

Hibernia Management and Development Company Ltd.

Presentation to
Newfoundland and Labrador
Offshore Helicopter Safety Inquiry

January 18, 2010

Presentation Outline

- Hibernia Overview
- Basis of Safe Operations
- Risk Management
- Personnel Safety
- Helicopter Operations Overview
- Aviation Contract Management
- Incident Management
- Emergency Response
- Summary and Closing Remarks

Presentation Outline

- **Hibernia Overview**
 - **Hibernia Overview**
 - **HMDC Overview**
 - **Offshore Workforce**
 - **Safety Commitment**
- Basis of Safe Operations
- Risk Management
- Personnel Safety
- Helicopter Operations Summary
- Aviation Contract Management
- Incident Management
- Emergency Response
- Summary and Closing Remarks

Hibernia Overview

Location

- Jeanne d'Arc Basin
- 315 kilometers offshore Newfoundland
- 80 meter water depth
- Ambient temperature range from -8°C to 20°C
- Sea ice and icebergs prevalent March to May

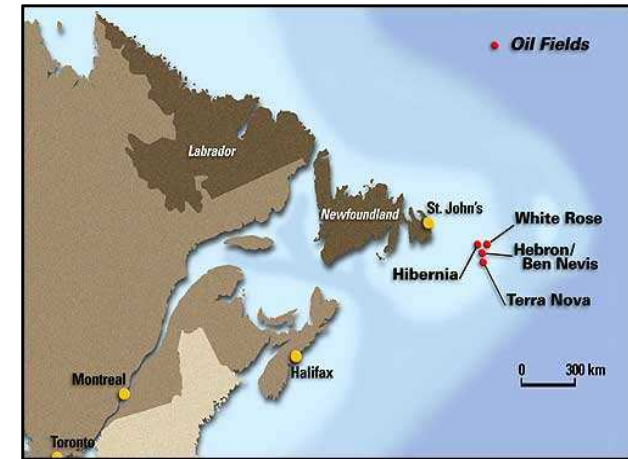
Operator Hibernia Management and Development Company Ltd. (HMDC)

Hibernia Co-Venturers

| | |
|------------|---------|
| ExxonMobil | 33.125% |
| Chevron | 26.875% |
| Suncor | 20.0% |
| CHHC | 8.5% |
| Murphy Oil | 6.5% |
| Statoil | 5.0% |

Production History

- 1979 - first discovery well drilled
- 1986 - initial Development Plan approved by C-NLOPB
- 1997 - first oil produced.
- 2002 - peak production approximately 230,000 barrels per day
- Hibernia has produced approx. 650 million barrels of oil to date



Hibernia Overview

Hibernia Platform

- Height – 224 meters
- Weight – 1.2 million tons
- 3 main components
 - Topsides
 - Gravity Base Structure
 - Offshore Loading System

Topsides

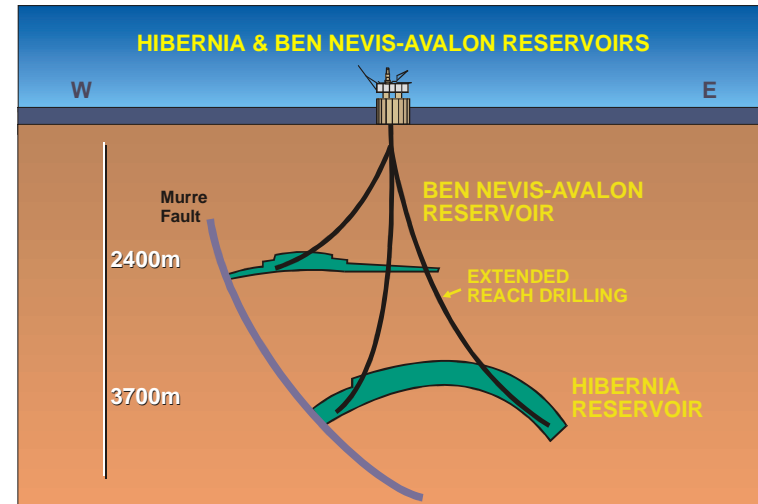
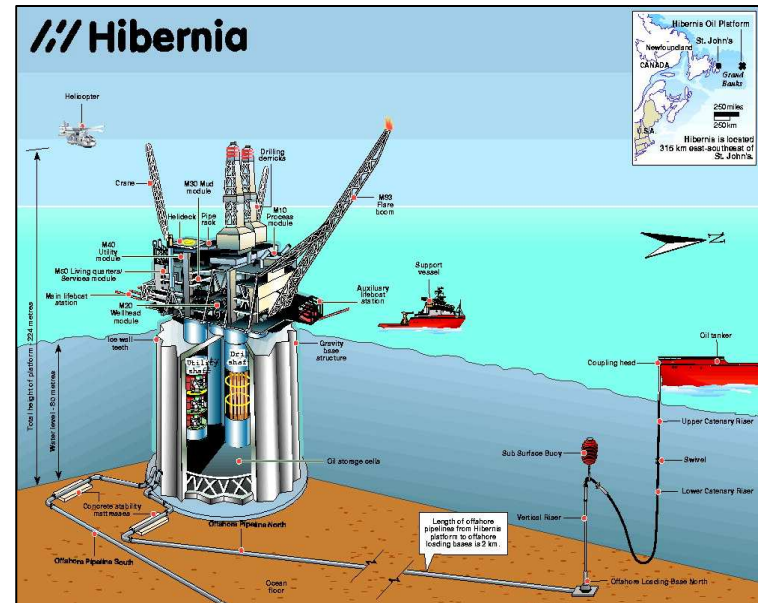
- 2 drilling rigs
- Production and utility equipment
- Living accommodations up to 280 people
- Normal offshore rotation 21 days on / 21 days off

Gravity Based Structure (GBS)

- 85 meters high
- 1.3 million barrels of oil storage capacity
- GBS sits on ocean floor; not subject to wave action
- Designed to withstand impact of sea ice and icebergs

Offshore Loading System

- Transfers oil from GBS storage to tankers
- Tankers transport crude directly to market or to transshipment terminal in Placentia Bay



Hibernia Overview

Hibernia - A World Class Facility

Gravity Base Structure (GBS)

- Built in Bull Arm, Newfoundland
- Dry dock created by erecting a massive berm across Great Mosquito Cove
- GBS ice wall consists of a 50-foot-thick concrete belt with 16 ice teeth
- Base of the GBS is equivalent to the length of two football fields



Topsides

- Topsides consists of five super modules - two built in Korea, two in Italy and one in Bull Arm

GBS and Topsides Mating

- GBS towed into deep water and flooded
- Topsides towed over the submerged GBS
- GBS slowly raised to meet Topsides



Tow Out

- Hibernia towed offshore by nine of the world's largest tugboats

Hibernia Overview



Hibernia's Safety Design

Hibernia platform was designed to the highest of standards and incorporates a large number of significant safety features including:

- an iceberg resistant Gravity Based Structure
- a temporary safe refuge area protected by a blast wall
- thousands of highly-sensitive smoke, fire and gas detectors
- a water/foam deluge system capable of delivering thousands of gallons per minute
- fire wall protection between modules
- automatic emergency shutdown system

Hibernia Overview



Hibernia Helideck

- Designed in accordance with Transport Canada Guidelines (TP-4414)
- Designed to API-RP-2L Recommended Practice for Planning, Designing, and Constructing Heliports for Fixed Offshore Platforms
- Located in southwest corner of the platform at 149 meters elevation
- Measures 22.85 meters by 22.85 meters
- Weight limitation of 15,870kg
- Can accommodate large working class helicopters including:
 - Eurocopter AS332L Super Puma
 - Sikorsky S61
 - Sikorsky S-92A
 - Cormorant



Hibernia Overview



Hibernia Helideck Design Features

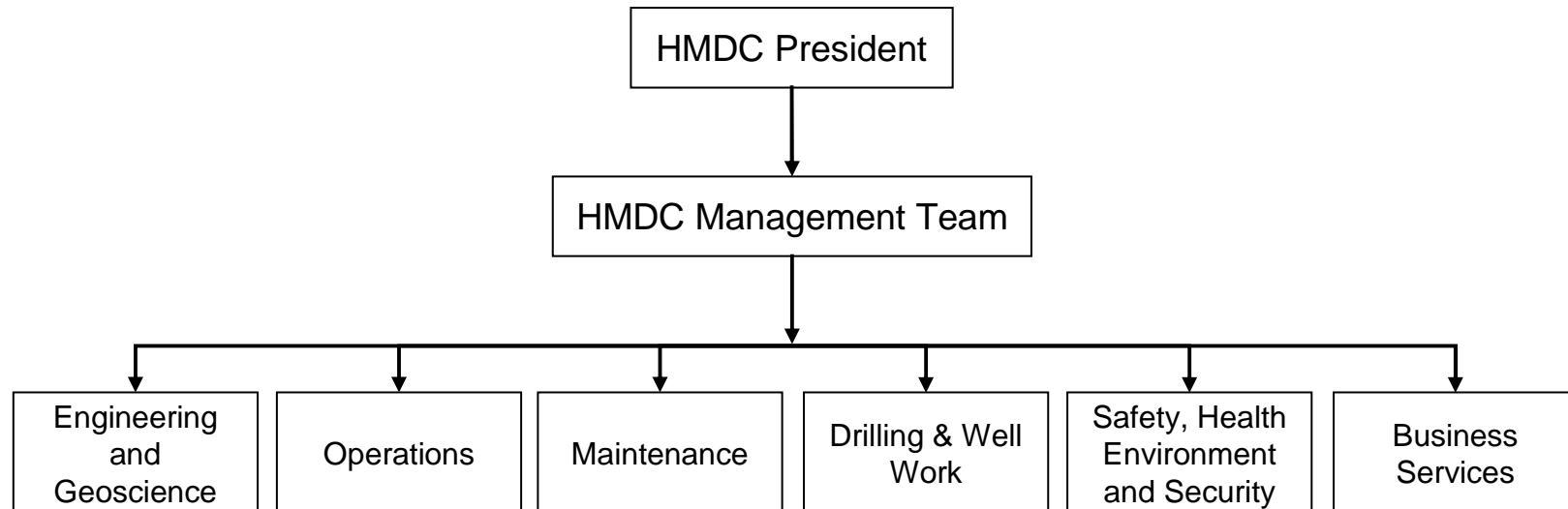
- Water and foam fire fighting equipment
- Lighting
- Perimeter net
- Non-skid surface (supplemented with netting during winter months)
- Tie-down points
- Windsocks
- Helideck rescue kit
- Emergency parking area



HMDC Overview

Hibernia Management and Development Company Ltd. (HMDC)

- Incorporated in 1988 by co-venture (shareholder) companies who entered into a joint venture to develop the Hibernia oil field
- Operator of the Hibernia project
- An integrated team of specialists originally comprised of direct hires, secondees from co-venture companies and contract staff



HMDC Overview



Hibernia Executive Committee

- HMDC's President and management team are accountable to the Hibernia Executive Committee
- The Hibernia Executive Committee is composed of co-venture company representatives and is responsible for the management, exercise of overall supervision and control of the joint venture

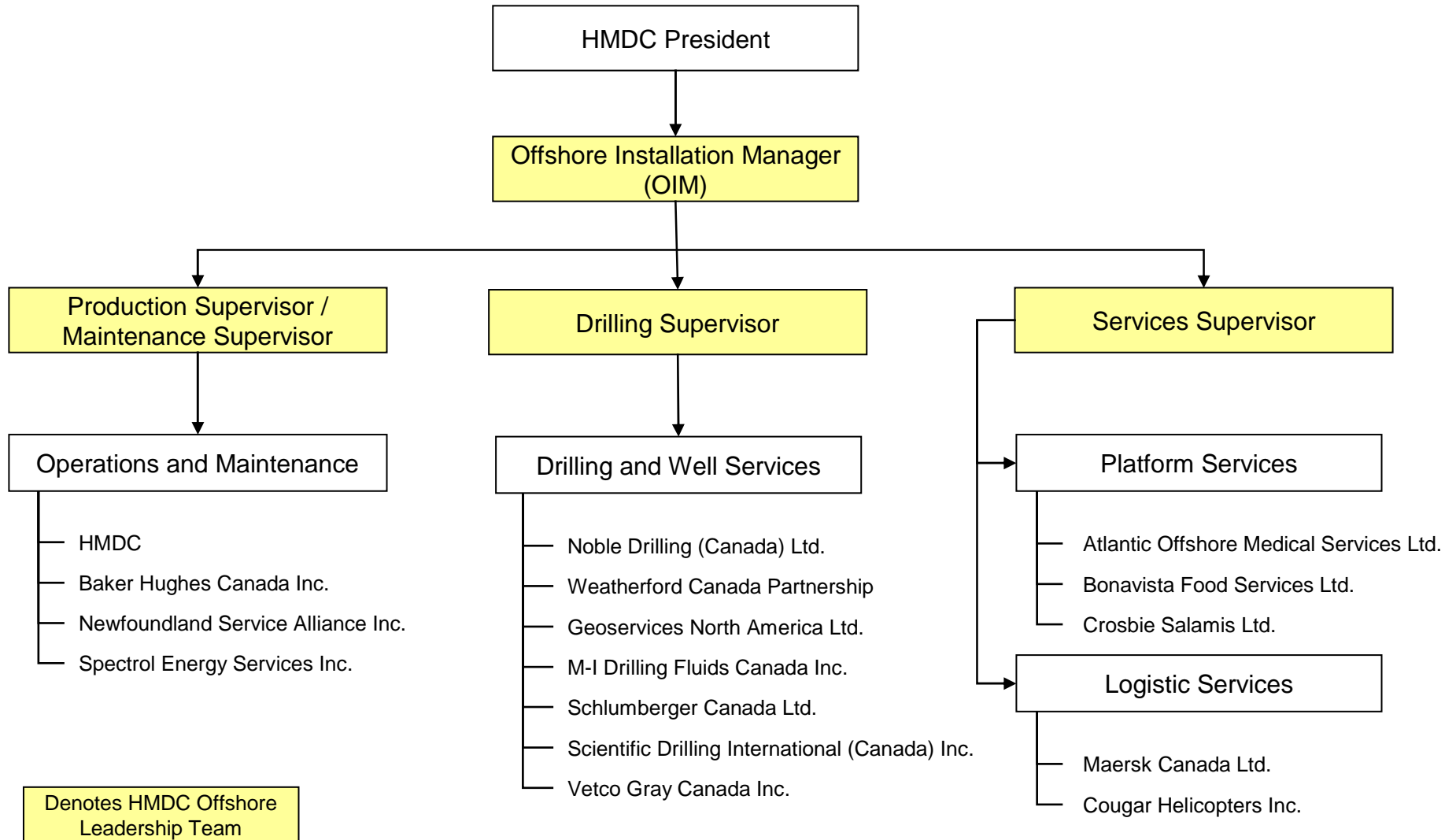


HMDC Overview

Hibernia Executive Committee

- Effective January 1, 2003 the Hibernia Executive Committee authorized HMDC to:
 - adopt and implement the policies, procedures, systems and business controls of ExxonMobil Canada Properties (ExxonMobil Canada)
 - rely solely on ExxonMobil Canada to nominate personnel for HMDC managerial and key technical and operations positions, subject to the HEC's right of approval
 - enter into business services agreements with ExxonMobil Canada and its affiliates, as necessary, to support HMDC operations
- This has provided HMDC with access to experienced personnel and robust, internationally tested policies and procedures

Offshore Workforce



Offshore Workforce



Hibernia Offshore Workforce

- The size and composition of the Hibernia offshore workforce varies depending on the scope of work being performed
- Maximum 360 persons on board (POB) immediately prior to first oil in late 1997
- As project evolved through its growth, plateau and decline cycle the POB changed. Current POB is approximately 220
- Approximately 90% of the workforce are Newfoundlanders and are employed either directly by HMDC or one of the 13 contractors engaged by HMDC to provide specialty services
- The workforce on the Hibernia platform is represented by the Communications, Energy and Paperworkers Union Local 60N

Statement of Commitment to Safety, Health and the Environment

“At Hibernia we are committed to the safety of our people, including contractors working at our work sites, and the environment. Our Operations Integrity Management System (OIMS) ensures that environmental responsibility, quality, and the safety and health of our employees are key business principles.

We all share the responsibility to communicate, implement, and live by Hibernia's commitment to safety, health and environment. Each of us and our teams will be familiar with principles embodied in the OIMS.

We have the right and the responsibility to work safely. We will follow safe work practices and procedures, ensuring full and proper training and the correct use of equipment and materials.

We are all proactive in guiding, supporting and coaching each other on responsibilities and objectives for safe, healthy and environmentally responsible work.

We will participate appropriately with government, industry and the community in developing and implementing quality standards and practices.

We will regularly review and measure our performance against this commitment and continue to look for opportunities to improve our Safety, Health and Environment management processes.

Together we will foster a culture that recognizes, practices, and promotes safe and environmentally responsible work by implementing and supporting the individual responsible safety system.”

– Hibernia Operational Plan

Presentation Outline

- Hibernia Overview
- **Basis of Safe Operations**
 - **Regulatory Environment**
 - **Hibernia Safety Plan**
 - **Operations Integrity Management System (OIMS) Overview**
- Risk Management
- Personnel Safety
- Helicopter Operations Summary
- Aviation Contract Management
- Incident Management
- Emergency Response
- Summary and Closing Remarks

Regulatory Environment



Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB)

The Newfoundland offshore oil and gas industry is a highly regulated industry.

- Detailed regulations and guidelines
- Work Authorization requirement
- Certifying Authority Fitness for Service verification
- Continuous monitoring by C-NLOPB
- Quarterly audits and compliance assessments by C-NLOPB and Certifying Authority (Lloyd's Register)

Regulatory Environment

Regulatory Requirements

The Operator must submit plans, including the following, to the C-NLOPB for approval prior to obtaining authorization for exploration, development and production:

- Development Plan
- Canada-Newfoundland Benefits Plan
- Safety Plan
- Drilling Program
- Reservoir Depletion Plan
- Environmental Protection Plan

Regulatory Environment

Operations Authorization

C-NLOPB has provided the following work activity approvals to HMDC:

- Production Operations Authorization (approved every 3 years)
- Drilling Program Authorization (approved every 3 years)
- Well Operations Authorization (approved every 3 years)
- Operating License (approved annually)

The primary safety documents required and approved by the C-NLOPB as prerequisites to the above authorizations were:

- Concept Safety Analysis (design phase)
- Safety Plan (operational phase)

Regulatory Environment

Regulatory Oversight

C-NLOPB performs scheduled inspections and compliance audits of HMDC to ensure:

- compliance with all regulatory requirements
- compliance with conditions imposed by the Operations Authorization, including the safety plan

C-NLOPB Audits and Inspections Frequency

- Annual audits
- Quarterly inspections
- Ad hoc inspections as required

No significant findings to date with respect to helicopter operations.

Hibernia Safety Plan



Overview

- Hibernia Operational Plan has been approved by the C-NLOPB as meeting the requirements of a safety plan
- Based on the Concept Safety Analysis
- Formalizes Hibernia's commitment to operate in a safe and environmentally responsible manner
- Lays out the management system or framework under which we conduct our work
- Living document updated as needed to reflect operational changes and at a minimum every three years to maintain the Operations Authorization as approved by the C-NLOPB
- Updates require C-NLOPB approval prior to implementation
- The Operational Plan serves as a basis for audits by the C-NLOPB and the Certifying Authority

Hibernia Safety Plan



The Hibernia Safety Plan is called the Hibernia Operational Plan.

Hibernia Operational Plan consists of the following sections

Section 1 – Introduction

Section 2 – Description of Installation

Section 3 – Organization and Management Systems

Section 4 – Basis of Safe Operations

Section 5 – Basis of Environmentally Responsible Operations (*not applicable in the context of helicopter safety*)

Hibernia Safety Plan



Operational Plan Section 2 - Description of Installation

- Describes the installation and the Safety Design Philosophy used to ensure a safe platform design. Hazards that could affect the safety of personnel and the integrity of the installation are identified and appropriate measures taken to prevent occurrence or minimize consequences
- The main objective of the Safety Design Philosophy was to ensure a safe working environment for personnel by:
 - minimizing the potential for hazardous occurrences
 - avoiding exposure to potential hazards
 - containing and minimizing the effects of hazards in the event of an emergency
 - providing a satisfactory means of escape from all work areas
- Section 2 includes description of helideck location, size and weight limitations

Hibernia Safety Plan



Operational Plan Section 3: Organization and Management Systems

- Describes HMDC's organizational structure and safety management system
- HMDC has adopted ExxonMobil's Operations Integrity Management System (OIMS)
- OIMS provides Hibernia management with the framework for meeting the Safety, Health and Environment Statement of Commitment
- Section 3 summarizes processes and procedures used to ensure safe helicopter operations and documents commitments made regarding helicopter services including:
 - adherence to the Hibernia Helicopter Operations Manual and Aviation Operations Guide
 - flight tracking by satellite based flight following system
 - standby helicopter in St. John's and standby vessel at Hibernia platform 24-hours, seven days a week to respond to emergency events

Hibernia Safety Plan



Operational Plan Section 4: Basis of Safe Operations

- Describes the hazard assessments and safety studies carried out during both the design and operational phases
- Describes the Hibernia installation and operational systems that prevent, control and mitigate hazards and their escalation
- Describes Hibernia's risk assessment process and assessment criteria
- Summarizes the detailed assessment of each potential major hazard identified

- Section 4 includes a summary of the studies and risk assessments of helicopter transportation.
- Helicopter transportation risks have been reviewed at all phases of the Hibernia project, from conceptual design to current operations including:
 - Concept Safety Analysis completed during the design phase
 - development of the original Operational Plan
 - pre-startup readiness reviews
 - updates to the Operational Plan
 - aviation risk assessments as required by OIMS

Operations Integrity Management System



Safety Management Systems

A safety management system provides a systematic approach to managing safety. The safety management system identifies hazards and ensures associated risk is eliminated or effectively managed. A typical safety management system includes:

- integrated organizational structures
- responsibilities and accountabilities
- policies and procedures
- measurement, feedback and continuous improvement processes

Operations Integrity Management System



Operations Integrity Management System

- HMDC's safety management system is called the Operations Integrity Management System (OIMS)
- Systematic and structured approach to the management of safety, health, environment and security
- Focused on identifying hazards and managing risk
- A mature and globally tested system



OIMS Stewardship and Sustainment

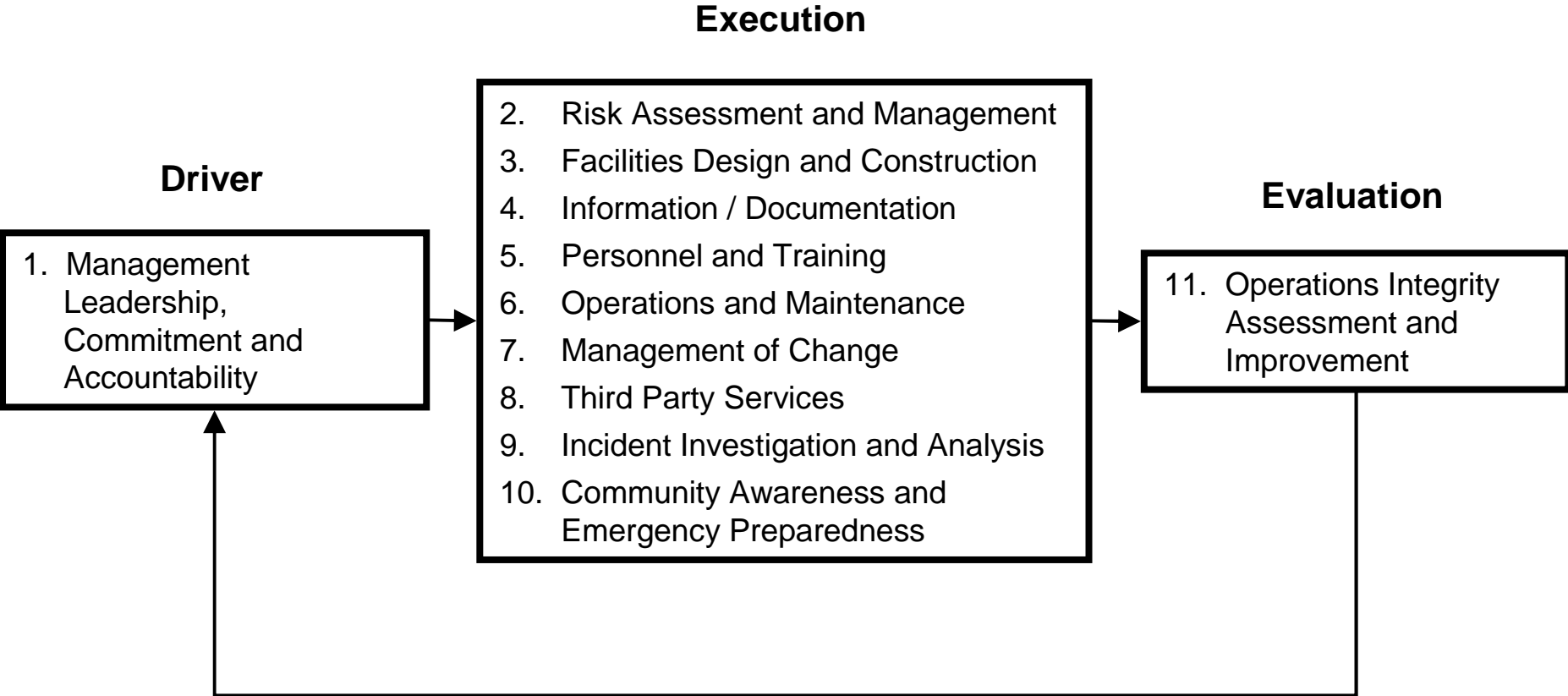
- High level of management involvement and accountability
- Ensures safety and environmental compliance with applicable laws and regulations and drives continuous improvement
- Workforce participation is key to OIMS effectiveness
- OIMS is fully integrated into HMDC's operations and impacts all work activities

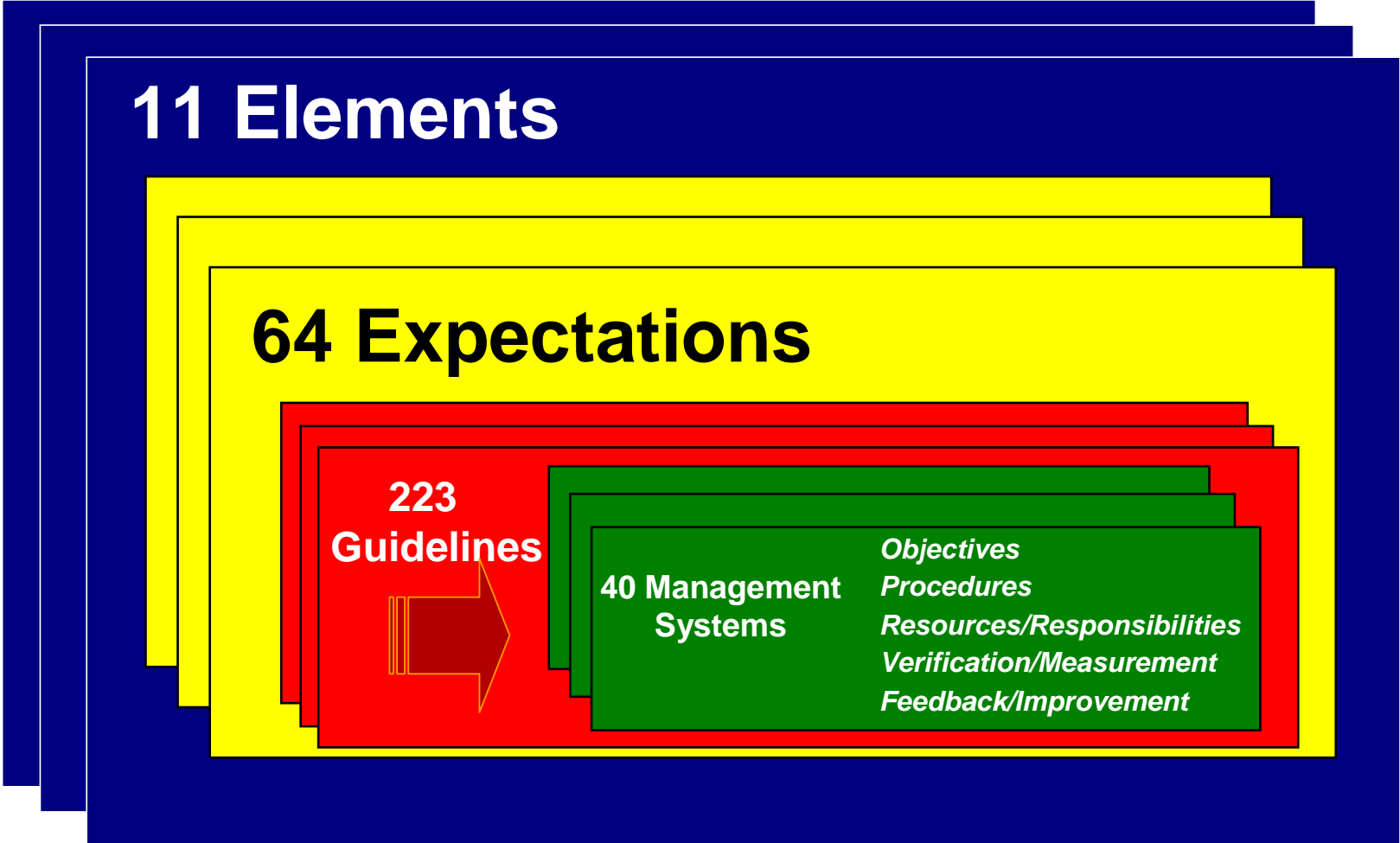


Operations Integrity Management System

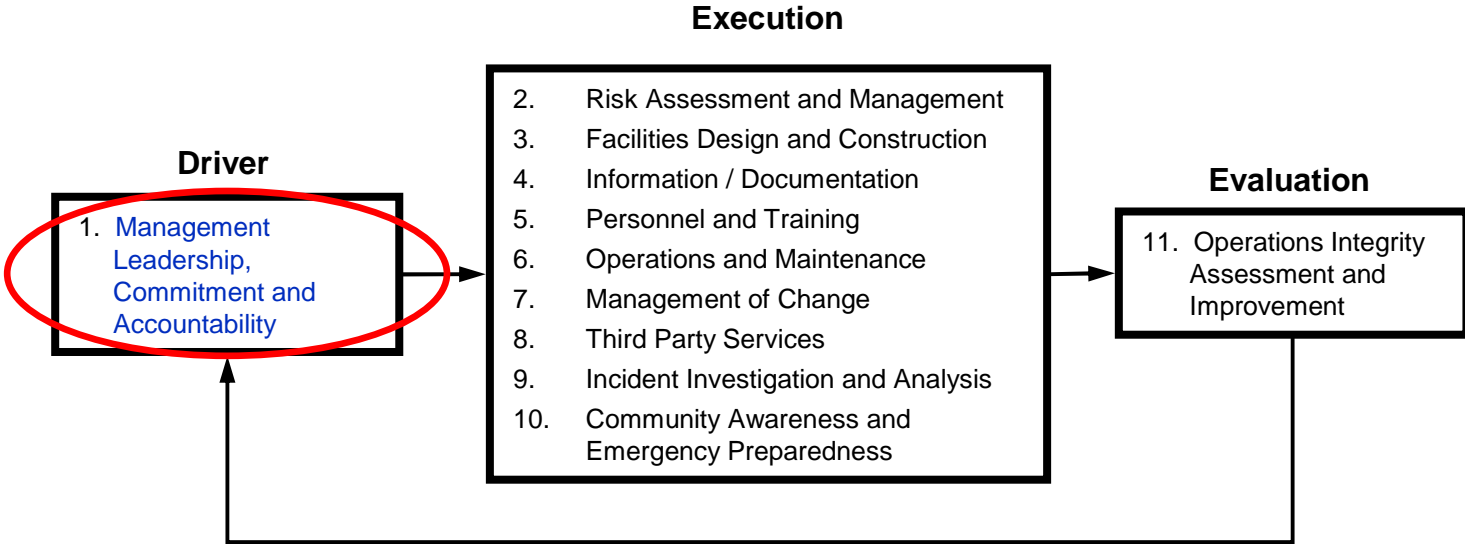


11 Elements of OIMS





OIMS Element 1 - Management Leadership, Commitment and Accountability



Operations Integrity Management System



Element 1: Management Leadership, Commitment and Accountability

Management establishes policy, provides perspective, sets expectations and provides the resources for successful operations. Assurance of operations integrity requires management leadership and commitment visible to the organization and accountability at all levels.

Expectation

Systems for operations integrity management are established, communicated and supported at every level in the organization.

Guidelines

- OIMS is used throughout the organization
- Maintain and publish policies that address safety, health, the environment and security that are consistent with OIMS Expectations and Guidelines
- Managers ensure that business objectives are consistent with OIMS Expectations and Guidelines
- Systems are established to address the OIMS Expectation and Guidelines consistent with the characteristics of management systems defined in OIMS

Operations Integrity Management System



OIMS Performance Reviews

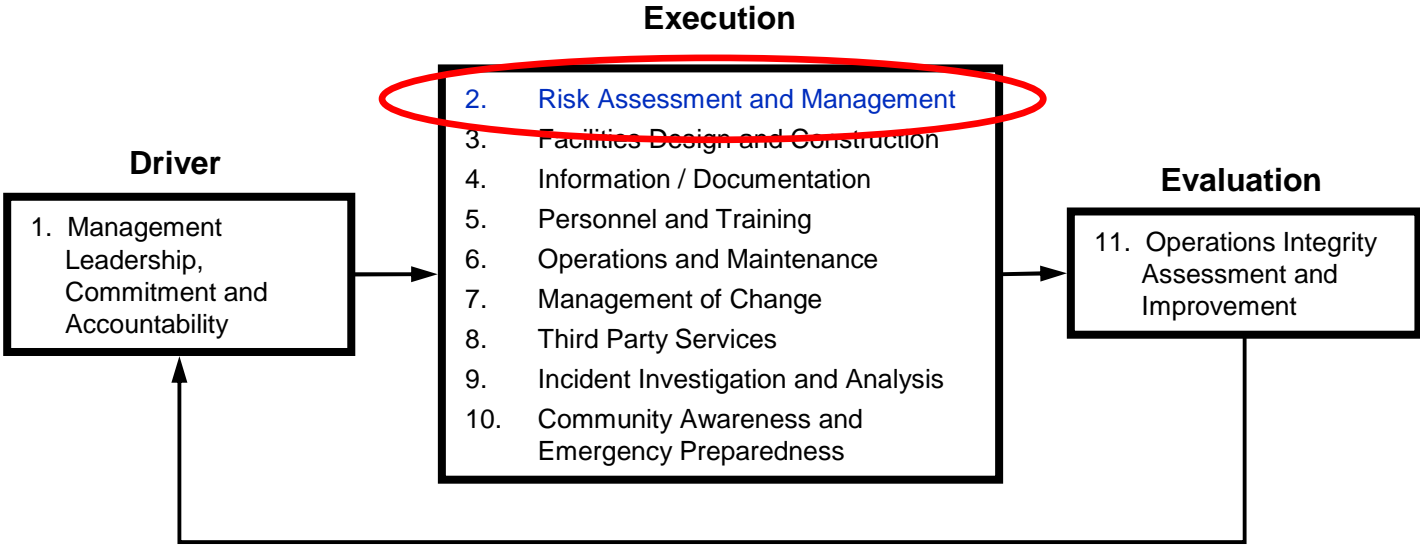
Obtain feedback from the following sources to ensure continuous improvement:

- workforce and user input
- management stewardship by regular verification and measurement feedback
- annual company assessments
- Certifying Authority (Lloyd's Register) quarterly inspections and audits
- regulatory (C-NLOPB) quarterly inspections and audits

Presentation Outline

- Hibernia Overview
- Basis of Safe Operations
- **Risk Management**
 - **Risk Assessment and Management (OIMS Element 2)**
 - **Aviation Operations Risk Assessment**
- Personnel Safety
- Helicopter Operations Summary
- Aviation Contract Management
- Incident Management
- Emergency Response
- Summary and Closing Remarks

OIMS Element 2 - Risk Assessment and Management



OIMS Element 2 – Risk Assessment and Management

Purpose

To prevent and/or mitigate the undesirable consequences of potential incidents by:

- identifying, evaluating and controlling hazards
- assessing and managing risks in a structured and prudent manner

Not all hazards can be eliminated and therefore must be managed. Accordingly, a risk management process is required.

Objectives

Perform formal risk assessments for ongoing operations, projects and maintenance activities and manage risk to a level that is as low as reasonably practicable.

Manage the risk assessment process and associated activities to ensure timely close out of findings.

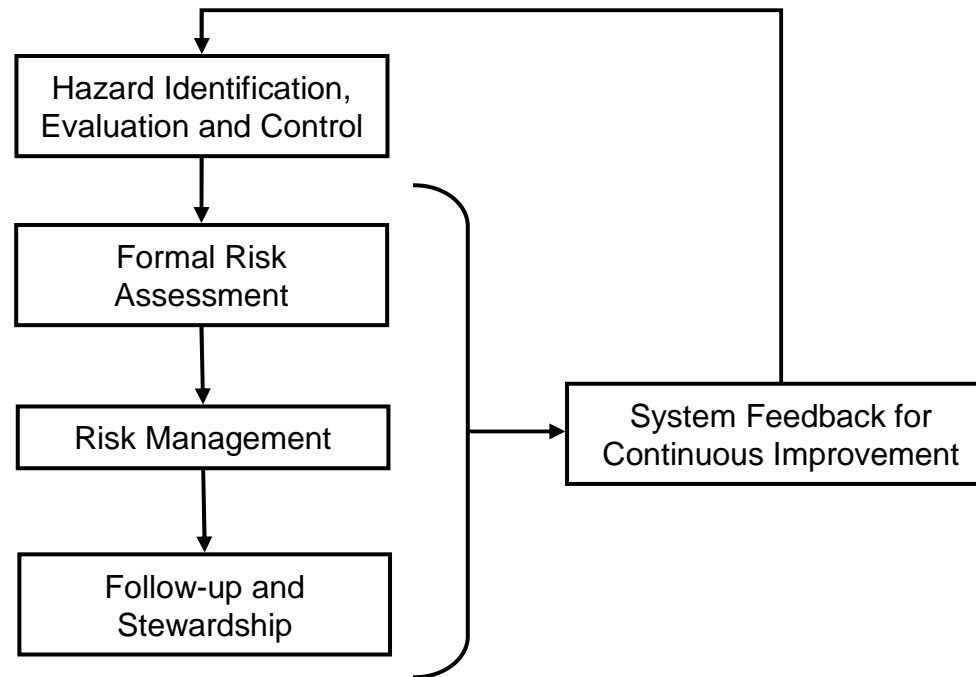
Risks are communicated to relevant parties affected by the risks and learnings are shared.

Periodic risk assessments are conducted, at a minimum every five years, for major ongoing operations.

OIMS Element 2 – Risk Assessment and Management

Processes and Procedures Related to Helicopter Operations

- Risk Assessment and Management Guide



OIMS Element 2 requires periodic risk assessments of major ongoing operations, including helicopter transportation, to be conducted at a minimum every five years.

Aviation Operations Risk Assessment



Risk Assessment Purpose

A risk assessment of Hibernia's helicopter transportation was undertaken in 2006 to identify potential hazards and risks, define safeguards and recommend improvement opportunities.

Risk Assessment Team

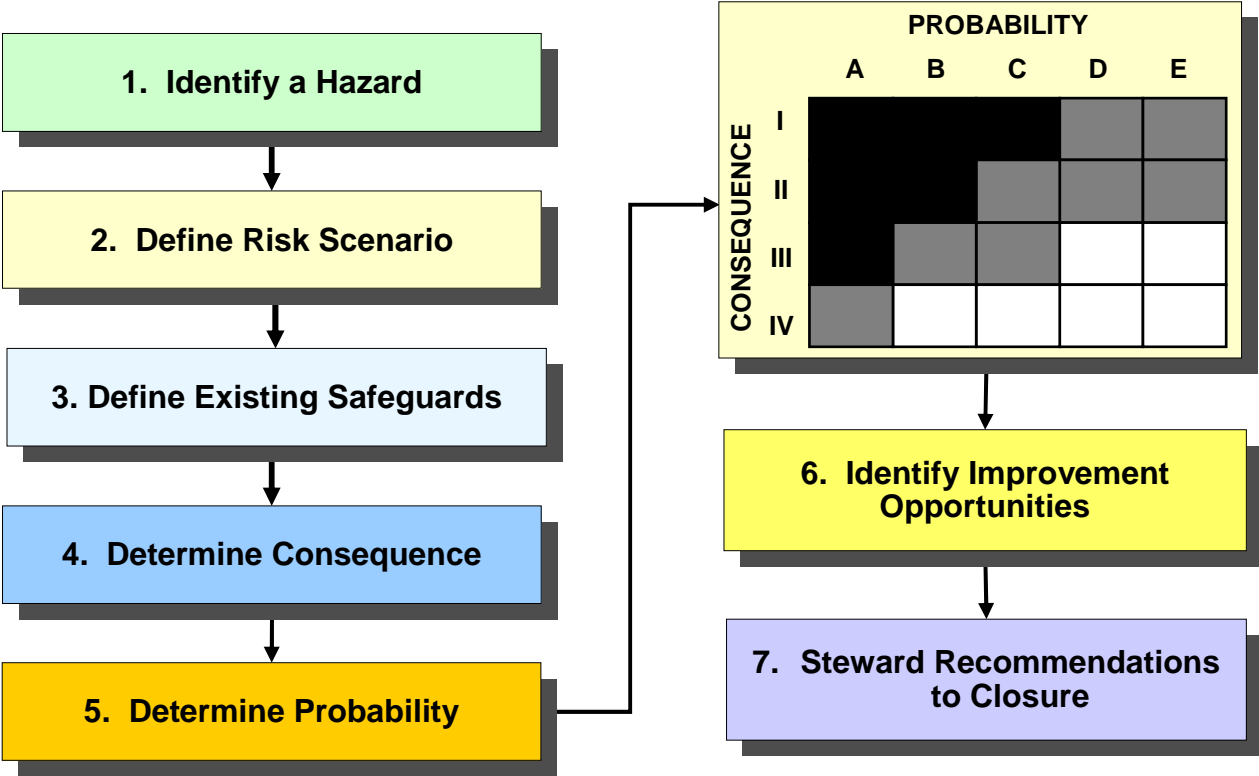
Proper representation on any risk assessment team is essential to ensuring hazard scenarios are properly identified and assessed. The Hibernia aviation operations risk assessment team included the following representation:

- HMDC
 - Risk Mitigation Engineer
 - Logistics Coordinator
 - Services Supervisor
 - Offshore Installation Manager
- ExxonMobil Aviation Advisor
- Risk Management Research Institute Representative
- Cougar
 - Flight Operations Manager
 - Base Aviation Safety Officer
 - Base Operations Manager

Aviation Operations Risk Assessment



Risk assessment methodology was a scenario based approach.



Aviation Operations Risk Assessment



Existing Safeguards

Safeguards are measures already in place to prevent the hazard scenario from occurring or to reduce potential impact. Some of the safeguards related to helicopter operations include:

Key Preventative Safeguards (ie reduce probability of occurrence)

- Equipment
 - Twin turbine engines
 - Two pilots
 - Helicopter landing lights on helideck
 - De-icing capability
 - Alternative offshore landing sites (Terra Nova, Sea Rose, tankers)
 - Health and Usage Monitoring System (HUMS)
- Operational
 - Operational, maintenance, inspection and testing procedures
 - Weather monitoring and adverse weather flying procedures (visibility, winds, freezing rain)
 - Platform communication with helicopter
- Training
 - Training and competence assurance of all personnel involved with helicopter operations
 - Annual simulator training for pilots

Aviation Operations Risk Assessment



Mitigation Safeguards (ie reduce consequence)

- Equipment
 - 3 foam/water monitors on the helideck. 3 modes - manual, fixed and automatic
 - All seats equipped with 4-point quick-release harness systems
 - Helicopters are equipped with floatation
- Operational
 - Fully trained Helicopter Landing Officer and helideck crew to provide rapid response to incidents
 - Flight following / tracking system
- Training
 - All offshore personnel undertake BST, including training on helicopter safety and underwater escape
- Personnel Protective Equipment
 - All passengers wear helicopter passenger transportation suits equipped with an emergency light and personal locator beacon
- Emergency Response
 - Standby vessel at Hibernia platform
 - Standby helicopter based in St. John's
 - DND SAR resources

Aviation Operations Risk Assessment

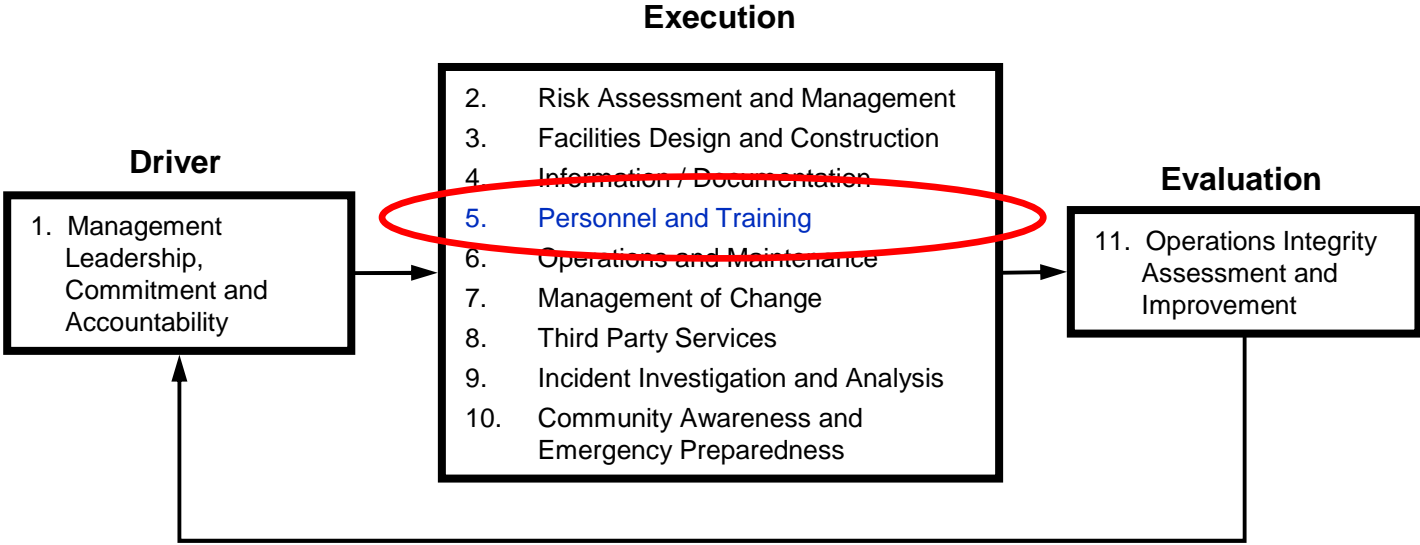


| Identified Improvement Opportunities | Status |
|---|------------------------------|
| Develop and adopt a site-specific wind speed versus direction matrix to formalize current guidance for decision making process regarding weather limits. Matrix to be included in Hibernia Helicopter Operations Manual | ✓ Complete |
| Conduct S-92A aircraft familiarization training for all Helicopter Landing Officers (HLO) at Cougar facility | ✓ Complete |
| Conduct S-92A aircraft familiarization training for all Hibernia helideck crew members at Cougar facility | ✓ Complete |
| Update applicable Hibernia documentation to include information relevant to the S-92A aircraft, and ensure consistency with the Aviation Operations Guide as required | ✓ Complete |
| Install ground proximity alert/warning system on all applicable aircraft | ✓ Complete |
| Modify 'Blue Sky' system to automatically alert Cougar dispatch of unplanned deviation from planned altitudes | ✓ Closed. Not implemented |
| Develop and implement program that requires all first time passengers to wear visible identification, e.g. colored armband attached to flight suit | ✓ Closed. Not implemented |

Presentation Outline

- Hibernia Overview
- Basis of Safe Operations
- Risk Management
- **Personnel Safety**
 - **Personnel and Training (OIMS Element 5)**
 - **Regulatory Requirements**
 - **Hibernia JOHS Committee Overview**
- Helicopter Operations Summary
- Aviation Contract Management
- Incident Management
- Emergency Response
- Summary and Closing Remarks

OIMS Element 5 – Personnel and Training



OIMS Element 5 – Personnel and Training

A key component of Element 5 is personnel safety management.

Purpose

Provide a framework for safety processes and activities and provide structure for implementing, maintaining, and continually improving personnel safety performance.

The system addresses the following key safety aspects:

- structured safety organizations at the management and operations levels
- ongoing safety programs
- safety emphasis through ongoing communications
- safety orientations for site visitors and new contract workers
- appropriate and well-maintained personal protective equipment
- workplace hazard identification and reporting
- work site safety assessments
- behavior-based safety programs
- safety performance trending
- recognition programs

Objective

The ultimate goal of managing personnel safety is to achieve an incident-free workplace where “Nobody Gets Hurt” by:

- reducing at-risk behavior and manage hazards associated with the work environment
- hazard identification and correction programs which are comprehensive and widely used

OIMS Element 5 – Personnel and Training



Procedures / Processes

Examples of OIMS Element 5 procedures and processes include:

- Offshore Safety Health and Environment Handbook
- Joint Occupational Health and Safety Committee
- Platform Safety Meetings
- Personal Protective Equipment (including passenger transportation suits)
- Training Requirements (including Basic Survival Training)

Hibernia JOHS Committee Overview



Legislative Requirements

- Occupational Health and Safety Committee mandated by Sections 37, 38 and 39 of the of the Newfoundland and Labrador Occupational Health and Safety Act
- Worker representatives are nominated and elected by their co-workers as per set standards/procedure
- All JOHS Committee representatives receive training with respect to their responsibilities and incident investigation

Hibernia JOHS Committee Overview



The Hibernia platform has a mature, well established JOHS Committee providing platform wide representation since 1997.

Committee Responsibilities

- Identify aspects of the workplace that may be unhealthy or unsafe
- Receive complaints/concerns/issues from workers and maintain records of issue and resolution
- Make recommendations to management and workers to enforce health and safety of the workplace
- Establish and promote health and safety programs for workers
- Provide C-NLOPB with copies of minutes and action lists
- Meet with C-NLOPB twice annually

Committee Structure

The Hibernia JOHS Committee is structured in accordance with the Joint Occupational Health and Safety Committee document and includes the following representation:

- equal attendance from management and workforce
- OIM, Production Supervisor, Maintenance Supervisor, Services Supervisor, Drilling Supervisor, and Safety Health and Environment Lead
- elected worker representatives from all departments throughout the platform which ensures maximum worker participation / representation
- JOHS Committee secretary
- Jointly chaired by OIM and elected worker representative

Hibernia JOHS Committee Overview



The Hibernia JOHS Committee has developed and enhanced numerous safety initiatives including:

- hearing protection programs
- loss prevention observation program
- platform shutdown safety monitor program
- transportation by vessel guidelines
- promoting worker participation in platform safety programs (i.e. STOP, Hazard ID, Injury and Near Miss reporting)

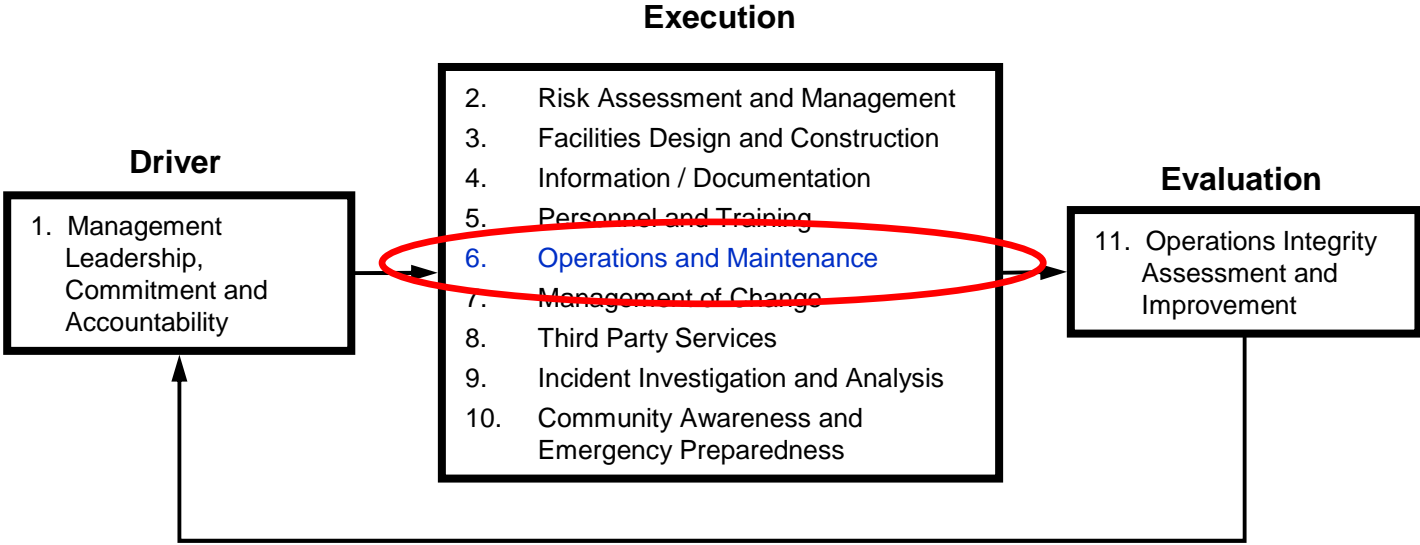
Addressed workforce concerns on a broad array of issues including:

- frequency and location of Basic Survival Training
- potable water quality
- accommodations humidification
- fumes in storage room
- E-452 passenger transportation suit comfort issues
- helicopter return to service
- passenger transportation suit water ingress testing

Presentation Outline

- Hibernia Overview
- Basis of Safe Operations
- Risk Management
- Personnel Safety
- **Helicopter Operations Summary**
 - **Operations and Maintenance (OIMS Element 6)**
 - **Aviation Operations Guide**
 - **Helicopter Operations Manual**
 - **Offshore Helicopter Refueling, Arrivals and Departures**
- Aviation Contract Management
- Incident Management
- Emergency Response
- Summary and Closing Remarks

OIMS Element 6 – Operations and Maintenance



OIMS Element 6 – Operations and Maintenance



Purpose

- Operating and maintenance procedures are identified, developed, and maintained
- Quality assurance process for replacement equipment and materials is in place

Objectives

- Operating and maintenance procedures are identified, classified, developed, approved, and available at all locations
- Improvements to operating and maintenance procedures are identified and communicated
- QA/QC plans ensure that replacement equipment and materials used in operations and maintenance activities meet design specifications

Processes and Procedures Related to Helicopter Operations

- Aviation Operations Guide
- Helicopter Operations Manual
- Helideck Operations Procedure
- Process for the Control of Platform Helifuel

OIMS Element 6 – Operations and Maintenance



Aviation Operations Guide

The Aviation Operations Guide (AOG) is a compilation of petroleum industry aviation best practices. It assists in the planning, development, and conduct of safe and efficient air transport activities.

The AOG provides guidance on:

- evaluation of helicopter service providers (performed by qualified Aviation Advisor)
- conduct of initial and periodic aviation reviews
- passenger and cargo management requirements
- helicopter standards and recommended equipment
- maintenance standards
- personnel qualifications and training
- fuel system design and management
- operational standards
- airbase design and operation
- emergency response planning and survival equipment

OIMS Element 6 – Operations and Maintenance



Hibernia Helicopter Operations Manual

Key information resource for Hibernia specific helicopter operations. Provides guidance to ensure all helicopter operations are conducted in accordance with HMDC's contract specifications, applicable regulatory requirements and safe work practices.

The Hibernia Helicopter Operations Manual:

- covers activities relating to helicopter operations both onshore and offshore
- defines roles and responsibilities
- provides procedures to ensure adherence to regulations/standards and to reduce risks
- details safe work practices

The document is utilized and referenced in conjunction with the Aviation Operations Guide.

Hibernia Helicopter Operations Manual



Helicopter Operations – HMDC

To ensure all helicopter operations on the Hibernia platform are performed safely, HMDC provides the following:

- certified helideck
- certified refueling system with personnel trained in aircraft refueling, testing and system maintenance
- comprehensive radio communication facility to provide communications with all aircraft
- site specific weather observation and reporting
- comprehensive emergency response capabilities to deal with aircraft emergencies on the platform
- Helicopter Landing Officer and helideck crew trained in all aspects of:
 - aircraft and passenger/cargo handling
 - refueling
 - firefighting, rescue and emergency response
- personnel trained in processing passengers and cargo, including the carriage of dangerous goods by air
- standby vessel with rescue capability

Offshore Installation Manager (OIM)

The OIM is responsible for:

- safe helicopter operations on the Hibernia platform
- ensuring personnel engaged in helicopter operations on the helideck are under the direct control of the Helicopter Landing Officer
- ensuring helideck support personnel are adequately trained in firefighting and helicopter emergency operations
- ensuring operational and emergency equipment is available and maintained
- ensuring helicopter passengers receive a Transport Canada approved aircraft safety briefing prior to departure
- authorization of all non-scheduled flights

Hibernia Helicopter Operations Manual



Platform Services Supervisor

The Platform Services Supervisor is responsible to the OIM for:

- ensuring helicopter operations comply with the Hibernia Helicopter Operations Manual, the Aviation Operations Guide and all relevant guidelines and regulations
- close liaison with Cougar regarding the provision of safe and efficient helicopter transportation services
- reporting to the OIM on all aspects of passenger coordination and administration
- coordinating with the Helicopter Landing Officer and helideck crew and ensuring all offshore equipment associated with helicopter operations is serviceable
- identifying the need for non-scheduled helicopter flights

Helicopter Landing Officer

The Helicopter Landing Officer is responsible for:

- on site supervision of the helideck crew
- monitoring readiness of all helideck firefighting and rescue equipment
- controlling all helideck operations including providing final clearance for the helicopter to land
- refueling of the helicopter and ensuring fuel quality checks are regularly carried out in accordance with established procedures
- keeping the radio operator fully informed of the helicopter arrivals / departures
- controlling the passengers movement and loading / unloading of baggage and cargo
- advising the Platform Services Supervisor of any factors affecting safe helicopter operations

Hibernia Helicopter Operations Manual



Helideck Crew

The Helideck Crew is responsible for:

- escorting passengers, loading and unloading baggage and cargo
- helicopter refueling
- ensuring passengers are properly seated with seatbelts fastened
- manning of fire fighting and rescue equipment

Hibernia Helicopter Operations Manual



Radio Operator

The Radio Operator is responsible for:

- all helicopter related communications
- monitoring and reporting actual weather conditions
- monitoring helicopter arrival and departure information and support to flight tracking
- monitoring of all aviation frequencies during helicopter operations
- coordination of standby vessel positioning
- maintaining daily flight operations and weather logs
- informing Platform Services Supervisor/Offshore Installation Manager of matters that could impact safe helicopter/helideck operations

Hibernia Helicopter Operations Manual



Heli-admin Clerk

The Heli-admin Clerk is responsible for:

- conducting safety and platform orientation briefing for all new arrivals
- assigning rooms and muster stations to all new arrivals
- coordinating passenger departures and helicopter flight safety briefings
- flight manifesting
- administration of passenger, baggage and cargo weights
- maintaining the personnel tracking system to ensure accurate record of personnel on the Hibernia platform

Hibernia Helicopter Operations Manual



Standby Vessel

The Standby Vessel has the following responsibilities with respect to helicopter operations:

- remain informed of flight times, number of personnel onboard each flight and aviation weather conditions
- remain in close proximity to the platform to provide immediate emergency response

Helicopter Refueling System

- Aviation fuel is held on the platform to enable refueling of helicopters. HMDC is responsible for the maintenance and quality control of the offshore refueling facility and the quality of the fuel delivered to the helicopter
- The Hibernia platform refueling system consists of transit tanks for bulk delivery of the fuel offshore and a direct to aircraft fuel delivery system. Transit tanks provide the bulk storage and are coupled to the delivery system to provide a helicopter refueling capability. Fuel is pumped directly from the transit tanks, through filters and a dispensing unit, to the helicopter
- Refueling facilities must hold minimum stocks of aviation fuel at all times for emergency use. The minimum fuel to be held on the Hibernia platform is 4500 litres

Helicopter Arrivals on the Hibernia Platform

- Helicopter Landing Officer (HLO) and helideck crew inspect the helideck and emergency response equipment and make ready for the incoming helicopter
- HLO gives incoming helicopter pilot “final clearance to land” and HLO and helideck crew standby fully suited and prepared for fire fighting duties
- After landing, the pilot indicates the “all clear” by switching off the helicopter’s anti-collision lights. The HLO gives permission for the helideck crew to approach the aircraft and insert the wheel chocks. The HLO provides the pilot with the departing passenger/cargo manifest and weather report
- The helideck crew remove baggage from the cargo compartments and directs passengers to remove their seat belts and depart the aircraft. A helideck crewmember escorts the arriving passengers to the heli-admin reception area for processing
- At heli-admin, passengers are assigned rooms and muster stations. Personnel arriving at Hibernia for the first time are provided with safety orientation by the heli-admin staff
- Once all passengers are clear of the helideck and any additional baggage/cargo has been unloaded, aircraft refueling will take place

Helicopter Departures from the Hibernia Platform

- One hour prior to aircraft arrival all departing passengers report to the heli-admin departure lounge
- Passengers, baggage and cargo are weighed
- Departing passengers sign a Security Declaration declaring their baggage free of hazardous or unauthorized material
- Passengers are issued a personal locator beacon (PLB) and helicopter underwater escape breathing apparatus (HUEBA) and shown a Transport Canada approved pre-flight safety video
- Passenger and cargo manifest is prepared by the heli-admin clerk
- When refueling is completed, departing passengers are escorted to the helideck where they hand over their baggage to the helideck crew and then board the aircraft
- A helideck crewmember ensures that seat belts are properly fastened
- The Helicopter Landing Officer will give the pilot the “all clear” for departure

Presentation Outline

- Hibernia Overview
- Basis of Safe Operations
- Risk Management
- Personnel Safety
- Helicopter Operations Summary
- **Aviation Contract Management**
 - **Third Party Services (OIMS Element 8)**
 - **Cougar as Helicopter Service Provider**
 - **Cougar Performance Monitoring**
 - **Selection of S-92A Airframe – Due Diligence**
- Incident Management
- Emergency Response
- Summary and Closing Remarks

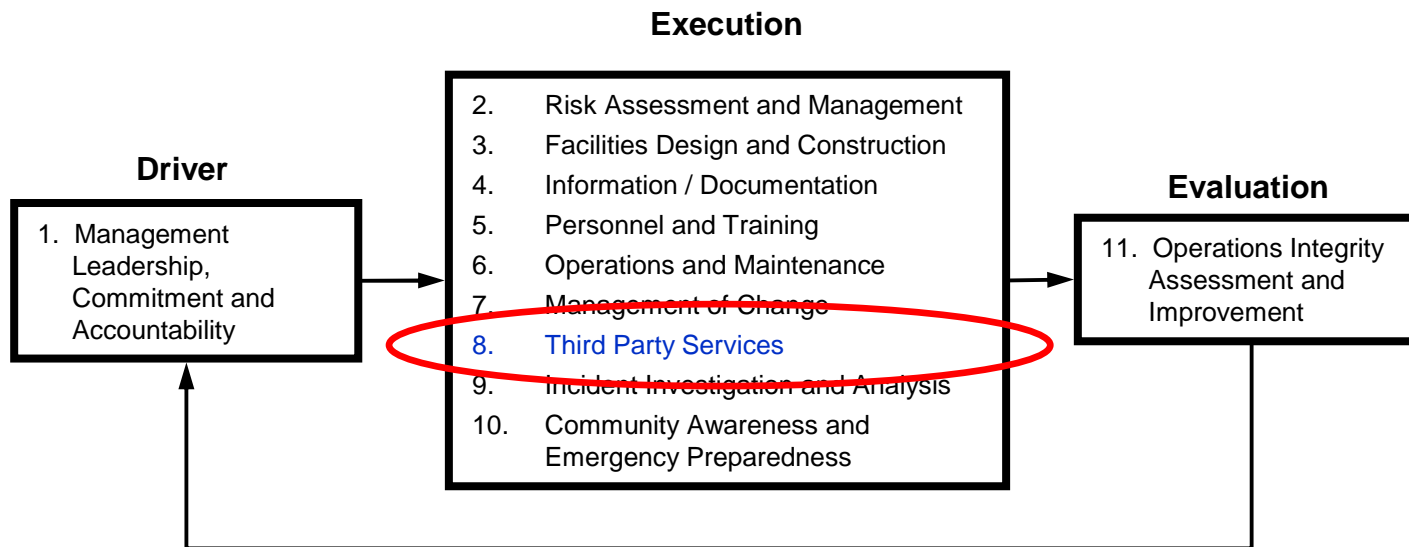
Contract Services

Contract Services

- HMDC hires contractors to provide goods and specialized services required to support the operation
- HMDC requires its contractors to comply with all applicable legislative requirements including those of the C-NLOPB and other applicable regulatory agencies
- Helicopter transportation is carried out by a specialized service provider

HMDC's contractors are evaluated, selected and monitored in compliance with OIMS Element 8

OIMS Element 8 – Third Party Services



OIMS Element 8 – Third Party Services

Purpose

To ensure third party service providers perform in a manner that is consistent and compatible with HMDC's policies and business objectives.

Objective

- Third party services are evaluated and selected using criteria that include an assessment of capabilities to perform work in a safe and environmentally sound manner
- Third party performance requirements are defined and communicated
- Interfaces between organizations providing and receiving services are effectively managed
- Third party performance is monitored and assessed, feedback is provided and deficiencies are corrected

Processes and Procedures

- Evaluation and selection of third party service providers
- Performance monitoring
- Performance reporting and feedback

Cougar as Helicopter Service Provider



Competitive Bid Selection Process

- Detailed description of scope of work
- Develop set of rigorous pre-qualifications to identify potential service providers
- Formal bid proposals requested from pre-qualified global service providers
- Detailed analysis is completed on each formal bid package to identify the preferred service provider consisting of:
 - safety and environmental assessment
 - technical analysis
 - economic and benefits analysis
- Helicopter Services Contract awarded to Cougar Helicopters Inc. in 1995
- Contract award to Cougar was reviewed and validated by C-NLOPB

Cougar as Helicopter Service Provider



Scope of Services:

- helicopter transportation services using only aircraft and equipment that is fit for purpose and meets all regulatory and industry standards
- passenger terminal services, administration and cargo transport
- flight tracking services
- first response standby helicopter and personnel
- training for all pilots and flight dispatchers as determined by the Hibernia Helicopter Operations Manual and the Aviation Operations Guide
- aircraft hangar and workshop facilities
- aircraft maintenance in accordance with the manufacturer's maintenance schedule performed by trained, licensed aircraft engineers
- support aircraft and engineers to undertake aircraft repair offshore in the event of an aircraft becoming unserviceable
- provision of an alternate landing site, with all necessary personnel and facilities to support flight operations

Cougar – Performance Monitoring



OIMS Element 8: Third Party Services

Third-party performance is monitored and periodically assessed to confirm:

- performance meets established criteria
- feedback is provided and deficiencies are corrected

Aviation Operations Guide Review Requirements

- All aviation operators should be subject to initial and periodic technical and operational reviews conducted by an external qualified Aviation Advisor
- All ongoing/long-term aviation operations should be reviewed annually

HMDC conducts performance reviews/audits of Cougar in accordance with Element 8 and the Aviation Operations Guide

Cougar – Performance Monitoring

Annual Audits

- 11 aviation audits have been completed since Hibernia platform start-up in September 1997
- HMDC contracted ExxonMobil Corporate Aviation Services to conduct annual audits

Findings (last 5 years)

| | 2005 | 2006* | 2007 | 2008 | 2009 |
|-------------|------|-------|------|------|------|
| Significant | 0 | 0 | 0 | 0 | 0 |
| Medium | 5 | 1 | 5 | 0 | 2 |
| Lower | 8 | 1 | 3 | 3 | 2 |

*Note: 2006 audit was completed in February 2007

Cougar – Performance Monitoring



| Aviation Audit – Medium Findings | | |
|----------------------------------|--|--------|
| Year | Description | Status |
| 2005 | Cougar to review and amend its process to ensure that all onboard documents are up to date | Closed |
| 2005 | Cougar to review the interface between the EPIRB located on the S92 forward bulkhead and the rear-facing passenger seat | Closed |
| 2005 | Cougar to ensure that S92 passenger seats are properly aligned with the window exits | Closed |
| 2005 | Next revision of the S92 passenger briefing cards to delineate those PED prohibited on board in the passenger cabin | Closed |
| 2005 | Amend S92 passenger briefing cards by labeling the pictograms of the emergency hatches corresponding to each location | Closed |
| 2006* | Assess ability to comply with AOG - night currency for pilots | Closed |
| 2007 | Include in ground training program topics related to night flying | Closed |
| 2007 | Assess Pilot Upgrade Program to ensure night competency is adequately developed and assessed | Closed |
| 2007 | HMDc obtain and keep on file at Hibernia platform the latest copy of CAP 437 for reference | Closed |
| 2007 | HMDc educate the Hibernia HLOs on the contents of the AOG relative to their jobs | Closed |
| 2007 | HMDc to update frequency of helideck inspections to annual basis as per AOG | Closed |
| 2009 | Recommend Cougar incorporate homing devices in the cockpits of airframes designated for SAR | Open |
| 2009 | Recommend Cougar consider, for the purpose of customer information, development of a spreadsheet listing the directives of the manufacturer and civil aviation authorities together with an initial assessment of the relative importance and impact to the user group | Open |

Cougar – Performance Monitoring



| Aviation Audit – Lower Findings | | |
|---------------------------------|--|--------|
| Year | Description | Status |
| 2005 | HMDC should update AOG to incorporate the latest updates | Closed |
| 2005 | Cougar to provide evidence of renewal of liability insurance due to expire November 1, 2005 | Closed |
| 2005 | Cougar to standardize the composition of the Technician training files | Closed |
| 2005 | Cougar to consider amending the verbiage of paragraph 6.1.2 of the Maintenance Procedures Manual | Closed |
| 2005 | For shared flights when HMDC personnel are on board, Cougar to establish a process to ensure the pilots observe most restrictive pitch, roll, and heave limits | Closed |
| 2005 | HMDC to review the requirement for random testing by the aviation contractor and adjust if required | Closed |
| 2005 | Recommend HMDC consider replacing current yellow helideck lighting with green perimeter lights | Closed |
| 2005 | AS recommends HMDC assess whether the Third Party Liability, Combined Single Limit insurance provided by CHI meets HMDC requirements | Closed |

Cougar – Performance Monitoring



| Aviation Audit – Lower Findings | | |
|---------------------------------|---|--------|
| Year | Description | Status |
| 2006* | Cougar review and amend as required its process to ensure documents on board aircraft are current and appropriate | Closed |
| 2007 | recommends HMDC consider installing a new style differential pressure gauge on its fuel system | Closed |
| 2007 | Cougar to review Operations Memos and Directives in aircraft route book for relevance | Closed |
| 2007 | recommends HMDC ensure HLOs are current on training by retaining paper or electronic copies of competency statements on file | Closed |
| 2008 | [Cougar] Incident/Hazard report form should allow submitter opportunity to characterize seriousness of the incident (Low/Medium/High) | Closed |
| 2008 | Contact numbers for HMDC not in [Cougar] Emergency Action Plan | Closed |
| 2008 | No random drug and alcohol testing for [Cougar] safety sensitive positions | Closed |
| 2009 | Recommend Cougar incorporate into the management diagram recent changes in management structure for the East Coast | Open |
| 2009 | Recommend Cougar review the Company Route Book in aircraft 'MCH' for outdated material | Open |

Selection of S-92A Airframe – Due Diligence

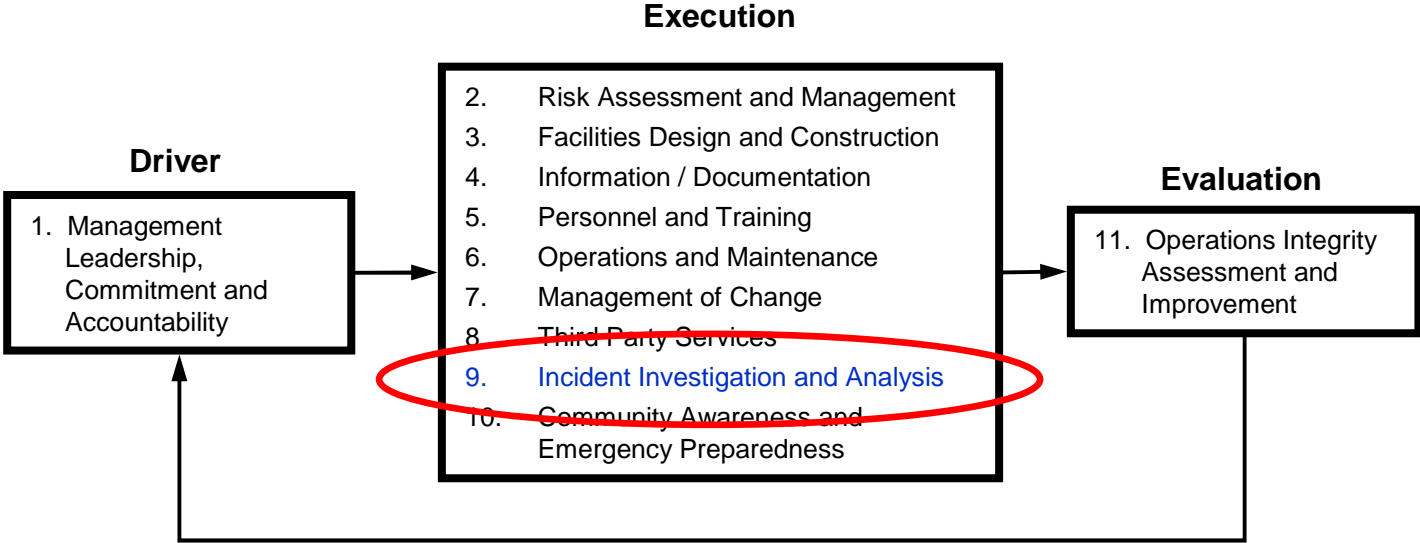


- The Sikorsky S-92A, as the next generation of helicopters, offered a number of technical improvements over the Super Puma
- Sikorsky S-92A helicopter was recommended by Cougar
- Sikorsky S-92A is fully compliant with the ExxonMobil Aviation Operations Guide and was endorsed by ExxonMobil Corporate Aviation Services
- Moving to a common aircraft type with Suncor and Husky would enhance synergies, improve safety and reliability and to be more cost effective

Presentation Outline

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- **Incident Management**
 - **Incident Investigation and Analysis (OIMS Element 9)**
- Emergency Response
- Summary and Closing Remarks

OIMS Element 9 – Incident Investigation and Analysis



OIMS Element 9 – Incident Investigation and Analysis



Purpose

- Facilitate the proper management of incidents so that valuable information and lessons learned are available to improve operations and avoid recurrence

Objective

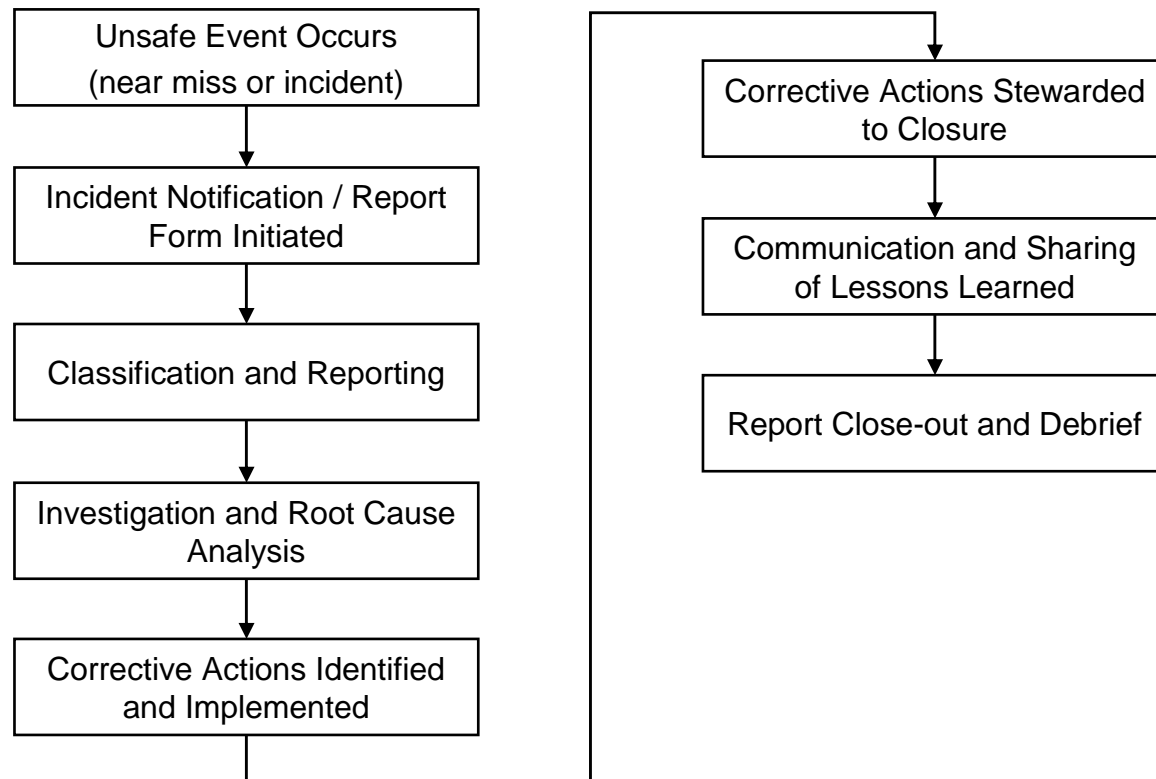
- Safety, health, environmental, security, process, and equipment related incidents are reported, investigated, and analyzed to identify the root cause
- Corrective actions are identified and implemented to prevent recurrence and lessons learned are communicated

OIMS Element 9 – Incident Investigation and Analysis

Process

- Incident Notification, Investigation and Reporting Process

Helicopter related incidents are reported, investigated, and analyzed in accordance with OIMS Element 9.



Presentation Outline

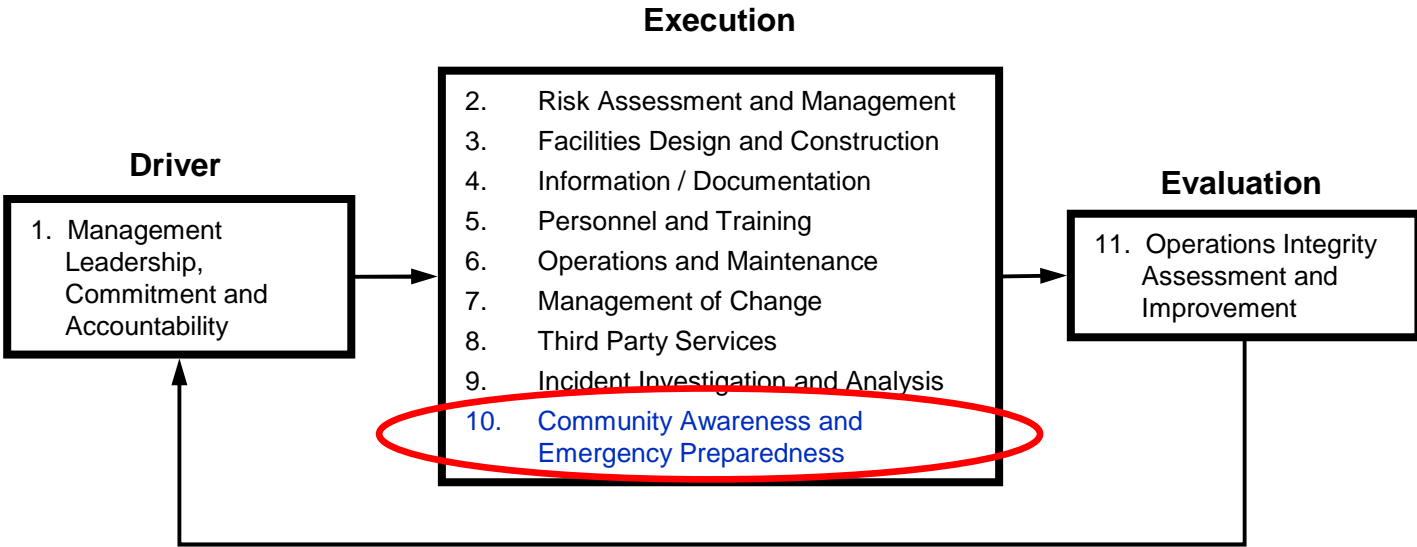
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- **Emergency Response**
 - **Regulatory Requirements**
 - **Community Awareness and Emergency Preparedness (OIMS Element 10)**
 - **Hibernia Emergency Response Structure**
 - **Response to March 12th**
 - **Lessons Learned**
- Summary and Closing Remarks

Regulatory Requirements

Emergency Response Regulatory Requirements

- Operators are required to prepare and submit a safety plan to the Chief Safety Officer of C-NLOPB for approval
- Safety plan must provide for all matters related to the safety and health of personnel and the integrity of an installation. This includes contingency plans for emergency response to, and mitigation of, accidental events
- The Hibernia Operational Plan (safety plan) references the Hibernia Emergency Response Plan which contains operational guidance on emergency response activities

OIMS Element 10 – Community Awareness and Emergency Preparedness



OIMS Element 10 - Community Awareness & Emergency Preparedness

A key component of Element 10 is emergency preparedness and response

Purpose:

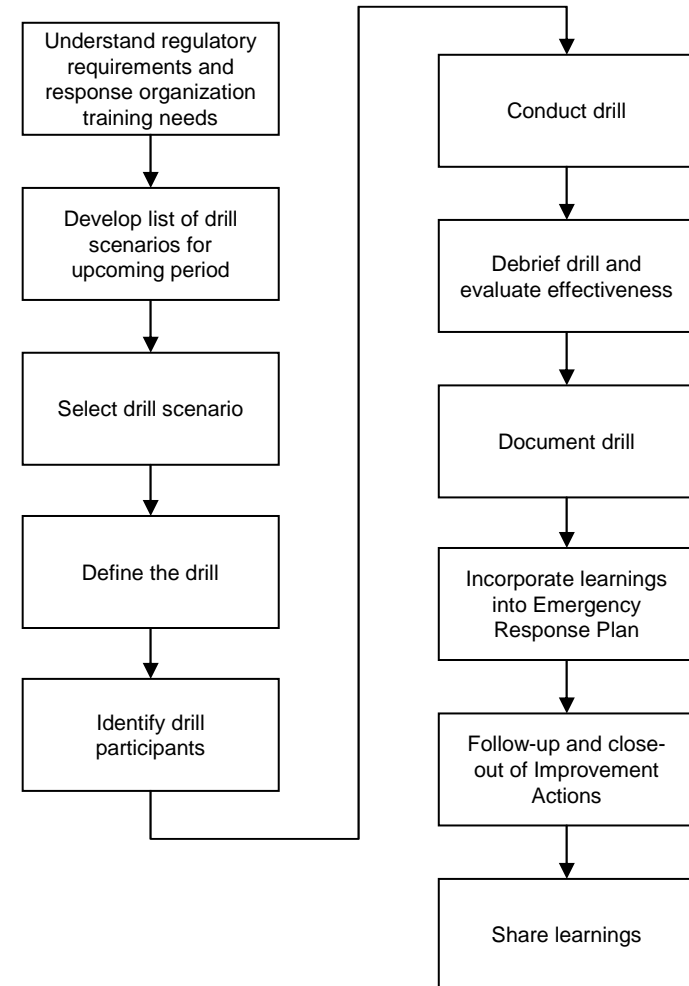
- Ensure effective emergency response plans are established
- Equipment is well maintained and trained personnel are available to deal with emergency situations

Objective:

- Emergency response plans are documented, resourced, accessible, current, and clearly communicated
- Required emergency response drills are conducted to test the adequacy of the response plans

Process:

- Develop and update an Emergency Response Plan
- Conduct emergency response drills



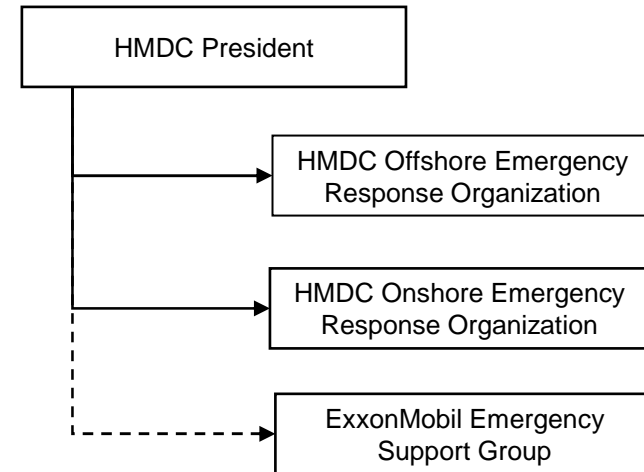
Hibernia Emergency Response Structure



Hibernia Emergency Response

- Multi-tiered system with well defined roles and responsibilities
- Response teams on call 24 hours a day
- Routine drills are conducted to ensure response team readiness
- Response teams have access to external resources such as RCMP and the Joint Rescue Coordination Center (JRCC)
- Focus during emergency situations:
 - protect people
 - protect the environment
 - safeguard assets
 - maintain corporate reputation

Hibernia Emergency Response Organization

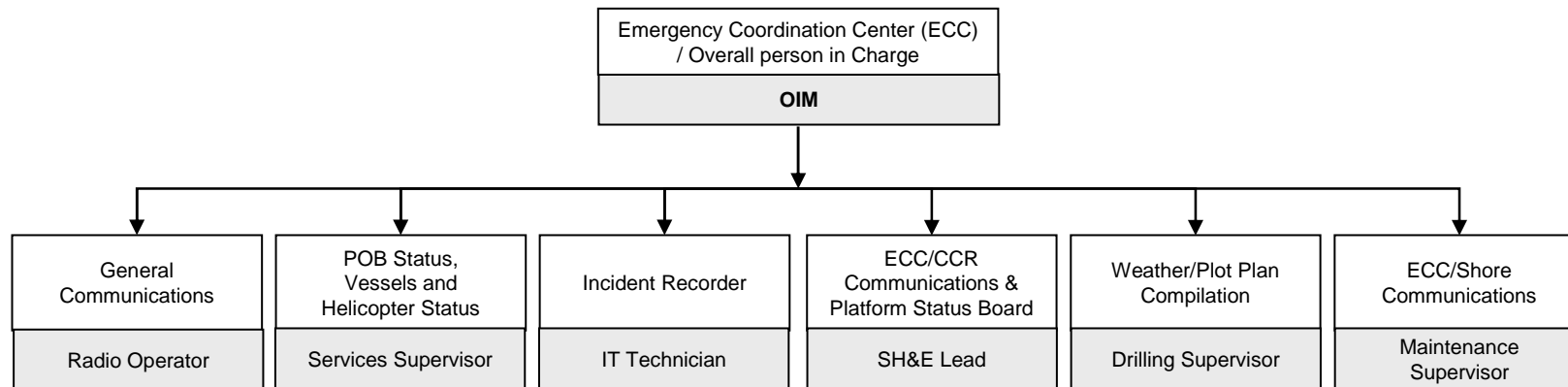


Hibernia Emergency Response Structure



HMDC Offshore Emergency Response

- Offshore emergency response team deals with all platform emergencies
- OIM is in overall command of the platform emergency response
- Primary consideration in any emergency response situation is:
 - safety of personnel on board
 - protection of the environment
 - integrity of the platform

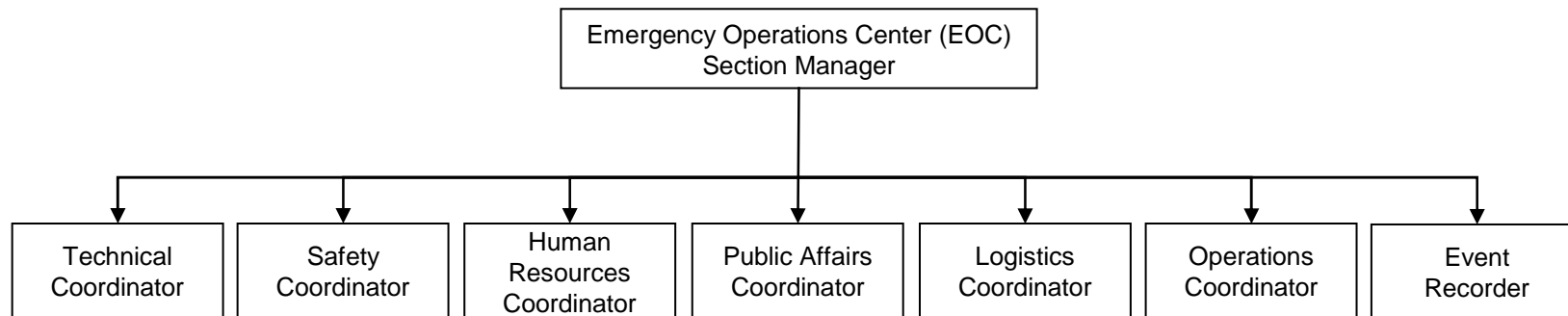


Hibernia Emergency Response Structure



HMDC Onshore Emergency Response

- Emergency Operations Center (EOC) provides direct support to the Hibernia platform
- The HMDC President or designate manages the response in the EOC
- EOC team members are selected based on experience, work skills and leadership qualities
- EOC team members are trained in emergency response duties and conduct regular drills involving helicopter ditching, fire and explosion and potential security threats
- These drills may involve major contractors and other support organizations such as the JRCC, RCMP and other Operators

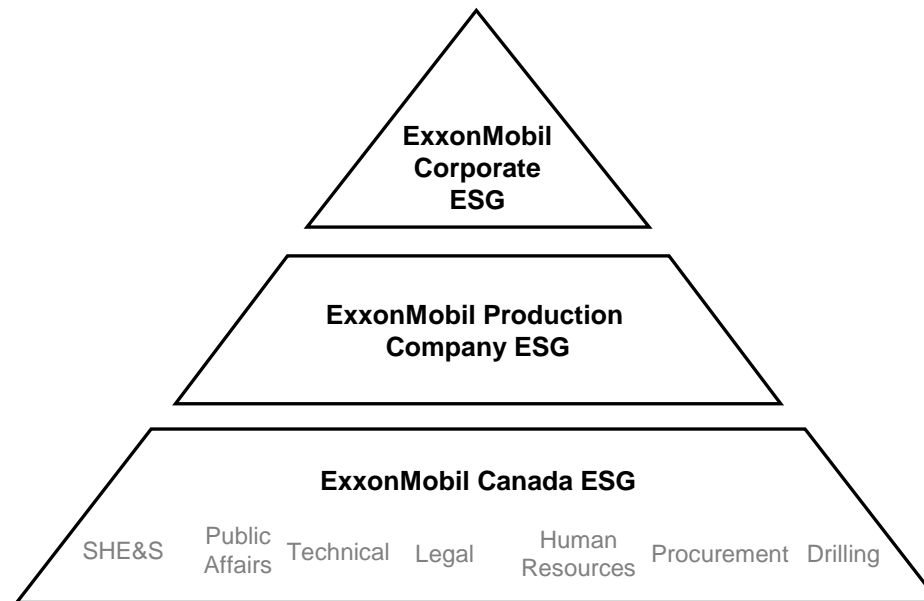


Hibernia Emergency Response Structure



ExxonMobil Emergency Support Group (ESG)

- HMDC has contracted ExxonMobil Canada to be available to provide additional support services for incidents, if requested by HMDC
- Hibernia EOC Section Manager has ability to activate ExxonMobil Emergency Support Group
- Provides access to the resources of ExxonMobil Canada and its affiliates to support emergencies
- HMDC President retains overall responsibility for Hibernia's emergency response activities



Emergency Response Activation



Protocols for Mobilizing Emergency Response Teams

- Hibernia has 24 hour/7 day activation capability for onshore Emergency Operations Center (EOC) team members
- Offshore Emergency Coordination Center (ECC) can also initiate the EOC activation process
- As part of its emergency response procedures, Cougar Helicopters can also activate the EOC
- Depending on the nature of the incident, the onshore Emergency Support Group (ESG) can also be activated on the request of the EOC Section Manager (HMDC President)

Response to March 12th



Emergency Response Activation

- During routine aircraft monitoring, the platform Radio Operator became aware that a Cougar helicopter was in trouble and as per normal protocol, informed the OIM
- The OIM immediately called the HMDC President to inform him of the situation
- The Radio Operator reviewed the helicopter passenger list and noted that two employees of a HMDC contractor were on board the aircraft and notified the OIM. The OIM updated the HMDC President
- HMDC President immediately contacted Hibernia Senior Emergency Preparedness and Response (EP&R) Advisor and informed him of the event
- The decision was made to activate both the Emergency Operations Center (EOC) and the ExxonMobil Emergency Support Group (ESG)
- Hibernia Senior EP&R Advisor initiated the emergency team call-out

Response to March 12th



Hibernia Platform Response

- Given the location of the incident, the OIM determined that the Hibernia platform was too distant to offer any direct support with the standby vessel. Personnel and equipment were put on standby to assist in any way possible
- The platform had previously shutdown production and was preparing for a major maintenance campaign. All non-critical work activities onboard the Hibernia platform were suspended
- Communications between the onshore Emergency Operations Center and OIM were conducted regularly
- The OIM kept the offshore workforce informed of the situation and the recovery efforts
- The OIM held a Town Hall meeting with all platform personnel on the evening of March 12th. Information about the incident and recovery efforts were shared with the workforce

Response to March 12th



Onshore Emergency Operations Center (EOC) Response

- At approximately 10:30hrs on March 12th the Hibernia EOC mobilized
- The HMDC family and media telephone response teams were activated to address incoming calls
- Communication links were quickly set up between the Hibernia EOC, JRCC, Husky and other support organizations
- HMDC vessels were made available to the JRCC to support rescue efforts
- Information was quickly provided to Hyflodraulic Limited (two of their employees were passengers on the helicopter) and updates were provided when information became available
- HMDC management representatives were dispatched to the Cougar facility to speak with Hibernia personnel that were scheduled to travel offshore
- HMDC President was available to media at news conferences held March 12th and 13th
- Grief counselor services were offered to employees of Hyflodraulic Limited and HMDC
- The Hibernia EOC was stood down at 17:30hrs

Response to March 12th



Onshore Emergency Support Group Response

- At approximately 10:30hrs the ExxonMobil Canada Emergency Support Group (ESG) was activated
- The ESG provided strategic planning and support to the HMDC President
 - monitored events and media coverage
 - communicated incident information to HMDC co-venturer companies and provincial government

Response to March 12th



Post Incident Activities

- Assisted HMDC employees, contractors' employees and their families
- Arranged grief counseling both onshore and offshore
- Monitored search and rescue efforts and provided assistance where possible
- Provided support for JRCC, Husky, and Cougar
- Communicated with government agencies, including TSB, and Hibernia co-venturers
- Supported incident investigations
- Ensured accurate and timely information was supplied to the media
- Suspended helicopter operations

Communication with Workforce

Multiple Town Hall meetings were held to communicate with the workforce

- On March 12th, the OIM held a Town Hall meeting with all platform personnel
- On March 13th, the Hibernia President held two Town Hall meetings:
 - Onshore HMDC and contract personnel
 - Offshore HMDC workforce who were off duty and families

Lessons Learned

Debrief Sessions

- All Hibernia emergency response teams held debrief session following the incident to review potential issues or areas for improvement
- Hibernia management held a separate meeting to review all the debrief notes from the helicopter incident

What Worked Well

- Hibernia emergency response personnel performed their roles skillfully. Previous training received during drills proved to be effective
- Hibernia's emergency response processes and procedures worked as planned
- HMDC management set up meetings with employees on each floor in Cabot Place to keep them informed of ongoing rescue efforts
- HMDC onshore employees were given the option to go home to their families or talk with grief counselors on site

Improvement Opportunities

- Monitoring of stress placed on response team members
- All Operators have their emergency response teams activated by one service provider. With all Operators mobilizing at one time the service response time could be impeded

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- **Summary and Closing Remarks**
 - **Hibernia Safety Performance**
 - **Helicopter Transportation Safety**
 - **Closing Remarks**

Hibernia Safety Performance



Hibernia has achieved its strong safety record by:

- Utilizing mature, globally tested safety management systems to drive continuous improvement
- Maintaining our facilities and securing best-available technologies
- Relying on comprehensive risk assessment and management processes to identify and eliminate/mitigate hazards
- Documenting and clearly stating safety policies and procedures
- Driving accountability for safety at every level within the organization
- Having a highly skilled, committed and engaged workforce
- Hiring industry leading specialized service providers
- Believing that it is possible to have a work environment without injuries
- Striving every day to learn from our past experiences to achieve a reality where no one gets hurt

Helicopter Transportation Safety

The safety of our workforce is our greatest responsibility. HMDC uses a top quality service provider and leading edge technology for helicopter transportation.

Operational Safety

- World class helicopter operator certified by Transport Canada
- Highly skilled flight crews with pilot training exceeding industry norms
- Certified aircraft maintenance facility with skilled, licensed aircraft engineers
- Clearly documented, and contractually required, operational procedures
- Rigorous oversight and monitoring by HMDC and ExxonMobil Aviation Services
- Compliance with all regulatory requirements

Aircraft Safety

- Latest generation twin engine “harsh environment” helicopters
- Leading edge aviation technology (e.g. Helicopter Usage and Monitoring System)
- Flight tracking capability and emergency locator transmitters
- Latest generation helicopter safety equipment

Personnel Safety

- High-quality basic survival training and helicopter underwater escape training
- Certified survival suits appropriate for the Newfoundland environment
- State of the art personnel protection equipment (e.g. HUEBA and PLB’s)
- Helicopter and vessel on emergency standby staffed by skilled personnel
- DND Search and Rescue support

Thank-you

We are committed to working with the Inquiry and C-NLOPB to identify and implement improvement opportunities.