



Maritime Helicopters

MARITIME HELICOPTERS

**3520 FAA Road
Homer, AK 99603**

Telephone: (907) 235-7771

Safety Management System

**Revision 2
08/14/24**

PROPRIETARY: ALL RIGHTS RESERVED. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING BY PHOTOCOPYING, RECORDING OR USE OF ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM WITHOUT EXPRESS WRITTEN PERMISSION OF MARITIME HELICOPTERS. © 2019 MARITIME HELICOPTERS

Published by:
Maritime Helicopters, Inc.
3520 FAA Road
Homer, AK 99603
(907) 235-7771

Copyright © 2019 Maritime Helicopters, Inc.

All Rights Reserved. No part of the contents of this document may be reproduced or transmitted in any form by any means without the written permission of Maritime Helicopters, Inc.



Record of Revisions

Rev No.	Date	Summary of Changes
Original	08/15/09	All Original
1	12/16/09	Online Reporting Added
2	01/06/09	Updated Personnel Organization Chart
3	03/10/10	Risk Assessment Tool Added
4	5/21/13	Updated Org Chart
5	09/02/14	Updated Personnel Throughout
6	04/01/19	Revised Safety & Quality Policy Statement, minor semantic changes throughout
7	11/01/21	Revised Safety & Quality Policy Statement, minor semantic changes throughout
Reissue	03/01/22	Formatting Revision for Company Standardization
Change 1	12/19/22	Reporting requirements amended for ISNetworld OSHA/FAA New Flight Risk Assessment Sheet
2	08/14/24	Personnel Change



Rev 2: 08/14/24

List of Effective Pages

[illegible]



Table of Contents

1.	INTRODUCTION	1
1.1	GENERAL INFORMATION	1
1.2	SMS FRAMEWORK	1
1.3	OVERVIEW OF SMS PROCESSES	2
1.4	OVERVIEW OF SMS PROCESSES	2
1.5	SCOPE OF SAFETY MANAGEMENT	4
1.6	INCIDENT REPORTER TM DATABASE	4
1.7	TECHNICAL MANAGEMENT SYSTEM	5
1.8	DEFINITIONS	7
2.	SAFETY POLICY AND OBJECTIVES	16
2.1	COMPONENT 1.0 OVERVIEW	16
2.2	ELEMENT 1.1 SAFETY POLICY	16
2.3	ELEMENT 1.2 MANAGEMENT COMMITMENT AND SAFETY ACCOUNTABILITIES	19
2.4	ELEMENT 1.3 - KEY SAFETY PERSONNEL	20
2.5	ELEMENT 1.4 - EMERGENCY PREPAREDNESS AND RESPONSE	21
2.6	ELEMENT 1.5 SMS DOCUMENTATION AND RECORDS	21
2.7	SMS PROCESS OUTPUTS	22
2.8	SMS OBJECTIVES	25
2.9	SMS GOALS	26
3.	SAFETY RISK MANAGEMENT	27
3.1	ELEMENT 2.1 HAZARD IDENTIFICATION AND ANALYSIS	27
3.2	ELEMENT 2.2 RISK ASSESSMENT AND CONTROL	29
4.	SAFETY ASSURANCE	33
4.1	COMPONENT 3.0 OVERVIEW	33
4.2	ELEMENT 3.1 SAFETY PERFORMANCE MONITORING AND MEASUREMENT	35
4.3	ELEMENT 3.2 MANAGEMENT OF CHANGE	40
4.4	ELEMENT 3.3 CONTINUAL IMPROVEMENT	41
5.	SAFETY PROMOTION	43
5.1	COMPONENT 4.0	43
5.2	ELEMENT 4.1 COMPETENCIES AND TRAINING	43
6.	SAFETY MANAGEMENT PLAN	47
6.1	GENERAL	47
6.2	SAFETY COMMITTEE	47
6.3	SAFETY TRAINING	48
6.4	ACCIDENT PREVENTION	49
7.	EMPLOYEE REPORTING SYSTEM	51
7.1	POLICIES	51
7.2	POSITIVE SAFETY CULTURE	51
7.3	RESPONSIBILITIES	52
7.4	HAZARD IDENTIFICATION	53
7.5	HAZARDS & EVENTS REQUIRING A REPORT	53
7.6	REPORTING PROCEDURES FOR HAZARDS & EVENT	54
7.7	REPORTING OF AIRCRAFT ACCIDENTS & INCIDENTS	56
7.8	REPORTING OF MINOR OCCURRENCES	56



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

7.9	REPORTING OF ERRORS AND/OR VIOLATIONS.....	56
7.10	NEAR MIDAIR COLLISION REPORTING	58
7.11	VOLUNTARY DISCLOSURE REPORTING PROGRAM.....	60
7.12	USE OF THE WEB-BASED VDRP TOOL FOR SUBMISSION OF VOLUNTARY DISCLOSURES	67
7.13	REPORTING OF AIRCRAFT ACCIDENT & INCIDENTS.....	68
7.14	REPORTING OF MINOR OCCURRENCES	69
7.15	REPORTING OF ERRORS AND/OR VIOLATIONS.....	69
7.16	NEAR MIDAIR COLLISION REPORTING	71
7.17	VOLUNTARY DISCLOSURE REPORTING PROGRAM.....	72
7.18	USE OF THE WEB-BASED VDRP TOOL FOR SUBMISSIONS OF VOLUNTARY DISCLOSURES.....	80
8.	SMS ORGANIZATION	82
8.1	STRUCTURE	82
8.2	SAFETY MANAGEMENT ORGANIZATIONAL CHAR.....	82
8.3	CHIEF OPERATIONS OFFICER - COO	83
8.4	QUALITY AND SAFETY MANAGER	83
8.5	SAFETY COMMITTEE	85
8.6	DEPARTMENT MANAGERS	87
8.7	PERSONNEL	88
9.	FLIGHT RISK ASSESSMENT	89
9.1	INTRODUCTION	89
9.2	FLIGHT RISK ASSESSMENT POLICY	89
9.3	RISK FACTORS	90
9.4	USE OF FLIGHT RISK ASSESSMENT TOOLS.....	92
9.5	SCENARIOS THAT MAY PROMPT A FLIGHT RISK ASSESSMENT	93
9.6	RISK ASSESSMENT TOOL	95



1. INTRODUCTION

1.1 General Information

BACKGROUND

Maritime Helicopters' Safety Management System has been developed from guidance contained in ICAO Document 9859: **Safety Management Manual**, Transport Canada Advisory Circular AC 107-001: **Guidance on Safety Management Systems Development**, and FAA's **Safety Management System Framework Guide** and **SMS Assurance Guide** (revisions dated July 15, 2009).

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:

- Health, Safety, & Environmental (HSE)
- Risk Management Program
- Internal Evaluation Program
- Event Investigation Program
- Emergency Response Plan
- SMS Forms Catalog

1.2 SMS Framework

STRUCTURE

Section titles and numbers of this SMS Manual correspond to the SMS components of FAA's SMS Framework Guide. Paragraphs and numbers also correspond to the SMS Framework Guide's elements and numbers, and sub-paragraphs correspond to the Guide's processes. The SMS Manual and each supporting program contains a Table of Contents with hyperlinks to all sections and paragraphs. These links permit rapid retrieval of information when documents are published in electronic format. The structure of this SMS Manual produces a user-friendly, auditable and standardized format, in alignment with both ICAO and FAA Frameworks.

SAFETY ATTRIBUTES

System Safety Attributes have been incorporated into this SMS Manual to ensure process outcomes and address SMS process interrelationships. Safety attributes include those of **Responsibility** and **Authority**; this means specifying who is responsible for accomplishment of a process or a procedure, and who is authorized to perform and revise that process or procedure. **Procedures** specify how an activity or process is accomplished. **Controls** help to ensure that procedures are followed and processes are satisfactorily completed. Many of these controls are contained in the Incident Reporter (IR) database. **Process measures** permit management to see how well various systems and processes are functioning, and to measure their success. Process measures enable system and/or process deficiencies to be identified and corrected, thereby elevating an already safe system to an even higher level of safety. Finally, **Interfaces** define input-output relationships between the activities of various processes, which include procedures, documentation, and flows of authority / responsibility / communication. These interfaces may involve lines of authority between departments, interactions between employees, departments and contractors, and consistency of procedures contained in written guidance. With regard to SMS activities, interfaces are the "Inputs" and "Outputs" of a process. *See definitions at the end of this Introduction for more information.*



1.3 Overview of SMS Processes

SMS processes are performed under the components of Safety Risk Management, Safety Assurance, and Safety Promotion. The following descriptions of SMS processes within each component provide an overview of the MHI Safety Management System, and how it is designed to operate.

1.4 Overview of SMS Processes

SAFETY RISK MANAGEMENT

System design (and existing system analysis) – The first step in Safety Risk Management (SRM) is to develop system and task descriptions for analysis. Here, the analysis needs to be only as extensive as needed to understand the processes in enough detail to:

- Develop procedures;
- Design appropriate training curricula;
- Identify hazards; and
- Measure performance.

Hazard identification – Next, operational processes are examined and **Hazard Identification Tools** are utilized to determine what could go wrong with operational processes (under both normal and abnormal operational conditions) that could be considered hazardous. This is how hazards are identified. Hazard ID tools may be found in the MHI **Risk Management Program**.

Risk analysis – When hazards are identified, they are then analyzed for their injury and damage potentials. Each hazard is analyzed in terms of **likelihood** of occurrence, and **severity** of resulting consequences. **Exposure** may also be considered, in terms of time, cycles, distance, and number of people or number of aircraft involved. This process is performed using the Incident Reporter database.

Risk assessment – Risk assessment is a decision step based on combined levels of severity and likelihood (and exposure, if desired). Is the risk acceptable? If so, the overall level of risk is recorded and operations commence, resume or continue. If the level of risk is unacceptable, risk controls and/or corrective actions may be needed, in order to bring risk down to an acceptable level.

Risk control – If one or more risks are unacceptable, risk controls and corrective actions must be developed and implemented. Most often, these entail either new processes or equipment, or changes to existing ones. Corrective actions typically eliminate or transfer risk in such a way that monitoring is not required. Risk controls typically require monitoring to ensure they are effective. The system is then evaluated with the proposed controls in place to see if the level of risk is now acceptable – this is called **residual risk**. Initial monitoring and a follow-up audit of each specific control are then performed, until it is determined that all identified risks for the proposed operation, change, etc. have been either accepted or mitigated to acceptable levels. These processes are also performed by managers using the IR database.

If initial monitoring and a follow-up audit of each specific risk control indicate conformance and effectiveness of the control, Safety Risk Management processes are complete and the system is ready for operation.

NOTE: Related system documentation may need to be updated to reflect the risk controls that have been put in place.

From here, Safety Assurance (SA) processes are performed that include continuous monitoring, internal audits, external audits, internal evaluations, and management reviews. These processes



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

determine regulatory compliance, conformity, and effectiveness of all risk controls. They also measure the performance of processes, and of the SMS itself.

SAFETY ASSURANCE

System operation – During system operation, monitoring and measurements of risk controls are critical to maintaining the high level of safety established by Safety Risk Management activities. This monitoring, measurement, and management of information and data acquired is accomplished using the safety assurance processes described below.

Data acquisition – Data is obtained from continuous monitoring of operational processes (e.g. dispatch procedures, observance of training activities, maintenance performed), internal audits, internal evaluations, and employee reports. Data is also obtained from event investigations. This data is needed to confirm regulatory compliance, and to test and confirm conformance with, and the effectiveness of, risk controls.

Analysis of data – As in Safety Risk Management, data must be analyzed in terms of performance objectives, and to determine the root causes of any shortfalls. Managers must also remain vigilant for any new conditions (hazards) that haven't appeared before, as well as unexpected results of system performance. Analysis of data produces outputs of identified hazards and root causes of deficiencies.

System assessment – The assessment process is one in which decisions are made. If assessment results are satisfactory, then monitoring, measurement and analysis of data continues and management continuously affirms that operational processes, as well as SMS processes, are producing desired results. If assessment results reveal risk control or system deficiencies, those deficiencies and non-conforming or ineffective risk controls go back into Safety Risk Management for correction.

Preventive / Corrective Action – When system assessment indicates that a system or operational process is not in conformance with established risk controls, corrections must be made to eliminate the causes of non-conformance. This does not require the same level of detail used in initial design. Often the corrective action needed is straightforward. If an existing risk control is not conforming or performing properly, it is "re-opened" in the IR database for improvement. If new hazards are found, they are recorded and managed through Safety Risk Management processes. If the system needs to be changed, the Quality & Safety Manager and/or the Safety Committee implement the necessary changes.

Management Review – The management review process looks at outputs of various safety risk management, safety assurance, and safety promotion activities. These SMS process outputs are specified for each process in Component 1 – Safety Policy and Objectives of this SMS Manual, and provide objective evidence of SMS performance. Top management uses the results of these reviews to determine whether any improvements are needed to SMS processes, and/or to operational processes within the organization.

NOTE: Sometimes, despite the efforts of all personnel and proper performance of their duties, risk is still not adequately being controlled (conditions may have changed so that the original control no longer is appropriate). This can be due to changes in contracts, changes to airports, new equipment, changing demographics of employee hiring pools, or a variety of new conditions. At any rate, when new and/or uncontrolled hazards are identified, the SRM process is again used to re-design system aspects (e.g. new procedures, training, etc.), or develop new risk controls.



SAFETY PROMOTION

Safety Promotion processes and activities provide support for all other SMS processes through clear communications of safety policy, and management's commitment to safety. Visible demonstration of this commitment to the SMS is also necessary in order to develop and improve the organization's positive safety culture. Safety promotion includes establishing competency requirements for safety-related positions, and training and qualification for personnel. This training aids personnel in understanding the SMS and its importance to safety and efficiency. Conveyance of lessons learned also keeps personnel informed and enhances overall organizational safety. Examples of Safety promotion within Maritime may include, Quarterly Safety Letters, Chief Inspectors CASS (Continuing Aviation Surveillance System) meetings and notes, Toolbox Talks, Annual Safety Training. Many safety topics will also be "trained" using the ThinkHR, online system.

1.5 Scope of Safety Management

Maritime Helicopters has developed an integrated and comprehensive Safety Management System for its entire organization. The SMS provides the highest reasonable level of safety by identifying and minimizing risks which could contribute to accidents, incidents, or injury to persons. MHI provides safety management covering the complete scope and life cycle of all systems and operational processes, including:

- Flight Operations;
- Operational Control (Dispatch / Flight Following);
- Maintenance and Inspection; including
 - Parts / materials
 - Resource management
 - Technical data
 - Quality control
 - Records management
 - Contract maintenance
- Cabin Safety;
- Security;
- Ground Handling and Servicing;
- Cargo Handling;
- Training of all Personnel.

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

1.6 Incident Reporter™ Database

Many of Maritime Helicopters' Safety Risk Management and Safety Assurance processes are performed using the Incident Reporter (IR) database, together with this SMS Manual and supporting programs. The IR database also serves as an Employee Reporting System (ERS) for the reporting of events, hazards, and other safety concerns. Reporting using the FIR ([Flight Irregularity Report](#)) GOR ([Ground Occurrence Report](#)), and FRI (First Report of Injury) are considered to be part of the Incident Reporter Database and will be kept by the Quality & Safety Manager.

MHI managers use the IR database to record, track and manage hazards identified through system / task analysis and the management of change. IR is also used to analyze, assess, control and manage safety risks (including substitute and residual risk), document responsibilities for the monitoring of risk controls, and to manage audit findings and internal / external evaluation findings.



Other tasks performed using the IR database include assignment of investigation responsibilities, corrective action plan (CAP) development, CAP acceptance by the appropriate risk-decision authority, and assignment of individual risk controls and corrective actions to specific individuals.

NOTE: If required by Maritime Helicopters' FAA Flight Standards District Office, the IR database may be listed in MHI Operations Specifications as an approved method of SMS recordkeeping.

1.7 Technical Management System

OVERVIEW

Maritime Helicopters' Technical Management System (TMS) provides a method of managing controlled documents, manuals, and programs, in order to ensure the availability and use of current and revised policies and procedures. The Technical Management System also ensures a minimum standard of compliance with applicable rules, regulations and requirements for the conduct of all MHI aviation activities. This includes identification and tracking of all applicable laws, regulations and standards, including approvals, authorizations, exemptions and permitted deviations.

RESPONSIBILITIES FOR TECHNICAL MANAGEMENT

MHI department managers are responsible and accountable for ensuring compliance with all applicable laws and regulations which apply to the operational processes they own. This includes the accomplishment of:

- Safety management processes and recordkeeping;
- Specific sections of the MHI Statement of Compliance (SOC);
- Assignment / availability of manuals, programs and other technical information which comprise the MHI manual system.

Department managers are further responsible and accountable for ensuring that all personnel are provided with easily accessible written guidance and technical publications, and for the continued revision and control of all documents within their respective departments.

APPLICABLE LAWS & REGULATIONS

The following documents and sources of information specify applicable regulations with which MHI must comply:

- **Manual System** - The MHI manual system contains references to regulations with which MHI must comply.
- **Operations Specifications** - MHI Operations Specifications (Ops Specs) as issued by FAA also require full compliance as part of MHI's minimum standard. Operations Specifications are included in the MHI manual system.
- **Foreign Licensing Requirements** - Regulations applicable to the State or country into which flight operations are conducted shall be complied with during those flight operations.
- **Contractual Requirements** - Contract requirements and specifications are considered minimum standards for MHI's contractual operations, which are incorporated into written guidance.
- **Standards & Best Practices** - MHI utilizes ICAO Standards and other Recommended Practices such as OGP (Oil and Gas Producers) as guidance for the development of MHI policies, procedures, standards and best practices. These internationally accepted standards are incorporated throughout the MHI manual system and other written guidance.
- **OSHA Requirements** - Occupational Health and Safety requirements are used as MHI minimum standards for worker safety and facility requirements.
- **Statement of Compliance** - MHI maintains a Statement of Compliance (SOC) as its primary means of identifying and documenting all current applicable regulations with which it must comply.



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

The Statement of Compliance may be divided into sections (such as Federal Aviation Regulations, OSHA Requirements, Foreign Licensing Requirements, etc.), and each of these sections may be further divided into those rules for which each department is responsible. For example, under the Federal Aviation Regulations, the Director of Operations is responsible for ensuring compliance with applicable FARs pertaining to flight operations and dispatch / flight following. Likewise, the Director of Maintenance is responsible for compliance with applicable FARs that pertain to aircraft maintenance and continued airworthiness.

MANUAL SYSTEM

Maritime Helicopters' manual system contains general policies, regulatory requirements, aircraft operating instructions and maintenance procedures. Technical data such as manufacturers' manuals and other aeronautical information is also incorporated into the manual system by reference. Department managers are responsible for accomplishing their respective portions of the MHI manual system, as specified in each manager's duties and responsibilities.

OPERATIONS MANUALS & INFORMATION

The Director of Operations is responsible for accomplishment of all manuals, programs, aeronautical information and other documents relating to flight operations.

MAINTENANCE MANUALS & INFORMATION

The Director of Maintenance is responsible for the accomplishment of all manuals, programs, technical data and information related to the performance of maintenance and continued airworthiness of all MHI aircraft.

SMS MANUAL, SUPPORTING PROGRAMS & INFORMATION

The Quality & Safety Manager is responsible for accomplishment of the SMS manual and supporting programs. The Quality & Safety Manager makes current versions of all relevant documents available at locations where operations essential to the effective functioning of the SMS are performed, and obsolete documents are promptly removed from all points of use. Each page of this SMS Manual and all supporting programs and forms contain controls at the bottom of each page to ensure against use of obsolete information. Obsolete documents and forms are removed from service and destroyed, to prevent unintentional use.

NOTE: Accomplishment refers to management, administration and revision of documents. This is not to be confused with the various duties and responsibilities of managers regarding MHI's Safety Management System.

DOCUMENT ASSIGNMENT

Control of manual assignment and distribution is provided by means of an online system. The current manual in each safety area is found in the Maritime Online Portal, placed there by the Director of Maintenance but reviewed monthly for currency by each department manager. In the case of the safety tab of the Maritime Master Publications List, those publications are reviewed by the Quality and Safety Manager, who is responsible for all Quality and Safety manuals, as well as the publishing, if not content of the Maritime Fuel Quality Manual.

If a regulatory issue does not pose an immediate hazard (for example, an incorrect regulatory reference), and can be corrected by manual revision, the Safety Committee may hold the change until the next program revision. If however a safety issue exists, the Safety Committee shall take any immediate actions required in the interest of safety and thereafter perform Safety Risk Management using the IR database.



NOTE: Unless a regulatory or safety issue exists, proposed changes are often held for incorporation into the next revision of a manual or program. In this case, the date by which the change must be incorporated may be shown as “Next Revision” on the Proposed Change Form.

All proposed changes should be retained by department managers for no less than one year. As a courtesy, all proposed changes that are not accepted by the Safety Committee should be copied and returned (if possible) to the person who proposed the change, with a brief reason as to why the change was not accepted.

REVISION CONSIDERATIONS

Revisions to MHI manuals, programs and other documents may be necessary whenever:

- Changes occur in management structure and/or staff;
- Changes occur in address, facility location(s), contact phone numbers or email addresses;
- Changes occur in Emergency Response Plan contact information;
- The company adds different aircraft types, equipment or geographic areas of operation;
- Regulatory changes necessitate a revision, including:
 - FAA Regulations;
 - OSHA Regulations;
 - Regulations of Foreign Authorities.

REVISION INTERFACES

Department managers present drafts of all proposed manual revisions to appropriate Safety Committee members for review and comment. Revision coordination is necessary to ensure that written guidance remains consistent and accurate between other programs and manuals within the MHI manual system.

Email, individual consultation or Safety Committee meeting may accomplish this coordination. Appropriate managers should review the draft, and are responsible for ensuring that the proposed revision:

- Does not conflict with other policies and procedures under that manager’s areas of responsibility.
- Does not require revision to other manuals or programs that are accomplished by that manager.

In the event a conflict exists, either the proposed revision will be modified or the other affected manuals and/or programs within the manual system shall be corrected. Should the proposed revision prompt or dictate a revision to other manuals or programs within the MHI manual system, the Safety Committee member responsible for accomplishment of such manuals or programs shall promptly make such required revisions using the same review process. Upon satisfactory review and coordination by appropriate Safety Committee members, draft revisions will be formalized and distributed.

1.8 Definitions

The following terms are used throughout this SMS Manual and supporting programs:

Accident – an unplanned event or series of events that results in death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment.

Accident / Incident (Ground) – An occurrence that involves damage to MHI aircraft, property, or personnel when no intent for flight exists. This can be damage or injury incurred while towing an aircraft (not during pushback, since then intent for flight exists), driving a vehicle, or falling down stairs, but is not limited to these events.



Aircraft Accident (NTSB 830.2 definition) means an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.

Aircraft Incident (NTSB 830.2 definition) means an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

Aircraft (reportable) means an accident that must be reported to NTSB.

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 may involve using scientific or mathematical methods for evaluation.

Assessment – process of measuring or judging the value or level of something.

- **Risk Assessment** – a quantifiable measurement of risk based on variables of exposure, severity and likelihood.
- **System Assessment** – a safety assurance process in which the performance of safety-related functions of operational processes area assessed against the objectives and expectations of those processes, and in which the performance of the SMS is assessed against its objectives and expectations.
- **External Assessment** – refers to an external audit by an oversight organization (e.g., FAA, CAA)

Attributes (System Safety) – first applied in the Air Transportation Oversight System (ATOS), *System Safety Attributes*, or *System Attributes*, are design criteria for written guidance, intended to ensure process outcomes. They form the basis for many SMS expectations:

- **Responsibility** – who is accountable for management and overall quality of a process (planning, organizing, directing, controlling) and its ultimate accomplishment.
- **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.
- **Procedures** – documented activities to accomplish various processes. ISO-9000-2000 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).
- **Controls** – checks and restraints designed into a process to ensure a desired result. Safety assurance activities of continuous monitoring, internal audits, internal evaluations, and management reviews, are examples of SMS controls. Other practices such as documentation, process reviews, and data tracking are also considered controls with respect to specific elements and processes.
- **Process Measures** – quantitative or qualitative measurements of process outputs, for the purpose of measuring the effectiveness of such processes. With regard to SMS, internal evaluations (which measure SMS process outputs) and management reviews are good examples of process measures.
- **Interfaces** – input-output relationships between the activities of various processes, which include procedures, documentation, and flows of authority / responsibility / communication. These interfaces may involve lines of authority between departments, interactions between employees, different departments and contractors, and consistency of procedures within written guidance. With regard to SMS activities, interfaces are the “Inputs” and “Outputs” of a process.



Audit – scheduled, formal reviews and verifications to evaluate compliance with policy, standards, regulations, 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 internally, by the organization being audited. In the context of this SMS Manual and supporting programs, internal audits are also referred to as departmental audits, wherein departments (e.g., flight operations, maintenance) audit themselves internally for regulatory compliance and other criteria.
- **External audit** – an audit conducted by an entity outside of the organization being audited. External audits by oversight organizations such as FAA or CAA are referred to as an **assessment**.
- **Vendor audit** – an audit performed to assure the quality of products and services received from a vendor or contractor.
- **Follow-up audit** – an audit conducted to determine the effectiveness of a risk control or corrective action that has been implemented.

Aviation system – the functional operation/production system used by an organization to produce a product or service. A “system” includes equipment, technology, personnel, managers and the working environment.

Causes - causes may be natural or man-made, active or passive, initiating or permitting, obvious or hidden. Those causes that lead immediately to an effect or outcome are often called direct causes. Direct causes often result from another set of causes, which could be called intermediate causes, and these may be the result of still other causes. When a chain of cause and effect is followed from a known effect or outcome, back to an origin or starting point, **Root Causes** are found. The process used to find root causes is called **Root Cause Analysis**.

Complete – nothing has been omitted and the attributes stated are essential and appropriate to the level of detail.

Conformity – fulfillment of a requirement (ref. ISO 9000-2000). This includes but is not limited to compliance with Federal regulations. It also includes company requirements, requirements of operator developed risk controls or operator specified policies and procedures.

Continual improvement – implementation of carefully analyzed corrective actions, and process measurement of those actions to ensure satisfactory process outputs; communication of lessons learned and further application of corrective actions to further improve processes and their outputs.

Continuous monitoring – uninterrupted watchfulness over the system.

Controls – are checks and restraints designed into a process to ensure a desired result.

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 nonconformity or other undesirable situation.

Corrective Action Plan (CAP) – one or more risk controls and/or corrective actions, which include follow-up inspection(s) and may include communication of lessons learned, which are documented and accepted by the appropriate risk decision authority, and implemented by persons who are assigned responsibility and accountability for their proper implementation.



Criteria – an accepted standard used in making a decision or judgment about something.

Documentation – information or meaningful data and its supporting medium (e.g., paper, electronic, etc.). In this context it is distinct from records because it includes the written description of policies, processes, procedures, objectives, requirements, authorities, responsibilities, or work instructions.

Evaluation – [ref. AC 120-59A] a functionally independent review of policies, procedures, and systems. The term is synonymous with **assessment**. If accomplished by the company itself (*internal evaluation*), the evaluation should be done by an element of the company other than the one performing the function being evaluated. With regard to this SMS Manual and supporting programs, internal evaluations are performed by the Quality & Safety Manager on operational departments, in order to measure the quality of SMS process outputs. The evaluation process builds on the concepts of auditing and inspection. An evaluation is an anticipatory process, and is designed to identify and correct potential findings before they occur. See: **Audit**.

Event – An accident, incident, mishap, irregularity, near-accident, “near-miss”, act, error, or other occurrence.

Expectations – are what an SMS component, element, or process is expected to accomplish or produce. This includes performance objectives, system outcomes, and process outputs.

- **Performance Objectives** represent the objective outcomes of a particular element or process.
- **Process Expectations** are the outputs a particular process is expected to produce, such as completed forms, data, records, etc.

Exposure - The amount of time, number of cycles, number of people involved, and/or amount of equipment involved in a given event, expressed in time, proximity, volume, or repetition.

FAA – Federal Aviation Administration

Fatal injury (NTSB 830.2 definition) – means any injury which results in death within 30 days of the accident.

Finding – a conclusion reached after examination or investigation. As applied to audits and evaluations, evidence of non-compliance with policy, standards, regulations, and/or contractual requirements.

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 prerequisite to an accident or incident.

Incident – a near-miss or minor-damage episode with minor consequences that could have resulted in greater loss; an unplanned event that could have resulted in an accident, or did result in minor damage, and indicates the existence of (though may not define) a hazard or hazardous condition(s).

Incident, Aircraft (NTSB 830.2 definition) means an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

Injury, Fatal (NTSB 830.2 definition) means any injury which results in death within 30 days of the accident.



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*.

Latent conditions – Weaknesses or deficiencies in a system that can contribute to an incident or accident but that will not, by themselves, cause an incident or accident to occur.

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.

Line management – management structure that operates the aviation system.

Minor occurrence – Minor aircraft damage or a minor injury that should be reported to management, but does not require reporting to NTSB.

- **Minor injury** – Minor cuts or bruises, minor first degree burns over less than 5% of the body, or minor fractures of fingers, toes or nose.
- **Minor aircraft damage** – Includes engine failure or damage limited to an engine if only one engine fails or is damaged, bent cowling or fairing, dented skin, small puncture holes in the skin, ground damage to propeller blades, damage to the landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips.

Mishap – An undesirable event that includes an aircraft accident / incident, personal injury, or damage to facilities, assets or other equipment.

Missing aircraft – An aircraft is considered to be missing when its position is unknown, and with the supply of fuel normally carried, can no longer be airborne.

Near-accident – A narrow escape from an actual accident; as used in the context of this manual, an event or situation which could have become an incident or accident that was narrowly averted.

Nonconformity – Non-fulfillment of a requirement (ref. ISO 9000-2000). This includes but is not limited to noncompliance with Federal regulations. It also includes company requirements, requirements of company- developed risk controls or company-specified policies and procedures.

Objective – the desired state or performance target of a process. An objective is usually the final state of a process and contains the results and outputs used to obtain the objective (see also *Safety objectives*).

Operational life cycle – period of time from implementation of a product/service until it is no longer in use.

Operational processes – (sometimes referred to as *systems*) are separate and distinct parts of an organization's aviation activities, such as flight operations; operational control (dispatch/flight following); maintenance and inspection; cabin safety; ground handling and servicing; cargo handling; and training.

Operational Risk Management (ORM) - A continuous, systematic process of identifying and controlling risks in all activities according to a set of pre-conceived parameters by applying appropriate management policies and procedures. This process includes detecting hazards,



assessing and analyzing risks, and implementing and monitoring risk controls to support effective, risk-based decision-making.

Outputs – The product of an SMS process, which is capable of being recorded, monitored, measured, and analyzed. Outputs are the minimum expectation for the content of each process area and the input for the next process in succession. Each of the outputs of a process should have a method of measurement specified by the service provider. Measures need not be quantitative where this is not practical, however some method of providing objective evidence of the attainment of the expectation is expected. The individual outputs of a process are the content of the measures.

Overdue aircraft - An aircraft is considered to be overdue when an ATC agency reports it as such, or when no information about the aircraft has been received by ATC or MHI (1) for 30 minutes after its last notified estimated time of arrival (ETA); (2) for 5 minutes after the estimated time of landing, after having landing clearance; or within 10 minutes after takeoff.

Oversight – a function that ensures the effective promulgation 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 this SMS Manual is conducted by an outside regulatory agency, such as the FAA, Transport Canada, or EASA.

Preventive Action – action to eliminate or mitigate the cause or reduce the effects of a potential nonconformity or other undesirable situation.

Probability - The likelihood an event will occur.

Procedure – specified way to carry out an activity or a process.

Process – set of interrelated or interacting activities which transforms inputs into outputs.

Process Measures – see Attributes (Process Measures).

Process Outputs – The expectations of a particular process in terms of measurable criteria.

Product/service – anything that might satisfy a want or need, which is offered in, or can be purchased in, the air transportation system.

Product/service provider – any entity that offers or sells a product/service to satisfy a want or need in the air transportation system. Examples of product/service providers include: aircraft and aircraft parts manufacturers; aircraft operators; providers of fueling and de-icing services; maintainers of aircraft, avionics, and air traffic control equipment; educators in the air transportation system; etc. (Note: any entity that is a direct consumer of air navigation services and or operates in the U.S. airspace is included in this classification; examples include: general aviation, military aviation, and public use aircraft operators.)

RCW – Risk Control Worksheet

RMR – Risk Management Record: a record created in the Incident Reporter database.

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 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.

Risk - The composite of predicted severity and likelihood of the potential effect of a hazard in the worst credible system state.

Risk Assessment - The systematic process of evaluating various risk levels for specific hazards identified with a particular task or operation, in terms of exposure, severity and likelihood.

Risk Control – refers to steps taken to eliminate hazards or to mitigate their effects by reducing severity, likelihood or exposure of risk associated with those hazards.

Risk level – The composite of predicted exposure, severity and likelihood of the potential effect of a hazard in the worst credible system state. Measured as High (unacceptable), Moderate (may be acceptable if mitigated), and Low (acceptable).

Root cause(s) – one or more basic initiating cause(s) which, either individually or combined, can lead to an undesirable outcome (such as an incident or accident).

Safety Assurance – processes within the SMS which include activities of continuous monitoring, internal audits, internal evaluations, external audits, data analysis, system assessment and management review, together which systematically provide confidence that organizational products/services meet or exceed safety requirements.

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 efficacy of preventive measures.

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) as well as support services, safety assurance and safety promotion).

- **Product/Service Provider Safety Management System (SMS-P)** – the SMS owned and operated by a product/service provider; in other words, this SMS Program.
- **Oversight Safety Management System (SMS-O)** – the SMS owned and operated by an oversight entity, such as FAA, Transport Canada or EASA.

SMS Manual – written guidance containing policies, procedures, roles, responsibilities, sub-programs and forms necessary for the formalized application of the Safety Management System.

Safety objectives – something sought or aimed for, related to safety.

- Safety objectives are generally based on the organization's safety policy.
- Safety objectives are generally specified for relevant functions and levels in the organization.

Safety planning – part of safety management focused on setting safety objectives and specifying necessary operational processes and related resources to fulfill quality objectives (i.e., assure the quality of operational process outputs).

Safety risk – the composite of predicted exposure, severity and likelihood of the potential effect of a hazard.



Safety risk control – anything that reduces or mitigates the safety risk of a hazard. Safety risk controls must be measurable and monitored to ensure effectiveness.

Safety Risk Management – processes within the SMS composed of describing and analyzing a system or task, identifying hazards and assessing / analyzing and controlling risk. These processes are embedded in the operational processes used to provide the product/service; they are not separate/distinct processes.

Safety-Risk Profile – also known as a Significant Safety Issue List, or SIL, the safety-risk profile lists the top ten or twelve potential hazards to which an organization is exposed. These areas of higher risk require increased vigilance and risk controls to ensure an accident, incident or injury does not occur.

Safety promotion – a combination of safety culture, training, and data sharing activities that support the implementation and operation of an SMS in an organization.

Serious Injury (NTSB 830.2 definition) means any injury which; (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (3) causes severe hemorrhages, nerve, muscle, or tendon damage; (4) involves any internal organ; or (5) involves second or third degree burns, or any burns affecting more than 5 percent of the body surface.

Severity - the consequence or impact of a hazard or event, in terms of degree of damage, injury, loss or harm.

Significant Event – An event where one or more fatal or serious injuries occurs, an aircraft receives substantial damage, or facilities / property are substantially damaged.

Substantial Damage (NTSB 830.2 definition) means damage or failure which adversely affects the structural strength, performance or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairings or cowling, dented skin, small punctured holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips are not considered substantial damage for the purpose of this part.

Substitute risk – risk unintentionally created as a consequence of safety risk control(s).

System – an integrated set of constituent 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.

System Attributes – see Attributes

Senior management – see Top management.

TC – Transport Canada

TCAS – Traffic alert and Collision Avoidance System.

TCAS RA – TCAS Resolution Advisory.



Top management – (ref. ISO 9000-2000 definition 3.2.7) the person or group of people who direct(s) and control(s) an organization.

Voluntary disclosure – (or self-disclosure, or Voluntary Disclosure Reporting Program (VDRP)) – a formal report or reporting program whereby an operator discloses a potential instance of regulatory non-compliance to FAA or CAA inspectors, together with a “comprehensive fix” (Corrective Action Plan) to prevent reoccurrence. Inadvertent errors, timeliness of reports, follow-through with the CAP, and other requirements may prevent or preclude civil penalties and/or certificate action against the operator.



2. SAFETY POLICY AND OBJECTIVES

Plan ahead to respond in a logical, coordinated manner to the news of an accident involving a company aircraft by putting together a team of key corporate personnel, each of whom will have specific, pre-assigned responsibilities in the event of an accident. Your Accident Response Team should be composed of a representative from each of the following departments (or their equivalents in your management structure) AND an alternate member, in the event a primary team member is involved in the accident:

2.1 Component 1.0 Overview

Maritime Helicopters conveys its safety policy through the company's **Safety & Quality Policy Statement**, signed by the company's accountable executive and published / visible to all employees and responsible parties. Additional statements of safety policy may be found throughout this and other company documents. MHI policies are to be considered mandates by all personnel and vendors. If a policy cannot be complied with for any reason, or if instructions or procedures are lacking that make policy compliance difficult, these problems must be brought to the attention of a manager or the Quality & Safety Manager. Telephonic notification should be used for issues that are of an urgent nature.

2.2 Element 1.1 Safety Policy

MISSION

Maritime Helicopters' mission is to achieve the highest level of safety possible by managing safety and reducing accidents, incidents and injuries, while at the same time increasing operational efficiency and providing a quality work environment for all personnel.

VISION

This mission (which includes attainment of strategic objectives), is accomplished through diligent and continued application of the company's SMS. Maritime Helicopters continually supports and promotes a positive safety culture among all managers and personnel by emphasizing the importance of safety in all activities and the responsibility of each individual to continually apply Operational Risk Management techniques. MHI provides the environment, tools, support, training and other resources necessary to achieve these strategic objectives.

DEDICATION TO SAFETY

Maritime Helicopters will regard the safety of its flight operations, crews, passengers and associated ground operations as the most important consideration throughout all its activities. The company's dedication to safety is made with the realization that risks must often be taken in the conduct of daily operations, and all personnel must accept the inherent risks associated with maintenance, flight operations and aviation in general. All personnel must remain devoted to duty, good judgment, sound operational planning, and efficient use of available resources.

REGULATORY COMPLIANCE

Principal elements governing the conduct of all operations are safety, regulatory compliance and strict observance of all company policies, standards and best practices. Adherence to MHI standards and best practices assures both regulatory compliance and a minimum level of safety. As a basic premise to safety, all activities conducted by flight, ground, and maintenance personnel shall be conducted in accordance with all applicable CAA / FAA regulations and all state and local laws. Further, all personnel must comply with the laws, regulations and procedures of those States (foreign countries) in which MHI operations are conducted. **It is important for all personnel to view regulatory compliance as a minimum standard.**



STANDARDS AND BEST PRACTICES

Standards & Best Practices are policies, procedures, methods and processes that have been developed by Maritime Helicopters to establish and maintain the highest level of safety possible. These standards and best practices are incorporated into the MHI manual system and written guidance, and shall be treated by all personnel as mandates. All standards and best 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 system safety. MHI will continue to investigate, pursue and adopt new safety standards and best practices that are commensurate with the highest levels of safety in the aviation industry.

OCCUPATIONAL HEALTH, SAFETY AND ENVIRONMENTAL PROTECTION

Maritime Helicopters 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 system safety alike. The health and safety of all personnel, the public and our environment, will remain continuing strategic objectives of Maritime Helicopters.

QUALITY MANAGEMENT AND SAFETY ASSURANCE

Maritime Helicopters managers will ensure that the products, services, systems and technologies it uses, whether developed internally or acquired externally, meet appropriate and specified standards. All quality management and assurance processes, including continuous monitoring, vendor audits, follow-up audits, departmental audits, internal / external evaluations, and management reviews, shall remain consistent with MHI's primary focus on safety risk management, and shall assure that intended process outputs conform with all regulatory and safety standards and best practices. All safety policies will be periodically reviewed to ensure they remain relevant and appropriate to the size, scope and types of activities conducted by Maritime Helicopters.

REPORTING OF UNSAFE CONDITIONS

Each employee is responsible for bringing to the immediate attention of a supervisor any action, conduct, event, observation, practice or operating principle that may lead to an unsafe condition. Maritime Helicopters personnel will be acknowledged and rewarded when they bring these issues to the attention of management. This will permit MHI to systematically identify and eliminate or control hazards, thus ensuring the highest possible degree of safety, quality of service and public protection.

ACCEPTING RISK IN SYSTEM AND TASK DESIGN

Utilizing procedures as set forth in the MHI [Risk Management Program](#), Maritime Helicopters determines the acceptability of safety-risks for each identified hazard prior to implementing:

- New system designs;
- Changes to existing system designs;
- New operations/procedures; and
- Modified operations/procedures.

For each identified hazard, a Risk Management Record (RMR) is created in the IR database and safety risk management processes are performed.

TRAINING & QUALIFICATION OF PERSONNEL

Formal personnel training programs and competency certifications are accomplished in accordance with applicable regulations and best practices as specified in the MHI manual system. 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.

POSITIVE SAFETY CULTURE

Maritime Helicopters continually supports a positive safety culture among all managers and personnel. An effective, positive safety culture is one in which all personnel and managers can identify and report safety issues, including unintentional errors, without fear of reprisal. It is the therefore the policy of MHI to encourage and reward employees for their reporting of hazards, errors and other safety concerns, and to educate managers and supervisors who may need assistance in moving away from apportioning blame, in order to create a climate of open communication and trust. Maritime Helicopters senior management advocates and promotes the growth of this positive safety culture as an essential component of safety management.

SAFETY & QUALITY POLICY STATEMENT

The owners, directors and officers (senior management) of Maritime Helicopters hereby pledge their commitment and dedication to the implementation and support of the MHI Safety Management System and resulting accident prevention. This commitment includes continual improvement in our level of safety, and to manage all safety risks to acceptable levels. Senior management is committed not only to fully comply with all applicable regulatory requirements, but to exceed those requirements in order to achieve the highest level of safety possible.

Maritime Helicopters' core values include the continued safety and health of all people and preservation of our environment. Our behavior will at all times remain ethical and of the highest standards, and we will continually demonstrate that we value people and the environment through our ethical behavior and commitments to health and safety. Safety and quality are both core business values and core personal values. We enjoy a competitive advantage through continually striving for high levels of both safety and quality, and our business is strengthened by making quality and safety excellence an integral part of all aviation activities.

Our objectives include a clear commitment to safety from all levels of management, clear safety measurements, and clear accountability. We will maintain open safety communications, and involve all relevant staff in the decision-making process. Objectives also include building and maintaining meaningful safety leadership skills by providing necessary training. The safety of our employees, customers and suppliers will be a continuing strategic issue. Maritime Helicopters maintains formal written safety objectives and goals, and ensures that everyone throughout the company understands and accepts those objectives and goals. Our most important goal is that of **Zero Harm to People or Environments!** We will remain focused on all safety objectives and goals through high quality standards, and by ensuring our communications and motivation systems remain effective and continually in place.

Each of us is expected to accept responsibility and accountability for our own behavior, and each of us will have an opportunity to participate in developing safety standards and procedures. We will openly communicate information about safety events, and will share our lessons learned with others. This is the basis for Maritime's **Just Culture**.

Each of us will remain vigilant and concerned for the safety of others in our organization. This requires that we learn from our mistakes, strive to reduce instances of human error, and develop systems and processes that both reduce human error, and are more error-tolerant. It is therefore essential that all personnel report instances of human error in which they are personally involved, or that they become aware of through any circumstances. By establishing and fostering a company-wide atmosphere of mutual trust, the uninhibited reporting of errors, hazards, incidents, irregularities and other occurrences that compromise safety will be encouraged. Through our uninhibited reporting of errors, MHI management will be able to learn more about existing risks within our operating environment,



and the effective dissemination of lessons learned from this enhanced level of error reporting will also result in a more informed organization and safer workplace.

To promote and encourage this uninhibited reporting, all personnel are advised that no disciplinary action will be taken against any person who reports an event or occurrence involving human error, ***provided all rules and regulations are being followed. This policy will not apply to those personnel who have behaved in a 'reckless' or illegal manner, or who have committed a series of human errors that indicates a general lack of care and professionalism.*** All reported errors, hazards, incidents and other irregularities or occurrences will be thoroughly investigated by MHI, root causes identified, risks assessed, corrective actions taken, and results communicated to all personnel.

Maritime Helicopters is committed to a process of continual improvement in the safety and quality of our ground, maintenance, flight and support activities. This includes periodic review of both safety policies and safety objectives, to ensure our policies remain relevant and appropriate. Safety and quality excellence will always be essential components of our mission, and your continued active participation in the company's Safety Management System will allow us to provide high quality products and services, while achieving the highest level of safety possible.

- Robert Fell, President & Chief Operating Officer:
- David Jones, Director of Operations:
- Matt Stevens, Director of Maintenance:
- Dave Buzga, Chief Pilot
- Steve Slade, Chief Inspector:
- David Barnett, Quality & Safety Manager:

2.3 Element 1.2 Management Commitment and Safety Accountabilities

COMMITMENTS OF TOP MANAGEMENT

The owners, directors and officers (senior management) of Maritime Helicopters are responsible for the continued support of the company's Safety Management System, and for providing the necessary resources in order for the SMS to function effectively. All levels of management within MHI are committed to, and accountable for our safety performance, including members of senior management. Senior management will hold line management and all employees accountable for safety performance.

Safety performance is also an important part of our management / employee evaluation system. Maritime Helicopters recognizes and rewards both individual and group safety performance. MHI management is committed to making everyone aware of all safety rules and processes, as well as each individual's personal responsibility to observe them.

Maritime Helicopters senior management is committed to providing all resources necessary to attain the strategic safety objectives set forth herein. Senior management is accountable for the diligent application of the company's Safety Management System and for its continued quality assurance, in order to achieve the highest level of safety in all MHI aviation activities.

COMMITMENTS OF MANAGERS

All levels of management, including senior management, support and actively engage in the core process of safety assurance, designed to discover latent conditions, non-compliance with all rules and regulations, and conformance with controls and expectations. All managers are committed to diligent continuous monitoring of operational processes and the establishment of performance indicators, which will help us evaluate our operational and safety performance.



Individual managers are committed to the integration of the company's Safety Management System into the training of all persons they supervise, and each assigned manager will actively participate as a member of the Safety Committee during periodic meetings.

Maritime Helicopters management welcomes input from all interested persons regarding the policies, procedures, standards and best practices contained herein. Utilizing your input, we will constantly improve the quality of our products and services, and further enhance the safety, reliability and professionalism of air transportation services provided by Maritime Helicopters.

COMMITMENTS TO SYSTEM SAFETY

All personnel, from senior management to line personnel and all levels of management in between, must be committed to **System Safety**. First conceived by visionary safety professionals in 1962, the System Safety Society defines system safety as follows:

“The system safety concept is the application of special technical and managerial skills to the systematic identification and elimination or control of hazards throughout the life-cycle of a system.”

System safety encompasses every aspect of all MHI aviation activities, and involves all personnel and vendors. Maritime Helicopters has therefore developed a comprehensive system-safety policy which includes the application of **Operational Risk Management**. ORM enables MHI personnel to identify hazards and manage risk by applying good judgment, sound operational planning, and efficient use of available resources at all times.

All supervisory personnel will support Maritime Helicopters' commitment to system safety by applying ORM to all aspects of ground, maintenance, flight operations and training. All MHI aircraft, equipment, facilities and records will be maintained to the highest standards of condition, safety and best practices.

ROLES, RESPONSIBILITIES & AUTHORITIES

Section 8: SMS Organization of this SMS Manual documents and defines the roles, responsibilities and relationships of all MHI personnel, including senior management, department managers, the Quality & Safety Manager, employees, and regulators. These and other safety-related positions, responsibilities, and authorities are communicated throughout Maritime Helicopters via memos, the MHI manual system, and during safety orientation training. All personnel, both individually and as a group, have a shared responsibility to uphold the highest standards of safety.

2.4 Element 1.3 - Key Safety Personnel

ACCOUNTABLE EXECUTIVE

As an authorized representative of senior management, Maritime Helicopters' President has been nominated as the accountable executive for continued diligent application of the MHI SMS, and for its continued quality assurance. The DOO is ultimately responsible for proper managing, monitoring and coordination of all SMS processes, and has the financial control necessary to ensure the SMS performs effectively.

Quality & Safety Manager Top management has appointed the Quality & Safety Manager to manage, monitor and coordinate SMS processes. The Quality & Safety Manager has responsibilities and authority that includes:

- Ensuring that processes needed for the SMS are established, implemented and maintained;



- Reporting to top management on the performance of the SMS and the need for improvement; and
- Communicating safety requirements and promoting awareness of safety expectations throughout the organization.

Irrespective of other responsibilities, The Quality & Safety Manager reports directly to the President, who holds the highest level of authority. Refer to **Section 8: SMS Organization** for more information.

2.5 Element 1.4 - Emergency Preparedness and Response

Members of the Safety Committee are jointly responsible for the quality of the Emergency Preparedness and Response process, and for satisfactory completion of periodic emergency response exercises. The MHI Emergency Response Plan is maintained under separate cover, and made available to personnel and other coordinating agencies who may require guidance in the event of an aircraft accident or other emergency.

The Quality & Safety Manager is responsible for accomplishment of all emergency response documentation and records, including accomplishment of the ERP document.

It is the policy of Maritime Helicopters to maintain itself in a state of preparedness to respond to an aircraft accident, incident or other emergency as set forth in the company's [Emergency Response Plan \(ERP\)](#). This preparedness includes continued updating of information and revisions to the ERP, annual simulation exercises for an aircraft accident, and other methods of process measurement.

NOTE: Refer to the MHI [Internal Evaluation Program](#) for more information regarding Emergency Response Plan exercises.

2.6 Element 1.5 SMS Documentation and Records

GENERAL INFORMATION

Maritime Helicopters maintains all required SMS documentation and records either in paper form or within the Incident Reporter (IR) database/FIR/GOR Database. Safety-related procedures and processes are documented, maintained and revised within this SMS Manual and supporting programs, with personnel responsibilities, authorities and accountabilities described for each safety-related procedure and process. Interfaces between these safety-related procedures and processes are also documented within the SMS Manual and supporting programs, and interactions between MHI managers and vendor POCs are recorded in the IR database. Paper records are kept in a secure and locked file cabinet, accessible only to the Quality & Safety Manager, members of the Safety Committee, and senior management.

SMS documentation refers to the safety policies, objectives and expectations as set forth in this SMS Manual and supporting programs.

SMS records are the outputs of SMS processes as specified in the following paragraph titled **SMS Process Outputs**.

RESPONSIBILITY AND AUTHORITY

The Quality & Safety Manager is responsible for the quality of all SMS documentation and records. This includes the identification, orderly maintenance, dating (with revision dates) and disposition of all SMS Manuals, supporting programs, and hard-copy records such as Audit finding Reports, completed Management Reviews, and records of SMS training.



The Quality & Safety Manager is also responsible for the continued maintenance, security, order and retention of the IR database, which contains electronic SMS records. This includes assignment of user names and account authorities for access to, and use of, the IR database.

All personnel who complete SMS records, both paper and electronic, are responsible and accountable for ensuring that records are legible, readily identifiable, dated and traceable to the activity involved. Personnel are also responsible for promptly removing from service and destroying all obsolete documents and forms, to prevent unintentional use.

DOCUMENT AVAILABILITY AND CONTROL

The Quality & Safety Manager makes current versions of the SMS Manual and supporting programs available and readily locatable at all locations where operations essential to the effective functioning of the SMS are performed, and causes obsolete documents to be promptly removed from all points of use. Each page of the MHI SMS Manual, supporting programs and all forms contain a built-in control (which includes the revision date in the footer of each page) to ensure against use of obsolete information.

Revisions to the SMS Manual and supporting programs, including acceptance of proposed revisions and approval for adequacy of use, are performed in accordance with procedures set forth in the MHI Technical Management System. See the **Introduction** of this SMS Manual for more information.

RECORDS RETENTION

SMS records are maintained by the Quality & Safety Manager so that they are readily retrievable and protected against damage, deterioration or loss. All records generated by the MHI Safety Management System shall be retained for no less than one year after they are made, or, in the case of Risk Management Records in the IR database, no less than one year after each record is CLOSED.

2.7 SMS Process Outputs

The MHI Safety Management System produces a number of **Process outputs** for SMS components of **Safety Risk Management**, **Safety Assurance**, and **Safety Promotion**. Process outputs of Safety Risk Management, for example, are the expectations for the Safety Risk Management component of the MHI SMS. Many process outputs become the inputs for other processes, as described below:

SAFETY RISK MANAGEMENT PROCESSES AND OUTPUTS

Process 2.1.1 System and Task Analysis produces outputs of system / task descriptions for:

- Initial designs of systems, organizational procedures, and products;
- Development of operational procedures;
- Planned major operational or organizational changes.

Process 2.1.2 Hazard Identification produces outputs of:

- Hazards recorded in the Incident Reporter (IR) database and FIR/GOR database
- Hazards tracked in the IR database.

NOTE: Outputs from System / Task Analysis and Hazard Identification become inputs for the Safety Risk Analysis process.

Process 2.2.1 Safety Risk Analysis is performed using the IR database, and produces outputs of:

- Assignment of severity and likelihood for each hazard;
- Consideration of exposure (if desired).



Process 2.2.2 Safety Risk Assessment produces records of acceptability for each risk in the IR database.

NOTE: Outputs from Safety Risk Analysis and Safety Risk Assessment become inputs for the Safety Risk Control process.

Process 2.2.3 Safety Risk Control produces, for each hazard with unacceptable risk, a CAP that includes:

- One or more risk controls to be recorded, assigned and tracked in the IR database;
- One or more corrective actions to be recorded, assigned and tracked in the IR database.

NOTE: Risk controls (RC) and corrective actions (CA) which comprise a Corrective Action Plan (CAP) are referred to as RC/CAs in the IR database. Outputs from Safety Risk Assessment and Safety Risk Control become inputs for Safety Assurance processes of Continuous Monitoring, Internal Audits, Internal / External Evaluations, Investigation, and Employee Reporting.

SAFETY ASSURANCE PROCESSES AND OUTPUTS

Process 3.1.1 Continuous Monitoring of operational processes produces outputs of:

- Objective evidence of monitoring activities;
- Audit Finding Reports.

Process 3.1.2 Internal Audits (Departmental Audits) produce outputs of:

- Plans and schedules for completion of audits;
- Audit Finding Reports.

Process 3.1.3 Internal Evaluation produces outputs of:

- Plans and schedules for completion of evaluations;
- Audit Finding Reports.

Process 3.1.4 External Audits / Evaluations / Assessments produce outputs of:

- Objective evidence of completion;
- Audit findings.

Process 3.1.5 Investigation produces outputs of investigation notes in the IR database for:

- Incidents (including near-accidents)
- Accidents
- Regulatory violations

Process 3.1.6 Employee Reporting and Feedback produces outputs of:

- Risk Management Records (RMRs) opened in the IR database.

NOTE: Outputs from Continuous Monitoring, Internal Audits, Internal Evaluations, External Audits, Investigations and Employee Reporting become inputs for the Analysis of Data process.



Process 3.1.7 Analysis of Data produces the following outputs for each source of data listed above:

- Deficient operational processes, for which new records are opened in the IR database;
- Root causes of accidents, incidents and regulatory violations, recorded in the IR database;
- Root causes of ineffective risk controls, recorded in IR;
- Potential new hazards, for which new records are created in IR.

NOTE: Outputs from Analysis of Data become inputs for the System Assessment process.

Process 3.1.8 System Assessment produces the following outputs:

- Corrective Action Plans in the IR database for deficient operational processes and newly identified hazards;
- Determinations of conformity with existing risk controls / SMS expectations (documented in the IR database as satisfactory follow-up audits);
- Nonconformities with existing risk controls / SMS expectations (recorded in IR under follow-up audit notes / nonconformities).

NOTE: Outputs from System Assessment may become inputs for the Hazard Identification process (when new hazards are found), or inputs for the Preventive / Corrective Action process (when nonconformities are revealed).

Process 3.1.9 Preventive / Corrective Action produces:

- Revised or additional risk controls and corrective actions for identified nonconformities with existing risk controls;
- Revised or additional risk controls and preventive actions for identified potential nonconformities with existing risk controls;
- Risk controls and/or corrective / preventive actions based on the findings of investigations.
- Safety Lessons Learned (recorded in the IR database)

NOTE: Outputs from ALL Safety Risk Management and ALL Safety Assurance processes become inputs for the Management Review process.

Process 3.1.10 Management Review produces:

- Completed Management Review Forms;
- Audit Finding Reports;
- New or revised Risk Management Records (RMRs) in the IR database.

SAFETY PROMOTION PROCESSES AND OUTPUTS

Process 4.1.1 Personnel Expectations (Competence) produces:

- Defined, documented and communicated competency requirements, responsibilities and authorities for aviation safety-related positions (see **Section 8: SMS Organization**);
- Evidence that persons assigned to aviation safety-related positions meet competency requirements.

Process 4.1.2 SMS Training produces:

- Plans and requirements for training;
- Records of required and delivered training;
- Incorporation of lessons learned into training.



All SMS Process outputs are recorded, monitored, measured, and analyzed, in accordance with procedures set forth in this SMS Manual and supporting programs.

2.8 SMS Objectives

PRIMARY SMS OBJECTIVES

Maritime Helicopters' Safety Management System is designed to prevent personal injury and property losses resulting from accidents and incidents. Primary objectives are also:

- To integrate safety by design;
- To identify hazards and mitigate associated risk;
- To provide a safe, healthy work environment for all personnel;
- To incorporate SMS awareness and education by providing programs delivered to employees;
- To encourage all employees to report errors and quality escapes through an incentive program;
- To motivate safe actions through continued improvement of a dynamic and positive safety culture;
- To work with MHI vendors and contractors to develop and implement safety interventions;
- To monitor intervention strategies in order to determine their effectiveness;
- To communicate the results of these efforts throughout MHI and industry;
- To develop and improve upon Standard Operating Procedures (SOPs), where applicable;
- To apply the appropriate levels of Operational Risk Management to all proposed new equipment acquisitions, facilities, operations and procedures; and
- To continually improve the effectiveness of MHI's Safety Management System through system assessments and annual management reviews that address all aspects of the SMS.

SAFETY AND QUALITY

Accomplishment of these objectives requires, in addition to safety management, quality process outputs. The following definitions of safety and quality are taken from IATA's Safety Management Systems Implementation Guide:

- **Safety** is an ideal state in which the risk of harm (to persons) or damage to property or the environment is reduced to an acceptable level through a continuing process of hazard identification and risk management.
- **Quality** is the degree to which a system consistently meets specified requirements, satisfies stated needs, or produces desired outcomes. Quality Assurance (QA) utilizes independent evaluation of established processes, procedures and documentation to identify systemic deficiencies. Quality Control (QC) measures compliance with existing standards through the use of continual testing and evaluation.

SAFETY BY DESIGN

Aviation is by nature a dynamic environment. Maintenance, inspection, administration, training, dispatch and flight operations all come together to form a system that is complex and difficult to manage. MHI Safety Management System must therefore also be dynamic and continually improving. This requires input from all personnel in all departments. When something goes wrong, root causes must be identified, hazards evaluated, risks assessed and risk controls or corrective actions implemented to prevent reoccurrence.

Input from employees enables Maritime Helicopters to develop systems and procedures that incorporate high standards and best practices which are more tolerant to human error. As these systems and procedures are developed and continually improved upon, MHI is provided with opportunities to incorporate *system safety principles* such as **controls**, that actually build safety into the various systems and processes that support and result in safe flight operations. **Safety By Design** is a primary objective for all systems and processes within this organization.



THE HIGHEST LEVEL OF SAFETY

This is Maritime Helicopters' objective; the highest level of safety attainable. All officers, managers and employees must strive to motivate and maintain safe actions through establishment of a cooperative and "just" safety culture, which will enable the identification of hazards, assessment of risks, implementation of risk controls and corrective actions, and the monitoring and follow-up of controls and actions to ensure their effectiveness. We shall communicate the results of these efforts throughout Maritime Helicopters, and to industry, in order to share our lessons learned and further foster a climate of open communication and safety improvement.

2.9 SMS Goals

The following specific and measurable goals have been established by the Safety Committee through implementation of Maritime Helicopters' Safety Management System:

- To consistently produce ZERO ACCIDENTS;
- To reduce annual insurance claims by 10% over the previous year;
- To reduce days lost to injury by 10% over the previous year;
- To increase the number of hazard and irregularity reports received by 10% over the previous year;
- To investigate all irregularities and occurrences within 10 days of the event.

JUST CULTURE

One key to the successful implementation of safety regulation is to attain a "**just culture**" reporting environment within aviation organizations, regulators and investigation authorities. This effective reporting culture depends on how those organizations handle blame and punishment.

Only a very small proportion of human actions that are unsafe are deliberate (e.g., criminal activity, substance abuse, use of controlled substances, reckless noncompliance, sabotage, etc.) and as such deserve sanctions of appropriate severity. A blanket amnesty on all unsafe acts would lack credibility in the eyes of employees and could be seen to oppose natural justice. A "no-blame" culture per se is therefore neither feasible nor desirable.

What is needed is a "just culture", an atmosphere of trust in which people are encouraged, even rewarded, for providing essential safety-related information - but in which they are also clear about where the line must be drawn between acceptable and unacceptable behavior.

There is a need to learn from [accidents](#) and [incidents](#) through safety investigation so as to take appropriate action to prevent the repetition of such events. In addition, it is important that even apparently minor occurrences are investigated, in order to prevent catalysts for major accidents. Safety analysis and investigation is a necessary and effective means of improving safety, by learning the appropriate lessons from safety occurrences and adopting preventative actions. It is therefore important that an environment exists where occurrences are reported, the necessary processes are in place for investigation and for the development of necessary preventative actions such as re-training, improved supervision etc.



3. SAFETY RISK MANAGEMENT

Safety Risk Management consists of processes designed by MHI to understand the critical characteristics of its systems and operational environment. This knowledge is then applied to the identification of hazards, risk decision-making, and the design of risk controls and corrective actions.

RISK MANAGEMENT PROGRAM

Instructions and guidance for managers regarding safety risk management processes may be found in this SMS Manual and within the MHI Risk Management Program, which is maintained under separate cover and hereby incorporated by reference. This supporting program contains policies, responsibilities, authorities, and procedures for Maritime Helicopters to effectively manage risk throughout the entire scope of its aviation activities.

INCIDENT REPORTER

Maritime Helicopters' Incident Reporter (IR) database is utilized by managers to record and document identified safety risks, assign investigation responsibilities, analyze and assess risks, develop and accept Corrective Action Plans, and assign risk controls and corrective actions to accountable managers. The IR database is also used by MHI managers to manage quality issues, and for proactive and predictive management of safety risks through trend analysis. Refer to the Safety Risk Management Process Flow Diagram on the following page for a graphic representation of how Incident Reporter is utilized to perform certain safety risk management processes.

3.1 Element 2.1 Hazard Identification and Analysis

PROCESS 2.1.1 SYSTEM AND TASK ANALYSIS

The System and Task Analysis process receives inputs in the form of system and task descriptions. These descriptions are developed by MHI managers in order to completely explain the interactions among hardware, software, people, and environment that make up the system or task being described. They must be in sufficient detail to identify hazards, develop operational procedures, and develop / implement risk controls. Operational procedures require sufficient detail for personnel to perform their jobs safely.

Department managers are responsible for the quality of the System and Task Analysis process for all operational processes they own.

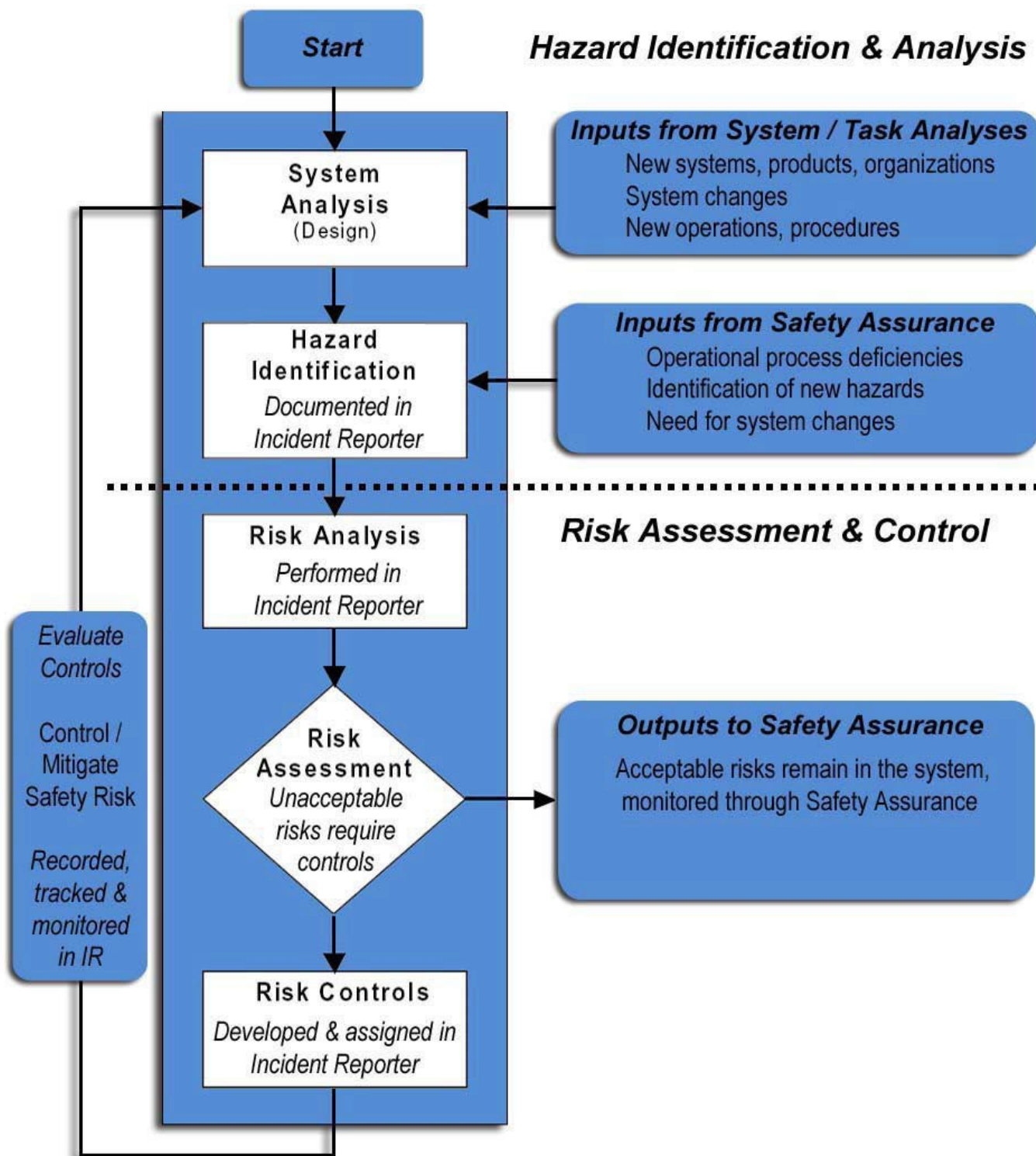
The System and Task Analysis process then uses these descriptions and developed procedures to gain an understanding of critical design and performance factors, processes, and activities. These analyses become inputs for the Hazard Identification process. System and task analyses are performed:

- During implementation of the MHI Safety Management System;
- During initial design of systems, organizational procedures, and products;
- During development of operational procedures;
- When a major operational or organizational change is planned;
- When key personnel change;
- When a new aircraft is introduced into the fleet;
- When a new type of operation is implemented (e.g., international, for-hire, RVSM, EMS, etc.).

The MHI [Risk Management Program](#) provides instructions and guidance to Maritime Helicopters personnel for system / task analysis and risk management procedures, in order to ensure that all risks associated with the proposed operation, activity or change have been properly managed, and risks mitigated.



SAFETY RISK MANAGEMENT PROCESS FLOW DIAGRAM



NOTE

Interactions and Interfaces between safety risk management and safety assurance activities are addressed in the IR database by assigning to managers and contractors, responsibilities for investigation, risk controls, monitoring and follow-up audits.



Element 2.1.2 Hazard Identification

Maritime Helicopters identifies hazards to safe operations for the entire scope of its aviation operations, and for each system as defined in system descriptions. Refer to this SMS Manual's **Introduction – Scope of Safety Management** for a complete listing of all systems and operational processes within which hazards are identified.

Department managers are responsible for the quality of the Hazard Identification process within the operational processes they own.

Members of the Safety Committee are both jointly and individually responsible for the quality of the Hazard Identification process for the entire scope of MHI aviation activities.

The Hazard Identification process receives inputs from a number of sources, including:

- System & task analyses;
- Continuous monitoring of operational processes;
- Surveys and feedback from personnel;
- Reports of incidents, errors, irregularities and other safety concerns;
- Event investigation;
- Internal audit and evaluation findings;
- FAA inspection & surveillance findings, industry safety reports, manufacturers' service bulletins, airworthiness directives, etc.
- Management reviews.

Instructions and guidance are contained in the MHI Risk Management Program for managers to effectively identify hazards within their respective departments. When hazards are identified, they are recorded, tracked and managed through the entire safety-risk management process. This is accomplished using the Incident Reporter database and guidance contained in the MHI [Risk Management Program](#).

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of Hazard Identification and inputs to the Safety Risk Analysis process.

3.2 Element 2.2 Risk Assessment and Control

PROCESS 2.2.1 SAFETY RISK ANALYSIS

The Safety Risk Analysis process receives inputs from Hazard Identification, in order to determine those factors which could cause a hazard to become realized as a potential adverse consequence. Identification of these factors is necessary in order to develop effective risk controls.

Department managers are responsible for the quality of the Safety Risk Analysis process, for hazards identified within the operational processes they own.

Members of the Safety Committee are both jointly and individually responsible for the quality of the Safety Risk Analysis process, for elements of the company's Safety Risk Profile.

The Safety Risk Analysis process is performed using the Incident Reporter database and guidance contained in the MHI [Risk Management Program](#). Proper analysis requires evaluation of existing safety risk controls and triggering mechanisms, or conditions, which could give rise to a potential adverse consequence. This includes human errors, equipment failures (hardware / software), environmental conditions (such as weather or lighting), process breakdowns (such as communications or control failures) and human interfaces with the hardware and software involved.



Some failures and accidents may require a combination or specific sequence of triggering conditions; others may require only one. All combinations of triggering mechanisms should be considered when analyzing safety risk.

NOTE: When analyzing outcomes or potential consequences of each safety risk, record risk statements in the IR Database. IR contains a reference tutorial to assist managers in developing accurate risk statements.

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of Safety Risk Analysis and inputs to the Safety Risk Assessment process.

PROCESS 2.2.2 SAFETY RISK ASSESSMENT

The Safety Risk Assessment process is used to assess the risk associated with each hazard, in terms of **likelihood** and **severity**. This assessment may be performed using the Risk Assessment Matrix in the MHI [Risk Management Program](#) as shown below. Risk may also be assessed directly in the IR database, where an additional value of **exposure** is used, in order to provide a more accurate assessment of overall risk.

Likelihood	Severity				
	Catastrophic	Critical	Major	Minor	Negligible
Certain					
Extremely Likely					
Likely					
Unlikely					
Remote					

Department managers are responsible for the quality of the Safety Risk Assessment process, for hazards identified within operational processes they own. Members of the Safety Committee are both jointly and individually responsible for the quality of the Safety Risk Assessment process, for elements of the company's Safety Risk Profile.

By combining values of severity and likelihood using this matrix, risk assessment is performed to determine **overall risk level**. The overall risk level (high, moderate, or low overall risk), is color-coded as shown in the matrix. This assessment allows management to make sound decisions, establish priorities, and implement risk controls and corrective actions to mitigate risk. Safety Risk Assessments are recorded in the IR database.



OVERALL RISK LEVELS

Red HIGH	High Risk – Unacceptable; REQUIRES HAZARD ELIMINATION or IMMEDIATE ACTION . If hazard cannot be eliminated, requires prompt risk controls and/or corrective actions to mitigate risk.
Yellow MODERATE	Moderate Risk – May be acceptable with risk-mitigating strategies; requires risk controls and/or corrective actions to mitigate risk.
Green LOW	Low Risk – Acceptable without further action

RISK ACCEPTANCE

Risk acceptance procedures and methods for effective risk mitigation are set forth in the MHI [Risk Management Program](#). This includes procedures for managers to accept overall residual risk and substitute risks, and for determining if the person accepting such risk is the appropriate risk-decision authority. Risk acceptance is documented in the IR database. Flight risk acceptance is documented on Flight Risk Assessment Checklists. See **Section 9: Flight Risk Assessment** for more information regarding acceptance of flight risks.

RISK CONTROL MEASURES

Maritime Helicopters managers develop and document their implementation of risk controls within the IR database. To assure the efficacy of these controls, MHI managers utilize macro-options, reduce options, and a preferred order of controls. This guidance is provided using reference tutorials within the IR database, and within the MHI [Risk Management Program](#).

For hazards that may exist in the short-term while safety risk control / mitigation plans are being developed and executed, **immediate actions to mitigate risk** are documented in the IR database, while additional risk controls and corrective actions are prioritized.

NOTE: Overall risk levels that are determined to be **HIGH** in the risk assessment matrix are unacceptable, even in the short-term, and require hazard elimination or immediate action to mitigate risk while additional risk control / mitigation plans are being developed and implemented.

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of Safety Risk Assessment and inputs to the Safety Risk Control process.

PROCESS 2.2.3 SAFETY RISK CONTROL / MITIGATION

For each identified hazard for which there is an unacceptable risk, MHI managers develop a Corrective Action Plan, or CAP, designed to reduce the potential for death, serious physical harm, or damage to equipment or property to acceptable levels. CAP development also requires analysis of any substitute risks. If substitute risks are present, additional risk controls to mitigate such risks are recorded as part of the CAP.

Department managers are responsible for the quality of the Safety Risk Control process, for hazards that apply to the operational processes they own.



Within the IR database, the Corrective Action Plan, together with risk assessments and all associated risk controls and corrective actions, are formally accepted by the appropriate risk-decision authority. A reference tutorial is provided within Incident Reporter as a control, to ensure that managers understand their responsibilities and accountability regarding safety risk acceptance.

Individual Risk Controls and Corrective Actions (RC/CAs) which comprise the CAP are then further developed, clearly described, and implemented by accountable managers, ready to be used in the operational environment for which they are intended. Each RC/CA is then monitored and/or scheduled for a follow-up audit, to ensure that expectations of effective risk mitigation have been met. All safety-risk control and mitigation activities are documented in the IR database.

NOTE: The Incident Reporter database permits recording of a follow-up audit for each individual risk control and corrective action. Controls built into the database prohibit closing of a record until all follow-up audits have been recorded as satisfactory. An unsatisfactory follow-up requires changes or additions to the affected Corrective Action Plan.

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of Safety Risk Control and inputs to the Safety Assurance processes of:

- Continuous Monitoring
- Internal (departmental) Audits
- Internal Evaluations
- External Evaluations
- Investigation
- Employee Reporting and Feedback

FEEDBACK LOOPS

Feedback loops are produced as risk controls from the Safety Risk Control process are audited, evaluated, and reviewed through Safety Assurance activities. These feedback loops are necessary for managers to ensure that implemented risk controls and corrective actions are working as expected, and to assess system performance. If feedback indicates a particular risk control is not properly mitigating risk as intended, the safety risk management process is re-applied. Feedback regarding the performance and effectiveness of risk controls may be received from one or all of the Safety Assurance processes as listed in the preceding paragraph.



4. SAFETY ASSURANCE

4.1 Component 3.0 Overview

Once systems are operational and risk controls are in place, Safety Assurance processes use quality management techniques for ensuring that risk controls and corrective actions achieve their intended objectives and, when they fall short, for improving them. Safety assurance can therefore be thought of as **quality management of safety related processes**, in order to achieve safety goals.

These same processes can and should be used to manage and improve the quality of all operational processes, products, and services provided by Maritime Helicopters, including issues pertaining to the quality of documents and records, grooming of front-line personnel, customer service, environmental protection, and occupational health & safety. Proper use of Safety Assurance processes produces consistent safety and quality policies, and harmonizes MHI safety management and quality management efforts.

SOURCES OF DATA

To perform the various Safety Assurance processes, data is collected from the following activities:

- Continuous Monitoring
- Internal Audits
- Internal Evaluations
- External Audits
- Investigations
- Employee Reports

This data is then analyzed through the **Analysis of Data** process to identify root causes of deficiencies in risk controls and operational processes. Data analysis also identifies new or previously undetected hazards.

Outputs from the Analysis of Data process become inputs for the **System Assessment** process, which is used to assess the performance of safety-related functions of operational processes, as well as conformity with existing risk controls and/or SMS requirements, including regulatory requirements.

Outputs from the System Assessment process become inputs for the **Preventive / Corrective Action** process, which is used to bring non-performing or poorly performing risk controls back into conformance with their intended design requirements. Existing risk controls in the IR database are modified or improved, and new risk controls and/or corrective actions are recorded and assigned as necessary.

MANAGEMENT REVIEW

Safety assurance also requires that top management perform a review of the SMS as a whole, to determine its effectiveness in managing safety risks. This is accomplished through quarterly **Management reviews** of the SMS, and a more extensive annual review, in accordance with the MHI [Internal Evaluation Program](#).

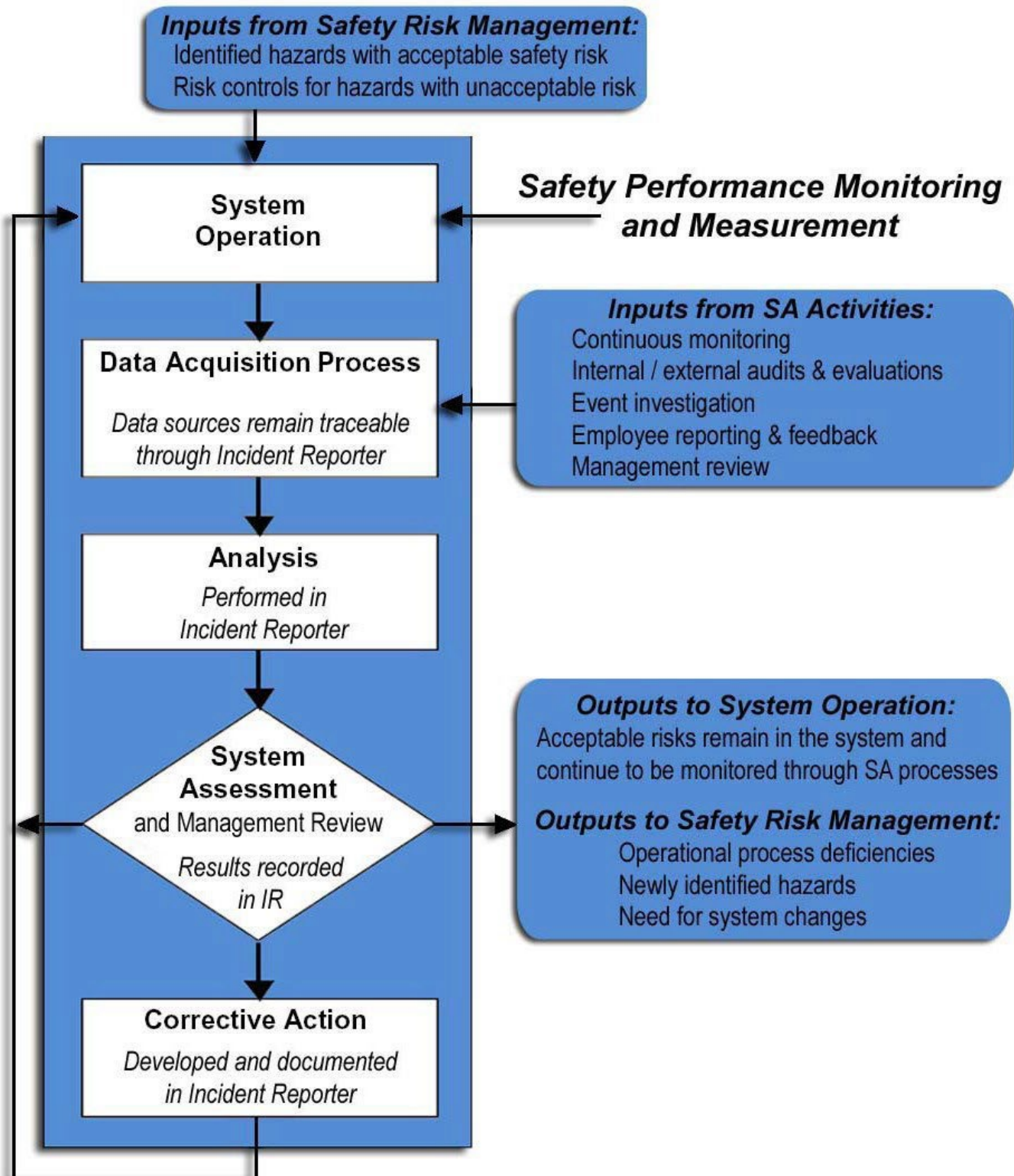
Data collected from management reviews is also analyzed for system deficiencies, and the IR database is again used to document and correct these findings.

Refer to the Safety Assurance Process Flow Diagram on the following page for a graphic depiction of the safety assurance process.

NOTE: Safety assurance processes must also address products and services received from contractors and vendors.



SAFETY ASSURANCE PROCESS FLOW DIAGRAM





4.2 Element 3.1 Safety Performance Monitoring and Measurement

PROCESS 3.1.1 CONTINUOUS MONITORING

Maritime Helicopters department managers monitor operational data for the processes they own, including products and services received from vendors and contractors. Continuous monitoring is performed in order to assure regulatory compliance, determine conformity with safety risk controls, measure the effectiveness of safety risk controls, assess system performance, and identify hazards to safe operations.

Department managers are responsible for the quality of the Continuous Monitoring process within their respective departments, and for their respective operational processes. Data inputs from monitoring include:

- Flight operations documents and records (e.g., flight schedules, logbooks, load manifests, flight releases, crew duty time reports, customs declarations, dangerous goods PIC notifications & declarations, etc.)
- Maintenance documents and records (e.g., maintenance logs, inspection status, work cards & packages, airworthy releases, Required Inspection Item (RII) authorities, duty time sheets, etc.)
- Records of training and certifications;
- Reports received from the Employee Reporting System;
- Risk controls implemented from the Risk Control / Mitigation process, as assigned in the IR database;
- Other operational data as necessary to assess system performance.

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of Continuous Monitoring and inputs to the Analysis of Data process.

PROCESS 3.1.2 INTERNAL AUDITS BY OPERATIONAL DEPARTMENTS

Internal audits by operational departments (departmental audits) are performed internally by managers within their respective departments.

Department managers are responsible for the quality of the Internal Audits process within their respective departments.

These audits serve two purposes. First, they confirm continued regulatory compliance. Managers are accountable for the operational processes within their departments, and are therefore best suited to determine compliance with those regulations for which they are held accountable.

Second, departmental audits are used to determine conformity with all risk controls which pertain to each specific department's operational processes, and to assess the performance of those risk controls. Departmental audits therefore receive inputs from those parts of the MHI Statement of Compliance which pertain to each department, and also from the Risk Control process, in the form of risk controls which pertain to the operational processes for which each department is responsible.

Refer to the MHI [Internal Evaluation Program](#) for responsibilities, policies, procedures, and methods for the performance of departmental audits, including the auditing of vendors and contractors.

NOTE: Auditors shall not audit their own work, in accordance with basic auditing and quality management principles.

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of Internal (departmental) Audits and inputs to the Analysis of Data process.



PROCESS 3.1.3 INTERNAL EVALUATION

Internal evaluations of all departments are performed by the Quality & Safety Manager (or delegate auditors). These evaluations are similar to departmental audits in that they also determine conformity with safety risk controls and assess the performance of those controls within the department being audited.

The Quality & Safety Manager is responsible for the quality of the Internal Evaluation process.

Internal Evaluations also look at operational processes within each department, and assist management in determining if the SMS is meeting the company's objectives and goals. **SMS process outputs** from within each department are sampled, in order to determine if operational processes within the department are conforming to SMS requirements. Internal Evaluations therefore receive inputs from the Risk Control process, in the form of risk controls which pertain to the operational processes of the department being evaluated.

Refer to the MHI [Internal Evaluation Program](#) for policies, procedures, and methods for the performance of internal evaluations.

NOTE: Internal evaluations are performed by the Quality & Safety Manager or delegated auditors, who should be functionally independent of the department being audited.

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of Internal Evaluation and inputs to the Analysis of Data process.

PROCESS 3.1.4 EXTERNAL AUDITING OF THE SMS

External audits are conducted by organizations or individuals outside of Maritime Helicopters. These may include audits by clients, accreditation agencies, insurance companies or designated IS-BAO auditors, as well as **assessments by oversight organizations** such as the Federal Aviation Administration or Civil Aviation Authorities. Inputs should be provided to external auditors from the Risk Control process, in the form of risk controls recorded in the IR database for the entire scope of all MHI operational processes. A printed copy of the Incident Report for each record may be used for this purpose.

Members of the Safety Committee are jointly and individually responsible for the quality of the External Auditing process.

NOTE: This responsibility is limited to the timely and accurate input of External Assessment results to the Analysis of Data process.

Maritime Helicopters will include the results of all assessments performed by oversight organizations in its Analysis of Data process. The Quality & Safety Manager is responsible for entering all findings from these assessments into the IR database for proper application of safety risk management and safety assurance processes.

The Safety Committee may also elect to include the results of audits performed by entities other than oversight organizations in its data analysis process, and for the development of risk-mitigating strategies. These objective, "outside-the-box," audits often reveal deficiencies or areas requiring improvement that would otherwise remain undetected.

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of External Auditing and inputs to the Analysis of Data process.



PROCESS 3.1.5 INVESTIGATION

Event investigation is an essential process of safety assurance. Through the investigation of events that occur, Maritime Helicopters collects data which helps to identify latent conditions that could contribute to a future incident or accident. These latent conditions may include previously unidentified hazards, or failures of existing risk controls. The Investigation process therefore requires inputs from the Risk Control process, in the form of existing risk controls recorded in the IR database. Other inputs as needed (such as surveys or interviews with personnel) will be generated during the Investigation process.

The Quality & Safety Manager is responsible for the quality of the Investigation process. The principles of Just Culture will continue to be a part of all Event Investigations.

Maritime Helicopters' Event Investigation Program provides Maritime Helicopters managers with responsibilities, policies, procedures and methods for the prompt and timely investigation of all incidents, accidents, near- accidents and instances of potential regulatory non-compliance that may occur. The program also provides information regarding the roles and responsibilities of employees, managers and investigative authorities during accident investigations.

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of Event Investigation and inputs to the Analysis of Data process.

NOTE: Refer to the MHI Event Investigation Program for instructions and guidance when investigating accidents, incidents, and other events.

PROCESS 3.1.6 EMPLOYEE REPORTING AND FEEDBACK SYSTEM

Maritime Helicopters' **Employee Reporting System** encourages all personnel to report accidents, incidents, near-accidents, hazards, irregularities, errors, instances of potential regulatory non-compliance and other safety concerns without fear of reprisal. Under this confidential and non-punitive reporting system, most safety issues are resolved through corrective action rather than through punishment or discipline.

The Quality & Safety Manager is responsible for the quality of the Employee Reporting and Feedback process.

Inputs for this process are encouraged through employee education and training, by providing employees with incentives for their active participation, and through the company's non-punitive policies.

Reports are validated and analyzed by appropriate managers to determine root causes and identify hazards to safe operations. Safety intervention strategies and/or Corrective Action Plans (CAPs) are then developed, implemented and monitored to validate effectiveness. Results of these safety management activities are communicated to MHI employees as lessons learned. By actively participating in this process, all company personnel and vendor employees make valuable contributions to the organization, thereby assisting MHI in achieving the highest possible level of safety.

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of Employee Reporting and inputs to the Analysis of Data process.

NOTE: Refer to **Section 7: Employee Reporting System** for more information, instructions and guidance.



PROCESS 3.1.7 ANALYSIS OF DATA

The Analysis of Data process uses data (inputs) collected from safety assurance activities of continuous monitoring, departmental audits, internal evaluations, external audits, investigations, and employee reports. This data is analyzed to:

- Assess the performance and effectiveness of risk controls
- Identify root causes of deficiencies
- Identify new hazards

Department managers are responsible for the quality of the Analysis of Data process, when data is received from continuous monitoring or departmental audits.

The Quality & Safety Manager and individual department managers are jointly responsible for the quality of the Analysis of Data process, when data is received from internal evaluations, external audits, investigations, or employee reports.

Newly identified hazards or operational process deficiencies require new Risk Management Records (RMRs) to be created in the Incident Reporter database, where Corrective Action Plans are developed and accountable managers implement new risk controls and corrective actions.

For findings of ineffective existing risk controls and system nonconformities, records are re-opened in the IR database, where revised and/or additional risk controls are recorded, and responsibilities for implementation assigned.

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of Analysis of Data and inputs to the System Assessment process.

NOTE: Instructions and procedures for validating and analyzing data may be found in the MHII [Risk Management Program](#).

PROCESS 3.1.8 SYSTEM ASSESSMENT

System Assessment is performed whenever a departmental audit or internal evaluation is conducted, or when an external audit reveals a process deficiency. System assessment receives inputs from the Analysis of Data process, in the form of existing Risk Management Records recorded in the IR database. The System Assessment process assesses the performance of risk controls and of the SMS against their objectives and expectations.

The Quality & Safety Manager is responsible for the quality of the System Assessment process.

System Assessment is performed using some of the same criteria used for departmental audits and internal evaluations. The Quality & Safety Manager performs a “find” in the IR database of all Risk Management Records (RMRs) for all operational processes, which pertain to the department being audited or evaluated. Particular attention is paid to Safety Risk Profile RMRs and risk controls, as these controls have a high level of associated risk and safety criticality.

Each record is systematically reviewed and the corresponding operational process assessed, in order to determine if the operational process is in conformance with risk controls, and if the operational process is producing desired results.

The System Assessment process is also intended to assess the performance of the SMS itself, against its objectives and expectations. If an existing risk control is not in conformance, or not



producing desired results, perhaps the deficiency lies within an SMS process, rather than the operational process the risk control is meant to address.

Results of the System Assessment process are recorded under the **Follow-ups Tab** in the IR database as follows:

For each existing risk control or corrective action (RC/CA) which pertains to the operational process being assessed, the Quality & Safety Manager will enter the date of the assessment in the AUDIT PERFORMED Field, and further record the individual RC/CA as Satisfactory, or Unsatisfactory.

- A satisfactory follow-up audit denotes **conformity** with existing safety risk control(s), and with SMS expectations, including regulatory requirements applicable to the SMS.
- An unsatisfactory follow-up audit denotes **nonconformity** with existing safety risk control(s); and/or with SMS requirement(s), including regulatory requirements applicable to the SMS.
- An Unsatisfactory follow-up audit requires additional information to be recorded in the FOLLOW-UP AUDIT NOTES / NONCONFORMITIES Field, which further defines the nonconformity.

If the System Assessment process reveals conformity, yet also identifies new or potential hazards, those new hazards must be recorded as **New Hazard(s) Found** in the FOLLOW-UP AUDIT NOTES / NONCONFORMITIES Field, together with details regarding the hazard. The Safety Risk Management process is then utilized to manage all new hazards found.

If the System Assessment process identifies the need for system changes, such needed changes will be recorded by creating new Risk Management Records in the IR database, and the Safety Risk Management process will be utilized to manage those needed changes.

See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of System Assessment and inputs to processes of Hazard Identification and/or Preventive / Corrective Action.

PROCESS 3.1.9 PREVENTIVE / CORRECTIVE ACTION

When System Assessment indicates that a system is not in conformance with its design requirements, or an operational process is not in conformance with established risk controls, corrections must be made to eliminate the causes of non-conformance, and to prevent recurrence. The Preventive / Corrective Action process receives inputs from System Assessment in the form of **nonconformities with existing safety risk control(s)**. Inputs are also received from investigation findings.

NOTE: Department managers will consider the findings of investigations and safety lessons learned in their development of both corrective actions and preventive actions.

PROCESS 3.1.10 MANAGEMENT REVIEW

Management review – The management review process looks at outputs of various safety risk management, safety assurance, and safety promotion activities. These **SMS process outputs** provide objective evidence of SMS performance. Top management uses the results of these reviews to determine whether any improvements are needed to SMS processes, and/or to operational processes within the organization.

The Quality & Safety Manager is responsible for the quality of the Management Review process.

NOTE: Instructions and procedures for the performance of quarterly and annual management reviews may be found in the MHI Internal Evaluation Program.



See **Component 1: Safety Policy & Objectives – SMS Process Outputs** for interfaces between outputs of Safety Risk Management and Safety Assurance components and inputs to the Management Review process.

4.3 Element 3.2 Management of Change

Change Management is used to identify hazards and determine acceptable safety risk for changes that may affect established services and operational processes, as well as for new system designs, changes to existing system designs, and new operations / procedures or modified operations / procedures. Inputs for this process are system / task descriptions for the proposed new system design, operation, or procedure.

The System and Task Analysis process uses these descriptions and newly developed procedures to gain an understanding of critical design and performance factors, processes, and activities. These analyses become inputs for the Hazard Identification process, in which hazards to safe operations are identified. Safety Risk Assessment and Safety Risk Analysis processes are then applied to each identified hazard, in order to determine acceptable levels of risk.

Department managers are responsible for the quality of the Management of Change process for all operational processes they own.

Members of the Safety Committee are jointly and individually responsible for the quality of the Management of Change process, for all changes which affect operational processes in more than one department.

Maritime Helicopters will not implement any of the following until the level of safety risk for each identified hazard has been determined to be acceptable for:

- New system designs;
- Changes to existing system designs;
- New operations or procedures;
- Modifications to existing operations or procedures.
- Changes to Key Personnel or Department Heads

During this process, hazards to existing operations may be identified. Should initial assessment of such a hazard indicate the potential for MODERATE or HIGH levels of risk, Maritime Helicopters personnel are authorized to take interim immediate action(s) to mitigate such risk, including cessation of flight operations, evacuation of personnel, etc.

NOTE: Instructions and procedures for the Management of Change process may be found in the MHI Risk Management Program.

The Management of Change process produces outputs of identified hazards and a safety risk assessment for each hazard. These outputs are recorded in the IR database and interface with (become inputs for) the Safety Risk Control process.

Maritime Helicopters ensures that it does not implement new system designs, changes to existing systems, new operations or procedures, or changes to operations or procedures, until the level of safety risk of each identified hazard is determined to be acceptable. This is accomplished by creating a new Risk Management Record in the IR database for each identified hazard. Controls built into Incident Reporter prevent the closing of a record until the level of safety risk for each identified hazard has been determined to be acceptable.



4.4 Element 3.3 Continual Improvement

Continual Improvement requires recurring application of various SMS processes. Maritime Helicopters' Continual Improvement process receives inputs (interfaces) through continuous application of Safety Risk Management and Safety Assurance processes, and by using and communicating safety lessons learned to all personnel. These activities continuously improve the effectiveness of risk controls, and of the SMS itself.

Members of the MHI Safety Committee are jointly and individually responsible for the quality of the Continual Improvement process.

The MHI Safety Management System provides a structured, documented method of establishing and promoting a system of continual improvement through quality management. One objective of the SMS is to proactively identify weaknesses in MHI management systems, operational processes, procedures, and employee training in order to efficiently target continual improvement strategies.

As departmental audits, vendor audits, internal evaluations and management reviews are performed, findings reveal new hazards and existing system / process / control deficiencies. These findings are documented on Audit Finding Reports and processes of Analysis of Data and System Assessment are applied.

Deficiencies in operational processes and existing risk controls, as well as newly identified hazards, are recorded in Incident Reporter, and the Safety Risk Management process is performed using the IR database. Follow-up audits ensure the effectiveness of risk controls and corrective actions, and results are communicated to appropriate personnel as safety lessons learned. This results in continual improvement, and proactively enhances safety throughout the organization.

DEFINITION OF LESSONS LEARNED

NOTE: A "good work practice" or innovative approach that is captured and shared to promote repeat applications, or an adverse work practice or experience that is captured and shared to avoid a recurrence

Solving existing problems provides opportunities to foster learning and embed knowledge (within a group, department or organization) that may help prevent similar problems from occurring in the future. Such knowledge is referred to as lessons learned. Gaining such knowledge, retaining it, and using it effectively is one of the objectives of Maritime Helicopters' Safety Management System.

Shared positive and negative work practices and experiences also provide excellent examples of situations and behaviors to emulate, as well as those to avoid. When communicated and applied, decision-making skills are improved at every level of the organization. Lessons learned contribute greatly to the overall safety, quality and efficiency of all MHI operations.

COMMUNICATION OF LESSONS LEARNED

Responsibilities for this vital SMS process are assigned to appropriate managers and documented in the IR database. Methods of communication, the names of accountable managers and the date(s) communications are affected are specified and recorded. These communications may be of an advisory nature, may inform personnel of risk controls & corrective actions taken to mitigate risk, or may be risk controls in and of themselves, recorded as part of a CAP to mitigate risk. Communication of lessons learned may also be sent to regulators, other operators of like equipment, manufacturers, or to industry in general. Likewise, lessons learned may come from industry, and be applied by Maritime Helicopters in the company's Safety Risk Management process.



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

When communication of a lesson learned is utilized as a risk control, the associated follow-up audit as recorded in the IR database will confirm whether the communication was satisfactory.

NOTE: Lessons learned may also come from sources outside the company, in the form of accident / incident reports from other operators, safety advisories, airworthiness directives and other sources. The Quality & Safety Manager and all department managers are responsible for disseminating this information throughout the organization to appropriate managers and personnel.

To further promote MHI process of Continual Improvement, Maritime Helicopters actively disseminates the results of safety investigations and analyses, and shares safety lessons learned both within the company and outside, if warranted. Lessons learned may come from industry, or may be lessons learned within the company, which are recorded in the IR database.

Findings from departmental audits, internal evaluations and other additional audits are assessed, analyzed and entered into the IR database for development of risk controls and corrective actions. Responsibilities for implementing these controls and actions are assigned, follow-up audits are performed, and results are communicated to appropriate personnel. These activities create a process of continual improvement designed to objectively, systematically and continuously monitor, assess and improve safety and quality throughout the entire scope of Maritime Helicopters' aviation activities.

NOTE: The Continual Improvement process is assured by measuring SMS process outputs during annual Management Review, and through trend analysis of safety and quality policies and objectives, audit and evaluation results, analysis of data, and corrective / preventive actions as recorded in the IR database.



5. SAFETY PROMOTION

5.1 Component 4.0

INTRODUCTION

Maritime Helicopters continually promotes the growth of a positive safety culture, and communicates this positive safety culture throughout MHI with policies, commitments, and actions of management. This begins with MHI's conspicuous publishing of the company's **Safety & Quality Policy Statement**. In addition:

- Maritime Helicopters communicates safety responsibilities for all personnel, which include clear and regular communications of safety policies, goals, expectations, standards, and performance to all employees.
- Maritime Helicopters' Employee Reporting System provides confidentiality and the ability to report anonymously, if desired, in order to promote and encourage the uninhibited reporting of hazards, errors, and safety concerns.
- The Incident Reporter database and SMS Information & Training Center provide accessible and efficient means of retrieving information and administering safety management training.
- MHI management allocates the necessary resources to implement and maintain the company's Safety Management System, thereby ensuring the highest level of safety.

Ongoing safety promotion activities of Maritime Helicopters include ensuring that new employees know what is expected of them with regard to safety management and how the MHI SMS functions. Employees are further instructed as to what their limits of authority are if a hazard or potential threat is perceived, how to communicate the presence of a threat or hazard, and what actions to take in such cases.

Methods of safety promotion include spoken and written word, posters, announcements, website updates, safety awards, etc. Above all, Maritime Helicopters provides ongoing safety promotion through continual demonstrations by management of hazard identification, prompt and decisive risk management, open communications and a "just" safety culture.

5.2 Element 4.1 Competencies and Training

PROCESS 4.1.1 PERSONNEL EXPECTATIONS (COMPETENCE)

Competency requirements are essential in order to ensure that personnel who perform safety-related functions have the knowledge, education, training and experience to carry out their duties with the highest level of professionalism and safety. Maritime Helicopters documents competency requirements for key safety personnel and other safety-related positions within the company, including requirements for:

- The Quality & Safety Manager; and
- Designated auditors.

The MHI Safety Committee is responsible for the quality of the Personnel Expectations process with regards to the position of Quality & Safety Manager.

The Quality & Safety Manager is responsible for the quality of the Personnel Expectations process for designated auditors.



Documented competency requirements for the position of Quality & Safety Manager may be found in Section 8: SMS Organization of this SMS Manual. Documented competency requirements for Auditors may be found in the MHI [Internal Evaluation Program](#).

Maritime Helicopters assures key safety personnel and personnel serving in other safety-related positions meet competency requirements by holding the Safety Committee accountable for these requirements. Quarterly Safety Committee meetings, which measure SMS outputs, also serve as controls to ensure procedures are followed for all safety-related operations and activities.

PROCESS 4.1.2 SMS TRAINING

Maritime Helicopters delivers, or causes to be delivered, SMS training for key safety personnel and other personnel who hold safety-related positions. Inputs for the SMS Training process are obtained from SMS outputs and the outputs of the Personnel Expectations process. By using these process outputs for the development of SMS training, Maritime Helicopters assures that key safety personnel and other personnel who hold safety-related positions meet and maintain necessary competency requirements.

The Quality & Safety Manager is responsible for the quality of the SMS Training process.

The Quality & Safety Manager and designated auditors will receive formal SMS Training commensurate with their levels of responsibility, and impact on the safety of Maritime Helicopters' products and services. SMS training will include, at a minimum:

- SMS Theory and Concepts, including the entire scope and content of:
 - Safety Policy and Objectives;
 - Safety Risk Management;
 - Safety Assurance;
 - Safety Promotion.

SMS training may be conducted in-house via traditional classroom training, or outsourced to a reputable provider of aviation safety training. If SMS training is conducted in-house, instructors are responsible for ensuring that all materials, handbooks, presentations and tests used in training are valid and current at the time of training.

If SMS training is outsourced, Maritime Helicopters will provide company-specific SMS training (such as instruction regarding how and where to use the Employee Reporting system). Company-specific SMS training will also cover safety lessons learned, as documented in the IR database.

SMS Training will be completed satisfactorily within the preceding 12 calendar months for each person's assigned duty position. Qualification is established by successful completion and documentation of a quiz or written exam. Subjects must be covered in sufficient depth so as to provide adequate knowledge for personnel to accomplish their duties with the highest level of safety.

The Quality & Safety Manager assembles and maintains a training folder for each individual who receives SMS training. These training folders are kept in the training records files at the company's principal base of operations. The Quality & Safety Manager is charged with the overall accuracy, completeness, maintenance and security of all SMS training files. Training files contain a record of the satisfactory completion of both initial and recurrent training for each individual. These records shall be maintained for as long as the individual is performing duties for the company, and for no less than 90 days thereafter.



The SMS Training process produces outputs of:

- Plans and requirements for training (as set forth above);
- Records of required and delivered training;
- Incorporation of lessons learned into training.

NOTE: The MHI SMS Information and Training Center (SMS ITC) generates automatic email reminders of competency and training due dates. The SMS ITC is also be used by managers to periodically review competencies and ensure the effectiveness of the SMS Training process.

ELEMENT 4.2 COMMUNICATION AND AWARENESS

This important element of Safety Promotion communicates SMS process outputs to employees. Through this sharing of information, employees see the results of their safety and quality management efforts. Maritime Helicopters' FAA oversight organization is also provided access to SMS process outputs, in accordance with established agreements and disclosure programs.

Inputs for the Communication and Awareness process are obtained from outputs of Safety Risk Management and Safety Assurance processes, which include:

- Hazard identification
- Risk severity and likelihood
- Risk assessments
- Risk control/mitigation plans
- Safety lessons learned
- Results of analysis of data

The Quality & Safety Manager is responsible for the quality of the Communication and Awareness process.

Outputs of Safety Risk Management and Safety Assurance processes as specified above are communicated to employees via distribution of Safety Risk Management (SRM) Process Reports, generated from the IR database by the Quality & Safety Manager.

NOTE: SRM Reports may contain confidential information, and should therefore be edited and de-identified prior to distribution.

Visiting oversight inspectors may be provided with view only access privileges to the IR database, in order for inspectors to view SMS process outputs in accordance with established agreements and disclosure programs.

Identified hazards, risk controls and safety lessons learned that may be of interest to other organizations are also communicated, in order to inter-operate with those organizations' SMSs, and cooperatively manage issues of mutual concern. Communications with other organizations are recorded in the IR database as **communications of safety lessons learned**. Refer to **Element 3.3 Continual Improvement** for more information regarding lessons learned.



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

GENERAL COMMUNICATIONS

These communications convey information of a general nature that is not related to specific safety issues, and further employee awareness of SMS benefits. Topics may include:

- Number of days worked without an injury;
- Positive impact of the company's Safety Management System;
- Success stories on how sharp eyes have identified hazards and risks have been mitigated;
- Announcements of safety awards presented to personnel for outstanding contributions, etc.



6. SAFETY MANAGEMENT PLAN

6.1 General

An aircraft incident is an occurrence other than an accident associated with the operation of an aircraft that affects, or could affect, the safety of operations.

- In an incident, the aircraft receives less than substantial damage; or if injury to personnel is involved, the injury is less than serious.
- Refer to **Definitions** in Section 1 of this ERP for descriptions of SERIOUS INJURY and SUBSTANTIAL DAMAGE.

The MHI Safety Management Plan describes methods for achieving the safety objectives and goals specified in **Section 1: Introduction** of this SMS Manual. The Plan is comprised of activities within the core operational processes of Safety Risk Management and Safety Assurance, as well as Safety Promotion. Other processes (such as job-specific safety training and OSHA policy) also assist MHI in achieving safety objectives and goals. Together, these activities and processes provide the foundation for an effective Accident Prevention Program.

SAFETY RISK MANAGEMENT

Maritime Helicopters' safety risk management efforts include instructions, guidance and training in the application of Operational Risk Management, which enables personnel at all levels to make sound decisions. This process is applied to daily tasking, project planning, change management and strategic objectives such as growth, acquisitions, new equipment, procedures and regulations. The ORM process enables identification of hazards and development of risk controls during process design and planning stages of all training, maintenance, ground and flight operations activities. ORM also assures effective change management, and success in all MHI endeavors. When applied by all persons within Maritime Helicopters, ORM protects personnel and assets, reduces liability, and effectively contributes to accident prevention.

SAFETY ASSURANCE

Continuous monitoring of systems and operations (which includes products and services received from contractors), internal audits and evaluations, external audits, investigation, and other safety assurance processes are performed in accordance with guidance contained in this SMS Manual and supporting programs. When monitoring, audits or investigations reveal deficiencies or areas in need of improvement, accountable managers create Risk Management Records in the IR database. Risk management and/or quality improvement strategies are then developed, responsibilities assigned, and Corrective Action Plans are implemented. All of these activities are recorded and tracked within the IR database.

SAFETY PROMOTION

Maritime Helicopters' safety promotion activities continually foster and promote the company's positive safety culture, which supports the SMS and facilitates employee reporting. Safety Promotion is integrated into planning, communications, and training. Surveys provide valuable feedback to management regarding the effectiveness of training, and proper functioning of all systems. Communication of **lessons learned** also promotes MHI's positive safety culture, by keeping personnel informed about continuing risk management and process improvement strategies that have been successfully applied.

6.2 Safety Committee

The Safety Committee is comprised of MHI management personnel, and includes MHI's accountable executive, who holds the highest level of authority. All Safety Committee members are actively involved with daily flight operations, ground, maintenance and training activities. They are therefore



well-suited to be Safety Committee members and hold both the responsibility and authority to participate in Safety Committee meetings and implement safety directives.

ACTIVITIES

The Safety Committee addresses any and all matters relating to the health and safety of employees, customers and the general public. Safety Committee members are also accountable, both jointly and individually, for compliance with all national and local laws, including those pertaining to the environment (EPA regulations).

Loss prevention through the identification of hazards and assessment of risk is an essential activity of the Safety Committee and its members.

INTERFACES

Safety Committee members coordinate and assign duties and responsibilities for all courses of action designed to mitigate risk, and for hazard communication to all personnel. The Safety Committee also manages interfaces:

- Between manuals and programs comprising the MHI manual system, to ensure consistency of content and written guidance;
- Between Safety Risk Management (SRM) and Safety Assurance (SA) activities involving different departments, vendors and contractors.

Through the Safety Committee's risk and quality management activities, the Committee ensures a process of continual improvement at Maritime Helicopters. Refer to **Section 8: SMS Organization** for more information regarding the duties and responsibilities of the MHI Safety Committee.

PROCEDURES AND CONTROLS

For processes within the SMS components of Safety Risk Management, Safety Assurance, and Safety Promotion, procedures with measurable criteria have been established to accomplish the objectives of Maritime Helicopters' safety policy. Processes are documented and continuously monitored. Outputs of each process within each system are recorded, measured and analyzed. Process controls ensure procedures are followed for all safety-related operations and activities, enabling all personnel and managers to perform their duties with the highest degree of safety.

6.3 Safety Training

SAFETY TRAINING OF PERSONNEL

Maritime Helicopters provides all personnel with **safety orientation/indoctrination training**. This training includes the application and use of MHI's Safety Management System, the contents of this SMS Manual, and specific safety education programs appropriate to each person's job duties.

SPECIFIC JOB-RELATED TRAINING

MHI trains or provides training of sufficient quality, depth and quantity in each employee's job duties and areas of responsibility, to enable each employee to perform and discharge their duties with the highest level of competency and safety. Personnel training programs and competency certifications are accomplished in accordance with applicable regulations and best practices, as specified in the MHI manual system. This includes documentation and assurance of qualifications, skills, competencies, training, equipment and tools necessary for all personnel to enable the discharge of their duties and responsibilities in a safe manner. When a student has completed Training, they will forward the date and time training was completed to the Quality & Safety Manager at safety@maritimehelicopters.com



RETRAINING OF PERSONNEL

Maritime Helicopters will retrain personnel, or administer additional training to personnel, without penalty or stigma, when an error, violation, irregularity, incident, occurrence or other event occurs that might compromise safety. Such error or event must not however be the result of negligence or willful violation of regulations, policy, standards and/or best practices.

6.4 Accident Prevention

Utilizing instructions and guidance within the programs listed below, Maritime Helicopters performs aggressive accident prevention by accurately discovering systemic and organizational deficiencies that could contribute to an accident. This enables management to focus safety efforts in those areas where hazard remediation can have the greatest effect on reducing future accidents. These supporting programs therefore each play an important role in accident prevention.

EMPLOYEE REPORTING SYSTEM

The Employee Reporting System (ERS) is utilized by all personnel for the reporting of hazards, irregularities, errors, violations, near-accidents and other safety concerns. This non-punitive system encourages employees to report these events without fear of retribution. Open, uninhibited reporting, and a positive safety culture to support such reporting, are necessary for identification of hazards and latent conditions that could contribute to an accident.

RISK MANAGEMENT PROGRAM

Maritime Helicopters' [Risk Management Program](#) enables managers to systematically validate and analyze data taken from the Employee Reporting System, audit findings, event investigations and external assessments. The program provides detailed instructions for the performance of system / task analysis, hazard identification, risk assessment and analysis. When risk analysis dictates, hazards are eliminated or risks mitigated through Corrective Action Plans (CAPs). Risk controls and/or corrective actions are prioritized, implemented and documented, responsibilities for monitoring are assigned, and follow-up audits performed.

INTERNAL EVALUATION PROGRAM

The [Internal Evaluation Program](#) (IEP) is managed by the Quality & Safety Manager and consists of **Departmental Audits** conducted internally by department managers, and **Internal Evaluations** of operational departments, conducted by the Quality & Safety Manager and/or other designated auditors. Periodic **Management Reviews** are also performed by the Safety Committee and top management. The IEP ensures compliance with applicable regulations, conformity of risk controls, and measures the effectiveness of risk controls and the SMS. Proper use of the IEP provides opportunities to improve organizational policies, procedures and processes throughout MHI. Audit findings are channeled into the Risk Management Program for risk control and system improvements.

EVENT INVESTIGATION PROGRAM

Maritime Helicopters investigates accidents, incidents, near-accidents, and instances of potential regulatory noncompliance. Other aircraft and non-aircraft related events, irregularities, injuries, and occurrences are also investigated in order to determine probable causes and latent conditions which may have contributed to the event. Results of these investigations are channeled into MHI's Risk Management Program for development of risk controls and/or corrective actions that will preclude reoccurrence of similar events. The Event Investigation Manual will be compliant with current industry **Just Culture** practices for investigation.



LESSONS LEARNED

Identified hazards and risk controls which have been implemented are communicated to employees and vendors as **safety lessons learned**. This includes dissemination of information regarding equipment-specific lessons which may come from other operators and industry in general, as well as other safety-related topics as appropriate. Communications of lessons learned from safety risk management and safety assurance activities are essential to successful accident prevention.

PROCESS MEASUREMENT

Management Review is an important quality assurance function that permits MHI management to improve its safety management procedures, systems and processes. This is accomplished by measuring safety management processes, evaluating results, and developing process improvement strategies.

Strategies consist of risk controls, corrective actions and communication of lessons learned, which are intended to minimize risk and enhance the efficacy of the MHI Safety Management System. Internal Audits as well as management review functions such as CASS (Continuing Aviation Surveillance System from 14 CFR) will be used to review the Safety Management System for Relevancy and Effectiveness.

NOTE: Management reviews assist managers in determining both the effectiveness of various SMS processes and of the Safety Management System as a whole.



7. EMPLOYEE REPORTING SYSTEM

A Ground Incident is an event or occurrence that involves damage to company property or personnel when no intent for flight exists. It can be but is not limited to damage or injury incurred while towing an aircraft (not during a pushback, since intent for flight exists), performing a maintenance engine turn, driving a vehicle, or falling downstairs.

7.1 Policies

RECOGNITION AND INITIAL REPORT

The first MHI employee who becomes aware of a ground incident should contact the Accident Response Team Leader at the telephone numbers listed in Section 1:

NOTE: Do not delay notification while awaiting more complete information.

The Accident Response Team Leader shall contact only those department managers who have authority over the operation or facility where the event occurred. For example, an incident of dangerous goods leakage at the MHI main maintenance facility may require only that the Director of Maintenance be alerted; a minor injury sustained by a pilot may require notification of only the Chief Pilot. Normally, the Accident Response Team Leader will determine which supervisors or department managers should be contacted.

ACCIDENT RESPONSE TEAM LEADER PROCEDURES

The Accident Response Team Leader will solicit a [Flight Irregularity Report](#) or **Error/Damage/Occurrence Report** (as appropriate) from all involved persons as soon as possible, and provide the Safety Officer with copies of all reports for investigation and follow-up. Upon receipt of information concerning an aircraft incident, the Accident Response Team Leader shall:

- Complete FORM SP031 AIRCRAFT ACCIDENT /INCIDENT REPORT.
- If persons are injured (even minor), complete **FORM SP030 INJURY REPORT or the First Report of Injury, available in the Maritime HSE Manual or the Maritime Portal**

7.2 Positive Safety Culture

Maritime Helicopters and its owners, directors, officers and managers are committed to creating and fostering a non-threatening environment whereby personnel can voluntarily report safety issues, concerns, errors, mishaps, and even violations, without fear of repercussions from MHI management and/or regulating authorities. If an incident or potential violation occurs, appropriate managers will:

- Assist employees in their submission of reports to outside agencies, often avoiding certificate action and civil penalties; FAA Reporting will follow
- Share the results of risk analysis and mitigation with appropriate persons in a manner that protects confidential information;
- Improve MHI systems and processes in order to preclude reoccurrence of the event.

To assure this outcome, personnel who report these issues, events and concerns to their manager or the Quality & Safety Manager are advised that no disciplinary action will be taken against any employee or person who reports an incident or occurrence involving human error, and who openly participates in the investigation and development of error prevention strategies. A minimum level of participation requires providing contact information in the report, and at least one suggestion for correction.

In addition to providing a “just safety culture” wherein personnel and vendor employees can identify and report safety issues without fear of reprisal, MHI management is committed to continued training



and re-education of its valued personnel, and to the rehabilitation of those employees in need of such assistance.

Report online at Maritime's Website (www.maritimehelicopters.com) click on "Safety."

COMMITMENTS FROM MANAGEMENT

Each person who reports a hazard, irregularity, error, violation or other safety concern hereunder will not be punished or receive retribution, provided all policies, procedures, rules and regulations are being followed. **This policy does not apply if the event was intentional, or resulted from willful misconduct or gross negligence.** In the event of an unintentional violation of regulations, company managers will make their best effort to defend and protect all certificated airmen and Maritime Helicopters from civil penalties and/or certificate action imposed by regulating authorities. Senior management is committed and dedicated to achieving the highest possible level of safety. All personnel who support and constructively contribute to MHI Employee Reporting System will be recognized and rewarded for their positive actions.

AWARD INCENTIVES

Maritime Helicopters rewards those individuals who make positive contributions to MHI's Safety Management System through safety recognition and awards, including:

- Letters of commendation;
- Printed certificates or engraved plaques;
- Personal items related to aviation;
- Caps, patches, jackets and mugs;
- Gift certificates to local restaurants.

Special emphasis is given to those individuals who include with their reports creative ideas for risk mitigating strategies that can be accomplished with maximum efficiency and conservation of resources. These recognitions and awards are effective tools for maintaining employee interest and participation in the SMS.

Candidates for recognition and awards may be submitted to department managers by all personnel. The Safety Committee agrees upon one individual to be recognized and awarded each quarter at quarterly Safety Committee meetings.

7.3 Responsibilities

SENIOR MANAGEMENT

The Chief Operating Officer is responsible for the continued fostering of Maritime Helicopters' "just culture" regarding the open reporting of hazards, irregularities, errors, violations and other safety concerns.

Quality & Safety Manager: The Quality & Safety Manager is responsible for administration of this Employee Reporting System. Administration of the system includes, but is not limited to:

- Collection and retention of all hazard, irregularity, incident, accident and injury reports generated by personnel and vendor employees;
- Collection and retention of reports submitted under NASA's Aviation Safety Reporting System (ASRS);
- Collection and retention of all other reports of errors, irregularities, violations, or other self-disclosures;
- Organization, filing and security of all reports.



The Quality & Safety Manager is further responsible for presenting all reports received at each regularly scheduled meeting of the Safety Committee, to solicit Committee recommendations for effective Corrective Action Plans designed to mitigate risk and prevent reoccurrence.

DEPARTMENT MANAGERS

Each manager who receives a verbal or written report of a hazard, irregularity, incident, accident or other safety concern is responsible for the immediate review, validation and assessment of the report to determine if an urgent safety condition exists. If warranted, immediate action to mitigate risk is authorized, including cessation of flight operations. All validated reports received shall be promptly entered into the IR database.

PERSONNEL

All personnel are responsible for the prompt reporting of any hazard, irregularity, incident, accident, error, omission, violation or safety concern which they have caused or of which they have become aware. Urgent concerns must be reported by the most expeditious means necessary.

7.4 Hazard Identification

Hazards are tangible, observable **objects, conditions or behaviors**. Identification of a legitimate hazard often requires evaluation of the context, or environment, in which the hazard is observed. Many hazards do not warrant reporting or corrective action unless associated with other conditions.

SIGNIFICANT HAZARDS

Hazard observations are subjective; what appears to be normal or routine for one person might be considered a significant hazard to another. All personnel should therefore use good judgment when determining which objects, conditions and behaviors are **significant hazards**, and should be reported. Obviously, a spinning propeller is a potential hazard in and of itself, but does not warrant a hazard report; however, the boarding of passengers in the vicinity of a spinning propeller is a significant hazard that should be reported. Each employee is responsible for reporting all observed significant hazards to management for evaluation and risk management. Suggestions for correction are always welcome and encouraged.

7.5 Hazards & Events Requiring a Report

Good judgment will dictate whether a situation or event warrants immediate verbal notification or submission of a written or electronic report. Although anonymity is possible, personnel are encouraged to include personal information, without fear of retribution. This will enable MHII managers to ask questions, gather more details and provide an opportunity for employees to participate in the development of Corrective Action Plans to prevent recurrence of an event. The following occurrences and events should be reported to MHI management:

An automated method of submitting a report is using the online method through the Maritime Helicopters website at www.maritimehelicopters.com. Available electronic reports are: Hazard, Error/Occurrence, Injury and Accident/Incident.

- **Hazards** - All observed or suspected hazards should be reported.
- **Flight Irregularities** - Report all flight irregularities that occur during flight, in preparation for flight, or during close-out of a completed flight. This includes **near-incidents and near-accidents**, both inflight and on the ground. Reports of these near-accidents and other “close-calls” are essential in determining how to prevent future accidents. Use of the phrase “intent to fly” will be utilized in decisions on requiring a Flight Irregularity Report as opposed to a Ground Occurrence Report.
- **Equipment Occurrences** - All events or occurrences should be reported that result in damage (even minor damage) to company or vendor aircraft, vehicle, facilities or equipment, if the event



or occurrence is associated in any way with any company aircraft, vehicle, facility, equipment, employee, contractor, operation or maintenance activity.

- **Maintenance Errors** – Occurrences or ***near-occurrences*** involving the use of suspected unapproved parts (SUP), improper fluids, supplies, equipment or tools, tool calibration, test equipment, incorrect parts or hardware, incorrect or conflicting technical references or guidance, or use of documents or forms that are not current, should be reported.
- **Injuries to Personnel** - All occurrences involving injury or illness to personnel, customers, passengers or other persons should be reported, if the event or occurrence is associated in any way with any aircraft, facility, equipment, employee, vendor, contractor, operation or maintenance activity. Federal regulations (OSHA) require such reports, as do managers to ensure that similar injuries or illnesses do not reoccur. All employers are required to notify OSHA **when an employee is killed on the job or suffers a work-related hospitalization, amputation, or loss of an eye**. A fatality must be reported within 8 hours. An in-patient hospitalization, amputation, or eye loss must be reported within 24 hours.
- **Aircraft Accidents & Incidents** - All accidents, incidents and occurrences involving aircraft should be reported, whether in-flight or on the ground. This includes even minor damage (even a scratch) to aircraft parked, in maintenance, or at the gate.

NOTE: MHI management will make a determination as to whether an event requires a report to NTSB in accordance with NTSB's accident/ incident notification requirements.

7.6 Reporting Procedures for Hazards & Event

INITIAL NOTIFICATION

An initial verbal or telephonic notification should be made to management of any hazardous situation, event or occurrence described above. The notification should be made by the most expeditious means possible, and should contain the following critical information:

- WHO – Names of all persons involved (if known)
- WHAT – What happened (include details if known)
- WHEN – Date & local time
- WHERE – Location(s) of events or occurrences

The following additional information should also be provided:

- Was anyone injured?
- Have any local authorities been notified?
- Does a continued safety hazard exist at the scene?
- How can the notifying person be contacted?

Initial notification will assist MHI management in classifying the event or occurrence as an accident, incident, irregularity or other safety concern. Appropriate action can then be taken, including prompt notification of required authorities when necessary. Good judgment should dictate whether a hazard or event demands immediate action, immediate telephonic notification to management, or submission of an online or written report.

RESPONSIBILITIES OF FIRST PERSON

The first person to observe an unsafe action should take immediate action to bring the situation to the attention of employees and supervisors involved. The first person to observe an accident or incident should also take immediate action to prevent further injury, illness, or damage. Ensure that first aid is administered, and arrange for emergency transportation to a medical facility if needed.



SAFETY MANAGEMENT SYSTEM

Rev 1: 12/19/22

When immediate danger has passed and time permits, contact Company management (or delegate contact) and provide the information listed above.

NOTIFICATION OF CLIENT (HOST FACILITY)

It is recognized that our clients/customers also have reporting requirements for incidences/accidents. Reporting to the client will generally be reported within 24 hours or according to contract if it includes reporting in less than 24 hours.



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

VERBAL OR TELEPHONIC REPORTS

Should the Quality & Safety Manager, manager or any other personnel receive a telephonic report or verbal notification of an accident, incident, potential hazard or other occurrence or safety concern, that person shall:

- Immediately ascertain whether the hazard or safety concern poses a threat to life or property; and
- Take IMMEDIATE ACTION to mitigate risk.
- If in doubt as to the severity of the concern, TAKE IMMEDIATE ACTION to remove the suspected hazard or mitigate the suspected risk, including cessation of flight operations, evacuation of personnel, etc.

CAUTION:

If in doubt as to the severity of a concern that might pose a threat of injury or death, it is better to err on the side of safety.

If additional information is necessary to make this determination, every available resource should be called upon to obtain additional information, AFTER IMMEDIATE ACTION HAS BEEN TAKEN. In these cases, the President shall immediately be notified and an emergency meeting of the Safety Committee shall be called by the manager who received the notification or report.

WRITTEN REPORTS

When a written report of a hazard, accident or incident, occurrence or irregularity, error, violation or other safety concern is received by a manager, it shall be immediately reviewed, validated and assessed. If the report contains one or more validated hazards, events or safety concerns, the manager receiving the report is responsible and accountable for accurately entering all information from the report into the IR database. Retain all written reports for Safety Committee review.

REPORTING DIRECTLY INTO INCIDENT REPORTER

Employees may report directly into the IR database any hazards, irregularities, errors, violations, near-accidents and other safety concerns for which immediate verbal or telephonic notification is not required. Standard web browsers are used by employees to access IR's online reporting form, via link from the MHI company website. Procedures for accessing IR's online reporting form, including account names and passwords, are issued to employees via memo from the office of the Quality & Safety Manager.

NON-DISCLOSURE

Both the Quality & Safety Manager and other managers involved with each report received under this program shall not disclose the contents of the report or disclose the identities of the persons involved, unless:

- Necessary to evaluate data or determine root causes;
- An immediate safety concern dictates otherwise.

In these cases, information from reports received shall be released only on a need-to-know basis. If the report involves an event of non-compliance, or if subsequent investigation by management reveals any issues of non-compliance, MHI management will assist those airmen involved with NASA ASRP reporting in an effort to protect personnel from civil penalties or certificate action imposed by regulating authorities.



7.7 Reporting of Aircraft Accidents & Incidents

Aircraft Accident / Incident Report Form SP031/ or the Maritime Helicopters Flight Irregularity Report is used by all personnel to report any type of aircraft accident, incident or damage to aircraft. Near mid-air collisions are considered incidents. The report is due within 24 hours of an event. Additional information, such as airport authority reports, vendor reports and photographs of the damage and accident or incident scene should be forwarded promptly as they become available.

IMPORTANT

For aircraft accidents / incidents that are of a serious nature, or if in doubt as to the seriousness of an event, refer to the MHI Emergency Response Plan

7.8 Reporting of Minor Occurrences

It is possible for an aircraft to receive **minor damage** or for a person to receive **minor injuries** that would not be considered an accident or an incident as defined by NTSB Part 830. These events are considered **Minor Occurrences** by Maritime Helicopters, and should nevertheless be reported to management. All events that do not meet NTSB definitions of an accident or incident will be classified as "occurrences". This will maintain a separation between NTSB responsibilities for accident investigation and occurrences that MHI will investigate. All events, regardless of their classification, will be investigated by MHI for application of risk management and corrective action(s). The following events are considered Minor Occurrences:

- Minor aircraft damage, including:
 - Engine failure or damage limited to an engine if only one engine fails or is damaged;
 - Bent cowling or fairing, dented skin;
 - Small puncture holes in the skin;
 - Ground damage to propeller / rotor blades;
 - Damage to the landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips.
- Minor injuries to passengers, personnel or vendor employees, including:
 - Minor cuts or bruises, or minor first degree burns over less than 5% of the body;
 - Minor fractures of fingers, toes or nose.

7.9 Reporting of Errors and/or Violations

RESPONSIBILITY OF ALL PERSONNEL

It is the responsibility of every person to place safety and compliance as their highest priorities, and to report mistakes and/or errors made by operations, administrative, maintenance and inspection personnel immediately upon discovery. The owners, officers and managers of Maritime Helicopters understand that mistakes sometimes happen. Although every effort must be made to keep mistakes and errors to a minimum, what really matters is the intent of those involved, and how mistakes and errors are dealt with after the fact.

Errors and violations may or may not result in a hazard. If a hazard exists that is not immediately dangerous or life-threatening, employees are encouraged to report the hazard to their department manager or the Quality & Safety Manager. Managers may offer suggestions for immediate risk controls or corrective actions, and may also direct employees to submit their reports into the online reporting form of the IR database.

NOTE: For hazards that pose immediate life-threatening danger, employees are authorized to take whatever immediate action is required to eliminate the hazard or reduce risk.

All errors and potential violations should be reported to your immediate supervisor or department manager. When making a report, attempt to identify the cause of the error, and all persons involved.



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

Suggest actions that may prevent similar future occurrences. While the IR database provides for anonymous reporting, contact information is encouraged to assist MHII managers in collecting additional information. Without additional information, a determination of root causes is sometimes not possible.

Maritime Helicopters will never punish an employee for reporting an honest mistake or error, even if something was overlooked or forgotten. Errors should always be honestly revealed, even if the error resulted in injury or equipment damage. The investigation of small errors, and taking steps to eliminate the causes of error, are essential parts of preventing major accidents.

If the error resulted from willful violation of government regulations or Company procedures, the error must still be disclosed. Safety benefits from rule violations only result when the circumstances of the violation are fully investigated. In many cases, personnel who repeatedly violate a rule prove eventually that the rule (or part of it) is not fostering safety at all, and should be modified. This determination can only be made through an honest examination of the violation.

Maritime Helicopters senior management may work together with the Quality & Safety Manager and department managers as necessary to determine any corrective action(s) that need to be taken. This may include the administering of additional training, revisions to documents, manuals and programs, or other corrective actions.

If a concern regarding pilot proficiency arises, the pilot may be evaluated, removed from all non-training flight duties, re-trained and re-qualified.

RESOLVE OF SAFETY ISSUES & REPORTS RECEIVED

Whenever an observed hazard, irregularity, occurrence, near-accident, error or violation is brought to the attention of a manager, that manager shall promptly perform an initial assessment of the hazard or situation and associated risk(s). If a life-threatening situation exists, or if there is risk of personal injury or damage to Company aircraft or other resources, the risk shall immediately be mitigated by that manager in any way possible. This includes interruption or diversion of flights, evacuation of personnel or any other action(s) deemed necessary by the manager involved.

As a control measure, managers should seek the consultation and advice of the Quality & Safety Manager or one other manager. Likewise, if a hazard, irregularity, occurrence, near-accident, error or violation is brought to the attention of the Quality & Safety Manager, the Quality & Safety Manager shall contact appropriate knowledgeable manager(s) to discuss and assess the event and associated risks. If doubt exists as to the severity of a hazard or event, and a possibility exists for injury or damage to property, it is better to err on the side of safety, and make decisions accordingly.

All validated reports received under the Employee Reporting System are entered by the manager who received the report into the IR database for further investigation, risk assessment, development of Corrective Action Plans and communication of lessons learned, in accordance with the MHI Risk Management Program.

CORRECTIONS TO WRITTEN RECORDS

All written Company records are to be made with ball-point pen, in blue or black ink. The use of liquid ink pens, pencils or other colors of ball-point pen is not acceptable. To correct a written record (such as the entry of an incorrect date or number on a form), simply draw a single line through the erroneous entry and enter the correct information adjacent to the error. This is the only acceptable method of correction.



WARNING

NEVER change a record or falsify any document to conceal any mistake or error. Provisions exist to protect personnel and MHI from certificate action and civil penalties in the event an inadvertent violation, or series of violations, occurs.

AVIATION SAFETY REPORTING SYSTEM (NASA ASRS REPORTS)

The FAA has established an Aviation Safety Reporting System (ASRS) to identify problems in the U.S. aviation system that might require corrective action. The primary objective of the program is to obtain information to evaluate and enhance the safety and efficiency of the present system. This program is described in AC 00-46, Aviation Safety Reporting Program.

When ASRS receives a report describing a hazardous situation – for example, a defective navigation aid, mis-charting, a confusing procedure, or any other circumstance which might compromise safety of flight, an alerting message is issued. Alerting messages take a variety of forms but they have a single purpose; to relay safety information to individuals in positions of authority so that needed corrective actions can be taken. This is a positive program intended to ensure the safest possible system by identifying and correcting unsafe conditions before they lead to accidents.

NASA ASRS reports are similar to voluntary self-disclosures in that airman who inadvertently make an error or violate a rule, and who file a report through this system within 10 days after a potential violation, may avoid FAA certificate action (receiving a violation, a civil penalty, or both).

The system is not only for pilots, but for dispatchers, ground and maintenance personnel as well. Operations covered by the program include departure, en route, approach, and landing operations and procedures, air traffic control procedures and equipment, crew and air traffic control communications, aircraft cabin operations, aircraft movement on the airport, near midair collisions, aircraft maintenance and record keeping and airport conditions or services.

The FAA utilizes the National Aeronautics and Space Administration (NASA) to act as an independent third party to receive and analyze reports submitted under the program. Reports are therefore anonymous and normally cannot be used by the FAA for enforcement purposes, unless the violation was willful or negligent. Additional information is available directly from NASA at:

www.asrs.arc.nasa.gov

LEGAL ASSISTANCE FROM MANAGEMENT

If a crewmember, dispatcher or mechanic should receive a "Notice of Investigation" involving a reported violation, caution is advised in preparing a response. Many people often make self-incriminating statements that subsequently appear as part of an enforcement action case or a civil action. For these reasons, MHI management advises all personnel not to make any statements until sufficient opportunity exists to review the allegations and details of the event, and competent legal advice has been obtained. Employees are encouraged to solicit the assistance of MHI management and the resources available to management, when dealing with these issues.

7.10 Near Midair Collision Reporting

DEFINITION

A near midair collision is defined as an incident associated with the operation of an aircraft in which a possibility of collision occurs as a result of proximity of less than 500 feet to another aircraft, or a report is received from a pilot or a flight crew member stating that a collision hazard existed between two or more aircraft.



COMPANY REPORTING

Contact the Chief Pilot or Director of Operations immediately upon landing. Report into the IR database or in writing within 24 hours.

ATC REPORTING

It is the responsibility of the pilot and/or flight crew to determine whether a near midair collision did actually occur and, if so, to initiate a NMAC report. Be specific, as ATC will not interpret a casual remark to mean that a NMAC is being reported. The pilot should state "I wish to report a near midair collision."

PURPOSE AND DATA USES

The primary purpose of the Near Midair Collision (NMAC) Reporting Program is to provide information for use in enhancing the safety and efficiency of the National Airspace System. Data obtained from NMAC reports are used by the FAA to improve the quality of FAA services to users and to develop programs, policies, and procedures aimed at the reduction of NMAC occurrences. All NMAC reports are thoroughly investigated by Flight Standards Facilities in coordination with Air Traffic Facilities. Data from these investigations are transmitted to FAA Headquarters in Washington, DC, where they are compiled and analyzed, and where safety programs and recommendations are developed.

WHERE TO FILE REPORTS

Pilots and/or flight crew members involved in NMAC occurrences are urged to report each incident immediately:

- By radio or telephone to the nearest FAA ATC facility or FSS;
- In writing, in lieu of the above, to the nearest Flight Standards District Office (FSDO).

ITEMS TO BE REPORTED

- Date and time (UCT) of incident;
- Location of incident and altitude;
- Identification and type of reporting aircraft, aircrew destination, name and home base of pilot;
- Identification and type of other aircraft, aircrew destination, name and home base of pilot;
- Type of flight plans; station altimeter setting used;
- Detailed weather conditions at altitude or flight level;
- Approximate courses of both aircraft: indicate if one or both aircraft were climbing or descending;
- Reported separation in distance at first sighting, proximity at closest point horizontally and vertically, and length of time in sight prior to evasive action;
- Degree of evasive action taken, if any (from both aircraft, if possible);
- Injuries, if any.

INVESTIGATION

The FSDO in whose area the incident occurred is responsible for the investigation and reporting of NMACs. Existing radar, communication, and weather data will be examined in the conduct of the investigation. When possible, all cockpit crew members will be interviewed regarding factors involving the NMAC incident. Air traffic controllers will be interviewed in cases where one or more of the involved aircraft was provided ATC service. Both flight and ATC procedures will be evaluated. When the investigation reveals a violation of an FAA regulation, enforcement action will be pursued.

NOTE: Flight Crewmembers desiring to file a Near Midair Collision Report are urged to contact the Chief Pilot or Director of Operations for assistance in mitigating any potential civil penalties



and/or certificate action. ASRS (NASA) Reports should also be filed. If an apparent violation has occurred, Maritime Helicopters may also wish to self-disclose to FAA through the Company's formal Voluntary Disclosure Reporting Program.

7.11 Voluntary Disclosure Reporting Program

BACKGROUND

FAA Advisory Circular AC 00-58A (or subsequent guidance) Voluntary Disclosure Reporting Program, sets forth procedures for the voluntary reporting of violations, and FAA policies regarding how these reported violations are handled. The FAA believes that aviation safety is well served by incentives for certificate holders to identify and correct their own instances of noncompliance, and to invest more resources in efforts to preclude their recurrence. The FAA's policy of forgoing civil penalty actions when a certificate holder detects violations, promptly discloses the violations to the FAA, and takes prompt corrective action to ensure that the same or similar violations do not recur, is designed to encourage compliance with FARs, foster safe operating practices, and promote the development of internal evaluation programs.

Self-disclosures by employees to MHI management also provide MHI with safety information that may not be captured through other reporting mechanisms. Self-disclosures are a positive indication to FAA of Maritime

Helicopters' commitment to addressing safety problems and proactively identifying potential safety hazards. They demonstrate both employees' and management's emphasis on safety and willingness to better manage safety issues. Self-disclosure of apparent violations to FAA also serves to heighten the trust that exists between MHI and the FAA, and is a visible demonstration of MHI positive safety culture.

Self-disclosures may also serve to protect individual airmen, agents and other employees from potential legal action from FAA in the event of an inadvertent violation, including civil penalty actions and suspension of airmen certificates. Certain eligibility requirements must be met for this protection, as set forth herein.

All employees are encouraged to immediately bring to the attention of a manager, any known or suspect violation of FARs. MHI managers support and promote MHI positive safety culture, and are well-qualified to assist individual employees with the protections offered under this program. Through the prompt reporting of apparent violations, determination of root causes and implementation of comprehensive fixes, Maritime Helicopters will continue to maintain the highest level of aviation safety.

NOTE: Apparent violations involving Hazardous Materials (Dangerous Goods) may also be reported under this program. Refer to Advisory Circular AC 121-37 for more information.

KEY TERMS

The following key terms and phrases are excerpted from AC 00-58A and defined herein to ensure a standard interpretation and understanding of the FAA's voluntary disclosure policy:

- Evidence. For the purpose of voluntary disclosure, evidence generally should be in the form of written documentation or reports that support a certificate holder's analysis of the disclosed apparent violation and the resulting elements of the proposed comprehensive fix. Evidence generally comes from the following four elements:
 - Documents or manuals reviewed.
 - Equipment examined.
 - Activities observed.
 - Interview data.



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

- Comprehensive Fix. A comprehensive fix is an action, or actions, proposed by the certificate holder and accepted by the principal inspector to preclude recurrence of the apparent violation that has been voluntarily disclosed under this program. A schedule of the dates and events encompassed by the comprehensive fix must be established, and will be included in FAA's letter of correction.
- Satisfactory Fix. A satisfactory fix is a comprehensive fix in which all corrective measures have been completed on schedule and are satisfactory to the FAA.
- Principal Inspector (PI). Under the Voluntary Disclosure Reporting Program, PI refers to the appropriate maintenance, avionics, operations inspector, or other designated FAA official of the program office responsible for oversight of the area of noncompliance involved in the disclosure.

NOTE: The designated FAA official for voluntary disclosure concerning anti-drug and alcohol misuse prevention program violations is the Branch Manager, Compliance and Enforcement Branch, Drug Abatement Division, FAA Headquarters.

FAA'S VOLUNTARY DISCLOSURE POLICY

AC 00-58A sets forth FAA policy regarding self-disclosures. The FAA believes that the open sharing of apparent violations and a cooperative, advisory approach to solving such problems will enhance and promote aviation safety. Certificate holders will receive a letter of correction in lieu of civil penalty action for covered instances of noncompliance that are voluntarily disclosed to the FAA in accordance with the procedures set forth in AC 00- 58A. Once the letter of correction is issued, the case will be considered closed unless the agreed-upon comprehensive fix is not satisfactorily completed by the certificate holder.

NOTE: Except as specified in the paragraph below, FAA ordinarily will not forgo legal enforcement action if MHI informs the FAA of the apparent violation during, or in anticipation of, an FAA investigation/inspection or in association with an accident or incident.

CONDITIONS REQUIRED FOR ELIGIBILITY

In evaluating whether an apparent violation is covered by FAA policy as set forth in AC 00-58A, FAA must ensure that the following five conditions are met:

- MHI must notify FAA of the apparent violation immediately after detecting it and before FAA has learned of it by other means.
- The apparent violation must have been inadvertent, and not a blatant disregard for the FARs.
- The apparent violation must not indicate a lack, or reasonable question, of qualification of MHI.
- Immediate action must be taken (satisfactory to the FAA) upon discovery to terminate the conduct or operation that resulted in the apparent violation.
- MHI must have developed, or be in the process of developing, a comprehensive fix which is satisfactory to FAA. The comprehensive fix must include:
 - Identification of root cause(s).
 - A schedule of implementation.
 - An internal follow-up self-audit to ensure the action taken corrects the noncompliance.

EXCEPTIONS

If the FAA has learned of an apparent violation by MHI from an ASAP report as described in the current edition of AC 120-66, Aviation Safety Action Program, a voluntary disclosure can still be accepted by the FAA, even though the FAA has already learned of the violation from the ASAP. Similarly, if MHI voluntarily agrees to conduct a joint audit (inspection) with the FAA during which an apparent violation is discovered either by MHI or FAA members of the audit (inspection) team, the FAA may accept a voluntary disclosure submitted by MHI, even though the FAA has already learned of the apparent violation during the course of the joint audit (inspection).



PROCEDURES FOR REPORTING TO MHI

Personnel should first report an apparent violation verbally to the appropriate manager and/or the Quality & Safety Manager. MHI managers will assist those involved in order to evaluate the number and depth of any potential violation(s). It may be possible for both employees and MHII to be protected from certificate action and civil penalties, provided:

- The violation was inadvertent and not a blatant disregard of the FARs;
- The apparent violation involves a deficiency of MHI policies, practices, procedures or written guidance that causes MHI to be in violation of a covered violation of an FAA regulation.
- The airman or other agent of MHI, while acting on behalf of MHI, inadvertently violates the FAA's regulations as a direct result of a deficiency of MHI that causes MHI to be in violation of the regulations.

NOTE: The voluntary disclosure policy does not apply to the airman or other agent when his/her apparent violation is the result of actions unrelated to a MHI deficiency.

MHI managers will first review the details surrounding the apparent violation(s), TAKE IMMEDIATE ACTION to terminate the conduct or operation that resulted in the apparent violation, and then develop a plan that includes:

- Immediate verbal and formal notification to FAA;
- Identification of root cause(s), including possible MHI deficiencies;
- A Corrective Action Plan (CAP) to prevent reoccurrence;
- Assurance of non-punitive measures and re-training/education for employees who are involved, if necessary;
- Protection of employees through NASA reporting (see Aviation Safety Reporting System in this section)
- Protection of the employee from FAA fines or civil penalties by seeking systemic or organizational deficiencies that may have contributed to the apparent violation(s).

PHASE 1: PROCEDURES FOR INITIAL NOTIFICATION TO FAA

Department managers are authorized to notify FAA of an apparent violation by making contact with, or directing correspondence to, the appropriate PI. FAA's Voluntary Disclosure policy as set forth in AC 00-58A applies only when notification of an apparent violation is made to the FAA immediately after the apparent violation has been discovered, and before the FAA learns of the apparent violation by some other means. It is FAA policy that initial notification should be accomplished on a timely basis, ordinarily within 24 hours of the discovery of the apparent violation. However, an inspector may accept disclosures that exceed the 24-hour policy when the inspector determines that a later submission is justified based on the specific circumstances, and in view of those circumstances, the submission is still considered timely. For example, a voluntary disclosure based on a MHI violation revealed in an Aviation Safety Action Program (ASAP) report may require more than 24 hours from the submission of that ASAP report in order for MHI to become aware of the information in the report and to initiate a voluntary disclosure. The FAA retains sole discretion in determining whether a voluntary disclosure received later than 24 hours after discovery of the violation is timely. If MHI is an authorized user of the Web- based VDRP:

- Use the Web-Based VDRP for Notification of an Apparent Violation.
 - When using the Web-based VDRP, submission of a voluntary disclosure via the Web-based VDRP system will result in automated notification of the PIs assigned to the MHI certificate.
 - The Web-based VDRP system contains provisions for indicating that the notification process was begun via another media. When acceptable to the PI, initial notice by MHI may be submitted orally, via a written hardcopy, or by electronic copy; provided MHI enters the initial



notification data via the Web-based VDRP system within 72 hours of the original notification. However, compliance with the 10- (or 30-) day limit for submission of the written report will be based on the date of the original notification, regardless of the submission means or media.

NOTE: If MHI is not yet authorized to use the Web-based VDRP, initial notification of an apparent violation will be submitted orally, via a written hardcopy, or by electronic copy. Although FAA accepts oral notification, a written hard copy or a written electronic copy (via email) is preferred in order for MHI to maintain a written record of prompt, accurate and descriptive notification.

If MHI is not authorized to use the Web-based VDRP, notification should not be delayed for any reason, and should be made by the appropriate department manager, directed to the appropriate principal inspector. Initial notification should address, to the maximum extent possible, the following items with the principal inspector:

- A brief description of the apparent violation, including:
 - An estimate of the duration of time that it remained undetected;
 - How the apparent violation was discovered;
 - When it was discovered (including date and time).
- Verification that noncompliance ceased after it was identified.
- A brief description of the immediate action taken after the apparent violation was identified, the immediate action taken to terminate the conduct that resulted in the apparent violation, and the person responsible for taking the immediate action.
- Verification that an evaluation is underway to determine if there are any systemic problems and a description of the corrective steps necessary to prevent the apparent violation from recurring (identifying root causes).
- The name and title of the person responsible for preparing the comprehensive fix.
- Acknowledgment that a detailed written report will be provided to the PI within 10 working days.

NOTE: If initial notification is made via the Web-based VDRP, notification of the PI is accomplished by the program. No further initial notification is required by MHI.

NOTE: MHI will have 10 work days from the date of the written acknowledgment of the apparent violation to follow up with a detailed written report to the principal inspector. If MHI does not agree that there has been a violation, or otherwise fails to provide information as required in the detailed written report, the FAA thereafter will proceed with its investigation and initiate enforcement action, if appropriate, against MHI.

PHASE II: FAA RESPONSE TO INITIAL NOTIFICATION

MHI management should expect the FAA principal inspector to respond with a written acknowledgment of the initial notification. This acknowledgment includes the request for a detailed written report, and is sent in lieu of a letter of investigation provided the written report is completed in accordance with the voluntary disclosure reporting procedures set forth in AC 00-58A and Appendices 1 & 2 of AC 00-58A. The PI will open an enforcement investigative report that will be closed out with a letter of correction, following satisfactory development of a comprehensive fix and schedule of implementation agreed upon by the FAA and MHI management.

NOTE: When the regulated entity has submitted the voluntary disclosure via the Web-based VDRP, action on the voluntary disclosure by the PI results in an automated electronic reply to MHI and an automated opening of the Enforcement Investigative Report (EIR).



PHASE III: MHI DETAILED WRITTEN REPORT

If a violation remains apparent or is confirmed, the manager in whose department the violation occurred shall prepare the written report (Voluntary Self-Disclosure Form SP-008). Among other requirements, the report shall contain a comprehensive fix and shall be submitted to the Safety Committee for acceptance prior to submission to FAA. If necessary, an emergency meeting of the Safety Committee may be convened to discuss the issue and develop MHI Corrective Action Plan, which comprises a comprehensive fix. The manager who prepared the report shall provide it to the principal inspector within 10 working days after the initial notification was made. In summary, the written report should include the following information:

- A list of the specific FAA regulations that may have been violated;
- A description of the apparent violation, including:
 - The duration of time it remained undetected;
 - How it was detected;
 - When it was detected (date and time).
- A description of the immediate action taken to terminate the conduct that resulted in the apparent violation, including:
 - When such action was taken; and
 - Who was responsible for taking the action.
- An explanation that shows the apparent violation was inadvertent;
- Evidence that demonstrates the seriousness of the apparent violation and MHI's analysis of that evidence;
- A detailed description of the proposed comprehensive fix, outlining:
 - The planned corrective steps;
 - The responsibilities for implementing those corrective steps; and
 - A time schedule for completion of the fix.
- Identification of the MHI manager responsible for monitoring the implementation and completion of the comprehensive fix.

If a proposed comprehensive fix is not fully developed within 10 working days, MHI should provide at least an overview of its comprehensive fix plans. In this case, the detailed description of the comprehensive fix must be provided to the principal inspector within 30 calendar days after MHI initially notified the principal inspector of the apparent violation.

APPLICATION OF RISK MANAGEMENT

During preparation of the detailed written report, the Safety Committee will identify root cause(s) of the violation and/or associated systemic problems. This exercise is necessary for sound development of a Comprehensive Fix, which must be submitted to FAA as part of the Voluntary Self-Disclosure process. The Incident Reporter database is utilized for monitoring, control and process measurement of the comprehensive fix. Refer to the MHI [Risk Management Program](#) for instructions and procedures regarding this process.

Upon final draft and preparation of the Voluntary Self-Disclosure Form and its associated Risk Management Record and Corrective Action Plan(s) (CAPs), confidential copies are reviewed by the Safety Committee and/or senior management for acceptance of each specific CAP and appropriate signatures. Upon acceptance of the CAP(s), copies of the forms are forwarded by the manager who prepared the voluntary Self-disclosure to the FAA and to the Quality & Safety Manager for follow-up on the comprehensive fix and further risk management.

NOTE: Failure to comply with the specific action requirements of the comprehensive fix, within the dates established, could permit FAA to disallow the disclosure and re-open an enforcement



case that could result in civil penalties and/or certificate action against both Maritime Helicopters and the individual airmen involved.

PHASE IV: WRITTEN REPORT REVIEW BY THE FAA

FAA should be expected to work with the appropriate managers to ensure that MHI has identified any root causes and systemic issues which led to the apparent violation. This collaboration helps to ensure that the corrective actions contained in the comprehensive fix are acceptable to the FAA.

PHASE V: IMPLEMENTATION OF A COMPREHENSIVE FIX AND FAA SURVEILLANCE

During the implementation period, the FAA and appropriate managers should continue to work together. The FAA may advise and assist MHI in correcting any identified systemic problems. Changes will be made to the proposed comprehensive fix when the need is identified. Upon determining that the initial implementation of the comprehensive fix is satisfactory, the PI will issue a letter of correction. Should a change to the comprehensive fix be identified after issuance of the letter of correction, the PI will issue an amendment to the letter of correction that reflects this change.

The FAA monitors the implementation of the corrective steps. Throughout the implementation period, the FAA assesses MHI's corrective efforts and top management's awareness of these efforts. If, during this period, the FAA determines that the steps taken by MHI are not those documented in the comprehensive fix, the letter of correction may be rescinded, the investigative report may be reopened, and appropriate legal enforcement action may be initiated.

PHASE VI: INSPECTOR SIGNOFF

At the conclusion of the implementation period, the PI makes a final assessment. If all elements of the comprehensive fix have been adequately accomplished, the PI finds the fix satisfactory and closes the case. The case remains subject to reopening in the event that the agreed-upon actions, outlined in the comprehensive fix, are not completed to the satisfaction of the FAA. A statement of follow-up investigation, confirming that the comprehensive fix was satisfactorily implemented and completed, is prepared to complete the FAA's investigative package.

The PI has the authority to close the case. Consultation with regional specialists, legal counsel, or other FAA personnel may be accomplished when deemed appropriate by the PI.

Following completion of the agreed-upon corrective action(s), the Quality & Safety Manager shall conduct a follow-up audit to ensure that the action taken remedies the problem that gave rise to the apparent violation.

If, following FAA closure of the investigative package resulting from a voluntary disclosure, the same or similar violations are discovered to have occurred prior to submission of the associated voluntary disclosure, the FAA does not reopen the case unless it determines that MHI failed to comply with all the elements of the comprehensive fix agreed upon by the FAA and MHI.

DISPUTE RESOLUTION

When disputes occur regarding the acceptance of a proposed comprehensive fix, or a modification thereto before the fix is considered satisfactory, the PI and MHI may request that the issue be resolved at the next level of management within the FAA. This procedure will provide for an independent assessment of the areas in disagreement.

SEPARATE ACTIONS AGAINST AIRMEN OR OTHER INDIVIDUAL AGENTS

FAA's voluntary disclosure policy (foregoing of certificate action) should apply to individual airmen or other agents employed by MHI when:



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

- The apparent violation involves a deficiency of company practices or procedures that causes MHI to be in violation of a covered violation of an FAA regulation;
- The airman or other agent of MHI, while acting on behalf of MHI, inadvertently violates the FAA's regulations as a direct result of a company deficiency that causes MHI to be in violation of the regulations.
- The airman or other agent immediately makes the report of his/her apparent violation to management; and
- MHI immediately notifies the FAA of both the airman's or other agent's apparent violation and the apparent deficiency in its practice or procedures.

NOTE: FAA's voluntary disclosure policy will not apply to the airman or other agent when his/her apparent violation is the result of actions unrelated to a company deficiency. Therefore, in order to further protect the individual airman or agent from certificate action, MHI should investigate the event in order to discover potential systemic deficiencies that could have contributed to the violation.

When all the above conditions are met, a separate EIR is opened for the individual and closed with no more than administrative action in accordance with the current edition of Order 2150.3, Compliance and Enforcement Program.

If all the above conditions are not met, the principal inspector will review all facts associated with the case and determine what action is appropriate for individual airmen or other agents of MHI. However, this provision does not apply to matters concerning qualifications to hold an airman certificate.

Special provisions exist for apparent violations when a voluntary disclosure is made based on information in an ASAP report. In such cases, the FAA may, at its sole discretion, accept the corrective action recommended by an ASAP Event Review Committee (ERC) for an accepted ASAP report as the comprehensive fix for the voluntary disclosure. This is acceptable when the following conditions all apply (even when an apparent employee qualification or competency issue is involved):

- The FAA determines that the violation is due entirely to the actions of the employee(s) and not to a systematic or procedural deficiency of MHI; and
- The employee completes the corrective action recommended by the ASAP ERC to the satisfaction of the FAA.

APPLICABILITY OF THE FREEDOM OF INFORMATION ACT (FOIA) TO SELF-DISCLOSURES

Records submitted to the FAA for review pursuant to this voluntary self-disclosure program, including information submitted using the Web-based VDRP tool, are protected from release to the public in accordance with the provisions of part 193 and FAA Order 8000.89, Designation of Voluntary Disclosure Reporting Program (VDRP) Information as Protected from Public Disclosure under 14 CFR Part 193.

REPEATED VIOLATIONS

If a repeated violation occurs, notwithstanding the fact that a comprehensive fix was satisfactorily completed and followed, the procedures outlined in this voluntary disclosure program and AC 00-58A may apply to disclosure of the repeated violation. Upon consideration of the facts and circumstances surrounding the repeated violation, the FAA will determine on a case-by-case basis whether a repeated violation will be covered under FAA policy as set forth in AC 00-58A. Both MHI managers and PIs should evaluate the systemic issues and circumstances surrounding each apparent violation. This is particularly important when citing a common regulation. Depending upon the specific circumstances associated with the event, citations of a common regulation may not necessarily be indicative of a common systemic failure.



USE OF INTERNAL EVALUATION PROGRAM TO PRECLUDE VIOLATIONS

Proper implementation and application of the MHI Internal Evaluation Program should help to ensure that any apparent violations are promptly identified, corrected, and reported to the FAA. While not required, the FAA strongly encourages certificate holders to make internal evaluation programs an integral part of their everyday management process so that the full benefits of voluntary disclosure can be realized. Excerpt from AC 00-58A:

“Aviation safety is served by programs that allow certificate holders... to identify and correct their own instances of noncompliance and invest more resources in efforts to preclude their recurrence.”

7.12 Use of the Web-Based VDRP Tool for submission of Voluntary Disclosures

INITIAL NOTIFICATION

An initial verbal or telephonic notification should be made to management of any hazardous situation, event or occurrence described above. The notification should be made by the most expeditious means possible, and should contain the following critical information:

- WHO – Names of all persons involved (if known)
- WHAT – What happened (include details if known)
- WHEN – Date & local time
- WHERE – Location(s) of events or occurrences

The following additional information should also be provided:

- Was anyone injured?
- Have any local authorities been notified?
- Does a continued safety hazard exist at the scene?
- How can the notifying person be contacted?

Initial notification will assist MHI management in classifying the event or occurrence as an accident, incident, irregularity or other safety concern. Appropriate action can then be taken, including prompt notification of required authorities when necessary. Good judgment should dictate whether a hazard or event demands immediate action, immediate telephonic notification to management, or submission of an online or written report.

RESPONSIBILITIES OF FIRST PERSON

The first person to observe an unsafe action should take immediate action to bring the situation to the attention of employees and supervisors involved. The first person to observe an accident or incident should also take immediate action to prevent further injury, illness, or damage. Ensure that first aid is administered, and arrange for emergency transportation to a medical facility if needed. When immediate danger has passed and time permits, contact Company management (or delegate contact) and provide the information listed above.

VERBAL OR TELEPHONIC REPORTS

Should the Quality & Safety Manager, manager or any other personnel receive a telephonic report or verbal notification of an accident, incident, potential hazard or other occurrence or safety concern, that person shall.

- Immediately ascertain whether the hazard or safety concern poses a threat to life or property; and
- Take IMMEDIATE ACTION to mitigate risk.



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

If in doubt as to the severity of the concern, TAKE IMMEDIATE ACTION to remove the suspected hazard or mitigate the suspected risk, including cessation of flight operations, evacuation of personnel, etc.

CAUTION

If in doubt as to the severity of a concern that might pose a threat of injury or death, it is better to err on the side of safety.

If additional information is necessary to make this determination, every available resource should be called upon to obtain additional information, AFTER IMMEDIATE ACTION HAS BEEN TAKEN. In these cases, the President shall immediately be notified and an emergency meeting of the Safety Committee shall be called by the manager who received the notification or report.

WRITTEN REPORTS

When a written report of a hazard, accident or incident, occurrence or irregularity, error, violation or other safety concern is received by a manager, it shall be immediately reviewed, validated and assessed. If the report contains one or more validated hazards, events or safety concerns, the manager receiving the report is responsible and accountable for accurately entering all information from the report into the IR database. Retain all written reports for Safety Committee review.

REPORTING DIRECTLY INTO INCIDENT REPORTER

Employees may report directly into the IR database any hazards, irregularities, errors, violations, near-accidents and other safety concerns for which immediate verbal or telephonic notification is not required. Standard web browsers are used by employees to access IR's online reporting form, via link from the MHI company [website](#). Procedures for accessing IR's online reporting form, including account names and passwords, are issued to employees via memo from the office of the Quality & Safety Manager.

NON-DISCLOSURE

Both the Quality & Safety Manager and other managers involved with each report received under this program shall not disclose the contents of the report or disclose the identities of the persons involved, unless:

- Necessary to evaluate data or determine root causes;
- An immediate safety concern dictates otherwise.

In these cases, information from reports received shall be released only on a need-to-know basis. If the report involves an event of non-compliance, or if subsequent investigation by management reveals any issues of non-compliance, MHI management will assist those airmen involved with NASA ASRP reporting in an effort to protect personnel from civil penalties or certificate action imposed by regulating authorities.

7.13 Reporting of Aircraft Accident & Incidents

Aircraft Accident / Incident Report Form SP031/ or the Maritime Helicopters Flight Irregularity Report is used by all personnel to report any type of aircraft accident, incident or damage to aircraft. Near mid-air collisions are considered **incidents**. The report is due within 24 hours of an event. Additional information, such as airport authority reports, vendor reports and photographs of the damage and accident or incident scene should be forwarded promptly as they become available.

IMPORTANT:

For aircraft accidents / incidents that are of a serious nature, or if in doubt as to the seriousness of an event, refer to the MHI Emergency Response Plan



7.14 Reporting of Minor Occurrences

It is possible for an aircraft to receive **minor damage** or for a person to receive **minor injuries** that would not be considered an accident or an incident as defined by NTSB Part 830. These events are considered **Minor Occurrences** by Maritime Helicopters, and should nevertheless be reported to management. All events that do not meet NTSB definitions of an accident or incident will be classified as “occurrences”. This will maintain a separation between NTSB responsibilities for accident investigation and occurrences that MHI will investigate. All events, regardless of their classification, will be investigated by MHI for application of risk management and corrective action(s). The following events are considered Minor Occurrences:

- Minor aircraft damage, including:
 - Engine failure or damage limited to an engine if only one engine fails or is damaged;
 - Bent cowlings or fairings, dented skin;
 - Small puncture holes in the skin;
 - Ground damage to propeller / rotor blades;
 - Damage to the landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips.
- Minor injuries to passengers, personnel or vendor employees, including:
 - Minor cuts or bruises, or minor first degree burns over less than 5% of the body;
 - Minor fractures of fingers, toes or nose.

7.15 Reporting of Errors and/or Violations

RESPONSIBILITY OF ALL PERSONNEL

It is the responsibility of every person to place safety and compliance as their highest priorities, and to report mistakes and/or errors made by operations, administrative, maintenance and inspection personnel immediately upon discovery. The owners, officers and managers of Maritime Helicopters understand that mistakes sometimes happen. Although every effort must be made to keep mistakes and errors to a minimum, what really matters is the intent of those involved, and how mistakes and errors are dealt with after the fact.

Errors and violations may or may not result in a **hazard**. If a hazard exists that is not immediately dangerous or life-threatening, employees are encouraged to report the hazard to their department manager or the Quality & Safety Manager. Managers may offer suggestions for immediate risk controls or corrective actions, and may also direct employees to submit their reports into the online reporting form of the IR database.

NOTE: For hazards that pose immediate life-threatening danger, employees are authorized to take whatever immediate action is required to eliminate the hazard or reduce risk.

All errors and potential violations should be reported to your immediate supervisor or department manager. When making a report, attempt to identify the cause of the error, and all persons involved. Suggest actions that may prevent similar future occurrences. While the IR database provides for anonymous reporting, contact information is encouraged to assist MHI managers in collecting additional information. Without additional information, a determination of root causes is sometimes not possible.

Maritime Helicopters will never punish an employee for reporting an honest mistake or error, even if something was overlooked or forgotten. **Errors should always be honestly revealed, even if the error resulted in injury or equipment damage.** The investigation of small errors, and taking steps to eliminate the causes of error, are essential parts of preventing major accidents.



If the error resulted from willful violation of government regulations or Company procedures, the error must still be disclosed. Safety benefits from rule violations only result when the circumstances of the violation are fully investigated. In many cases, personnel who repeatedly violate a rule prove eventually that the rule (or part of it) is not fostering safety at all, and should be modified. This determination can only be made through an honest examination of the violation.

Maritime Helicopters senior management may work together with the Quality & Safety Manager and department managers as necessary to determine any corrective action(s) that need to be taken. This may include the administering of additional training, revisions to documents, manuals and programs, or other corrective actions.

If a concern regarding pilot proficiency arises, the pilot may be evaluated, removed from all non-training flight duties, re-trained and re-qualified.

RESOLVE OF SAFETY ISSUES & REPORTS RECEIVED

Whenever an observed hazard, irregularity, occurrence, near-accident, error or violation is brought to the attention of a manager, that manager shall promptly perform an initial assessment of the hazard or situation and associated risk(s). If a life-threatening situation exists, or if there is risk of personal injury or damage to Company aircraft or other resources, the risk shall immediately be mitigated by that manager in any way possible. **This includes interruption or diversion of flights, evacuation of personnel or any other action(s) deemed necessary by the manager involved.**

As a control measure, managers should seek the consultation and advice of the Quality & Safety Manager or one other manager. Likewise, if a hazard, irregularity, occurrence, near-accident, error or violation is brought to the attention of the Quality & Safety Manager, the Quality & Safety Manager shall contact appropriate knowledgeable manager(s) to discuss and assess the event and associated risks. If doubt exists as to the severity of a hazard or event, and a possibility exists for injury or damage to property, it is better to err on the side of safety, and make decisions accordingly.

All validated reports received under the Employee Reporting System are entered by the manager who received the report into the IR database for further investigation, risk assessment, development of Corrective Action Plans and communication of lessons learned, in accordance with the MHII [Risk Management Program](#).

CORRECTIONS TO WRITTEN RECORDS

All written Company records are to be made with ball-point pen, in blue or black ink. The use of liquid ink pens, pencils or other colors of ball-point pen is not acceptable. To correct a written record (such as the entry of an incorrect date or number on a form), simply draw a single line through the erroneous entry and enter the correct information adjacent to the error. This is the only acceptable method of correction.

WARNING

NEVER change a record or falsify any document to conceal any mistake or error. Provisions exist to protect personnel and MHI from certificate action and civil penalties in the event an inadvertent violation, or series of violations, occurs.

AVIATION SAFETY REPORTING SYSTEM (NASA ASRS REPORTS)

The FAA has established an **Aviation Safety Reporting System (ASRS)** to identify problems in the U.S. aviation system that might require corrective action. The primary objective of the program is to obtain information to evaluate and enhance the safety and efficiency of the present system. This program is described in **AC 00-46, Aviation Safety Reporting Program**.



When ASRS receives a report describing a hazardous situation – for example, a defective navigation aid, mis-charting, a confusing procedure, or any other circumstance which might compromise safety of flight, an alerting message is issued. Alerting messages take a variety of forms but they have a single purpose; to relay safety information to individuals in positions of authority so that needed corrective actions can be taken. This is a positive program intended to ensure the safest possible system by identifying and correcting unsafe conditions before they lead to accidents.

NASA ASRS reports are similar to voluntary self-disclosures in that airman who inadvertently make an error or violate a rule, and who file a report through this system within 10 days after a potential violation, may avoid FAA certificate action (receiving a violation, a civil penalty, or both).

The system is not only for pilots, but for dispatchers, ground and maintenance personnel as well. Operations covered by the program include departure, enroute, approach, and landing operations and procedures, air traffic control procedures and equipment, crew and air traffic control communications, aircraft cabin operations, aircraft movement on the airport, near midair collisions, aircraft maintenance and record keeping and airport conditions or services.

The FAA utilizes the National Aeronautics and Space Administration (NASA) to act as an independent third party to receive and analyze reports submitted under the program. Reports are therefore anonymous and normally cannot be used by the FAA for enforcement purposes, unless the violation was willful or negligent. Additional information is available directly from NASA at:

www.asrs.arc.nasa.gov

LEGAL ASSISTANCE FROM MANAGEMENT

If a crewmember, dispatcher or mechanic should receive a "Notice of Investigation" involving a reported violation, caution is advised in preparing a response. Many people often make self-incriminating statements that subsequently appear as part of an enforcement action case or a civil action. For these reasons, MHI management advises all personnel not to make any statements until sufficient opportunity exists to review the allegations and details of the event, and competent legal advice has been obtained. Employees are encouraged to solicit the assistance of MHI management and the resources available to management, when dealing with these issues.

7.16 Near Midair Collision Reporting

DEFINITION

A near midair collision is defined as an incident associated with the operation of an aircraft in which a possibility of collision occurs as a result of proximity of less than 500 feet to another aircraft, or a report is received from a pilot or a flight crew member stating that a collision hazard existed between two or more aircraft.

COMPANY REPORTING

Contact the Chief Pilot or Director of Operations immediately upon landing. Report into the IR database or in writing within 24 hours.

ATC REPORTING

It is the responsibility of the pilot and/or flight crew to determine whether a near midair collision did actually occur and, if so, to initiate a NMAC report. Be specific, as ATC will not interpret a casual remark to mean that a NMAC is being reported. The pilot should state "I wish to report a near midair collision."



PURPOSE AND DATA USES

The primary purpose of the **Near Midair Collision (NMAC) Reporting Program** is to provide information for use in enhancing the safety and efficiency of the National Airspace System. Data obtained from NMAC reports are used by the FAA to improve the quality of FAA services to users and to develop programs, policies, and procedures aimed at the reduction of NMAC occurrences. All NMAC reports are thoroughly investigated by Flight Standards Facilities in coordination with Air Traffic Facilities. Data from these investigations are transmitted to FAA Headquarters in Washington, DC, where they are compiled and analyzed, and where safety programs and recommendations are enveloped.

WHERE TO FILE REPORTS

Pilots and/or flight crew members involved in NMAC occurrences are urged to report each incident immediately:

- By radio or telephone to the nearest FAA ATC facility or FSS;
- In writing, in lieu of the above, to the nearest Flight Standards District Office (FSDO).

ITEMS TO BE REPORTED

- Date and time (UCT) of incident;
- Location of incident and altitude;
- Identification and type of reporting aircraft, aircrew destination, name and home base of pilot;
- Identification and type of other aircraft, aircrew destination, name and home base of pilot;
- Type of flight plans; station altimeter setting used;
- Detailed weather conditions at altitude or flight level;
- Approximate courses of both aircraft: indicate if one or both aircraft were climbing or descending;
- Reported separation in distance at first sighting, proximity at closest point horizontally and vertically, and length of time in sight prior to evasive action;
- Degree of evasive action taken, if any (from both aircraft, if possible);
- Injuries, if any.

INVESTIGATION

The FSDO in whose area the incident occurred is responsible for the investigation and reporting of NMACs. Existing radar, communication, and weather data will be examined in the conduct of the investigation. When possible, all cockpit crew members will be interviewed regarding factors involving the NMAC incident. Air traffic controllers will be interviewed in cases where one or more of the involved aircraft was provided ATC service. Both flight and ATC procedures will be evaluated. When the investigation reveals a violation of an FAA regulation, enforcement action will be pursued.

NOTE: Flight Crewmembers desiring to file a Near Midair Collision Report are urged to contact the Chief Pilot or Director of Operations for assistance in mitigating any potential civil penalties and/or certificate action. ASRS (NASA) Reports should also be filed. If an apparent violation has occurred, Maritime Helicopters may also wish to self-disclose to FAA through the Company's formal Voluntary Disclosure Reporting Program.

7.17 Voluntary Disclosure Reporting Program

BACKGROUND

FAA Advisory Circular AC 00-58A (or subsequent guidance) **Voluntary Disclosure Reporting Program**, sets forth procedures for the voluntary reporting of violations, and FAA policies regarding how these reported violations are handled. The FAA believes that aviation safety is well served by incentives for certificate holders to identify and correct their own instances of noncompliance, and to invest more resources in efforts to preclude their recurrence. The FAA's policy of forgoing civil penalty



actions when a certificate holder detects violations, promptly discloses the violations to the FAA, and takes prompt corrective action to ensure that the same or similar violations do not recur, is designed to encourage compliance with FAR's, foster safe operating practices, and promote the development of internal evaluation programs.

Self-disclosures by employees to MHI management also provide MHI with safety information that may not be captured through other reporting mechanisms. Self-disclosures are a positive indication to FAA of Maritime Helicopters' commitment to addressing safety problems and proactively identifying potential safety hazards. They demonstrate both employees' and management's emphasis on safety and willingness to better manage safety issues. Self-disclosure of apparent violations to FAA also serves to heighten the trust that exists between MHI and the FAA, and is a visible demonstration of MHI positive safety culture.

Self-disclosures may also serve to protect individual airmen, agents and other employees from potential legal action from FAA in the event of an inadvertent violation, including civil penalty actions and suspension of airmen certificates. Certain eligibility requirements must be met for this protection, as set forth herein.

All employees are encouraged to immediately bring to the attention of a manager, any known or suspect violation of FARs. MHI managers support and promote MHI positive safety culture, and are well-qualified to assist individual employees with the protections offered under this program. Through the prompt reporting of apparent violations, determination of root causes and implementation of comprehensive fixes, Maritime Helicopters will continue to maintain the highest level of aviation safety.

NOTE: Apparent violations involving Hazardous Materials (Dangerous Goods) may also be reported under this program. Refer to Advisory Circular AC 121-37 for more information.

KEY TERMS

The following key terms and phrases are excerpted from AC 00-58A and defined herein to ensure a standard interpretation and understanding of the FAA's voluntary disclosure policy:

- **Evidence.** For the purpose of voluntary disclosure, evidence generally should be in the form of written documentation or reports that support a certificate holder's analysis of the disclosed apparent violation and the resulting elements of the proposed comprehensive fix. Evidence generally comes from the following four elements:
 - Documents or manuals reviewed.
 - Equipment examined.
 - Activities observed.
 - Interview data.
- **Comprehensive Fix.** A comprehensive fix is an action, or actions, proposed by the certificate holder and accepted by the principal inspector to preclude recurrence of the apparent violation that has been voluntarily disclosed under this program. A schedule of the dates and events encompassed by the comprehensive fix must be established, and will be included in FAA's letter of correction.
- **Satisfactory Fix.** A satisfactory fix is a comprehensive fix in which all corrective measures have been completed on schedule and are satisfactory to the FAA.
- **Principal Inspector (PI).** Under the Voluntary Disclosure Reporting Program, PI refers to the appropriate maintenance, avionics, operations inspector, or other designated FAA official of the program office responsible for oversight of the area of noncompliance involved in the disclosure.



NOTE: The designated FAA official for voluntary disclosure concerning anti-drug and alcohol misuse prevention program violations is the Branch Manager, Compliance and Enforcement Branch, Drug Abatement Division, FAA Headquarters.

FAA'S VOLUNTARY DISCLOSURE POLICY

AC 00-58A sets forth FAA policy regarding self-disclosures. The FAA believes that the open sharing of apparent violations and a cooperative, advisory approach to solving such problems will enhance and promote aviation safety. Certificate holders will receive a letter of correction in lieu of civil penalty action for covered instances of noncompliance that are voluntarily disclosed to the FAA in accordance with the procedures set forth in AC 00- 58A. Once the letter of correction is issued, the case will be considered closed unless the agreed-upon comprehensive fix is not satisfactorily completed by the certificate holder.

NOTE: Except as specified in the paragraph below, FAA ordinarily will not forgo legal enforcement action if MHI informs the FAA of the apparent violation during, or in anticipation of, an FAA investigation/inspection or in association with an accident or incident.

CONDITIONS REQUIRED FOR ELIGIBILITY

In evaluating whether an apparent violation is covered by FAA policy as set forth in AC 00-58A, FAA must ensure that the following five conditions are met:

- MHI must notify FAA of the apparent violation immediately after detecting it and before FAA has learned of it by other means.
- The apparent violation must have been inadvertent, and not a blatant disregard for the FARs.
- The apparent violation must not indicate a lack, or reasonable question, of qualification of MHI.
- Immediate action must be taken (satisfactory to the FAA) upon discovery to terminate the conduct or operation that resulted in the apparent violation.
- MHI must have developed, or be in the process of developing, a comprehensive fix which is satisfactory to FAA. The comprehensive fix must include:
 - Identification of root cause(s).
 - A schedule of implementation.
 - An internal follow-up self-audit to ensure the action taken corrects the noncompliance.

EXCEPTIONS

If the FAA has learned of an apparent violation by MHI from an ASAP report as described in the current edition of AC 120-66, Aviation Safety Action Program, a voluntary disclosure can still be accepted by the FAA, even though the FAA has already learned of the violation from the ASAP. Similarly, if MHI voluntarily agrees to conduct a joint audit (inspection) with the FAA during which an apparent violation is discovered either by MHI or FAA members of the audit (inspection) team, the FAA may accept a voluntary disclosure submitted by MHI, even though the FAA has already learned of the apparent violation during the course of the joint audit (inspection).

PROCEDURES FOR REPORTING TO MHI

Personnel should first report an apparent violation verbally to the appropriate manager and/or the Quality & Safety Manager. MHI managers will assist those involved in order to evaluate the number and depth of any potential violation(s). It may be possible for both employees and MHI to be protected from certificate action and civil penalties, provided:

- The violation was inadvertent and not a blatant disregard of the FARs;
- The apparent violation involves a deficiency of MHI policies, practices, procedures or written guidance that causes MHI to be in violation of a covered violation of an FAA regulation.



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

- The airman or other agent of MHI, while acting on behalf of MHI, inadvertently violates the FAA's regulations as a direct result of a deficiency of MHI that causes MHI to be in violation of the regulations.

NOTE: The voluntary disclosure policy does not apply to the airman or other agent when his/her apparent violation is the result of actions unrelated to a MHI deficiency.

MHI managers will first review the details surrounding the apparent violation(s), TAKE IMMEDIATE ACTION to terminate the conduct or operation that resulted in the apparent violation, and then develop a plan that includes:

- Immediate verbal and formal notification to FAA;
- Identification of root cause(s), including possible MHI deficiencies;
- A Corrective Action Plan (CAP) to prevent reoccurrence;
- Assurance of non-punitive measures and re-training/education for employees who are involved, if necessary;
- Protection of employees through NASA reporting (see Aviation Safety Reporting System in this section)
- Protection of the employee from FAA fines or civil penalties by seeking systemic or organizational deficiencies that may have contributed to the apparent violation(s).

PHASE 1: PROCEDURES FOR INITIAL NOTIFICATION TO FAA

Department managers are authorized to notify FAA of an apparent violation by making contact with, or directing correspondence to, the appropriate PI. FAA's Voluntary Disclosure policy as set forth in AC 00-58A applies only when notification of an apparent violation is made to the FAA **immediately after the apparent violation has been discovered, and before the FAA learns of the apparent violation by some other means**. It is FAA policy that initial notification should be accomplished on a timely basis, ordinarily within 24 hours of the discovery of the apparent violation. However, an inspector may accept disclosures that exceed the 24-hour policy when the inspector determines that a later submission is justified based on the specific circumstances, and in view of those circumstances, the submission is still considered timely. For example, a voluntary disclosure based on a MHI violation revealed in an Aviation Safety Action Program (ASAP) report may require more than 24 hours from the submission of that ASAP report in order for MHI to become aware of the information in the report and to initiate a voluntary disclosure. The FAA retains sole discretion in determining whether a voluntary disclosure received later than 24 hours after discovery of the violation is timely. If MHI is an authorized user of the Web- based VDRP:

- Use the Web-Based VDRP for Notification of an Apparent Violation.
 - When using the Web-based VDRP, submission of a voluntary disclosure via the Web-based VDRP system will result in automated notification of the PIs assigned to the MHI certificate.
 - The Web-based VDRP system contains provisions for indicating that the notification process was begun via another media. When acceptable to the PI, initial notice by MHI may be submitted orally, via a written hardcopy, or by electronic copy; provided MHI enters the initial notification data via the Web- based VDRP system within 72 hours of the original notification. However, compliance with the 10- (or 30-) day limit for submission of the written report will be based on the date of the original notification, regardless of the submission means or media.

NOTE: If MHI is not yet authorized to use the Web-based VDRP, initial notification of an apparent violation will be submitted orally, via a written hardcopy, or by electronic copy. Although FAA accepts oral notification, a written hard copy or a written electronic copy (via email) is preferred in order for MHI to maintain a written record of prompt, accurate and descriptive notification.



If MHI is not authorized to use the Web-based VDRP, **notification should not be delayed for any reason, and should be made by the appropriate department manager, directed to the appropriate principal inspector.** Initial notification should address, to the maximum extent possible, the following items with the principal inspector:

- A brief description of the apparent violation, including:
 - An estimate of the duration of time that it remained undetected;
 - How the apparent violation was discovered;
 - When it was discovered (including date and time).
- Verification that noncompliance ceased after it was identified.
- A brief description of the immediate action taken after the apparent violation was identified, the immediate action taken to terminate the conduct that resulted in the apparent violation, and the person responsible for taking the immediate action.
- Verification that an evaluation is underway to determine if there are any systemic problems and a description of the corrective steps necessary to prevent the apparent violation from recurring (identifying root causes).
- The name and title of the person responsible for preparing the comprehensive fix.
- Acknowledgment that a detailed written report will be provided to the PI within 10 working days.

NOTE: If initial notification is made via the Web-based VDRP, notification of the PI is accomplished by the program. No further initial notification is required by MHI.

NOTE: MHI will have 10 work days from the date of the written acknowledgment of the apparent violation to follow up with a detailed written report to the principal inspector. If MHI does not agree that there has been a violation, or otherwise fails to provide information as required in the detailed written report, the FAA thereafter will proceed with its investigation and initiate enforcement action, if appropriate, against MHI.

PHASE II: FAA RESPONSE TO INITIAL NOTIFICATION

MHI'S management should expect the FAA principal inspector to respond with a written acknowledgment of the initial notification. This acknowledgment includes the request for a detailed written report, and is sent in lieu of a letter of investigation provided the written report is completed in accordance with the voluntary disclosure reporting procedures set forth in AC 00-58A and Appendices 1 & 2 of AC 00-58A. The PI will open an enforcement investigative report that will be closed out with a letter of correction, following satisfactory development of a comprehensive fix and schedule of implementation agreed upon by the FAA and MHI management.

NOTE: When the regulated entity has submitted the voluntary disclosure via the Web-based VDRP, action on the voluntary disclosure by the PI results in an automated electronic reply to MHI and an automated opening of the Enforcement Investigative Report (EIR).

PHASE III: MHI'S DETAILED WRITTEN REPORT

If a violation remains apparent or is confirmed, the manager in whose department the violation occurred shall prepare the written report (**Voluntary Self-Disclosure Form SP-008**). Among other requirements, the report shall contain a **comprehensive fix** and shall be submitted to the Safety Committee for acceptance prior to submission to FAA. If necessary, an emergency meeting of the Safety Committee may be convened to discuss the issue and develop MHI's Corrective Action Plan, which comprises a comprehensive fix. The manager who prepared the report shall provide it to the principal inspector within 10 working days after the initial notification was made. In summary, the written report should include the following information:



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

- A list of the specific FAA regulations that may have been violated;
- A description of the apparent violation, including:
 - The duration of time it remained undetected;
 - How it was detected;
 - When it was detected (date and time).
- A description of the immediate action taken to terminate the conduct that resulted in the apparent violation, including:
 - When such action was taken; and
 - Who was responsible for taking the action.
- An explanation that shows the apparent violation was inadvertent;
- Evidence that demonstrates the seriousness of the apparent violation and MHI's analysis of that evidence;
- A detailed description of the proposed comprehensive fix, outlining:
 - The planned corrective steps;
 - The responsibilities for implementing those corrective steps; and
 - A time schedule for completion of the fix.
- Identification of the MHI manager responsible for monitoring the implementation and completion of the comprehensive fix.

If a proposed comprehensive fix is not fully developed within 10 working days, MHI should provide at least an overview of its comprehensive fix plans. In this case, the detailed description of the comprehensive fix must be provided to the principal inspector within 30 calendar days after MHI initially notified the principal inspector of the apparent violation.

APPLICATION OF RISK MANAGEMENT

During preparation of the detailed written report, the Safety Committee will identify root cause(s) of the violation and/or associated systemic problems. This exercise is necessary for sound development of a **Comprehensive Fix**, which must be submitted to FAA as part of the Voluntary Self-Disclosure process. The Incident Reporter database is utilized for monitoring, control and process measurement of the comprehensive fix. Refer to the MHI [Risk Management Program](#) for instructions and procedures regarding this process.

Upon final draft and preparation of the Voluntary Self-Disclosure Form and its associated Risk Management Record and Corrective Action Plan(s) (CAPs), confidential copies are reviewed by the Safety Committee and/or senior management for acceptance of each specific CAP and appropriate signatures. Upon acceptance of the CAP(s), copies of the forms are forwarded by the manager who prepared the voluntary Self-disclosure to the FAA and to the Quality & Safety Manager for follow-up on the comprehensive fix and further risk management.

NOTE: Failure to comply with the specific action requirements of the comprehensive fix, within the dates established, could permit FAA to disallow the disclosure and re-open an enforcement case that could result in civil penalties and/or certificate action against both Maritime Helicopters and the individual airmen involved.

PHASE IV: WRITTEN REPORT REVIEW BY THE FAA

FAA should be expected to work with the appropriate managers to ensure that MHI has identified any root causes and systemic issues which led to the apparent violation. This collaboration helps to ensure that the corrective actions contained in the comprehensive fix are acceptable to the FAA.

PHASE V: IMPLEMENTATION OF A COMPREHENSIVE FIX AND FAA SURVEILLANCE

During the implementation period, the FAA and appropriate managers should continue to work together. The FAA may advise and assist MHI in correcting any identified systemic problems.



Changes will be made to the proposed comprehensive fix when the need is identified. Upon determining that the initial implementation of the comprehensive fix is satisfactory, the PI will issue a letter of correction. Should a change to the comprehensive fix be identified after issuance of the letter of correction, the PI will issue an amendment to the letter of correction that reflects this change.

The FAA monitors the implementation of the corrective steps. Throughout the implementation period, the FAA assesses MHI corrective efforts and top management's awareness of these efforts. If, during this period, the FAA determines that the steps taken by MHI are not those documented in the comprehensive fix, the letter of correction may be rescinded, the investigative report may be reopened, and appropriate legal enforcement action may be initiated.

PHASE VI: INSPECTOR SIGNOFF

At the conclusion of the implementation period, the PI makes a final assessment. If all elements of the comprehensive fix have been adequately accomplished, the PI finds the fix satisfactory and closes the case. The case remains subject to reopening in the event that the agreed-upon actions, outlined in the comprehensive fix, are not completed to the satisfaction of the FAA. A statement of follow-up investigation, confirming that the comprehensive fix was satisfactorily implemented and completed, is prepared to complete the FAA's investigative package.

The PI has the authority to close the case. Consultation with regional specialists, legal counsel, or other FAA personnel may be accomplished when deemed appropriate by the PI.

Following completion of the agreed-upon corrective action(s), the Quality & Safety Manager shall conduct a follow-up audit to ensure that the action taken remedies the problem that gave rise to the apparent violation.

If, following FAA closure of the investigative package resulting from a voluntary disclosure, the same or similar violations are discovered to have occurred prior to submission of the associated voluntary disclosure, the FAA does not reopen the case unless it determines that MHI failed to comply with all the elements of the comprehensive fix agreed upon by the FAA and MHI.

DISPUTE RESOLUTION

When disputes occur regarding the acceptance of a proposed comprehensive fix, or a modification thereto before the fix is considered satisfactory, the PI and MHI may request that the issue be resolved at the next level of management within the FAA. This procedure will provide for an independent assessment of the areas in disagreement.

SEPARATE ACTIONS AGAINST AIRMEN OR OTHER INDIVIDUAL AGENTS

FAA's voluntary disclosure policy (foregoing of certificate action) should apply to individual airmen or other agents employed by MHI when:

- The apparent violation involves a deficiency of company practices or procedures that causes MHI to be in violation of a covered violation of an FAA regulation;
- The airman or other agent of MHI, while acting on behalf of MHI, inadvertently violates the FAA's regulations as a direct result of a company deficiency that causes MHI to be in violation of the regulations.
- The airman or other agent immediately makes the report of his/her apparent violation to management; and
- MHI immediately notifies the FAA of both the airman's or other agent's apparent violation and the apparent deficiency in its practice or procedures.



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

NOTE: FAA's voluntary disclosure policy will not apply to the airman or other agent when his/her apparent violation is the result of actions unrelated to a company deficiency. Therefore, in order to further protect the individual airman or agent from certificate action, MHI should investigate the event in order to discover potential systemic deficiencies that could have contributed to the violation.

When all the above conditions are met, a separate EIR is opened for the individual and closed with no more than administrative action in accordance with the current edition of Order 2150.3, Compliance and Enforcement Program.

If all the above conditions are not met, the principal inspector will review all facts associated with the case and determine what action is appropriate for individual airmen or other agents of MHI. **However, this provision does not apply to matters concerning qualifications to hold an airman certificate.**

Special provisions exist for apparent violations when a voluntary disclosure is made based on information in an ASAP report. In such cases, the FAA may, at its sole discretion, accept the corrective action recommended by an ASAP Event Review Committee (ERC) for an accepted ASAP report as the comprehensive fix for the voluntary disclosure. This is acceptable when the following conditions all apply (even when an apparent employee qualification or competency issue is involved):

- The FAA determines that the violation is due entirely to the actions of the employee(s) and not to a systematic or procedural deficiency of MHI; and
- The employee completes the corrective action recommended by the ASAP ERC to the satisfaction of the FAA.

APPLICABILITY OF THE FREEDOM OF INFORMATION ACT (FOIA) TO SELF-DISCLOSURES

Records submitted to the FAA for review pursuant to this voluntary self-disclosure program, including information submitted using the Web-based VDRP tool, are protected from release to the public in accordance with the provisions of Part 193 and FAA Order 8000.89, Designation of Voluntary Disclosure Reporting Program (VDRP) Information as Protected from Public Disclosure under 14 CFR Part 193.

REPEATED VIOLATIONS

If a repeated violation occurs, notwithstanding the fact that a comprehensive fix was satisfactorily completed and followed, the procedures outlined in this voluntary disclosure program and AC 00-58A may apply to disclosure of the repeated violation. Upon consideration of the facts and circumstances surrounding the repeated violation, the FAA will determine on a case-by-case basis whether a repeated violation will be covered under FAA policy as set forth in AC 00-58A. Both MHI managers and PIs should evaluate the systemic issues and circumstances surrounding each apparent violation. This is particularly important when citing a common regulation. Depending upon the specific circumstances associated with the event, citations of a common regulation may not necessarily be indicative of a common systemic failure.

USE OF INTERNAL EVALUATION PROGRAM TO PRECLUDE VIOLATIONS

Proper implementation and application of the MHI **Internal Evaluation Program** should help to ensure that any apparent violations are promptly identified, corrected, and reported to the FAA. While not required, the FAA strongly encourages certificate holders to make internal evaluation programs an integral part of their everyday management process so that the full benefits of voluntary disclosure can be realized. Excerpt from AC 00-58A:



“Aviation safety is served by programs that allow certificate holders... to identify and correct their own instances of noncompliance and invest more resources in efforts to preclude their recurrence.”

7.18 Use of the Web-Based VDRP Tool for Submissions of Voluntary Disclosures

Authorized Users:

Use of the Web-based Voluntary Disclosure Reporting Program (VDRP) tool will initially be limited to certificated air carriers. Subsequent revisions to the Web tool will provide access to other authorized users. Announcements relating to expansion of access to other users are available at <http://av-info.faa.gov/vdrp>

Effective December 8, 2006, voluntary disclosures by air carriers must be processed utilizing the above referenced Internet application, even if initial notification to the Federal Aviation Administration (FAA) is accomplished by other means. This Web-based application offers an automated interface for regulated entities and FAA inspectors to accomplish the voluntary disclosure process virtually paper-free. In addition, the Web-based VDRP provides enhanced capabilities for tracking and managing voluntary disclosures, while protecting all submissions in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 193 and Order 8000.89, Designation of Voluntary Disclosure Reporting Program (VDRP) Information as Protected from Public Disclosure under 14 CFR Part 193.

VDRP Web Address (URL): <http://av-info.faa.gov/vdrp>

GENERAL INFORMATION

- The Web-based VDRP is accessible anywhere with an Internet connection, on a 24-hour, 7-day-a-week basis, subject to access privileges granted in accordance with the paragraph USER LOGIN below.
- Internal tracking and email alerts simplify management of voluntary self-disclosures.
- Online data entry provides a streamlined and automated VDRP process.
 - No software to download or install.
 - Secure: Only authenticated users can access VDRP system. All transactions are encrypted using 128 bit Secure Socket Layer (SSL) technology.

USER RESPONSIBILITIES

- **Regulated Entities:** A regulated entity (MHI) is responsible for submitting the voluntary disclosure, completing the written report, and implementing corrective actions satisfactory to the principal inspector (PI).
- **FAA Inspectors:** A PI, or his/her designee, is assigned to a voluntary disclosure. The assigned inspector is responsible for reviewing and accepting (or declining) submissions from MHI (i.e., initial notification, written report and any revisions to the written report/corrective actions). In addition, the PI will issue a Letter of Correction (or other administrative action, as appropriate), while confirming implementation of the corrective actions agreed upon with the regulated entity. The PI will close the VDRP file upon satisfactory implementation of the corrective action(s), or open an enforcement investigation if MHI should fail to implement the corrective action as detailed in the Letter of Correction.

USER LOGIN

- **FAA Inspector:** Login information will be provided via internal channels.
- **Regulated Entity (MHI):** Contact your FAA certificate-holding office to obtain access information.



USER SUPPORT

- **VDRP Online Help:** Provides context sensitive help for every Web form of the application. Online help is available within the Web-based application.
- **VDRP Users Guide:** Contains detailed explanation of the VDRP web application, descriptions of VDRP terms, functions and features of VDRP. This is available at the VDRP Web site.
- **AVS Central Support:** Provides answers to VDRP related questions and support to solve any VDRP related problems. Call AVS support central for trained personnel to aid users of the Web-based VDRP system.
 - Hours of operation: 6:00 a.m. – 5:00 p.m. CST Monday through Friday.
 - Telephone number: Toll-free at (866) 285-4942 or at 405-954-7272.
 - E-mail address: 9-AMC-AVS-Support-Central@faa.gov.



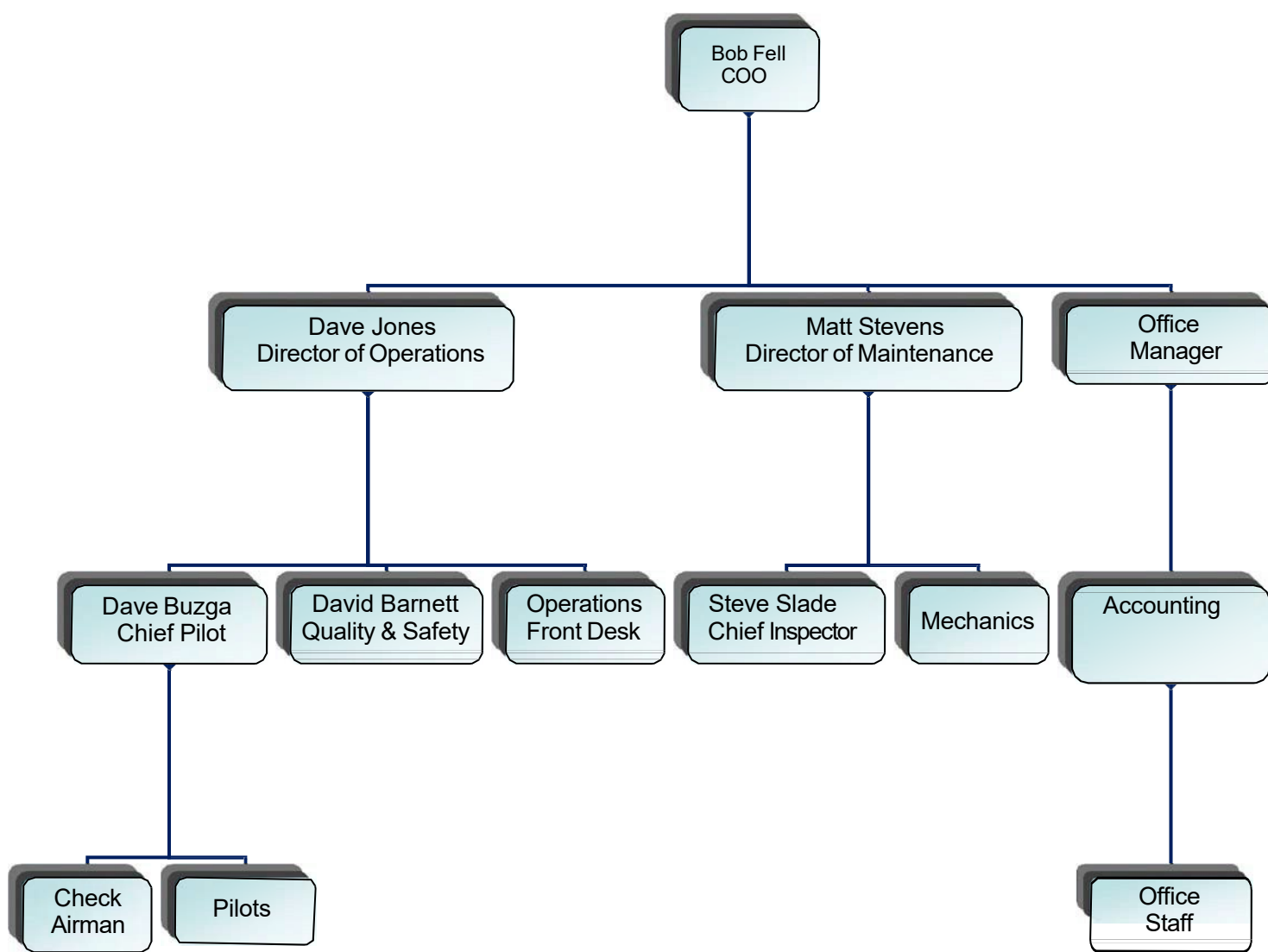
8. SMS ORGANIZATION

8.1 Structure

INJURY REPORT FORM SP030 should be submitted for any job-related injuries, regardless of their severity. Reports may be submitted to your department / station manager, or directly to the Q&S Manager.

Maritime Helicopters' Safety Management Organization consists of both management personnel and employees, all of whom actively participate in the company's safety management efforts. These participants consist of the accountable executive the **President**, the Quality & Safety Manager, the **Safety Committee**, **department managers**, and **all employees**.

8.2 Safety Management Organizational Chart





8.3 Chief Operations Officer - COO

Bob Fell Tel: 907-235-7771 bfell@maritimehelicopters.com

AUTHORITY

The COO holds the highest level of authority within MHI, and is authorized by senior management to:

- Place safety matters on the agenda of meetings, from the Board level downwards;
- Maintain active involvement in safety activities and reviews at both local and remote sites;
- Allocate the necessary resources, both human and financial, to safety matters;
- Promote safety topics in MHI publications.

DUTIES & RESPONSIBILITIES

The COO is responsible and accountable for the continued diligent application of the Safety Management System, and for its continued quality assurance. The COO shall provide a strong and active leadership role in safety management by fostering Maritime Helicopters' positive safety culture and setting personal examples in day-to-day work, including endorsement of the MHI **Safety & Quality Policy Statement**.

The COO is an **active participant** in Maritime Helicopters' Safety Management System. The COO reviews the results of departmental audits and internal evaluations, as well as all Risk Management Records (RMRs) created in the IR database and Risk Control Worksheets (RCWs) generated as a result of strategic, change and task planning efforts. The COO also reviews and accepts Corrective Action Plans (CAPs) to mitigate risk as developed by department managers or the Safety Committee, whenever the President is the appropriate risk-decision authority.

The COO shall, when absent, appoint a representative of senior management to serve in his capacity, with regard to SMS duties and responsibilities.

8.4 Quality and Safety Manager

APPOINTMENT

The Quality & Safety Manager is appointed by the COO as identified above. The Quality & Safety Manager shall perform all duties at all times in accordance with MHI best practices and with the highest level of safety.

COMPETENCY REQUIREMENTS

The Quality & Safety Manager shall have received training in the implementation and administration of this SMS Manual and supporting programs through completion of appropriate online SMS training courses. It is highly desirable that the Quality & Safety Manager shall also have completed a course of study in Aviation Safety and one or more Aviation Safety Education Programs as offered by FAA and other private organizations. Participation in industry safety meetings, conferences or schools is also considered an essential part of the continuing education of the Quality & Safety Manager.

EXPERIENCE

The Quality & Safety Manager should have extensive operational experience and professional qualifications in aviation. This includes knowledge and understanding of the following:

- This SMS Manual;
- Aviation safety standards;



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

- Safe aviation operating practices.

EXPERTISE

The person assigned as Quality & Safety Manager should have established professional qualifications. These qualifications may be any of the following:

- A commercial pilot or airline transport pilot certificate.
- A mechanic's certificate.
- An aircraft dispatcher certificate.
- Three years' experience in a supervisory position within a corporate flight department or a commercial air carrier.
- Three years' experience in a comparable position in military aviation operations.
- Three years' experience in a supervisory position with an ICAO member state government department, board, or agency that deals directly with aviation matters.

KNOWLEDGE

The person assigned as Quality & Safety Manager should have a full understanding of the following materials with respect to MHI's operations:

- The MHI manual system;
- MHI Operations Specifications and appropriate maintenance and airworthiness requirements;
- OSHA standards and safe operating practices.

AUTHORITY

The Quality & Safety Manager is authorized to perform internal evaluations of all operational processes, in all departments. In this capacity, the Quality & Safety Manager collects data, observes systems and processes, performs follow-up audits and makes recommendations for improvements. These recommendations are made not only to required managers but directly to the highest level of authority, the COO.

The Quality & Safety Manager reports directly to the Director of Operations and, unless also serving as a key aviation manager for Maritime Helicopters, operates independently from the operations, dispatch, maintenance and inspection departments of MHI. Even though the Quality & Safety Manager may hold a full-time position under another department head (such as pilot or mechanic), a direct line of responsibility, authority and reporting to the COO permits the Quality & Safety Manager to perform follow-up audits and internal evaluations without pressure or fear of reprisal from any manager.

DUTIES & RESPONSIBILITIES

The Quality & Safety Manager is responsible for acting as chairperson of the Safety Committee, and shall perform the duties of Safety Committee chairperson as set forth in the Committee Chair subparagraph below. In addition to serving as Safety Committee chairperson, the Quality & Safety Manager shall:

- Accomplish the SMS Manual and supporting programs;
- Oversee, administrate and manage the Incident Reporter database;
- Administer MHI's Employee Reporting System, which allows employees and vendors to report concerns (anonymously if desired) without fear of reprisal.
- Collect pertinent safety information from industry sources regarding industry safety concerns that may have an impact on operations, and incorporate such information and concerns into Safety Notices;



SAFETY MANAGEMENT SYSTEM

Rev 2: 08/14/24

- Maintain and distribute to department managers appropriate documents and sources of information from MHI's Technical Management System, in current and revised form, which may include:
 - The MHI SMS Manual;
 - Supporting programs;
 - OSHA Requirements
- Develop loss prevention programs;
- Conduct Internal Evaluations in accordance with the Internal Evaluation Program;
- Conduct follow-up audits for each risk control and corrective action recorded in the IR database;
- Determine needs for, and coordinate development of, required safety training courses prescribed by national, state, and local laws and regulations.
- Maintain minutes of Safety Committee meetings;
- Maintain a library of basic industrial hygiene, safety and environmental reference materials;
- Participate on safety-oriented committees sponsored by industry organizations.
- Perform other duties and accept other responsibilities as specified throughout this SMS Manual and supporting programs.

NOTE: The Quality & Safety Manager may delegate certain duties to other personnel (such as auditors or an administrative assistant), but remains responsible for the proper accomplishment of all duties delegated. The Quality & Safety Manager shall, when absent, appoint a representative to serve in his/her capacity, with regard to the duties and responsibilities of the MHI Safety Management System.

8.5 Safety Committee

STRUCTURE & STAFF

Bob - Fell, President/COO	907-235-7771	bfell@maritimehelicopters.com
Dave Buzga - Chief Pilot	208-596-9076	cp@maritimehelicopters.com
Dave Jones - Dir. of Operations	907-388-8390	djones@maritimehelicopters.com
Matt Stevens - DOM	907-360-7459	hommx2@maritimehelicopters.com
Steve Slade - Chief Inspector	907-235-7771	dom@maritimehelicopters.com
David Barnett - Q&S Mgr.	907-388-8016	safety@maritimehelicopters.com

AUTHORITY

The Safety Committee is authorized to:

- Perform all safety risk management / assurance and quality management activities as set forth herein;
- Implement and review the effectiveness of all safety and loss prevention programs;
- Review all actions taken regarding risk mitigation of identified hazards;
- Review internal / external audit findings and assign responsibilities for corrective actions to be taken;
- Review all incidents, accidents, and employee reports;
- Perform SMS Management Review in accordance with the [Internal Evaluation Program](#).

DUTIES & RESPONSIBILITIES

Safety Committee members are responsible for promoting interaction between communications personnel, pilots, mechanics and ground personnel with regard to safety practices,



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

concerns, issues and questions. Safety Committee members are responsible and accountable for:

- Ensuring the Quality & Safety Manager and designated auditors meet minimum competency requirements;
- Implementing the MHI Safety Management System throughout Maritime Helicopters;
- Coordination of corrective action plans which involve more than one department;
- Investigating and reporting on incidents/accidents, with recommendations to preclude a recurrence.
- Managing interfaces between documents, and between safety risk management and safety assurance activities as they pertain to various operational processes;
- Review of, and revisions to, the Emergency Response Plan;
- Resolution of disagreements between departments and/or vendors regarding audit findings and interpretations of regulations or policy.

Safety Committee members may call upon the Quality & Safety Manager for recommendations and guidance in the performance of their duties, but are not authorized to delegate these duties to the Quality & Safety Manager. Each Safety Committee member shall, when absent, appoint a representative from their department to serve in his/her capacity, with regard to that member's duties and responsibilities as set forth herein.

QUALITY MANAGEMENT

The Safety Committee performs quality management activities in conjunction and in concert with risk management activities, through applied use of the company's SMS Manual, supporting programs, and the Incident Reporter database. Quality management includes the continuous monitoring, assessment and improvement of all operational processes, as well as continued quality assurance of SMS processes, through measurement of process outputs and implementation of corrective actions. Quality management is applied throughout the entire scope of Maritime Helicopters' aviation activities.

The **Incident Reporter** database is used to record, assign, and track quality management activities. Data is entered from safety assurance activities and other sources. Investigation is performed and root causes analyzed in order to develop effective controls and actions which improve the quality of all identified deficiencies. Corrective Action Plans are developed and accepted by the appropriate authority. All corrective actions are monitored and follow-up audits are performed to ensure the effectiveness of each control or action. Lessons learned are shared with appropriate personnel, producing a loop of continuous feedback and continuous quality improvement, in all departments.

COMMITTEE CHAIR

The Quality & Safety Manager chairs the Safety Committee. The Quality & Safety Manager conducts and chairs regularly scheduled quarterly Safety Committee meetings and emergency meetings when necessary, and prepares written agenda and minutes for all meetings. The Quality & Safety Manager reports regularly to the Safety Committee and the COO on various elements of the MHI Safety Management System, including identified hazards, employee suggestions for safety, IEP (audit) findings, industry safety developments, analysis of risks, and the results of industry accident and incident investigations. The Quality & Safety Manager may also submit loss prevention programs to the Safety Committee for review and approval.

NOTE: The COO serves as chairperson for the annual Safety Committee meeting once each year, during which annual SMS Management Review is performed.



MEETINGS

Safety Committee meetings should be held at least quarterly or more often if deemed necessary by the Quality & Safety Manager or the COO. Minutes of each meeting will be taken by a team member and formalized by the Quality & Safety Manager. Minutes shall then be distributed to all team members and should contain, at a minimum:

- Courses of action regarding high-risk issues
- Plans for growth or change
- Responsibilities for creating new Risk Management Records (RMRs) in the IR database.

All minutes shall be kept on file by the Quality & Safety Manager for no less than one year after they are made.

8.6 Department Managers

Department managers are responsible for maintaining documents and sources of information from the MHI **Technical Management System** that pertain to their respective departments. These documents and information sources include:

- Appropriate parts or sections of Maritime Helicopters' Statement of Compliance;
- Appropriate Parts of MHI Operations Specifications;
- Manuals and Programs applicable to each department;
- Department-specific foreign licensing and contractual requirements;
- OSHA requirements.

Department managers are further responsible for specific safety-related tasks and duties within their respective departments and areas of management authority. These include:

- Continuous monitoring of operational data (e.g., duty logs, crew reports, work cards, process sheets, and reports from the employee reporting system);
- Receipt, evaluation and forwarding to the Quality & Safety Manager of all reports received from the Employee Reporting System;
- Encouragement of employee and vendor suggestions which lead to improved safety, health, or environmental quality in the workplace;
- Incorporation of safety training requirements and applicable portions of this SMS Manual into approved training curricula;
- Development of department-specific loss prevention programs;
- Determining needs for personal protective equipment;
- Acquisition of safety equipment, clothing, posters and notices as needed in the workplace to comply with OSHA, state and FAA requirements;
- Providing all department employees with easily accessible Safety Data Sheets as required by OSHA regulations, and maintaining currency of SDS files;
- Posting and dissemination of all **SAFETY NOTICES** to department personnel and vendors;
- Elimination of accumulations of equipment or waste materials from the workplace that could lead to injuries, accidents, or unhealthy conditions.
- Development and improvement of controls that help to ensure safety and successful process outputs.

NOTE: Controls that regulate or ensure process functions are critical to system safety. Whenever changes are made to controls in operational processes, best practices dictate that MHI assess the impact those changes may have. Changes to controls require Safety Committee review and acceptance before being implemented.



8.7 Personnel

RESPONSIBILITIES

All personnel are responsible and accountable for performance of their duties in accordance with all MHI and government rules. These rules are written in the interest of preserving the lives and resources entrusted to each person, and when rules are violated, risk is usually increased.

All personnel are also responsible and accountable for adhering to all MHI standards and best practices, and for initiating suggestions to management that will improve safety, efficiency, and the quality of services provided.

All personnel are encouraged to participate in safety education programs and to be on the alert for hazards on the job. All personnel are responsible for the prompt and diligent reporting of all observed or suspected hazards. As a demonstrated interest in the safety of all employees and the general public, and as a condition of employment, each member of this organization agrees to report all errors, irregularities, incidents and accidents honestly, and without fear of reprisal.

AUTHORITY

In the interest of safety, all personnel are authorized to take whatever actions are deemed necessary, based on sound judgment and knowledge at hand, to eliminate or control a hazard that poses a serious and credible threat to persons or property. This includes cessation or interruption of flight operations, interruption of ground and/or maintenance activities, and evacuation of premises.



9. FLIGHT RISK ASSESSMENT

9.1 Introduction

An aircraft is considered to be overdue when an ATC agency reports it as such, or when no information about the aircraft has been received by ATC or MHI:

- For 30 minutes after its last notified estimated time of arrival (ETA)
- For 5 minutes after the estimated time of landing after having landing clearance
- Within 10 minutes after takeoff

Every flight has hazards and some level of risk associated with it. Operational Risk Management (ORM) provides us with techniques and methods for identifying these hazards and assessing risk in order to make sound operational decisions. When utilized in conjunction with an appropriate checklist or other tools, ORM may be applied during preflight planning to consider and quantify various *risk factors*. Both pilots and managers are then able to differentiate in advance between a low-risk flight and a high-risk flight, review risk factors, and apply risk mitigation strategies to address those risks which are deemed unacceptable.

MHI has developed a proactive method of quantifying and assessing various risk factors for a specific flight using the following **Flight Risk Assessment Plan** and the appropriate **Flight Risk Assessment Checklist**. Risk factors such as the type of operation, environment, aircraft and equipment, crew training and overall operating experience are reviewed and assessed using a 5-step process. When the risk for a flight exceeds an established acceptable level, risk factors are further evaluated and the risk reduced using the procedures contained herein.

NOTE: MHI utilizes an integrated method of flight risk assessment through the application of Operational Risk Management to aeronautical decision-making (training-weighted method) and the use of Go / No-go checklists (procedure-weighted method) in order to achieve the highest level of safety.

A higher risk flight should not be operated if identified hazards which pose unacceptable levels of risk cannot be mitigated to acceptable levels.

9.2 Flight Risk Assessment Policy

RECOGNITION AND INITIAL REPORT

An aircraft is considered to be missing when its position is unknown, and when it can no longer be airborne based on the amount of fuel aboard at take-off.

An overdue aircraft can become a missing aircraft, and then evolve into an aircraft accident or other serious situation. Information concerning an overdue or missing aircraft will most likely come to the Accident Response Team Leader or Flight Control.

ACCIDENT RESPONSE TEAM LEADER PROCEDURES

In either situation, the first steps are to try and locate the aircraft using **OVERDUE OR MISSING AIRCRAFT CHECKLIST FORM SP032** as found in the MHI **SMS Forms Catalog**.

- If no contact is established with the aircraft, the Accident Response Team Leader shall declare an emergency with the FAA Command Center and the appropriate Air Traffic Control facility.
- If the situation deteriorates further, proceed with **SECTION 5: AIRCRAFT ACCIDENT CHECKLISTS**.
- Immediately contact the Q&S Manager, the MHI COO or other member of senior management.

NOTE: Do not delay notification while awaiting more complete information.



The following policies comprise MHI's **Flight Risk Assessment Plan**. This plan is utilized by flight crewmembers and flight management personnel to expand the parameters of decision-making for the pilot or flightcrew, to assist in preflight planning, and to enhance operational control of the aircraft.

The plan is based on the following MHI policies:

- The pilot's authority to decline a flight assignment is supreme, while his / her decision to accept a flight assignment is subject to review, if certain risks are identified.
 - The pilot's decision to decline, cancel, divert, or terminate a flight overrides any decision of other parties to accept or continue a flight.
 - The pilot's decision to accept a flight assignment may be overridden by other personnel through use of the operational control procedures and policies of MHI, including use of the risk assessment / management tools and techniques contained herein.
- If the pilot has declined a flight assignment, NO other parties (e.g., management, operations, etc.) shall continue to conduct risk assessments pertaining to that flight as their input will not be used to override the pilot's decision to decline the assignment.
- If the pilot's initial risk assessment results in a tentative decision to accept the flight, but significant risks have been identified, then per the MHI flight risk assessment plan, other knowledgeable personnel must provide additional operational inputs.
- As potential hazards are identified in the assessment process, a collaborative group of additional persons who have the experience and knowledge to assist the flightcrew in safety determinations are brought into the decision-making process. Such collaboration should never result in the questioning or overruling of the pilot's determination that the risks associated with a flight mission or operation are too numerous or high.

9.3 Risk Factors

Risk factors, or variables, will be affected by the type of mission being planned, operating environment, equipment, and human factors. In addition to the list of risk factors presented here, MHI flight managers should remain vigilant for other variables that are unique to typical MHI flight operations, and in particular to planned flights which are atypical or outside the norm. Flight risk variables may include the following:

PREFLIGHT PLANNING

- Availability and currency of preflight planning information
- Familiarity with area, routes, airports, landing areas
- Required current maps, approach charts, NOTAMs

WEATHER (CURRENT AND FORECAST)

- Ceiling, visibilities - departure, enroute, arrival, alternate
- Precipitation - type(s)
- Turbulence - existing and forecast
- Icing - type and forecast
- Winds/gust spread - wind direction, speed, gust spread
- Density altitude
- Ambient lighting

AIRWORTHINESS STATUS

- Proper preflight
- Any deferred items in accordance with the Minimum Equipment List (MEL)
- Fuel and oil serviced
- Security of cowling(s), doors and/or equipment



SAFETY MANAGEMENT SYSTEM

Rev - Reissue: 03/01/22

- VFR vs. IFR equipment capabilities
- Recent maintenance actions & inspection status
- Time remaining until next inspection, overhaul, teardown, etc.

COCKPIT TECHNOLOGIES

- Radio / radar altimeters
- Global positioning system (GPS) moving map systems
- Airborne weather radar systems
- Enhanced vision and display systems
- Autopilot / stability augmentation systems
- Terrain Avoidance Warning System (TAWS)
- Adequacy of training on new technologies

PERFORMANCE MARGINS

- Weight/center of gravity margins
- High density altitudes
- Fuel margins and range limitations

OPERATING ENVIRONMENT

- Terrain / obstructions
- Ambient lighting and trend (diminishing or increasing)
- Natural and industrial weather factors
- Availability and status of airports / heliports / suitable landing areas
- Air traffic density
- Knowledge that other operators in the area have declined the flight due to:
 - Localized weather
 - Forecast weather
 - Recent flight(s) experiencing marginal conditions
- Airspace requirements
- Communications and navigation facilities
- Availability of low-level VFR route structure

PILOT AND FLIGHT CREWMEMBER PERFORMANCE

- Experience in make and model
- Experience in duty position
- Experience in area of operations, and type of operation
- Experience of crewmembers operating together as a team
- Interpersonal relationship between crewmembers
- Influence of pilots' perception of mission criticality
- Crew resource management
- Continuity during shift changes
- Currency of training
- Inadvertent IMC training
- Personal performance factors, such as personal stress (recent divorce, death, illness, or birth in family)
- Rest, duty, and flight time impacts on human performance (additional duties during duty time and adequate sleep during rest period time).



ORGANIZATIONAL ENVIRONMENT

- Changes in required management personnel
- Rapid expansion or growth
- Merger or takeover
- Labor management relations
- New or major program changes
- Company safety culture
- Organization accidents, incidents, or occurrences

NOTE: In order to ensure the highest level of flight safety, all pertinent risk factors should be evaluated and hazards identified. The risks associated with each hazard should then be assessed and managed to ensure that they are mitigated, deferred, or accepted in accordance with applicable regulations and MHI policies, procedures, standards and best practices.

9.4 Use of Flight Risk Assessment Tools

CHECKLIST DEVELOPMENT

The Flight Risk Assessment Checklist contained in this appendix have been developed by MHI flight department managers for use by MHI pilots and briefers. They are printed on the Maritime Helicopters laminated aircraft checklists distributed in each aircraft. The checklists prompt pilots and briefers to consider various risk factors during preflight planning. Whenever values fall above specified thresholds, risk mitigating strategies are required in accordance with MHI policy (see paragraph 2: Policies above).

To ensure the efficacy of Maritime Helicopters' Flight Risk Assessment Checklist, and to ensure they remain effective in assessing and mitigating risk, MHI flight managers assign values to each checklist item. Thresholds are also established that trigger additional levels of scrutiny prior to a go/no-go decision for a given flight. These thresholds help to ensure that the safety standards of each individual flight operation are maintained. However, it is important that MHI flight managers create realistic thresholds. If every flight is within the acceptable range under any condition, it is likely that the thresholds have not been set correctly.

When assigning checklist item values and establishing thresholds, it is important to understand that risk has several elements that must be considered, including probability, severity, and weighted value:

- What is the probability of a particular event occurring?
- If the event does occur, what is the severity likely to be?
- And what is the weighted value of this type of event compared to other aspects of the operation?

Maritime Helicopters flight managers should periodically review checklist items for continued applicability, and for items that are unique to current MHI operations. In addition to values and thresholds, checklist items can be changed, provided MHI managers conduct a realistic assessment of the hazard being changed. Consider the various risk factors presented in paragraph 3: risk factors above during checklist development and revisions.

Maritime Helicopters flight managers are responsible for determining an acceptable level of risk for all flight operations based on the type of operation, environment, aircraft used, crew training, and overall operating experience. When the risk for a flight exceeds the acceptable level, the hazards associated with that risk should be further evaluated and the risk reduced.



CAUTION

A higher risk flight should not be operated if hazards cannot be mitigated to an acceptable level.

CHECKLIST PROCEDURES

Perform preflight planning in accordance with MHI standards and policies. Then, using the desired Flight Risk Assessment Checklist, conduct an analysis of the intended flight by considering all pertinent risk factors. Use the first 5 steps of the ORM process as described in MHI's Risk Management Program, in order to identify hazards and assess risk:

- Step 1: Identify the hazards
- Step 2: Assess the risks
- Step 3: Analyze risk control measures
- Step 4: Make control decisions
- Step 5: Implement risk controls

9.5 Scenarios that may Prompt a Flight Risk Assessment

RECENT MAINTENANCE

A flight crew is aware of a maintenance discrepancy that has been repaired, or a component that has been overhauled. The flight crew may be concerned with what to watch for on subsequent flights, i.e., higher temperatures or higher pressures (providing the instrument readings are within the required operating range) and seek input from maintenance professionals.

INOPERATIVE EQUIPMENT

A pilot accepts a VFR-only flight assignment in marginal VFR conditions, due to inoperative equipment required for IFR flight. Following the MHI Flight Risk Assessment Plan, the pilot receives subsequent input on the status of nearby airports/heliports. The pilot then uses the information to support his/her decision: to fly the planned flight, cancel the flight, delay the flight until weather improves, or determine that an IFR (instrument flight rules) certificated aircraft is required. In any case, the information is used to support the pilot's decision-making process.



In the above examples, as more information is obtained to assist the flight crew with the go / no-go decision-making process, the determination to fly is reviewed against a new and better-defined standard / environment.

 Maritime Helicopters			
Flight Risk Assessment			
Instructions: Complete all sections during flight planning. Please write any suggestions on the bottom of the form.			
PILOT EXPERIENCE			
<1 year with Maritime	+1	>30 days since last flight	+2
< 200 hours in Alaska	+1	> 12 hour duty day	+1
< 100 hours in Type	+2	> 6 hours of flight time	+1
> 60 days since last flight in Type	+3	> 14 continuous days of duty	+1
PILOT EXPERIENCE TOTAL:			
WEATHER CONDITIONS			
Visibility < 1 mile Onshore	+3	Precipitation	+1
Visibility < 3 miles Offshore	+2	Ceiling < 500'	+2
Wind Gust >15 Kts	+1	Ceiling < 300'	+3
Wind > 25 Kts	+2	Temperature < - 35°F	+1
WEATHER CONDITIONS TOTAL:			
TYPE OF OPERATION			
External Load -Belly Hook	+3	X-C leg< 30 minutes of fuel at landing	+1
External Load- Long Line	+4	Pipeline patrol Operation	+2
Operations above 5000' PA	+2	Vessel Operation	+2
Anticipated white out/Flat light operation	+3	STEP (Single Skid/Toe-In Operation)	+4
Helideck/Confined/Pinnacle Operation	+2		
TYPE OF OPERATION TOTAL:			
RISK FACTOR	TOTAL	IF VALUE IS	ACTION
PILOT EXPERIENCE		> +5	
WEATHER		> +8	REQUIRES TIER 1 APPROVAL
TYPE OF OPERATION		> +8	REQUIRES TIER 1 APPROVAL
TOTAL RISK VALUE		> +15	REQUIRES TIER 1 APPROVAL
TIER 1 APPROVAL REQUIRED FOR THE FOLLOWING			
Prior to conducting Heliski Operations			
Prior to conducting Night Operations			
Prior to conducting STEP Operations (Single Skid/Toe-in/Hover Exit Procedures)			
Prior to conducting Operations when the OAT is <- 35°F			
Prior to conducting Class B HEC (Human External Cargo) Operations			
TIER 1 OPERATIONAL CONTROL APPROVAL BY:			
Maritime Helicopters Inc Rev 1 Flight Risk Assessment Form 19 Dec 22			



9.6 Risk Assessment Tool

Factors affecting flight verses risk. As more factors become applicable to a particular flight, the risk is increased. This diagram is in each aircraft and permits the PIC to check the particular risk profile of the flight before takeoff. Risk factors, or variables, will be affected by the type of mission being planned, operating environment, equipment, and human factors. In addition to the list of risk factors presented here, MHI flight managers should remain vigilant for other variables that are unique to typical MHI flight operations, and in particular to planned flights which are atypical or outside the norm.

RISK FACTOR CATEGORIES

- Equipment
- Pilot
- Weather
- Job Site
- Performance
- Increased Risk

RESULTANT RISK CATEGORIES

- Low – no action required
- Medium – use caution, reduce risk if possible
- High – No/Go until risk factors are reduced or obtain DO approval

USE OF RISK ASSESSMENT TOOL

- Work down the column on the left. Move one column to the right for each factor that applies
- Note resultant risk
- If High, wait until more favorable conditions exist and overall risk falls into Medium or obtain DO approval