execution of a task. At this level there is little or no time to make a plan. An “on-the-run” mental or verbal assessment of the new or changed/changing situation is the best one can do. Time is limited in this situation, so the application of a more thorough plan is not effective.

2.1.4.2 Deliberate SRM

- A. The deliberate risk management refers to situations when there is ample time to apply the risk management process to the detailed planning of a mission or task. At this level, the planning primarily uses experienced personnel and brainstorming and is most effective when done in a group. Other examples include: planning of flight missions, tasks or events; review of standard operating, maintenance or training procedures; recreational activities; and the development of emergency response plans.
- B. Deliberate risk management records identify hazards and risk mitigations.
- C. Operational risk assessments may be in the form of a JSA for non-flight related operations. Again, this is utilized to document identified hazards and their overall risk for the planned task.

2.1.4.3 Strategic SRM

- A. Strategic risk management refers to situations when time is not a limiting factor and the right answer is required for a successful mission or task and is considered proactive risk management. Thorough research and analysis of available data, use of diagrams and analysis tools, formal testing or long-term tracking of associated hazards are some of the tools used at this level. Other examples include, but are not limited to: long term planning of complex or contingency operations; technical standards and system hazard management applied in engineering design during acquisition, introducing new aircraft, new routes, facilities, new equipment and systems; development of tactics and training curriculum; and major system overhaul or repair. Strategic SRM documents hazards and associated risks, risk assessments, and risk controls designed to reduce risk to acceptable levels.

2.2 Hazard Identification

- A. Hazards are identified through the application of a hazard identification processes. The hazard identification process is the formal means of collecting, recording, analyzing, acting on and generating feedback about hazards and the associated risks that affect the safety of the Company's operational activities.

2.2.1 Hazard Identification Methodologies

2.2.1.1 Reactive Approach

- A. The reactive approach consists of analyzing accidents and incidents that have occurred and trying to understand why. Based on the analysis of reported accidents and incidents, the following questions should be asked:
- What accidents or incidents did happen and why?
 - For what reasons or did these occur? Because of what causal factors?
 - What barriers or risk controls failed and which barriers worked?

2.2.1.2 Proactive Approach

- A. The proactive approach consists of analyzing the conduct of operations to identify potential hazards and assess the associated risks and then to mitigate risks factors before they result in an accident or incident. This approach should trigger the following questions:
- What accidents or incidents could happen and why?
 - For what reasons could these occur?
 - Do we feel protected enough?
 - Are there any actions we should make now to prevent these from occurring in the future?

2.2.1.3 Predictive Approach

- A. A predictive approach consists of conducting a predictive analysis using; for instance, data extrapolation (estimating for instance the future risk level based on the data collected over the past 3 or 5 years) or statistical modelling (a more complex way). A predictive approach aims to identify and mitigate risks before they become evident (addressing today the risks of tomorrow). This approach poses the following questions:
- What accidents or incidents could happen in the future and why?
 - Do we feel enough protected?
 - Any action we should take now to avoid such future risks and occurrences (addressing today the risks of tomorrow)?

2.2.2 Hazard Identification Sources

- A. Internal Sources (*not limited to*)
- Audits and inspections
 - Safety reporting system (Voluntary and mandatory)
 - Flight Data Monitoring System
 - Management of Change
 - Internal Investigation
- B. External Sources (*not limited to*)

- Accident and incident reports.
- Technical publications from manufacturers (for instance Safety Bulletins).
- Safety Information Bulletins, safety alerts and other safety publications from GACA, EASA, ICAO, the FAA, NTSB and other authorities worldwide.
- Benchmarks between operators, data aggregated at sector level or by the manufacturers, etc.

2.2.3 Hazard Taxonomy

A. Hazards can be associated with the following high-level hazard taxonomy categories:

- **Organizational** – Management, documentation, process, and procedures
- **Environmental** – Weather or Wildlife
- **Human** – Limitation of the human which in the system has the potential for causing harm
- **Technical** - Aerodrome, Air Navigation, Operations, Maintenance, and Design and Manufacturing

2.2.4 Hazard Reports and Categories

2.2.4.1 Air Safety Report (ASR)

- **ABRUPT MANEUVER - AMAN**
 - The intentional abrupt maneuvering of the aircraft by the flight crew
- **FUEL RELATED - FUEL**
 - One or more powerplants experienced reduced or no power output due to fuel exhaustion, fuel starvation/mismanagement, fuel contamination/wrong fuel, or carburetor and/or induction icing.
- **LOSS OF CONTROL – INFLIGHT LOC-I**
 - Loss of aircraft control while, or deviation from intended flightpath, in flight. Loss of control in flight is an extreme manifestation of a deviation from intended flightpath. The phrase “loss of control” may cover only some of the cases during which an unintended deviation occurred.
- **LOW ALTITUDE OPERATIONS - LALT**
 - Collision or near collision with obstacles/objects/terrain while intentionally operating near the surface (excludes takeoff or landing phases).
- **UNINTENDED FLIGHT IN IMC - UIMC**
 - Unintended flight in Instrument Meteorological Conditions (IMC).
- **BIRD - BIRD**
 - Occurrences involving collisions/near collisions with bird(s).
- **ABNORMAL RUNWAY CONTACT - ARC**
 - Any landing or takeoff involving abnormal runway or landing surface contact.
- **CONTROLLED FLIGHT INTO/TOWARD TERRAIN - CFIT**
 - In-flight collision or near collision with terrain, water, or obstacle without indication of loss of control.
- **COLLISION WITH OBSTACLE(S) DURING TAKE-OFF AND LANDING - CTOL**
 - Collision with obstacle(s) during takeoff or landing while airborne.
- **UNDERSHOOT/OVERSHOOT - USOS**
 - A touchdown off the runway/helipad/helideck surface.
- **ICING - ICE**

- Accumulation of snow, ice, freezing rain, or frost on aircraft surfaces that adversely affects aircraft control or performance.
- TURBULENCE ENCOUNTER - TURB
 - In-flight turbulence encounter.
- WIND SHEAR OR THUNDERSTORM - WSTRW
 - Flight into wind shear or thunderstorm.
- UNKNOWN OR UNDETERMINED - UNK
- OTHER - OTHR

2.2.4.2 Cabin Safety Report (CSR)

- CABIN SAFETY EVENTS - CABIN
 - Miscellaneous occurrences in the passenger cabin of transport category aircraft.
- MEDICAL - MED
 - Occurrences involving illnesses of persons on board an aircraft.

2.2.4.3 Maintenance Safety Report (MSR)

- FIRE/SMOKE (NON-IMPACT) - F-NI
 - Fire or smoke in or on the aircraft, in flight, or on the ground, which is not the result of impact.
- SYSTEM/COMPONENT FAILURE OR MALFUNCTION (NON-POWERPLANT) - SCF-NP
 - Failure or malfunction of an aircraft system or component other than the powerplant.
- SYSTEM/COMPONENT FAILURE OR MALFUNCTION (POWERPLANT) - SCF-PP
 - Failure or malfunction of an aircraft system or component related to the powerplant.

2.2.4.4 Ground Safety Report (GSR)

- EVACUATION - EVAC
 - Occurrence in which either, (a) a person(s) was/were injured during an evacuation, (b) an unnecessary evacuation was performed, (c) evacuation equipment failed to perform as required, or (d) the evacuation contributed to the severity of the occurrence.
- FIRE/SMOKE (POST-IMPACT) F-POST
 - Fire/Smoke resulting from impact.
- GROUND COLLISION- GCOL
 - Collision while taxiing to or from a runway in use.
- GROUND HANDLING - RAMP
 - Occurrences during (or as a result of) ground handling operations.
- LOSS OF CONTROL on GROUND - LOC-G
 - Loss of aircraft control while the aircraft is on the ground.
- RUNWAY EXCURSION - RE
 - A veer off or overrun off the runway surface.
- RUNWAY INCURSION - RI
 - Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle, or person on the protected area of a surface designated for the landing and takeoff of aircraft.
- EXTERNAL LOAD RELATED OCCURRENCES - EXTL
 - Occurrences during or as a result of external load or external cargo operations.
- WILDLIFE

- Collision with, risk of collision, or evasive action taken by an aircraft to avoid wildlife on the movement area of an aerodrome or on a helipad/helideck in use.

2.2.4.5 Air Traffic Service/Navigation Safety Report (ATSR)

- AIRPROX/TCAS ALERT/LOSS OF SEPARATION/NEAR MIDAIR COLLISIONS/MIDAIR COLLISIONS - MAC
 - Air proximity issues, Traffic Collision Avoidance System (TCAS)/Airborne Collision Avoidance System (ACAS) alerts, loss of separation as well as near collisions or collisions between aircraft in flight.
- AERODROME - ADRM
 - Occurrences involving Aerodrome design, service, or functionality issues.
- NAVIGATION ERRORS - NAV
 - Occurrences involving the incorrect navigation of aircraft on the ground or in the air.
- ATM/CNS - ATM
 - Occurrences involving Air Traffic Management (ATM) or Communication, Navigation, Surveillance (CNS) service issues.

2.2.4.6 Health, Safety, Security & Environment Report (HSSER)

- PROCESS SAFETY
 - Fire (FI)
 - Environmental Release
- INJURY
 - Fatal Injury (FAT)
 - FAI (Minor)
 - LTI (Major)
 - Restricted Duty
 - Fatal
 - Off-Work Injury
- MOTOR VEHICLE ACCIDENTS (MVA)
- TRAFFIC VIOLATION

2.2.4.7 Security Report

- SECURITY RELATED - SEC
 - Criminal/Security acts which result in accidents or incidents (per Annex 13 to the Convention on International Civil Aviation).

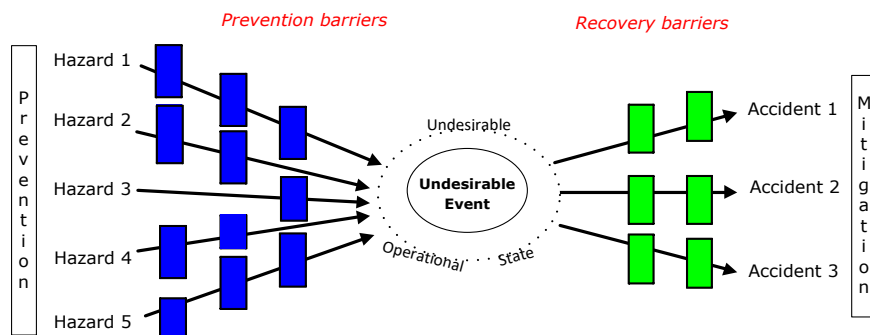
2.2.4.8 Quality Report

- OPERATIONAL
- EFFICIENCY
- SYSTEM DESIGN
- OTHER

2.3 Hazard Analysis

- A. Hazard analysis is performed to the level of detail necessary to establish relevant likelihood and consequence values. Alternatively, values can be estimated on the basis of expert judgement, or on the basis of observed/reference frequencies provided for the sector, type of operations, type of machine(s) etc.
- B. The Company utilizes the safety risk control model 'Bowtie' to perform this analysis. A 'bowtie' is a diagram that visualizes the risk you are dealing with in just one, easy to understand picture or spreadsheet. The diagram is shaped like a bow-tie, creating a clear differentiation between proactive and reactive risk management. In short, it provides a simple, visual explanation of a risk that would be much more difficult to explain otherwise.

The 'Bowtie' Safety Risk Control Model



2.4 Risk Assessment

- A. The results of the risk assessment are compared to the criteria for acceptable risk. This comparison is documented using a format that can be used by decision makers. One method that can be used is a Risk Matrix combining the analysis results and the risk acceptance criteria. The red-colored values indicate unacceptable risk levels, the yellow-coded values are tolerable risk levels, and the green-coded values establish acceptable risk levels. Each risk level calls for a particular action and the levels of management who have the authority to make decisions regarding the tolerability of safety risks need to be specified.

2.4.1 Risk Description

- A. Based on the results of the likelihood and severity analysis, the risk is described as a combination of the likelihood of occurrence and the associated severity. Depending on the analysis method and the risk acceptance criteria, the description is either qualitative and/or quantitative. The level of detail depends on the level of detail in the likelihood and severity analysis.
- B. One method that can be used for risk description is a risk matrix, combining risk likelihood and risk severity. If a hazard has more than one consequence, the risk may be expressed as a combination of the likelihood and severity for each of the consequences.
- C. Uncertainties in the risk description are to be identified and documented. If the analysis is based on critical assumptions or other conditions that could affect the assessment, these are to be identified and documented (if necessary in the form of a sensitivity analysis).

2.4.2 Analysis of Likelihood

- A. The likelihood of an event is based upon the frequency or possible frequency of the occurrence and assessing the event within the Company and/or industry benchmark.

Likelihood Description and Values

LIKELIHOOD	MEANING	VALUE
EXTREMELY IMPROBABLE	Almost inconceivable that the event will occur. It has never occurred in the history of the aviation industry.	1
IMPROBABLE	Very unlikely to occur. Not known to have occurred in the Company but has already occurred at least once in the history of the aviation industry.	2
REMOTE	Unlikely to occur, but possible. Has already occurred in the Company at least once or has seldom occurred in the history of the aviation industry.	3
OCCASIONAL	Likely to occur sometimes. Has already occurred in the Company (Freq. < 3 times per year – indicative*). Has occurred infrequently in the history of the aviation industry.	4
FREQUENT	Likely to occur many times. Has already occurred in the Company (Freq. > 3 times per year – indicative*). Has occurred frequently in the history of the aviation industry.	5

2.4.3 Analysis of Severity

- A. The severity of all hazard consequences is analyzed to consider both short-term and long-term consequences, such as effects on the natural and work environment. Consequences are categorized as loss or damage of life/health, environment, material values/assets, functions and reputation. In the analysis of severity of each consequence, human and organizational factors are primarily considered for their possible contributing effects.
- B. The determination of severity is normally of a descriptive nature, except when relevant calculations (quantitative) can or should be applied. A qualitative analysis describes the chains of events that could follow from the hazard and its possible consequences. Quantitative analysis is used to calculate the extent of damage that could be caused.
- C. Severity can be expressed using terminology like 'very small, small, medium, large and very large'. The meaning of each term is then expressed in words and/or numbers / ranges.
- D. Risk levels may vary over time depending on the nature of the operation(s) (machines and equipment, procedures and documentation, flight environment, personnel qualifications, duration of the tasks, etc.). Comprehensive and up-to-date data such as risk assessments and risk descriptions help in the task of performing good and effective risk assessments.

Consequence Description and Values

SEVERITY	CONSEQUENCE	VALUE
NEGLIGIBLE (VERY LOW)	<ul style="list-style-type: none">Negligible injuries not needing medical treatment.No or slight effect/damage within a system.Slight damage and/or operational impact with costs up to \$10 K.No Impact and no public concern.	A
MINOR (LOW)	<ul style="list-style-type: none">Minor employee/ contractor injury or damage to health not affecting work performance nor requiring treatment beyond first aid.Minor effect or contamination within the fence with no permanent effect on the environment or Single exceedance of statutory or prescribed limit.Minor damage and/or operational impact with costs up to \$100 K.Slight impact and no public concern. Public or media awareness may exist.	B
MODERATE (MEDIUM)	<ul style="list-style-type: none">Employee/ contractor serious injury or health effect that can result in lost workdays (Loss Time Injury), restricted work, or irreversible health effects.Localized effect within the facility fence with limited damage and spontaneous recovery.Repeated exceedance of statutory or prescribed limit.Partial damage and/or operational impact with costs up to \$1 million.Regional public or media attention, causing considerable impact.	C

MAJOR (HIGH)	<ul style="list-style-type: none">• Single employee fatality or permanent total disability, or some impact on third party.• Severe damage to be extensively restored with no significant lasting consequences.• Extended exceedance of statutory or prescribed limits.• Major damage and/or operational impact with costs up to \$10 million.• National public or media attention, with potentially restrictive impact.	D
CATASTROPHIC (VERY HIGH)	<ul style="list-style-type: none">• Multiple employee or third-party fatalities.• Persistent damage extending over a large public area or in environmentally sensitive areas with significant lasting consequence with major loss.• Constant, high exceedance of statutory or prescribed limits.• Significant damage and/or operational impact with costs above \$10 million.• International public or media attention, with potentially severe impact.	E

2.4.4 Intolerable Risk Level

- A. An **INTOLERABLE Risk Level** as indicated in the red zone on the matrix, indicates risk is too high to continue operating.
- a. Action required: Accountable Executive shall review and approve the conducted risk assessments.
- B. Once mitigation and/or controls have been accepted by the Accountable Executive and implementation completed, operations may continue.
- C. Management levels who have the authority to make decisions regarding risk tolerability:
- a. For the risk evaluation validation: The assumptions are made for the determination of the risk level and its tolerability are to be validated by SRMG.
- b. For the authorization of operations: No personnel have the authority to authorize operations at this level of risk. Operations will not be authorized.

2.4.5 Tolerable Risk Level

- A. A **TOLERABLE Risk Level** is indicated in the yellow zone on the matrix. The risk level can be tolerated for the operation, providing that appropriate mitigation measures and controls are in place.
- a. Action required: Introduce appropriate mitigation measures.
- B. In line with the ALARP concept, actions may still be taken to further reduce the risk level if feasible and reasonable. Additionally, any assumptions used to make an assessment must be monitored to ensure they remain valid.
- C. Management levels who have the authority to make decisions regarding risk tolerability:
- a. For the risk evaluation validation: The assumptions are made for the determination of the risk level and its tolerability are to be validated by SRMG.

- b. For the authorization of operations: The Accountable Manager has the authority to authorize operations at this level of risk.

2.4.6 Acceptable Risk Level

- A. An **ACCEPTABLE Risk Level** is indicated in the green zone on the risk matrix. Implementation of measures to maintain risks at this level and improve through administrative measures and manage for continuous improvement.
- a. Action required: Monitor. Risk is considered sufficiently controlled and no additional risk mitigation measures are required.
- B. In line with the ALARP concept, actions may still be taken to further reduce the risk level if feasible and reasonable. Additionally, any assumptions used to make an assessment must be monitored to ensure they remain valid.
- C. Management levels who have the authority to make decisions regarding risk tolerability:
- a. For the risk evaluation validation: The assumptions are made for the determination of the risk level and its tolerability are to be validated by SRMG.
- b. For the authorization of operations: No special authorization is required. The authorization of activities featuring 'acceptable risks' fall within the regular operational control for operations.

Risk Matrix

RISK LIKELIHOOD	RISK SEVERITY				
	NEGLIGIBLE (A)	MINOR (B)	MODERATE (C)	MAJOR (D)	CATASTROPHIC (E)
FREQUENT (5)	5 A	5 B	5 C	5 D	5 E
OCCASIONAL (4)	4 A	4 B	4 C	4 D	4 E
REMOTE (3)	3 A	3 B	3 C	3 D	3 E
IMPROBABLE (2)	2 A	2 B	2 C	2 D	2 E
EXTREMELY IMPROBABLE (1)	1 A	1 B	1 C	1 D	1 E

2.4.7 Risk Acceptance Criteria and the ALARP Concept

- A. Risk acceptance criteria are established on the basis of the Safety Policy and Safety Objectives. Furthermore, management responsibility for the acceptability of safety risks is defined as part of the SMS.
- B. The Company employs the 'As Low As Reasonably Practicable' (ALARP) risk acceptance criterion. This ALARP criterion is not exclusively based on fixed risk level targets but is a systematic and documented process to reduce safety risks below the maximum allowed by regulations or standards or when the risk is otherwise considered unacceptable. ALARP means that the safety risk is being managed to as low a level as reasonably practicable whilst at all times staying below the maximum allowed risk.
- C. After safety risks have been assessed, appropriate mitigations can be implemented. Mitigation measures may include a number of alternatives including, but not limited to, modifications to existing operating procedures, training programs or equipment used in the delivery of safe air transportation.
- D. In general, safety risk mitigation efforts and controls are categorized as one of three options:
 - *Avoidance* – Where the activity is suspended, either because the associated safety risks are intolerable or deemed unacceptable vis-à-vis the associated benefits.
 - *Reduction* – Some safety risk exposure is accepted, although the severity or probability associated with the risks are lessened, possibly by measures that mitigate the related consequences.
 - *Segregation* – Where action is taken to isolate the potential consequences related to the hazard or to establish multiple layers of defenses to protect against them.
- E. Risk mitigation may involve one or more of the approaches described above. It is important to consider the full range of possible control measures to find an optimal solution. The Company has several tools to help guide crews and technical staff through hazard identification and risk mitigation.

2.4.8 Hazard Hierarchy of Controls

- A. The risk evaluation forms the basis for deciding on risk control (mitigating) measures and in assessing the effectiveness of these measures.
- B. Risk control measures identify the consequences associated with both an intolerable and tolerable risk and where further risk reduction measures are feasible and reasonable. Identification of possible mitigation is based on the risk description and evaluation, considering in particular any uncertainties identified and critical assumptions made. Controls measures should address the human factors (e.g. training and competence), equipment or organizational factors (e.g. procedures).
- C. The identification of control barriers to eliminate and/or minimize risks shall be in line with the inherent safety concept where all risk being mitigated to ALARP as follows:

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No.	Hierarchy of Control	Description
1.	Elimination	Involve redesigning the tasks or removal of the substance in eliminating the hazard. However, the alternative method should not tolerate the product quality as well as the process effectiveness.
2.	Substitution	Replace the material with less hazardous substance.
3.	Isolation	Separating the hazard from operators by methods such as remote handling techniques or enclosing/guarding dangerous items.
4.	Technical Controls	Install or use additional machinery, equipment, or instrumentations in controlling the hazard.
5.	Administrative Controls	Administrative controls consist of various policies and requirements that are established at an administrative level such as written safety policies, rules, supervision, schedules, and training with the goal of reducing the duration, frequency, and severity of exposure to hazards.
6.	Personal Protective Equipment (PPE)	PPE will be needed should all the above control measures are found to be ineffective. It may be used as a temporary control measure until other alternatives are installed. Personnel shall be trained/aware in the function and limitation of the PPE.

2.4.9 Risk Register

- A. The Department's risk register will be maintained by the Risk Manager and reviewed and approved by the Accountable Executive.
- B. High level Company risks shall be reviewed and approved in the Corporate e-GRC program no later than the 25th day of the last month in each quarter. In preparation for the quarterly review of the risk register, the Risk Administrators will ensure that all the risk register data is current and complete in the e-GRC by utilizing the Risk Register Assessment Tool issued by the Corporate ERM Group.
- C. The quarterly review will, at a minimum, include:
 - Reviewing existing active risks;
 - Reviewing the risks whose status is Tolerate and the corresponding Effectiveness of the existing Risk Controls;
 - Reviewing potential new risks.

2.4.10 Communication

- A. To ensure that the outcome of risk assessment studies and the risk register is effectively communicated, these items will be presented during the SRB meetings. Risk communication shall ensure the understanding of affected people, as well as their specific roles and responsibilities in maintaining safe operations, as appropriate to their needs and exposures.

2.4.11 Coordination with Higher Organizations

- A. On a quarterly basis, the Company's Risk Manager will meet with the reporting organization (Aramco Admin Area) to appraise them of the Company's risk register. This to avoid duplication of treatment efforts and to highlight potential risks for escalation.

2.4.12 Risk Management Awareness Sessions

- A. Per year a minimum of 4 risk management awareness sessions will be conducted. These will be conducted as part of 2 regularly scheduled events (e.g. communication, SRB meetings) and 2 standalone sessions

2.4.13 Risk Assessment Report & Meeting

- A. A risk report will document the team findings and conclusions. For each hazard, documentation of the likelihood, consequence, risk, and control measures where each is allocated to the appropriate Division or Supervisor for developing the assigned measures.
- B. A risk mitigation meeting should be held to finalize the risk assessment recommendations. Following that, the findings should be presented to the operating organization management to decide on the appropriate actions. For high and medium risk scenarios, management need to be immediately informed and necessary measures must be taken to ensure that risk is reduced to acceptable levels.

2.4.14 Measurement & Review

- A. To ensure that hazards are identified, risk assessments are conducted and risk reduction and control measures are applied. The Risk Administrators will review the risk assessment processes and plans annually. The review verifies that well-defined goals are established, adequate processes are in place, proper risk assessments and evaluations have been conducted, and risk reduction and control measures are applied.

2.5 Fatigue Risk Management

2.5.1 Purpose

- A. Fatigue is related to a variety of operational experiences, not the least of which is exposure to long and/or irregular work hours. This environment prevails in long distance flight operations, which describes the local and worldwide scope of the Company's mission. Sleep deprivation and the consequent sleep debt accumulation over time may result from this type of work environment, with crewmember fatigue as a consequence. The Company recognizes that fatigue is a significant factor in flight operations because of its potential to cause degradation in operator and crew/team performance.
- B. The effects of fatigue upon individuals are physical, emotional, and mental. Physical fatigue manifests in slowed reaction time. Emotional fatigue may cause a decrease in personal motivation and deteriorating demeanor. Mental fatigue may result in poor decision-making and lapses in attention. Fatigue affect individuals differently, but what is common among front-line operators suffering from such effects is a lack of personal fatigue awareness and detection. No one individual is completely capable of self-policing with respect to the onset and insidious effects of fatigue.
- C. Fatigue is a recognized hazard while conducting transport missions. Some flight crewmembers routinely and regularly transit multiple time zones during the course of a normal multi-week trip. While others are on a non-routine work schedule. They experience both circadian phase advance and phase delay challenges, often in close succession. The Company understands the importance of including a Fatigue Management Program (FMP) in the Safety Risk Management pillar of the SMS. The scope of the FMP includes required crewmembers and maintenance personnel. Required crewmembers are defined as pilots and flight attendants as designated in the Operations Specifications. Maintenance coordinators may be assigned to trips as necessary. They are maintenance technicians assigned to accompany required crewmembers (hereafter to be referred to as "crewmembers") on international trips in order to accomplish required maintenance tasks and cargo handling, or will be positioned downline as deemed appropriate considering the relevant flight segment logistics. Maintenance coordinators also perform/manage routine and non-routine "fixed base" ground maintenance tasks at the Dammam, Ras Tanura and Tanajib hangars, and out stations as required.
- D. Thresholds have been established for risk associated with fatigue, and for total risk for each activity.
- E. No employee shall work while fatigued. With the aforementioned in mind, operational events may occur wherein employees may extend to longer duty periods than scheduled or planned. The policy permits this with appropriate controls.

2.5.2 Policy

- A. The Company is responsible for providing crewmembers and maintenance coordinators with appropriate and adequate fatigue management training and education regarding preventative and operational countermeasures.

- B. Crewmembers and maintenance coordinators are responsible to complete all fatigue management-related training. Initial training and/or annual recurrent training will be assigned as appropriate.
- C. The Pilot in Command (PIC) must be cognizant of the insidious influence of fatigue while planning and executing the trip schedule. The PIC is also responsible to know and understand the published flight and duty-time limitations for crewmembers. He is required to schedule flights in accordance with these limitations, and to the extent possible, schedule in accordance with informed, industry-accepted fatigue management principles and educational material in fatigue management training module.
- D. The Airline Information Management System (AIMS) is programmed with the crewmember flight time, duty time, and crew rest time limitations, which are documented in the Ops Specs. These built-in time limitations alert the flight schedulers that the planned flight schedule will exceed the Ops Specs parameters.
- E. Crewmembers and maintenance coordinators are responsible to report for all work periods fit for duty. Crewmembers and maintenance coordinators are fit for duty when they are physiologically, emotionally, and mentally prepared and capable of performing assigned flight and cabin duties or maintenance duties as required (aircraft trip or fixed-base maintenance) at the highest degree of safety and skill.
- F. It is the responsibility of each crewmember and maintenance coordinator to guard against fatigue. He may refuse to work if fatigued. If a crewmember or maintenance coordinator reports not fit for duty for a flight, cabin, or maintenance duty assignment, that individual shall not accept his assignment, nor shall FD, MROD assign that individual for flight, cabin, or maintenance duty.

2.5.3 Fit for Duty

- A. The primary physiological determinants of fatigue for a given crewmember and/or maintenance coordinator accomplishing a given task are the timing and duration of prior sleep and time awake. These factors are the most appropriate criteria for judging whether a crewmember and/or maintenance coordinator is likely to be fit for duty.
- B. The Company requires all crewmembers and maintenance coordinators to report for all assigned work periods fit for duty. Personnel are to understand the term fit for duty to mean that they are physiologically, emotionally, and mentally prepared and capable of performing their assigned tasks and duties to the highest degree of safety and skill. Crewmembers and maintenance coordinators are to understand that it is their responsibility to guard against fatigue. They should understand that, if they become aware that they are not fit for duty, they are obligated to advise their supervisor of this condition. Also, if a crewmember and/or maintenance coordinator feels that their personal fatigue level is such that they will be unable to perform their assigned tasks and duties to the highest level of safety and skill, they may refuse to commence their work period or refuse to continue their work period in a fatigued state.

2.5.4 Flight and Duty Time Limitations

- A. Required crewmember flight, duty, and rest time limitations are published in the approved GACA Part 125 Flight Operations Manual.
- B. Defined duty periods are:
- Airplane Aircrew Division (AAD)
 - Within the context of a trip, starts one hour prior to the flight-leg scheduled departure time if the trip is “In-Kingdom” (IK) and two hours prior to the departure time if the trip is “Out-of-Kingdom” (OOK). The duty period is complete when the crewmember complement completes its flight-related tasks and departs the aircraft for either the lay-over hotel or their homes in Dammam in the case of trip completion.
 - Helicopter Aircrew Division (HAD)
 - Begins 30 min prior to the flight-leg scheduled departure time if the trip is “In-Kingdom” (IK). The duty period is complete when the crewmember complement completes its flight-related tasks and departs the aircraft for their home.
- C. Layover crew rest shall be defined as a period “free from duty” commencing when the crewmembers complete their postflight tasks and leave the aircraft in order to travel to the layover hotel, and the layover rest period is complete one hour prior to departure time (IK) or two hours prior to the departure time (OOK) of the first leg of the succeeding duty period.
- D. The Airline Information Management System (AIMS) is programmed with the crewmember flight time, duty time, and crew rest time limitations, which are documented in the Ops Specs. These built-in time limitations alert the flight schedulers that the planned flight schedule will exceed the Ops Specs parameters.
- E. There are no specific flight and duty time limitations defined for the maintenance coordinator position, while assigned to a Trip, as it is not identified as a “required crewmember.”

SECTION 3: SAFETY ASSURANCE

3.1 Introduction

- A. Safety assurance is at the core of the SMS. Safety assurance includes systematic and ongoing monitoring and recording of the Department's safety performance, as well as evaluating the safety management processes and practices.
- B. The Company shall monitor operations to continually identify new hazards, measure the effectiveness of safety risk controls that have been implemented and ensure compliance with regulatory requirements. This will be achieved through internal investigations, audits, analysis of identified risks , analysis of Safety and Quality Reports, comparison to external hazard data, trends, and benchmarking.
- C. The Company shall monitor operational data (Safety Reports, audit and inspection findings, safety surveys, etc.) for the following:
 - Assess conformity with safety risk controls, such as policies, restrictions, limitations and procedural guidelines given by Accountable Executive directive or via written instructions.
 - Measure the effectiveness of those safety risk controls through the use of safety performance indicators (SPI's) and their respective targets.
 - Process to identify, track and review (OE process).
 - Assess system performance.
 - Identify additional hazards.
- D. Safety and Quality, as part of the performance monitoring process, maintain and present highlighted safety data from the Safety and Quality reporting web application. It is also important that the Company monitors products and services received from third party vendors. The results of these reports and audits regarding safety will be communicated to all personnel.

3.2 Safety Performance Indicator (SPI)

- A. Safety performance indicators are identified, monitored, and tracked by each operational Department. Each SPI has an alert and target which is evaluated on an annual basis.
- B. Department SPI's are compiled and shared with GACA on a quarterly basis.

3.3 Continuous Improvement of the SMS

- A. Continuous improvement of the SMS effectiveness is supported by safety assurance activities that include the verification and follow up of recommendations and the internal audit process.
- B. The development and implementation of corrective actions are issued to ensure that each relevant Department/Division manages and closes the findings effectively. Non-conformity reports may come from the following:
 - Internal Audit
 - Safety and Occurrence Reporting
 - Investigation Report
 - Third Party audit observations or findings

- C. The Company establishes high level safety objectives with aligned SPI's to identify reasonable levels of improvements after a baseline safety performance has been established. This data is gathered from the Departments/Divisions.

3.4 Internal Audit Program (IAP)

- A. The Company has a process for continual improvement that responds to all findings and deficiencies. These deficiencies may be identified through a formal audit and analysis process, or as a result of individual reports or observed events, to determine if the existing procedures and controls are achieving the desired results.
- B. Audits will be conducted throughout the year to monitor compliance within the Company. In addition, special evaluations or safety audits may be conducted at any time, as directed by the Accountable Executive or the Director of Safety and Quality.

3.4.1 Audit Plan

- A. Quality Assurance & Control Unit will develop the annual audit plan for each area and submit to the Director of Safety and Quality for approval. The audit plan should identify all required audits that cover both technical and safety management that will also include vendors if required. The internal audit checklist will be managed through the Safety and Quality Reporting web application.

3.4.2 Responsibilities

3.4.2.1 Director of Safety and Quality

- A. The Director of Safety and Quality has the overall responsibility to develop and implement the Internal Audit Program with coordination with the different operations managements.

3.4.2.2 QA&CU Manager

- A. The QA&CU Manager has overall responsibility for the day-to-day management of the IAP. This person serves as the chairman of the Internal Evaluation Review Board with regard to IAP management and control.
- B. The QA&CU Manager will develop and manage the IEP to ensure compliance with the written program as outlined in this manual and will seek to continually improve and enhance the program.
- C. QA&CU Manager is responsible for notifying all proponents of audits and arranging the audit scope and dates that the audit will take place.

3.4.2.3 Department Representative

- A. Each Department representative is responsible for any changes that may be required to their policies and procedures manuals. This authority may be delegated to their designees.

3.4.3 Policy

- A. An internal audit of operations compliance with the applicable policies and procedures will be accomplished once a year at minimum with additional audits occurring at the direction of the Director of Safety and Quality.
- B. The scope of these audits covers, at minimum, all basic operational functions, including; flight operations, flight operations center, ground support, inspection, engineering, planning, training, records system, technical data, precision tools, measuring devices and test equipment, parts/material, housing, facilities, and others as applicable.
- C. At the direction of the Director of Safety and Quality, external audits may also include those of contracted or other vendors located out of Kingdom that support operational activities or provide specialized services. These audits will be conducted based on the location, scope of work, and duration of operational activities to be performed.
- D. QA&CU Manager will set the following timelines for corrective actions based on the type of findings:
 - For regulatory findings: 7 days for corrective action. (Immediate action may be required to prevent continued violation)
 - For internal policy findings: 15 days for corrective action

3.4.4 Conducting Audits

- A. The QA&CU Manager will notify the Department, Division, or vendor of its intent to perform an audit and will arrange the dates with them.
- B. QA&CU Manager will conduct audits using a form created specifically for the particular scope of audit being performed.
 - For internal audits, the focus will be on the organization following regulatory compliance, policies and procedures stated in the respective Department Manual.
 - For vendor audits, the focus will be on the vendor complying with Company policies and procedures as well as the respective vendor manual system.
- C. In general, audits take place in four phases:
 - Findings
 - Corrective Action
 - Follow-up
 - Record keeping

3.4.4.1 Finding Phase

- A. During the Findings Phase of the audit, the following steps will occur based on the scope of the audit being performed:
 - QA&CU will develop a checklist to address the audit topics as identified in the audit scope.
 - QA&CU will perform a random sampling audit of the subject areas and make observations.
 - QA&CU will document the deficiencies, utilizing the appropriate audit checklist.
 - QA&CU will then communicate all audit findings to the respective Department VP for review and required action.

- The Department VP will review the audit checklist findings for issues that may require additional administrative action.

3.4.4.2 Corrective Action Phase

- A. For internal audits, during the Corrective Action Phase, the responsible Department/Division will take the following actions in regards to audit findings:
- Evaluate the audit finding(s).
 - Address the finding by identifying the root cause and taking appropriate corrective actions and create an action plan to prevent a re-occurrence.
 - The VP or Director will respond to the finding by noting the root cause and corrective action taken and any action plans put in place. This response is to be sent to QA&CU Manager by the assigned response date.
- B. For vendor audits, during the Corrective Action Phase, the following actions will take place:
- The QA&CU Manager will discuss the audit findings with the vendor Accountable Manager and concur with the findings.
 - The QA&CU Manager will submit a written report to the respective vendor's Accountable Manager containing the audit findings and request a reply to the findings to be done within 30 days with corrective actions and root cause analysis (if requested).
 - The QA&CU Manager will follow-up with the respective vendor in regards to any questions related to the audit findings and corrective actions requested.
 - The QA&CU Manager will report corrective action status with Director of Safety and Quality at end of the 30-day corrective actions period (or sooner) to brief him on corrective action responses.
 - If the Director of Safety and Quality is satisfied with the corrective action responses, the audit will be considered closed. If not satisfied, he may request the QA&CU Manager perform additional follow-up actions.

3.4.4.3 Follow-up Phase

- A. For Internal Audits, QA&CU Manager will take the following actions:
- Conduct a follow-up audit within 90 days after submitting audit findings to the Director of Safety and Quality.
 - Evaluate the initial finding to ensure the corrective action was implemented and effective.
 - Manage the list of findings to keep track of those that are open or closed. When a finding is closed, record the closing date.
 - Once the follow-up audit has been performed and found satisfactory with all findings closed, the audit form will then be forwarded to QA&CU Manager (or designee) for final review and close the audit.
- B. For vendor audits, QA&CU Manager will take the following actions:
- Conduct a follow-up audit within 90 days after submitting audit findings to the vendor Accountable Manager.
 - For all other vendors, schedule a follow-up audit if one is requested by the Director of Safety and Quality based on the vendor's geographical location.
 - Evaluate the initial finding to ensure the corrective action was implemented and effective.

- Manage the list of findings to keep track of those that are open or closed. When a finding is closed, record the closing date.
- Once the follow-up audit has been performed and found satisfactory with all findings closed, the audit form will then be forwarded to QA&CU Manager (or designee) for final review and close the audit.

3.4.4.4 Record Keeping Phase

- A. For Internal Audits, QA&CU Manager will take the following actions:
- Make sure all audit reports/cycles are completely closed prior record keeping
 - Maintain a record of all internal, vendor and external audit records for a minimum of 2 years in safe and secured location.
 - Make sure all records are available to GACA or any authorized individual upon request.

3.4.4.5 Audit Outcomes

- A. The Department VP or Division Director performs the following actions at the conclusion of an internal audit:
- Reviews the corrective actions to determine if their applicable manuals or processes require any additional changes for the purpose of continuous improvement.
 - If revisions to the manuals are required, the manual revision should be completed per the respective Department/Division manual revision process.
 - Any subsequent policies and procedures resulting from an audit will be reviewed at the next audit to determine effectiveness.
- B. The QA&CU Manager and Quality performs the following actions at the conclusion of a vendor audit:
- If audit was satisfactory, provide a written notification of audit completion to the vendor.
 - Review the corrective actions to determine if the finding requires any self-disclosure reporting to GACA. If required, he is responsible for notifying GACA accordingly.
 - If audit was unsatisfactory and/or findings were not adequately addressed, provide a written notification to the vendor containing required actions prior to conducting further business.
 - The vendor that is found to be unsatisfactory will be removed from the Contracted Vendor list for a minimum of one (1) years. A new audit will need to be conducted and all findings resolved satisfactorily prior to resuming business with that facility.
- C. Audits provide a valuable means of acquiring specific safety-related information about the Company's organization and a way to determine the overall health of the safety program. Audits are conducted under the responsibility of the Director of Safety and Quality where reports and inspection documents will be maintained on the Safety server.

3.4.5 Audit Levels and Focus Area

3.4.5.1 Level 1 – Self-Assessment

- A. Flights Department
- Flight Operations (GACA Part 125)

- Flight Operations (GACA Part 133)
 - Flight Operations Dispatch
 - Safety Management System (GACA Part 125)
- B. Maintenance & Repair Operations
- MRO (GACA / FAA 145)
 - Safety Management System (GACA / FAA 145)
- C. Airport & Ground Operations Department
- Ground Support (GACA 151)
 - Safety Management System (GACA Part 151)
- D. Health, Safety, Security and Environment

3.4.5.2 Level 2 – Corporate Audit

- A. Flights Department
- Flight Operations (GACA Part 125)
 - Flight Operations (GACA Part 133)
 - Flight Operations Dispatch
 - Safety Management System (GACA Part 125)
- B. Maintenance & Repair Operations (MRO)
- MRO (GACA / FAA 145)
 - Safety Management System (GACA / FAA 145)
- C. Airport & Ground Operations Department
- Ground Support (GACA 151)
 - Safety Management System (GACA Part 151)
- D. Health, Safety, Security and Environment

3.4.5.3 Vendor Audit

- A. Flights Department
- Universal Aviation Service (UAS)
 - Saudi Private Aviation (SPA)
 - Others (as directed)
- B. Maintenance & Repair Operations (MRO)
- Leonardo
 - JET/AMAC
 - Gulfstream
 - MTU Engines
 - SASSCO
 - DJC

- Others (as directed)

3.5 External Audits

- A. The Company submits operational and administrative processes and procedures to third-party/regulatory entities for compliance review. Audits shall include the results, findings, and recommendations for continuous SMS improvement.
- B. Third-party regulatory audits will be completed by the following:
- Flights Department
 - GACA Operational Certificate - 125 (Flight Ops)
 - GACA Operational Certificate 125 (SMS)
 - GACA Operational Certificate 133 (Flight Ops)
 - Maintenance & Repair Operations (MRO)
 - GACA 145
 - FAA 145
 - GACA 145 - Safety Management System (SMS)
 - Airport & Ground Operations Department
 - GACA 151
 - GACA 151 - Safety Management System (SMS)
- C. Aviation may also contract with respected third-party audit organizations for Best-Practice performance reviews by the following:
- Flights Department
 - ARGUS
 - ISBAO - IBAC
 - Airport & Ground Operations Department
 - ISBAH - IBAC
 - Health, Safety, Security and Environment
 - Aramco - LPD

3.6 Investigations

3.6.1 Purpose

- A. To report and investigate all accidents, serious incidents, incidents, and near misses which occur. This document outlines the process necessary to investigate based on evidence which will be reported to internal and external sources as mandated by the Accountable Executive.
- B. Not all occurrences or hazards can or should be investigated. The decision to conduct an investigation and its level should depend on the actual or potential consequences of the occurrence. As such, the Company will investigate all accidents, incidents and other issues at the discretion of the Accountable Executive or Director of Safety and Quality. Division Directors or a SRMG member can and should make a request to the Accountable Executive and/or Director of Safety and Quality, if they can reasonably articulate the need for an investigation.
- C. The goal of the investigation is to identify the events that lead to the incident, perform a root cause analysis, followed by SMART recommendations for mitigation.
- D. Investigations are NOT to be used for punitive purposes unless the investigator determines through a preponderance of evidence that the incident, accident, hazard, or near miss was caused by willful disregard of regulations, policies and/or procedures. A Just Culture review may be completed if the investigation report details the cause to be gross negligence or willful disregard of policies, procedures and/or regulations.

3.6.2 Process

- A. Internal Investigations are conducted with the intent of finding and correcting root causes. Investigations may be accomplished reactively or proactively.

3.6.2.1 Initiating an Investigation

- A. The Accountable Executive and/or the Director of Safety and Quality may initiate the investigation process. The Lead Investigator should begin a record of the investigation as soon as possible.
- B. Notification and Reporting requirements are to be addressed by the Director of Safety and Quality based on information provided by the Lead Investigator. Notification to any regulating entity (GACA or AIB) must be done in accordance with the corresponding GACAR's & regulations.

3.6.2.2 Event Classification

- A. The types of events (and examples) to be reported are:
 - **Accidents**
 - Runway excursion
 - Crashed aircraft
 - Structural damage
 - Lost aircraft
 - Mid-air collisions
 - Aircraft equipped/blocked runway
 - Serious injuries or fatalities

- Tail strike
- Fire
- Landing gear collapse
- **Serious Incidents**
 - Substantial damage
 - Runway incursion
 - Hard landing
 - Blown/damaged tires
 - Injuries
 - Ground collision (aircraft involved)
 - Power plant failure
 - Evacuation
 - Overshoot/undershoot
- **Incidents**
 - Bird strike
 - Foreign object debris
 - Weather related
 - Fuel
 - Navigation errors
 - Security
 - Wildlife
 - System components (non-powerplant)
- **Near miss**
 - Any event where an incident or accident was narrowly avoided.

3.6.2.3 Investigation Types

- A. Major Investigation (Full Report).
- All Accidents.
 - All Serious Incidents.
 - Incidents & Near-Miss with Intolerable Risk Assessment only.
- B. Minor Investigations (Safety web application)
- Incidents & Near-Miss with Tolerable/Acceptable Risk Assessments.
 - Hazards with based on safety assessment.

3.6.2.4 Conducting the Investigation

- A. During the investigation, the Lead Investigator should keep the Director of Safety and Quality appropriately informed as to the status of the investigation.
- B. Depending on the investigation type and severity of the event, the Lead Investigator may request additional support from within the Company or any outside Aramco Department for collaboration. Depending on the severity of the accident, the Lead Investigator may be requested to be a party to the investigation of the regulatory group (GACA or AIB).

- C. During an investigation, in the interest of safety, an aircraft may be held in quarantine by the Lead Investigator until released by the Safety and Quality Division.
- D. If appropriate, interim updates can be distributed to personnel. This may take the form of a preliminary report to the Accountable Executive and Director of Safety and Quality, a Lessons Learned document to the entire department, or other various methods. If appropriate, interim recommendations/corrective actions may also be issued.

3.6.2.5 Status of Major Investigations

- A. Issuance of investigation reports will be based upon the following:
 - Preliminary Report (48 hours)
 - Draft Final report
 - Final Report/Closed

3.6.2.6 Recommendations

- A. Recommendations or corrective actions are the end result of a successful investigation. They should be indicated in the report and should follow the SMART (Specific, Measurable, Achievable, Relevant, and Timely) Principle consisting of one of following three types:
 - Type 1: Actions to eliminate the cause or causes of the accident or incident.
 - Type 2: Actions to control the circumstances that caused the accident or incident.
 - Type 3: Personnel actions, such as improved procedures or additional training for employees involved in the occurrence.
- B. All recommendations from an investigation shall be approved by the Director of Safety and Quality. They are then tracked by SMRU and may be entered into the Saudi Aramco SafeLife system via the appropriate section if necessary depending on the involvement of outside vendors. Each recommendation shall have a recommendation level (Urgent, High, Medium or Low) based upon the risk severity of the event and analysis of the control outcome. The recommendation level will note to the assigned person the required time allotted for action and closure based upon the table below.

<u>Recommendation Level</u>	<u>Due Date</u>
Urgent	Immediately
High	7 Days
Medium	14 Days
Low	30 Days

- C. Recommendations are issued to the assigned Department when the investigation report is issued. The assigned Department is responsible to ensure corrective actions are actioned and closed. Possible actions include:
 - Completing the action as issued.
 - Proposing an alternate solution.

- Requesting a due date extension.
 - Requesting the recommendation/corrective action to be cancelled.
- D. Once recommendations have been completed, the assigned Division shall provide the following:
- A statement of compliance noting what was done to close the assigned recommendation/corrective action.
 - Any additional documentation necessary to close the recommendation/corrective action.
- E. The Director of Safety and Quality will review the report and will either approve or respond back to the issuing Division for additional clarification or action. The final review will be completed by the Accountable Executive as necessary.
- F. The recommendation is required to be maintained for a minimum of 5 years to aid in tracking repeat items. Directors and SMRU should periodically monitor the success and continuation of the corrective action to ensure interest does not fade over time and allow the erroneous behavior to reoccur.

3.6.2.7 Concluding the Investigation

- A. Completed investigations should include:
- Risk assessment based on the 5x5 risk matrix
 - Occurrence or Incident type
 - Root Cause Analysis (e.g. TapRoot, 5 Why, HFACS)
 - Recommendations/Corrective Actions,
 - Any supporting documents which may be used to support the investigation or requested by regulatory entities.
 - Lessons Learned - may take many forms and should be distributed with the appropriate timeline. Normal sharing of lessons learned will be immediately after issuing the final report.
- B. If, during an investigation, it is found that there are elements of human error, HFACS may be used to determine the underlying cause.

3.6.2.8 Review of the Investigation

- A. The completed investigation report shall be reviewed by the SRT members. The respective SRT lead will advise the SRMG Manager that all items are accepted for the issuance of the report based upon the root cause and safety recommendations.
- B. Additional recommendations may be written in the report and placed in the Executive Summary for the Accountable Executive to review and approve.

3.6.2.9 Information Distribution

- A. All investigation reports shall be reviewed, at a minimum, by the following prior to being issued:
- Lead Investigator
 - A second person who has received aviation investigation training or an SMRU member.

- B. The following investigations reports have different audiences and shall be disseminated only to these audiences:
- Preliminary report: Issued to the Accountable Executive and Division Directors.
 - Final Report: Issued to Accountable Executive and Division Directors.
 - Safety Event Bulletins: Issued to all Company employees. It contains most of the final report contents but all names are de-identified.
- C. It will be at the discretion of the Director of Safety and Quality or the Accountable Executive if the report is to be shared with other personnel.

3.7 Just Culture

3.7.1 Definition

- A. Just Culture means a culture in which front-line operators and other persons are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but in which gross negligence, willful violations and destructive acts are not tolerated.

3.7.2 What Just Culture is

- A. Just Culture is about safety. It is a question of mindset, about fostering a constructive environment by which individuals can share their accounts to add to our knowledge of how the SMS system works. In doing so, Just Culture is a mechanism that allows to uncover pertinent aspects of the operation that are traditionally hidden, whilst ensuring that people are not punished for doing their best at their job (even if they may have to submit to a judicial process).
- B. The concept of Just Culture addresses the mutual recognition of two key functions, aviation safety and the administration of justice, and represents the fundamental recognition that both would benefit from a carefully established equilibrium, moving away from fears of criminalization, balancing and satisfying the interests of the two unique and basically not compatible domains.
- C. The benefits of a Just Culture are:
- Increased reporting of hazards and safety-related events
 - Identification of trends
 - Recognition of latent conditions that may produce errors or violations in an organization.
- D. Building and maintaining a Just Culture within the Company is a complex task that requires participation at all levels to build the trust required. Management (Supervisors, Managers, Directors, etc.) must trust that employees are reporting all hazards, events and mistakes that may adversely affect safety. Employees must trust that Management has their best interests in mind and will not punish reports of honest errors and identification of hazards. Safety is everyone's responsibility. Building trust and a Just Culture is also everyone's responsibility.

3.7.3 What Just Culture is NOT

3.7.3.1 Nothing Quick or Unambiguous

- A. Just Culture is not about quick fixes, clear rules, strict guidelines or a set of given norms. It is about a constant interaction.
- Externally: Between safety and judiciary to satisfy both needs.
 - Internally: With organizational justice processes (analysis process, investigation process, etc.).

3.7.3.2 No Absolution, No 'No Blame Culture'

- A. Just culture does not mean complete protection of front-line operators in the event of aviation incidents and accidents. Particularly, it does not offer protection in case of gross negligence, willful misconduct and/or destructive acts, severe and serious disregard of an obvious risk

and/or profound failure of professional responsibility. Just Culture covers a reported incident – but not the omission of reporting!

- B. If the company reveals doubts about the mentioned exclusions from protection, Just Culture might come to an end.

3.7.3.3 No One-Way Street

- A. Just Culture is not a given concept from the outside world. Based on a mindset, a way of thinking and behavior and a constant give-and-take, it is fair to expect a just and fair treatment from the outer world. But at the very same time we have to be just and fair towards the outer world, too. Otherwise this two-way road will come to a dead end.
- B. The same is valid for the internal world. As long as the above-mentioned exclusions (i.e. gross negligence, etc.) are found to be true, there is no reason to blame colleagues. Emotions during or right after an incident are normal reactions to an abnormal situation. However, the Company will not accept continuous, unfounded blaming of colleagues after an incident.

3.7.4 Unsafe Behaviors

- A. There are four types of unsafe behaviors:
- **Human Error** – When there is general agreement that the individual should have done something different than what they did. In doing so, that individual inadvertently caused, or could have caused, an undesirable outcome.
 - **Negligent Conduct** – Negligence falls below the standard of what is reasonably normal. In the legal sense, negligence applies to a person who fails to use the reasonable level of skill expected in that particular activity, whether by omitting something that a prudent person would not or by doing something that no prudent person would do in that same situation. Where there is a duty to exercise care, a person must take reasonable care to avoid acts or omissions, which reasonable can be foreseen to be likely to do harm to persons or property.
 - **Reckless Conduct** – To be considered reckless, the risk has to be obvious to a reasonable person. Reckless conduct involves a person taking a conscious unjustified risk, knowing that there is a high probability that harm will result from such conduct, foresees the harm and nevertheless takes the risk. It differs from negligence in that reckless conduct is a conscious disregard of an obvious risk.
 - **Intentional Willful Violations** – When a person knows or foresees the harmful result of the action and chooses to go ahead and do it anyway.
- B. In order for the Company to determine the type of error made, a trained safety investigator (such as member from SMRU) must classify the event. Risks are then classified according to the risk matrix. After which, the employee will then be subject to a Just Culture Review if required.

3.7.5 Just Culture Review Process

3.7.5.1 Responsibilities

- A. Director of Safety and Quality
- Maintains the Just Culture Review system and documentation.

- Provides education to all employees about Just Culture through this manual.
- Provides review, as needed, to the assigned review committee members prior to a specific culpability determination.
- Plays no role and is not present during a specific culpability determination.

B. Management Authority

- This position is filled by the Accountable Executive, VP's, or Directors.
- Initiates the Just Culture Review Process.
- Selects members for the Review Committee.
- Endorses and Records the Just Culture Review and its' outcome.
 - The Just Culture Review is to be submitted to SRMG for record retention.
- Ensures the outcome of the review is appropriately actioned.

C. Review Committee

The Just Culture Review Committee is responsible for determining the culpability attributed to an event.

- Review Committee shall be comprised of a minimum of 3 personnel:
 - Two (2) peers (e.g., a pilot should have 2 similar pilots (fleet & seat)).
 - One (1) direct level supervisor, not their own.

3.7.5.2 Process Steps

A. Initial Stage

- Management Authority works with the SRMG to gather all documents related to the event and investigation.
- Management Authority selects members of the Review Committee.
- The Review Employee is informed of the pending Review date and reason for review. They are not required to be In-Kingdom and may not be present during the culpability determination.

B. Intermediate Stage

- The Management Authority, along with SRMG (if required), reviews the concept and generic process of Just Culture Review to the Review Committee.
- The Management Authority, presents the details of the event to the Review Committee.
- The Review Committee is left alone to complete the Review Process by utilizing the Just Culture Flow Chart.

C. Review Stage

- The Management Authority is presented with the outcome of the review for their acceptance and endorsement.
- The Management Authority presents the outcome and their acceptance decision to the SRMG Manager, or SRMG representative, and to the Employee under review, for each of them to accept or decline the outcome.
- If the outcome is accepted by all three parties, the Management Authority may continue to the Final Stage.

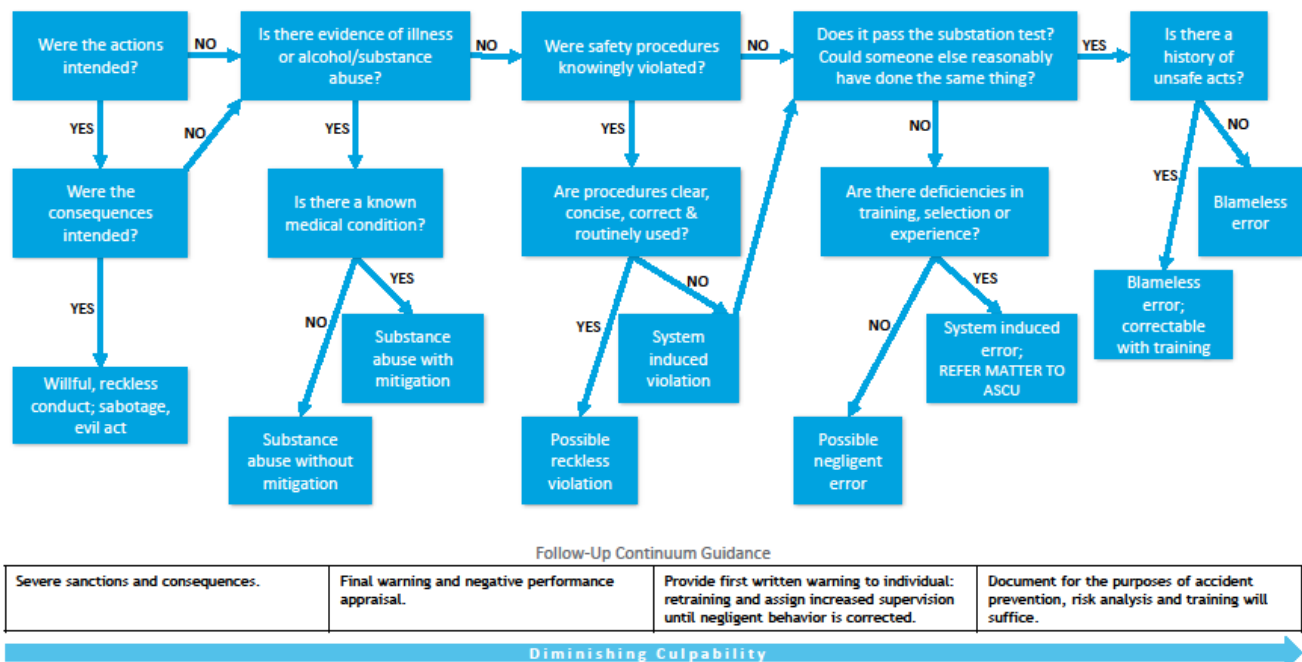
- If the outcome is declined by either of the three parties, a 2nd review may be performed without any escalation.
- For this to occur, a new Review Committee is to be chosen and an SRMG representative is required to educate the new board on the review process and investigation details. No connection between the process and the investigation details may be presented.
- At the discretion of the Accountable Executive or Director of Safety and Quality, the investigation may be reopened. If significant details arise, the entire process resets.
- If after a 2nd review the outcome is still contested, escalation is required to the Accountable Executive.

D. Final Stage

- The Management Authority reviews all documents related to the review and ensures the outcome of the review is appropriately actioned, then submits to SRMG.
- The Management Authority issues the details of the review to the Accountable Executive for review and endorsement.
- Accountable Executive may hold a meeting with the SRMG and personnel involved in the event as an out brief and closure.

3.7.5.3 Just Culture Review Flow Chart

Just Culture Review Flow Chart



3.8 Management of Change (MOC)

- A. The Company has designed an MOC system to help evaluate, authorize, implement, document, and communicate changes affecting the Company. These changes should be assessed for potential risks and hazards and how it may affect the department. This Instruction applies to all proposed changes to all Company assets including personnel, aircraft, facilities, and major workshop equipment where removal, disabling, by-passing or modifying safety critical or shut down devices are necessary.
- B. All changes, other than Replacement-in-Kind to Non-Critical Equipment, must be managed in accordance with this procedure. This includes, among others:
- Installation of new, or modification of existing, equipment.
 - Changes in operating procedures (e.g. new aircraft checklist , aircraft tow procedure).
 - Changes in equipment maintenance programs.
 - Changes in spare parts requirements.
 - Turnover of responsibilities during personnel replacement.
 - Change in organization structure (e.g Management change, new employee, employee job change, etc.).
 - Re-assignment of responsibilities when position is eliminated or vacated indefinitely.
- C. **Do not** make any change to an asset to which this instruction applies unless it fully complies with the requirements of this Instruction.

3.8.1 Responsibilities

A. Accountable Executive

- Establish MOC guideline to manage the change effectively by assigning an MOC coordinator, the approval authority level and the form to be utilized.
- Provide the required resources to implement the changes.
- Ensure implementation of MOC is audited periodically.
- Approve emergency changes.
- Assign the change review team (CRT).

B. Department VP's and Division Directors

- Approve MOC's for implementation.
- Ensure employees are trained on the changes.
- Approve the MOC for closure.
- Determine the impact of the change and update the MOC through QSMS.
- Provide required support for implementing the change.

C. MOC Originator

- Identify change.
- Complete a Change Request Form and attach related documents.
- Obtain supervisor approval.
- Coordinate with MOC Rep within respective Division or unit.

D. MOC Coordinator

- Coordinate the MOC process from initiation to completion/closure.
- Document receipt of Change Request.
- Present to the Aviation Safety & Compliance Unit.
- Initiate the MOC request for emergency changes.
- Recommend MOC closure.

E. Division Assigned Coordinator

- Participate on all Change Review Team (CRT) Meetings.
- Assign Division SME for Change Design Team (CDT) (Appropriate to the MOC).

F. Risk Manager

- Review change request and potential impact.
- Recommend whether or not to proceed with the proposed change.

3.8.2 Process

The following is the overall process developed to meet the intent of the MOC expectation:



- A. **Identify change** - Changes to process technology, material, equipment, procedures, facilities, buildings or organizations set-up) and the change type is to be either of the two as follows:
- a. Replacement In-Kind - A replacement-in-kind is an identical or an equivalent change that would not require any modification to the system or organization structure set-up. This type of change does not require management of change (MOC) and not covered under this process.
 - b. Replacement Not In-Kind - A replacement that is not of the same kind or an equivalent change that would require modification to the system or organization structure. Examples when change management shall be completed are:
 - i. Introduction of new technology or equipment.
 - ii. Changes in the operating environment.
 - iii. Changes in key personnel.
 - iv. Significant changes in staffing levels.
 - v. Changes in safety regulatory requirements.
 - vi. Significant restructuring of the organization.
 - vii. Introducing new type of aircraft
 - viii. Introducing new procedures including maintenance and operational procedures.
 - ix. Physical changes such as facilities including operation setup, aerodrome, and ground facilities.
 - c. The Replacement not in kind can be either temporary, permanent, or emergency as per the below definitions
 - Temporary Change - is implemented with the intent that the change is applied for a fixed duration, e.g., until the next planned facility shutdown or until a date predetermined by the manager, in conjunction with the Change Coordinator.

Temporary changes that remain in place for longer than six months should be subject to the full permanent change procedures.

- **Permanent Change** - is one, which, once implemented, will be a permanent feature of the design, operation or procedural control of the plant or facility.
- **Non-Emergency Change** - is any change that does not require immediate implementation.
- **Emergency Change** - the emergency change is defined where work is immediately required to eliminate or reduce potential risks to personnel, the plant or environment, or to maintain operations. The emergency change is initiated, approved and can be implemented prior to the MOC form issuance as per the following steps:
 - **Obtain pre-approval** - Review the need and applicability of change with the concerned parties and develop immediate plan/procedures to implement the change while complying with HSE requirements.
 - **Authorize to proceed** - Obtain the authorization to proceed and implement the change from the appropriate approval level (Supervisor or Manager).
 - **Implement change and initiate the MOC Change Request Form** - Implement the change as per the plan/procedures while complying with safety requirements.

- B. Initiate MOC request and initial approval** - The MOC request shall be initiated for any change that meets the requirements. The following are the steps to be followed to initiate the MOC request:
- a. Originator to fill out the MOC Change Request Form
 - b. Submit the form to their Department/Division for approval.
 - c. Gather and attach (include) all applicable information regarding the change.
 - i. Drawings
 - ii. Data sheets
 - iii. Process Documents
 - iv. Organizational chart
 - d. Once approved, submit the MOC form to the MOC Coordinator.
 - e. MOC meeting review to be completed with Department MOC Representatives.
- C. Review MOC Request** - Review of every initially accepted MOC request by completing the following steps:
- a. Inform the Change Review Team.
 - b. Select venue and date of review.
 - c. Prepare the applicable MOC checklist and assign MOC change design team.
 - d. Check/plan if engineering studies are required, e.g., Pre-Startup Safety Review, Preliminary Hazards Analysis study, Risk Assessment, and Manpower Base Study.
 - e. Conduct MOC meeting to review applicable studies to evaluate the change impact and determine its feasibility. The review shall recommend whether or not to proceed with the change implementation. After the review, the change will be verified by the MOC coordinator.
 - f. Finalize the change request form after completing the review by either:
 - i. Processing the form for implementation (if recommended for change).
 - ii. Archiving the change form (if not recommend for change).

D. MOC Development

- a. Develop the design of the proposed change ensuring that they deliver on the original intent.
- b. Perform Risk Assessments and Engineering Studies.
 - i. All proposed changes should be assessed for risks. The CDT need to determine which type of risk assessments are suitable for the type of change being proposed. The assessment for risk should also consider items which are sometimes not as obvious (e.g. how the proposed change may affect the organization).
 - ii. The risk assessment should address the following areas for applicability (TEPIOILQC):
 1. Training - The provision of the means to practice, develop and validate the competence of sufficient Personnel for the change.
 2. Equipment - The provision of systems and equipment, needed to outfit/equip an individual, group or organization.
 3. Personnel - The timely provision of sufficient and motivated personnel to deliver the change outputs.
 4. Infrastructure - The provision of a coherent development of approved data, information, and knowledge requirements for capabilities and all processes designed to gather and handle data, information, and knowledge.
 5. Organization - Relates to the operational and non-operational organizational relationships of people. It is typically made up of organizational structures.
 6. Information - The development, management, and disposal of all permanent buildings and structures, land, utilities, and facility management services. It includes estate development and structures that support the organization's personnel.
 7. Logistics - Relates to the aspect of product operations which deals with; the design and development, storage, transport, distribution, maintenance, evacuation, and disposition of material (supply chain).
 8. Quality - The deployed robust Quality Management System in place to support the on-going safety of the change.
 9. Contingency - The robust emergency plans and business continuity procedures in place, and practiced.
 - iii. Risk assessment is to be conducted per the risk assessment process and provided to the MOC Coordinator for review.
 - iv. Consideration should be given to the implementation phase of the change to ensure hazards are controlled. This may mean that the implementation stage is risk assessed to allow for continued safe operation while the change is taking place.
- c. Develop plans for implementation.
 - i. Must include the conclusions from the risk assessments and engineering studies performed. The plans should be specific, measurable, achievable, realistic, and time bound (SMART). The implementation plan should also include a communication plan which includes (e.g. types of communication, awareness, training, documentation updates etc.), as applicable to ensure the change is understood and accepted effectively & efficiently.

E. Approve & Implement the Change

- a. Prepare the following documentations as applicable prior to obtaining the change approval from the affected area Department/Division:
 - i. Cost Estimate
 - ii. Detailed scope of work/procedure
 - iii. Detailed schedule
 - iv. Impact analysis
 - v. Manpower requirements
 - vi. Training needs
- b. Obtain Approval from the initiated Department of the MOC plan.
- c. Train impacted area personnel on change as applicable.
- d. Implement Change
 - i. Carry out the change as per the detailed scope of work. All required safety precautions and measures shall be detailed and followed prior to implementation such as JSA, heavy lift plan and work permit.

F. Document, update and close MOC

- a. Update all change affected documents such as engineering drawings.
- b. Ensure all appropriate documentations are gathered and filed to maintain complete up-to date change package.
- c. Recommend to Department/Division to close MOC after complete implementation.
- d. Approve MOC closure by impacted area Department/Division.
- e. Communicate the change to the affected area personnel.

3.8.3 Performance Measurement

Below table provides measurement KPIs:

Performance Measures	Formula	Source	Frequency
Quantity of MOCs	Total number of new MOC issued/ month	MOC Coordinator	Monthly
MOC Tracking	# of MOC closed *100 / # of MOC initiated	MOC Coordinator	Quarterly
Quality of MOCs	Total number of MOCs due date overdue per quarter / the total number of MOCs.	MOC Coordinator	Quarterly

3.8.4 Training

- A. MOC team shall complete the e-learning course #00008276 Management of Change through SAP/SucessFactors.
- B. All personnel whom are involved in the MOC process shall be trained on the MOC process.

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- C. MOC team shall complete the e-learning course #00008276 Management of Change (SAP) (00008276).
 - D. All personnel (involved in the MOC process shall be trained on the MOC process.

3.9 Flight Operation Quality Assurance (FOQA)

3.9.1 Purpose

- A. Flight Operational Quality Assurance (FOQA) is defined as a program to improve flight safety by providing more information about, and greater insight into, the total flight operations environment through selective automated recording and analysis of data generated during flight operations. Analysis of FOQA data can reveal situations that require improved operating, training, and maintenance procedures, practices, equipment, and infrastructure.
- B. FOQA is a voluntary safety program endorsed by GACA (EBook Volume 2) and is designed to make commercial aviation safer by allowing commercial airlines and pilots to share de-identified aggregate information to monitor trends in aircraft operations and target its resources to address operational risk issues (e.g., flight operations, air traffic control (ATC), airports). The fundamental objective is to allow all parties to identify and reduce or eliminate safety risks, as well as minimize deviations from the regulations.
- C. FOQA programs are based on the premise that operators have primary responsibility for continuously monitoring and ensuring that their operations are safe and in compliance with their operating standards and the regulations. A FOQA program will assist the Flight Department in identifying and addressing operational deficiencies and trends that are not generally detectable with other procedures. Additionally, analysis of some FOQA program data may contribute to improved safety and efficiency in the design and operations of air traffic control (ATC) systems, aircraft, and airports. Many potential applications of FOQA data have been identified to date. These applications aim to improve safety, evaluate and enhance training practices, revise operating procedures, assist aircraft engineering programs, improve maintenance efficiency, and assist manufacturers in aircraft design and modification.
- D. The core objective and intent of the FOQA program is to facilitate the free flow of safety information. The FOQA program will:
- Collect operational flight data.
 - Develop methods to analyze the collected flight data, such as triggered events and routine operational measurements.
 - Establish procedures for comparing the collected data with established procedures and standards and the use of analyzed data in formal awareness and feedback programs to enhance safety in the following areas:
 - Flight procedures
 - Flight training procedures and qualification standards
 - Crew performance in all phases of flight
 - Aircraft maintenance and engineering programs
 - Aircraft and airport design and maintenance
 - Perform trend analyses of FOQA data to identify potential problem areas, evaluate corrective actions, and measure performance over time.
 - When situations warrant, a Safety Event Bulletin may be issued to revise information contained in this manual. Safety Bulletins with an issue date after the FOQA Implementation and Operations Manual date of issue should be considered the most current.

3.9.2 Protective Provision and Company Policy

- A. Key to the success of the FOQA program are specific protective provisions that will protect both aircrews and other employees from information and data that is collected and analyzed by the FOQA program. In establishing these protective provisions, SRMG has pursued the following distinct courses of action. SRMG has established a policy endorsed by the Accountable Executive providing that no pilot shall ever be subject to disciplinary action from data or information that is produced by the FOQA program, except for deliberate or criminal acts. SRMG will establish procedures for sharing of FOQA trend analysis and other pertinent de-identified data with the relevant Authorities (GACA or other entity). These actions are intended to create a framework of cooperation between the relevant Authorities, and the Company that will permit the most effective use and analysis of FOQA data.

3.9.3 Data Protection and Security

- A. Key areas that were considered in developing the protective provisions for the FOQA program include:
- **Confidentiality** – Provides that the identity of individual crewmembers cannot be associated with any FOQA data, except for the purposes of crew-contact.
 - **Anonymity** – Provides that any identification of flight release and/or flight crews with specific FOQA flight data necessary during an analysis is eliminated permanently at the earliest possible time.

3.9.4 Program Details

3.9.4.1 General

- A. The principal components that will compose the FOQA program are described below. This implementation plan will be applied to existing and new aircraft as they are introduced.

3.9.4.2 Aircraft Fleet

- A. Aircraft selected to participate in the FOQA program will be equipped with a Flight Data Acquisition Management System on a schedule established by Saudi Aramco Aircraft Maintenance Division.

3.9.4.3 Data Download and Airborne System Maintenance and Support

- A. The Flight Data Acquisition Management System and Data Recorder will be maintained per the approved aircraft maintenance manual. Maintenance and Repair Operations Department (MROD) will be responsible for managing this process. The FOQA data shall be downloaded on a schedule established by MROD. The FOQA Specialist or designee will be responsible for coordinating maintenance issues with MROD regarding data downloads and any Flight Data Acquisition Management System problems discovered during data analysis.

3.9.4.4 Ground Data Replay and Analysis System (GDRAS)

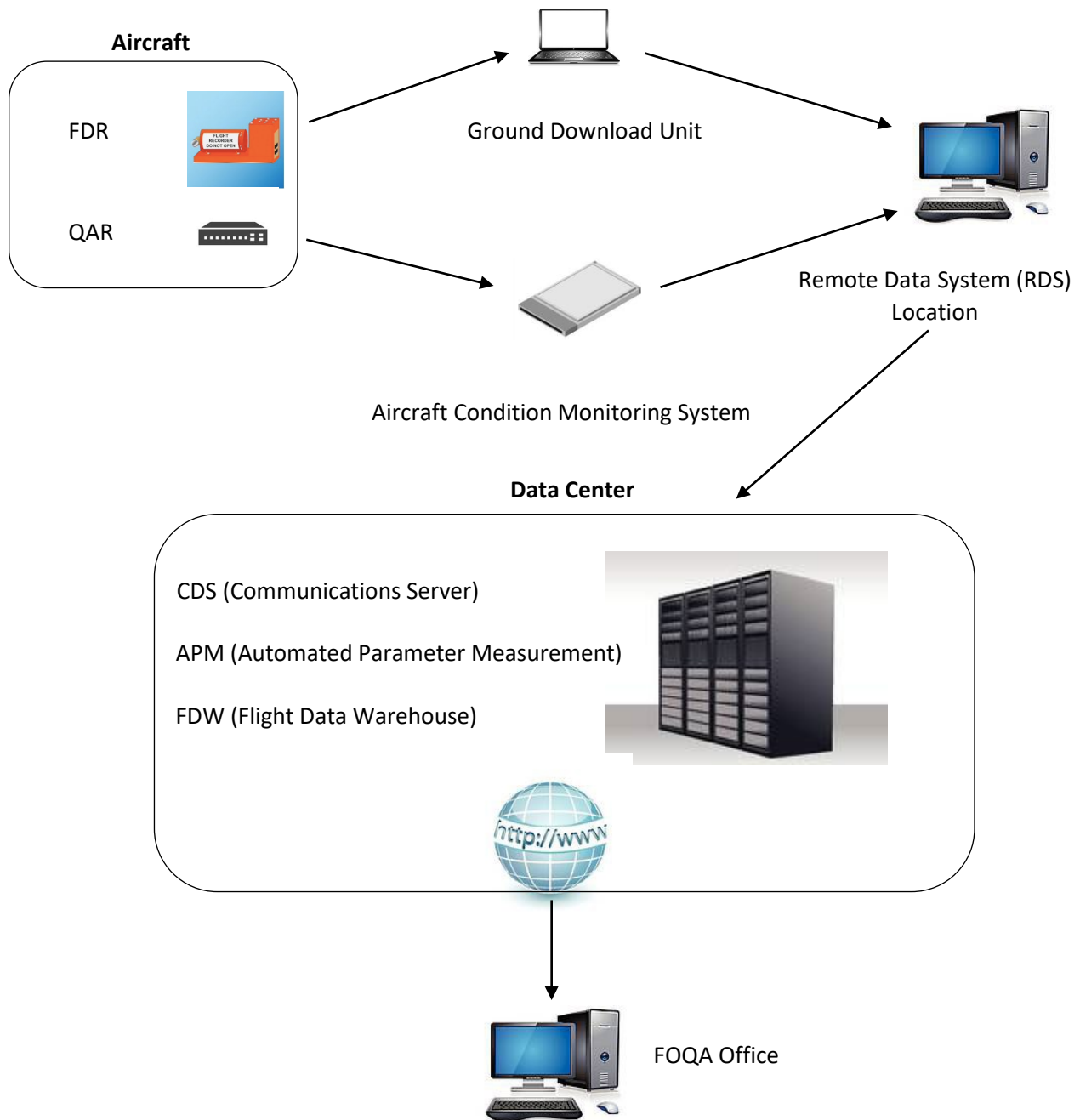
- A. Depending on vendor, GDRAS may be available to process and analyze data from FOQA-equipped aircraft in the Company fleet. It will apply protective mechanisms, including removal of identifying information in accordance with the provisions described in the previous sections. The GDRAS will also include trend analysis capabilities to explore historical data and analyze similar event data from past flights to determine if any patterns exist or if further study is warranted.

3.9.4.5 Equipment Upgrade, Modification, or Replacement

- A. The equipment used initially in the FOQA program, including airborne and ground systems, may be upgraded, modified, or replaced with equipment from the same or a different vendor that will provide comparable or superior functionality to the equipment described in this section. Documentation of such changes in airborne or ground systems will be maintained by the MOC Coordinator and will be made available to the applicable Authority on request.

- B. The Company will continuously investigate other components to incorporate into the FOQA program as the technology becomes available and requirements are identified and refined. The addition of these components is subject to approval by the Director of Safety and Quality.

3.9.4.6 General System Architecture



3.9.5 Roles and Responsibilities

- A. FOQA Steering Committee – The FOQA Steering Committee is chaired by the SRMG Manager and serves as the advisory group for the FOQA program. Members of this committee include the Accountable Executive, the respective Division Chief Pilot, Technical Training and Standards Manager, and the MROD VP.
- B. FOQA Monitoring Team (FTM) – The FOQA Monitoring Team is chaired by the FOQA Specialist and serves as the advisory group for the FOQA program parameters. The FMT meets once per quarter to conduct reviews of aggregate trend data to identify recommendations to stakeholders. Members of this committee include the aircraft specific Fleet Captain, Training Manager/Designee (AAD, HAD), and a Pilot from each fleet.
- C. Safety and Risk Management Group Manager – The SRMG Manager is responsible for the overall management, administration, security, and maintenance of the FOQA program. Different SRMG members may be assigned to the FOQA program as determined by the SRMG Manager. These duties include interfacing with the GACA, vendors, and other entities. Their primary duties include addressing the FOQA data needs and reporting requirements of Aircraft Maintenance, Operations, Training, and the SRMG (and any other stakeholders).
- D. FOQA Gatekeeper – The FOQA Gatekeeper will have access to identifying data. The FOQA Gatekeeper will manage password selection and maintenance, control access to identifying data, and perform any necessary crew contacts. Different FOQA Gatekeeper may be assigned to the FOQA program as determined by the SRMG Manager.
- E. FOQA Analyst – The FOQA analyst will assist the FOQA Gatekeeper and may assist in day-to-day operations of the FOQA GDRAS, generating GDRAS-related reports.

3.9.6 Data Analysis

3.9.6.1 Data Usage and Management

- A. All processed FOQA data will be maintained by the GDRAS subject to periodic deletion as determined by the FOQA Steering Committee and in accordance with the Saudi Aramco Aviation Department record retention policies.
- B. The FOQA Gatekeeper will be responsible for developing reports summarizing the information obtained through the FOQA Program. The reports will include summaries of the most recent information obtained through the FOQA Program as well as trend information to demonstrate the effectiveness of prior corrective actions. These reports will be distributed to all stakeholders involved on a regular basis. The FMT will solicit recommendations from the recipients of the reports in order to improve their usefulness as the program proceeds.

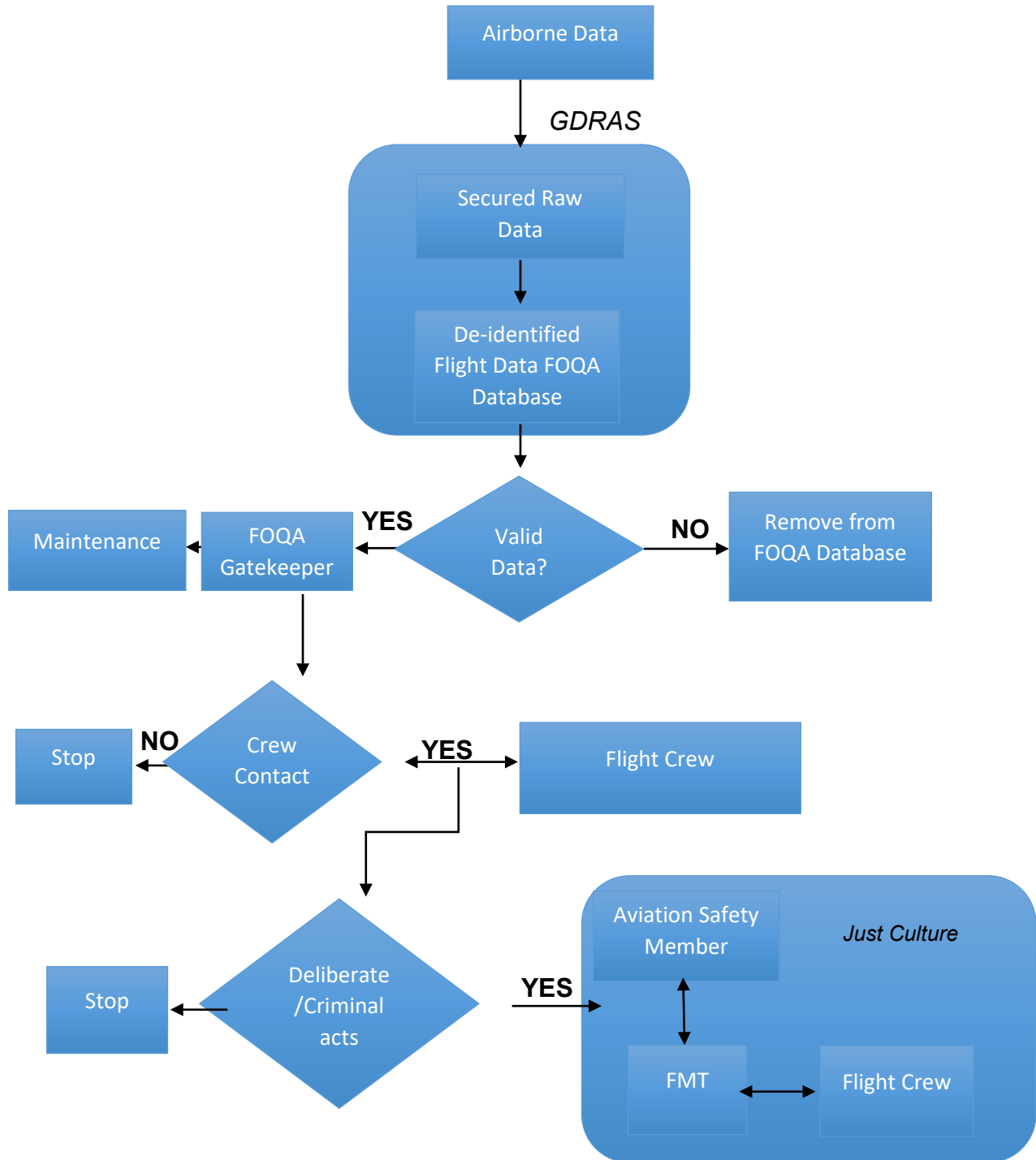
3.9.6.2 Flight Data Collection and Analysis

- A. Data may either automatically be uploaded by the system onboard the aircraft or MROD may retrieve and upload the data from the aircraft. If manually retrieved a ground analysis station will process the recorded flight data either locally or transmit the data to a third-party vendor.

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- B. Flight data will be analyzed by FOQA Specialist to determine what occurred and whether the recorded information was legitimate. A preliminary analysis will use the GDRAS to interpret identified events or trends and determine whether the information was valid or invalid because of bad data, a faulty sensor, or some other invalidating factor. In the event that the data reveals a situation of immediate concern, the gatekeeper shall notify the Aviation Safety Pilot who will in turn notify the FMT.

 - C. Preliminary review of the data to assess validity should be completed within 7 business days from the time the data is received. Further analysis of the data received is accomplished in relation to existing aggregate information within the FOQA Program. Program trend reports of the aggregate data are developed by the FOQA Gatekeeper with input from the FMT on a regular basis for presentation to stakeholders for use in developing corrective actions or for monitoring of operational issues.

3.9.6.3 Data Processing Flow Chart



3.9.6.4 Data Classifications and Definitions

- A. Parameters and measurements used in the FOQA program are contained below. The definitions will be programmed into the GDRAS to measure events and/or monitor trends. The performance limits that define these definitions will be continually reviewed by the FMT to determine they are consistent with the FOQA program goals, applicable publications, and guidance materials, which may include, but are not limited to, the following:
- Flight Operations Manual (OMA)
 - Quick Reference Handbooks (QRH)
 - Aircraft Flight Training materials
 - Approved Aircraft Flight Manuals (RFM)
 - Manufacturer Maintenance Manuals
- B. Event sets will be modified as deemed appropriate by the FMT and additional event sets will be defined as needed. The FOQA Gatekeeper will be responsible for maintaining the event sets and coordinating with the FMT.

3.9.6.5 Data Definition Maintenance

- A. The procedures for validating, reviewing, and defining event and trend definitions will be established by the FMT and they will determine whether the information is valid and reflects the qualification and performance standards, training practices, and aircraft performance limits. All changes in the event and trend definitions will be logged and maintained by the Gatekeeper.

3.9.6.6 Data Review and Evaluation

- A. All data recorded by the FOQA Program will be evaluated by the SRMG Manager and FMT on a periodic basis. FOQA data should be evaluated to determine if the program is accurately monitoring collected information for events and trends. The review and evaluation of the measurements, profiles, events, and trends used in FOQA Program should reflect changes, updates, or enhancements to policy and procedures within all stakeholders' departments. Consideration should also be given to any changes, updates, or enhancements to policies and procedures within GACA and industry.

3.9.6.7 Data Trending and Record Retention

- A. De-identified full flight data stored in the GDRAS will be periodically deleted as determined by the FOQA Steering Committee. Trend data will be maintained for a period of time as specified by the FMT in consultation with the FOQA Steering Committee. Maintenance shall retain the data as long as necessary to satisfy manufacture's warranties.

3.9.7 Documentation

3.9.7.1 Operational Development

- A. The FOQA Specialist will develop appropriate documentation for support of the FOQA program operation. This documentation will be used to provide routine support for the process and facilitate any personnel transitions that may occur during the program. All documents will be available on the Safety internal server.

3.9.7.2 Information and Data Control

- A. The FOQA Specialist will maintain a history of the information used in the FOQA program. This information will be stored on the Safety internal server. When a FOQA or safety issue is highlighted to the FMT, a tracking sheet will be used to track how trends are revealed and addressed. The tracking process will include:
- A description of the identified issue
 - Analysis that was accomplished
 - Specific corrective actions or recommendations taken or made
 - Personnel who were notified (e.g., flight crews [de-identified], Engineering, Maintenance, Operations, Training and Standards, Safety)
 - Resolution of actions or recommendations
- B. The tracking process will be used to generate a summary report for presentation to the FOQA Steering Committee and management. This log will be maintained in a secure place. The FOQA Steering Committee will establish the retention period for this log.

3.9.8 Training

- A. Pilot education about the FOQA Program will be accomplished during Pilot Initial Indoctrination and through Roads shows and Safety Event Bulletins when required. These Safety Event Bulletins will highlight FOQA issues, including featured events or issues of an urgent nature.
- B. All FOQA personnel will receive training on the GDRAS software. Additionally, FOQA stakeholders will visit other operators with established FOQA programs if possible. Other training will be provided as new hardware and/or software is added to the program.

3.10 Health and Usage Monitoring

- A. HUMS is a technical evaluation tool where onboard sensor-based monitoring systems measure the health and performance of critical aircraft components. By continuously monitoring vibration at critical points on an aircraft, HUMS provide actionable information for MROD so they can make data-informed decisions.
- B. The Company incorporates HUMS in its helicopter fleet to achieve the highest level of safety and as a predictive maintenance tool. Full procedures and responsibilities are contained in the Engineering Manual.

SECTION 4: SAFETY PROMOTION

4.1 Overview

- A. Safety Promotion is a process aimed at promoting a culture of safety by ensuring that all personnel in an organization are aware that, at their level and in their day-to-day activity, they are key players in safety and that everyone, therefore, contributes to an effective SMS.
- B. Safety promotion, whether relating to flight safety or ground safety, will be demonstrated by management activities. Vice Presidents and Directors will decide how to best to promote safety within their areas of responsibility. This may take the form of poster campaigns, formal training, activities, newsletters, safety bulletins, or any other method that shall convey the chosen message to a group of personnel.
- C. The content, frequency, and areas of applicability of such promotion will be very dependent on areas of content, frequency, and areas of a concern that may have been identified. Information such as occurrence reports statistics, audit findings, introduction of new working practices or standards, and achievement (or otherwise), of stated objectives and targets, should be used to highlight areas within the company which require attention.
- D. The Safety and Quality Division will work closely with management and SAG teams to carry out the safety promotion at each individual base.

4.2 Training and Education

- A. Formal personnel training programs and competency certifications are accomplished in accordance with applicable regulations and recommended practices. This includes documentation and assurance of qualifications, skills, competencies, training, equipment and tools necessary for all personnel to enable them to discharge their duties and responsibilities in a safe manner.

4.2.1 Training Needs Analysis

- A. The Company has established a specific training matrix in relationship to each employee position that includes SMS related subjects. This is reviewed annually by each Department and provided to Technical Training & Standards.

4.2.2 Safety Management System (SMS) Awareness Training

4.2.2.1 Scope

- A. SMS Awareness Training is provided to all Company employees to assist with their understanding of the SMS system and to encourage active participation and contribution to further the safety standards and goals set forth by management.
- B. Safety training will be documented for each employee by Technical Training & Standards. TT&S is responsible for ensuring that training records are up-to-date and on file, in accordance with applicable Company instructions and government regulations.

4.2.2.2 Training Requirement

A. Safety Management System (SMS) training will consist of the following:

- **Initial:** New Company employees within the first 3 months of employment.
- **Recurrent:** Every 24 months
- **Remedial:** Individuals who cause more than one accident or injury will be retrained. Remedial training will also be given to those employees who reveal a lack of knowledge or proficiency with respect to their jobs, even if no accident has resulted.

4.2.2.3 Qualification

A. Qualification is established by successful completion of a quiz or written exam. Subjects are covered in sufficient depth so as to provide adequate knowledge for personnel to accomplish their duties with the highest level of safety.

4.2.2.4 Evaluation of SMS Training

- A. Evaluation of training will be conducted at the end of SMS where it allows attendees to write the comments for improvement.
- B. This is done using a training assessment format to be reviewed by the SMS team. It aims to analyze analysis to identify the gap between the current safety, skill, and knowledge across the workforce, and to improve the syllabus.

4.2.3 Human Factors Training (HF)

- A. The purpose of human factors training is to increase safety, quality, and efficiency in operations by reducing human errors and its impact. Human Factors training encourage positive attitudes towards safety and discourage unsafe behavior and practices.
- B. Employees to be trained on initial and continuation Human Factors include all employees whose work has a direct or indirect effect on the safety of the aircraft.
- Accountable Executive
 - Maintenance post holders
 - Managers of Engineering, supply chain, ground equipment.
 - Technicians
 - Continuing airworthiness personnel, including planners
 - Safety and Quality assurance personnel
 - Human factors Trainers
 - Supply chain personnel
 - Equipment operators
 - Base SAG members

4.2.4 Auditor Training

- A. Company auditors should have the following training and background:
- Formal auditor training from an accepted accreditation (IATA or similar).
 - Relevant knowledge, background and appropriate experience related to the activities of the Company.

- Knowledge and experience in compliance monitoring.
- Demonstrate diplomacy, independence, ethics, and possess good verbal and written communication skills.

4.2.5 Other Technical & Specific Training

4.2.5.1 Talent Development

- A. Employee talent and organizational development programs are managed by the HR Division for all levels of personnel.

4.2.5.2 Job Specific Training

- A. Additional training in relation with tasks and duties of the employee shall be designed and developed by each individual Department/Division.

4.2.6 Internal Safety Trainers (SMS, HSSE, HF)

- A. Company training may be conducted in-house where instructors are responsible for ensuring that all materials, handbooks, presentations and tests used in training are valid and current at the time of training.
- B. Trainers for the subject shall be either a representative from the SAG or an appointed employee from the respective Department/Division. These personnel shall possess the following background and criteria:
- Attend a Train the Trainer (TTT) course appropriate for the subject matter.
 - Attend specific subject course matter.
 - On-Job training (OJT) with an experienced trainer with a minimum of 2 courses taught.
- C. Prior to the completion of OJT, the employee shall be assessed for competency and delivery method. Assessment can be done by the Director of Safety and Quality, SRMG Manager or HSSE Manager.

4.2.7 External Safety Training Provider (SMS)

- A. If SMS training is outsourced, the Company will provide company-specific SMS training that includes instruction regarding safety policy and objectives, how to use the confidential reporting system, and company safety performance.
- B. External trainers related to SMS training are required to meet the following requirements:
- Certified from an accredited organization.
 - Minimum 5 years' experience as trainers.
 - Manuals and course syllabus are current and up to date with all current changes.

4.3 Safety Communication

4.3.1 Visible Safety

- A. The Company's Safety Policy statement is visibly endorsed by the Accountable Executive and visible to all employees and stakeholders. Access to the Safety Policy is accomplished by logging into the Company Safety and Quality Reporting web application and selecting 'Documents' from the main menu, or through ShareK (Company intranet). Additional documentation regarding safety, quality, and various other aspects of company operations may be found within these same areas.

4.3.2 Issued Notices

- A. Promotion and awareness notices will be issued in the form of bulletins, posters, technical memos, and notices to aircrew, ground staff, support staff, and training. The formats of these documents will be dependent upon the type of information being communicated and the target audience.

4.3.3 Town Halls

- A. The Company is committed to ensuring employees are provided information from top management, the Accountable Executive and the management team will be carrying out town all sessions at each operating base at least twice (2) per calendar year.

4.3.4 Open Door Concept

- A. The Accountable Executive and Management are committed to an open-door concept and will ensure that access is provided directly to staff without prejudice.

4.4 SMS Communication

4.4.1 Notifications

- A. A notification will be issued to all applicable employees of lessons learned which have arisen from an incident or accident, as well as other SMS related information. These will be issued in the following formats:
- Safety Notice: A notice to all employees or specific personnel and/or Department/Division relating to any changes in procedures and safety alerts.
 - Quality Assurance Notice: A notice issued to all maintenance personnel on quality assurance related issues.
 - Safety Bulletin: Summary of an accident/incident report for lessons learned and sharing, both internally and externally.
 - HSSE Alert: Sharing of safety issues to all personnel at specific or all locations.

4.4.2 External Sharing

- A. Any document issued for an external entity shall be approved by the Director of Safety and Quality and/or the Accountable Executive.

4.4.3 External Publications

- A. External publications may be shared with personnel through the Safety and Quality Reporting web application. Examples of these publications for safety are:

- International or local Accident Investigation Bureau (AIB) reports
- Regulatory Notices
- HeliOffshore InfoShare
- Any safety publication that pertains to the Company's safety vision

4.5 Safety Awards Program

- A. The Company supports a Safety Award to recognize exemplary dedication to the safety of its operation. The awarded individual will receive a certificate from the Director of Safety and Quality. In addition, SRMG can recommend to the VP or Director that a monetary reward, such as gift card or vouchers, be awarded to the individual. Examples of actions that could be rewarded are:
- Identification of hazard(s) (an act or suggestion which prevents damage or injury).
 - Assisting in conducting an investigation or evaluation.
 - Accomplishing a safety training course that leads to an advanced qualification.
 - Performing research on a topic of safety interest to the Company and writing a report or article for use by the employees.
- B. Awards may be presented in a public forum, preferably by the Accountable Executive or Director of Safety and Quality. The goal is not only to reward the individual for safety vigilance and for preserving company resources but also to show, by example, that an investment in safety consciousness pays off in conserved resources that might otherwise be lost to accidents. The preservation of the story behind each safe act also helps to spread the exemplary behavior pattern throughout the Company.