Factual Report – Attachment 6

Safety Management System and Related Documents

Table of Contents

ISLAND EXPRESS HELICOPTERS

SAFETY MANUAL

REVISION 2
9/26/2018

THIS PAGE INTENTIONALLY LEFT BLANK

NOTICE

DISCLAIMER. The information contained in this publication is subject to revision in light of changing government requirements and regulations. No PRISM subscriber or other reader should act on the basis of any such information without referring to applicable laws and regulations and/or without taking appropriate professional advice. Although every effort has been made to ensure accuracy, the ARGUS International, Inc. shall not be held responsible for loss or damage caused by errors, omissions, misprints or misinterpretation of the contents hereof. Furthermore, ARGUS International, Inc. expressly disclaims all and any liability to any person, whether a purchaser of this publication or not, in respect of anything done or omitted, and the consequences of anything done or omitted, by any such person in reliance on the contents of this publication. The PRISM Safety Management System Manual may only be reproduced, recast, reformatted or transmitted in any form by any means, electronic or mechanical, including photocopying, recording or any information storage and retrieval system, for the expressed use of the PRISM subscriber for whom this manual was written. Any other distribution or use of this manual is expressly forbidden and is a violation of copyright laws.

THIS PAGE INTENTIONALLY LEFT BLANK

Revision Control

REVISION NUMBER	ISSUE DATE	DATE INSERTED	INITIALS
ORIGINAL	7/15/2013		
REV 1	5/30/2014		
REV 2	9/26/2018		

THIS PAGE INTENTIONALLY LEFT BLANK

List of Effective Pages

Section: Page	Date	Revision
DISCLAIMER:		
iii		Original
REVISION CONTROL:		
iv		1
LIST OF EFFECTIVE PAGES:		
vi		1
TABLE OF CONTENTS:		
viii		1
ix		1
CHAPTER 1:		
1-1		Original
1-2		Original
1-3		Original
1-4		Original
1-5		Original
1-6		Original
CHAPTER 2:		
2-1		~~Original~~1
2-2		~~Original~~1
2-3		1
2-4		1
2-5		~~Original~~1
2-6		~~Original~~1
CHAPTER 3:		
3-1		~~Original~~1
3-2		1
3-3		1
3-4		1
3-5		1
3-6		1
3-7		1
3-8		~~Original~~1
3-9		1
3-10		1

Section: Page	Date	Revision
CHAPTER 3 (Continued):		
3-11		1
3-12		1
3-13		1
3-14		1
CHAPTER 4:		
4-1		~~Original~~1
4-2		1
4-3		1
4-4		1
4-5		1
4-6		1
CHAPTER 5:		
5-1		1
5-2		1
5-3		1
5-4		~~Original~~1
CHAPTER 6:		
6-1		~~Original~~1
6-2		1
6-3		1
6-4		~~Original~~1
CHAPTER 7:		
7-1		1
7-2		Original
7-3		Original
7-4		Original

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

Field Code Changed

1 Introduction

1.1 Background

A safety management system (SMS) is essentially a quality management approach to controlling risk. It provides the organizational framework to construct and support a sound safety culture that actively controls its risk exposure. For Island Express Helicopters, the SMS can become an efficient means of interfacing with the FAA and international regulatory agencies. This SMS employs safety strategies and practices by developing and implementing a structured management system to control risk and meet legal responsibilities in aviation operations. This manual is written under the designs of the ICAO Safety Management Manual and the FAA's AC 120-92A.

1.2 Scope of the Safety Management System

The SMS shall comprehensively examine the functions of Island Express Helicopters and the operational environment to identify hazards and to analyze associated risks. These functions include the organizational structure, processes and procedures, as well as the people, equipment, and facilities used to accomplish Island Express Helicopters mission. The specific functional components of Island Express Helicopters include:

1. Safety management;
2. Organization and personnel;
3. Training and proficiency;
4. Flight operations;
5. International operations (when applicable);
6. Aircraft equipment requirements;
7. Aircraft maintenance;
8. Operations policies and procedures;
9. Emergency accident/incident response;
10. Environmental management;
11. Occupational health and safety; and
12. Security.

1.2.1 SMS Structure and Organization

There are four components comprising Island Express Helicopter's Safety Management System; each is an essential piece of a comprehensive safety-oriented management system. All safety management requirements and activities at Island Express Helicopters will have a relationship to these four components:

1. Safety policy;
2. Safety risk management;
3. Safety assurance; and
4. Safety promotion.

1.3 The PRISM Role

Through the development and implementation of the SMS within Island Express Helicopters, Professional Resources In System Management (PRISM) plays an important role in supporting the efforts of Island Express Helicopters. The utilization of PRISM will be highlighted throughout this manual.

1.4 Definitions

Accident – An occurrence associated with the operation of an aircraft that 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 (Title 49 of the Code of Federal Regulations (49 CFR) § 830.2, Definitions).

Analysis – The conversion of data into information, to identify measures that predict safety related problems to allow risk-management decision making, by the identification of trends, deficiencies and root causes. This involves the processes of identifying a question or issue to be addressed, modeling the issue, investigating model results, interpreting the results, and possibly making a recommendation. Analysis typically involves using scientific or mathematical methods for evaluation.

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

Attributes – System Attributes, or the inherent characteristics of a system that apply to an effective SMS. While the six system attr butes were first applied with Air Transportation Oversight System (ATOS) fielding, there are differences when applied to SMS, as discussed below:

- **Responsibility** – Who is accountable for management and overall quality of the 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 –** International Organization for Standardization (ISO)-9001-2000 defines "procedure" as "a specified way to carry out an activity or a process" – procedures translate the *what* in goals and objectives into *how* in practical activities (things people do). Procedures are simply documented activities to accomplish processes, e.g., a way to perform a process. The organization should specify their own procedures for accomplishing processes in the context of their unique operational environment, organizational structure, and management objectives.

- **Controls** – Controls are elements of the system, including hardware, software, special procedures or procedural steps, and supervisory practices designed to keep processes on track to achieve their intended results. Organizational process controls are typically defined in terms of special procedures, supervisory and management practices, and processes. Many controls are inherent features of the FAA SMS Framework. Practices such as continuous monitoring, internal audits, internal evaluations, and management reviews (all parts of the Safety Assurance (SA) component) are identified as controls within the design expectations. Additionally, other practices such as documentation, process reviews, and data tracking are identified as controls within specific elements and processes.

- **Process Measures** – Ways to provide feedback to responsible parties that required actions are taking place, required outputs are being produced, and expected outcomes are being achieved. A basic principle of SA is that fundamental processes be measured so that management decisions can be data-driven. The general expectations for Component 1, Policy, specify that SMS outputs be measured and analyzed. These measurements and analyses are accomplished in Component 3, SA. Outputs of each process should, therefore, be identified during Component 3 activities. For example, these outputs should be the subjects of continuous monitoring, internal audits, and internal evaluation.

- **Interfaces** – This aspect includes examining such things as lines of authority between departments, lines of communication between employees, consistency of procedures, and clearly delineating lines of responsibility between organizations, work units, and employees. Interfaces are the "inputs" and "outputs" of a process.

Audit – Scheduled, formal reviews and verifications that evaluate whether an organization has complied with policy, standards, and/or contract requirements. An audit starts with the management and operations of the organization and then moves to the organization's activities and products/services.

- **Internal audit** – An audit conducted by, or on behalf of, the organization being audited, e.g., the flight training department audits the flight training department.

- **External audit –** An audit conducted by an entity outside of the organization being audited, e.g., the flight operations department audits the flight training department.

Aviation Service Provider – Refer to definition for *organization* below. *Aviation service provider* is interchangeable with the terms *service provider* and *organization*.

Aviation System – The functional operation or production system used by an organization to produce an aviation product or service.

Complete – Nothing has been omitted and what is stated is essential and appropriate to the level of detail.

Competency – An observable, measurable set [pattern] of skills, knowledge, abilities, behaviors, and other characteristics that an individual needs to perform work roles of occupational functions successfully. Competencies are typically required at different levels of proficiency depending on the work roles or occupational function. Competencies can help ensure that individual and team performances align with the organization's mission and strategic direction.

Conformity – Fulfilling or complying with a requirement [refer to ISO 9001-2000]; this includes but is not limited to complying with Federal aviation regulations. It also includes complying with company requirements, requirements of operator developed risk controls, or operator policies and procedures.

Continuous Monitoring – Uninterrupted (constant) watchfulness (checks, audits, etc.) over a system.

Corrective Action – Action to eliminate (remove) or mitigate (lessen) the cause or reduce the effects of a detected nonconformity or other undesirable (unwanted) situation.

Correct – Accurate without ambiguity or error in its attributes.

Documentation – Information or meaningful data and its supporting medium (e.g., paper, electronic, etc.). In this context, *documentation* is different from *records* because *documentation* is the written description of policies, processes, procedures, objectives, requirements, authorities, responsibilities, or work instructions; whereas *records* are the evidence of results achieved or activities performed.

Evaluation – An independent review of company policies, procedures, and systems [refer to AC 120-59, current edition]. If accomplished by the company itself, the evaluation should be done by a person or organization in the company other than the one performing the function being evaluated. The evaluation process builds on the concepts of auditing and inspection. An evaluation is an anticipatory process designed to identify and correct potential problems before they happen. An evaluation is synonymous with the term "systems audit."

Function – A function consists of specific or discreet actions required by a system to achieve an objective (e.g. an operation that a system must perform in order to accomplish its mission, such as a maintenance action required to restore a system to operation). Such actions may be accomplished through the use of equipment, personnel, facilities, firmware, software, or a combination thereof. In a broader sense, the term function refers to what is expected to be incorporated into each system rather than how the system accomplishes its objective. This makes for a more performance-based system and allows for a broad range of techniques to be used to accomplish the performance objectives. This, in turn, maximizes scalability while preserving standardization of results across the aviation organization communities.

Hazard – Any existing or potential condition that can lead to injury, illness, or death; damage to or loss of a system, equipment, or property; or damage to the environment (environmental issues are not within the scope of the SMS). A hazard is a condition that might cause (is a prerequisite to) an accident or incident.

Incident – An occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations (49 CFR § 830.2, Definitions).

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 inside and 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 – The management structure that operates (controls, supervises, etc.) the operational activities and processes of the aviation system.

Nonconformity – Non-fulfillment of a requirement (refer to ISO 9001-2000). This could include but is not limited to, noncompliance with Federal regulations, company requirements, requirements of operator-developed risk controls or operator-specified policies and procedures.

Objective – The desired state or performance target of a process. Usually it is the final state of a process and contains the results and outputs used to obtain the desired state or performance target.

Operational Life Cycle – Period of time from implementation of a product/service until it is no longer in use.

Organization – Within the context of this document, the term *organization* refers to Island Express Helicopters as the aviation service provider organization.

Outputs – The product or end result of a SMS process, which is able to be recorded, monitored, measured, and analyzed. Outputs are the minimum expectation for the product of each process area and the input for the next process area in succession. Each of the outputs of a process should have a method of measurement specified by the organization. Measures need not be quantitative where this is not practical; however, some method of providing objective evidence of the attainment of the expected output is necessary.

Oversight – A function performed by a regulator (such as the FAA) that ensures that an aviation organization complies with and uses 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.

Preventive Action – Preemptive action to eliminate or mitigate the potential cause or reduce the future effects of an identified or anticipated nonconformity or other undesirable situation.

Procedure – Specified ways to carry out operational activities that translate the *what* (objectives) into *how* (practical activities).

Process – A set of interrelated or interacting activities that transform inputs into outputs.

Process Measures – Refer to definition for process measures under the *attributes* definition, above, i.e., a means of providing feedback to responsible parties that required actions are taking place, required outputs are being produced, and expected outcomes are being achieved.

Product/Service – Anything that is offered or can be purchased that might satisfy a want or need in the air transportation system.

Records – Evidence of results achieved or activities performed.

Residual Safety Risk – The safety risk that exists after all controls have been implemented or exhausted and verified. Only verified controls can be used for assessing residual safety risk.

Risk – The composite of predicted severity (how bad) and likelihood (how probable) of the potential effect of a hazard in its worst cred ble (reasonable or believable) system state. The terms *risk* and *safety risk* are interchangeable in this manual.

Risk Control – Steps taken to eliminate (remove) hazards or to mitigate (lessen) their effects by reducing the severity and/or likelihood of risk associated with those hazards.

Safety Assurance – A formal management process within the SMS that systematically provides confidence that an organization's 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-l ke approach to managing safety risk. It includes systematic procedures, practices, and policies for the management of safety (as described in this document it includes safety risk management, safety policy, safety assurance, and safety promotion).

Safety Objective – A goal or desirable outcome related to safety. Generally based on the organization's safety policy, and specified for relevant functions and levels in the organization. Safety objectives are typically measurable.

Safety Planning – Part of safety management focused on setting safety objectives and specifying needed operational processes and related resources to fulfill these objectives.

Safety Risk – The composite of predicted severity (how bad) and likelihood (how probable) of the potential effect of a hazard in its worst credible (reasonable or believable) system state. The terms *safety risk* and *risk* are interchangeable in this manual.

Safety Risk Control – A characteristic of a system that reduces or mitigates (lessens) the potential undesirable effects of a hazard. Controls may include process design, equipment modification, work procedures, training or protective devices. Safety risk controls must be written in requirements language, measurable, and monitored to ensure effectiveness.

Safety Risk Management (SRM) – A formal process within the SMS that describes the system, identifies the hazards, assesses the risk, analyzes the risk, and controls the risk. The SRM process is embedded in the processes used to provide the product/service; it is not a separate/distinct process.

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

Severity – The degree of loss or harm resulting from a hazard.

Substitute Risk – A 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 – Refer to definition for *Attributes*, above.

Top Management – The person or group of people who direct and control an organization (ref. ISO 9000-2005 definition 3.2.7 - person or group of people who directs and controls an organization at the highest level). Top management translates the policy into goals, objectives and strategies, and projects a shared-vision of the future. It makes decisions that affect everyone in the organization, and is held entirely responsible for the success or failure of the enterprise. In many large organizations, this can be the Chief Executive Officer (CEO), chairman/chairwoman, president or the board of directors; in smaller organizations, this might be the owner of the company.

2 Safety Management Policy

2.1 Safety Commitment and Responsibility

Island Express Helicopters is committed to developing and implementing a safety management system (SMS) and continuously improving the operation. All employees are expected to uphold the highest levels of performance, and never compromise safety by assuming excessive risk.

As an organization our commitment is to:

a. Develop and maintain a safety culture that recognizes the value of safety management;
b. Clearly define the duties, responsibilities, and accountabilities for all employees;
c. Provide all employees with adequate training and information to enhance performance;
d. Comply with or exceed all regulatory and company specific requirements;
e. Proactively manage the risks associated with our operation;
f. Ensure externally supplied services and materials meet or exceed all regulatory and company specific requirements;
g. Set defined performance goals and consistently measure performance against those goals;
h. Conduct internal management and safety reviews to improve performance; and
i. Encourage all employees to report errors and safety issues in the spirit of a just culture.

All Island Express Helicopters aviation personnel are expected to continuously take an active role in the identification and mitigation of hazards and risks pertinent to the operation. Each employee is personally responsible to perform his/her duties in a way that gives primary concern to the safety of passengers, his/her own safety, and the safety of fellow employees and equipment entrusted to his/her care. The safety policies and procedures established in the SMS will be reviewed at least annually by the Safety Managers to ensure they remain relevant and appropriate to Island Express Helicopters.

2.2 Quality Policy

Top management shall ensure that Island Express Helicopter's quality policies and procedures are consistent with the SMS requirements defined in this manual. The quality management (assurance and control) processes existing at Island Express Helicopters shall be consistent with the objectives of the SMS in a collaborative effort to jointly improve the efficiency of the entire organization.

2.3 Safety Planning

This manual shall serve as a safety management plan to meet the safety objectives of Island Express Helicopters described in the company safety policy and the policies contained herein. The requirements established in this manual are anticipated to comprehensively define the SMS at Island Express Helicopters, but will require periodic review to ensure continuous improvement is sustained. As such, this manual shall be reviewed at least annually by the Safety Managers, and otherwise as assigned by the Director of Operations. Any emerging planning requirements shall be incorporated in this manual at the earliest practical opportunity.

2.4 Organizational Structure and General Responsibilities

The Director of Operations, known as the accountable executive, has the ultimate responsibility for safety at Island Express Helicopters and shall provide resources essential to implement and maintain the SMS. The accountable executive shall appoint a manager or managers to be directly responsible for:

a. Ensuring that processes needed for the SMS are established, implemented and maintained;
b. Reporting the performance of the SMS to the organization; and
c. Ensuring the promotion of safety awareness and safety requirements throughout Island Express Helicopters.

2.5 Safety Accountabilities

Island Express Helicopter's accountable executive, the Director of Operations, is responsible for the continued support of the Safety Management System, to include setting goals and objectives, and providing the necessary resources in order for the SMS to function effectively. Additionally, all levels of management within Island Express Helicopters must be committed to, and held accountable for safety performance. This includes support for and execution of the processes and procedures defined in this manual.

Each Island Express Helicopters manager is required to:

a. Monitor conditions to ensure the safe operation of company aircraft;
b. Actively support the SMS;
c. Ensure assigned employees are trained and actively participating in the SMS; and
d. Actively identify and assess the company's risk exposure.

Managers' safety responsibilities involve the supervision of employees, and the provision of resources for those employees to safely carry out their assigned duties. Each manager must be an active supporter of the Island Express Helicopters safety mission, and therefore the SMS. Managers are responsible for integrating SMS activities into their assigned duties and responsibilities. All employees must be encouraged to report hazards and be assured of receiving a response to their hazard identifications. Employees who commit errors should be encouraged to report the circumstances, and not be subjected to punishment for legitimate errors. If there is reason to suspect willful negligence or criminal activity, lawful actions will be taken.

Employees are responsible for conducting their duties in accordance with all company policies, procedures, and government regulations. These rules are written in the interest of preserving the lives and the resources entrusted to each employee, and when the rules are violated, the risk is usually increased. To strive for the highest level of safety, each member of Island Express Helicopters must report errors, incidents, and accidents swiftly and honestly, and without fear of reprisal. If there is reason to suspect willful negligence or criminal activity, lawful actions will be taken.

2.6 Emergency Preparedness and Response

Island Express Helicopters shall establish procedures contained in an Emergency Response Plan to:

a. Coordinate and plan the response to accidents and incidents; and
b. Execute periodic exercises of Island Express Helicopter's response plan.

This information is detailed separately in the Island Express Helicopters Emergency Response Plan Manual (ERP), which contains all of the elements necessary for effective preparedness and response. Preparedness includes continual updating of information, training for employees, and simulation exercises (emergency response drills).

2.7 Appointment of Key Personnel (Safety Organization)

2.7.1 The Accountable Executive

The accountable executive is ultimately responsible for ensuring coordination of all SMS processes, and provides the resources necessary to ensure the SMS performs effectively. At Island Express Helicopters the accountable executive is the Director of Operations. The Director of Operations has the ultimate responsibility for safety performance at Island Express Helicopters and shall designate resources essential to effectively implement and maintain the SMS.

The Director of Operations shall appoint a manager responsible for:

a. Ensuring that processes needed for the SMS are established, implemented and maintained;
b. Reporting the performance of the SMS to the organization; and
c. Ensuring the promotion of safety awareness and safety requirements throughout Island Express Helicopters.

2.7.2 The Safety Manager

The Safety Manager monitors all aspects of the safety system descr bed in this manual, and acts with the authority of the Director of Operations in all matters regarding safety, and as such, can designate any delegated resources to accomplish Island Express Helicopters stated safety goals and objectives. Specific responsibilities of the Safety Managers are:

a. Maintain safety documentation; specifically this manual will be maintained as a controlled document and the requirements listed in section 2.8 will be kept current and in good order;
b. Develop safety goals and objectives for the accountable executive's consideration;
c. Develop and implement the Emergency Response Program;
d. Monitor Island Express Helicopter's SMS performance and create performance reports for other managers and the accountable executive, as directed;
e. Facilitate hazard identification and risk management;
f. Determine the need for and coordinate development of required safety training materials prescr bed by national, state, and local laws and regulations or industry best practices;
g. Evaluate employee hazard identifications for risk and recommend action;
h. Receive, evaluate, and process all employee hazard reports in accordance with this manual's requirements and recommend action to mitigate risk;
i. Coordinate all safety activities and act as liaison between Island Express Helicopters and PRISM, as well as applicable governmental agencies and insurance carriers;
j. Monitoring safety concerns in the aviation industry and their perceived impact on Island Express Helicopter's operations; and
k. Monitor employee training programs to ensure that safety, health, and environmental information presented is current and satisfies applicable government rules and meets Island Express Helicopters needs.

2.7.3 Safety Committee

The Safety Committee is a critical part of Island Express Helicopter's SMS, and should be continually used as a resource, providing guidance and leadership to facilitate the safety risk management process. The Safety Committee is tasked with examining "grass roots" issues pertaining to specific activities to ensure control of the safety risks and the consequences of hazards pertaining to Island Express Helicopters operations.

2.7.3.1 Membership

The membership of the Safety Committee should include the range of functions within the company whenever possible. The following list is the typical Safety Committee membership at Island Express Helicopters. When membership circumstances change, revision to this manual shall occur at the soonest practical time.

a. Safety Manager (Chairman)
~~a.~~b. Pilot Representative
~~b.~~c. ~~Heraclio~~Assistant ~~Crew Manager~~Ground Operations~~Crew Manager~~Supervisor

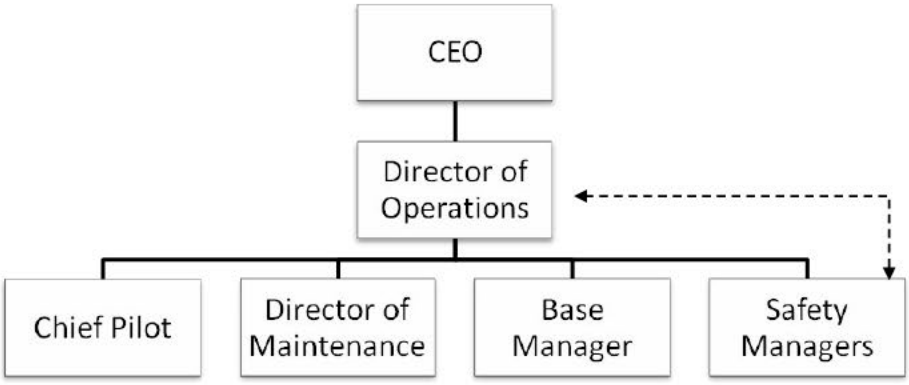
2.7.3.2 Responsibilities

a. Reviews operational safety performance within the functional areas listed in section 1.2 of this manual and ensures that hazard identification and safety risk management are carried out as appropriate, with staff involvement as necessary to build up safety awareness;
b. Reviews and updates the Company Risk Profile at scheduled meetings;
c. Coordinates the resolution of mitigation strategies for the identified consequences of hazards and ensures that satisfactory arrangements exist for safety data capture and employee feedback;
d. Assesses the impact of operational changes on safety;
e. Coordinates the implementation of corrective action plans when required;
f. Convenes meetings or briefings as necessary to ensure that ample opportunities are available for all employees to participate fully in the management of safety;
g. Ensures that necessary corrective action discovered as a result of SMS activities is taken in a timely manner;
h. Reviews the effectiveness of previous safety recommendations; and
i. Oversees safety promotion and ensures that appropriate safety, emergency and technical training of personnel is carried out that meets or exceeds minimum regulatory requirements.
j. Review hazard report trend analysis.

2.7.3.3 Meeting Requirements

Meetings will be held bi-yearly or more often, if deemed necessary by the chairman. The chairman shall ensure an agenda is prepared and distr buted to committee members in advance of the meeting. Minutes of each meeting will be prepared by the Safety Manager, and made available to all employees.

2.7.4 Island Express Helicopters Organizational Chart - Safety Organization



2.8 Documentation

Pertaining specifically to SMS requirements, Island Express Helicopters will maintain all required SMS information, in paper or electronic form, to contain:

a. Island Express Helicopters Safety Management Manual;
b. Safety goals and objectives;
c. Reported hazards;
d. Company risk exposure;
e. Audit performance (internal and external);
f. Corrective actions;
g. Change management actions;
h. Holistic SMS performance; and
i. Safety Committee meeting activities (agendas, minutes, resulting actions, etc.);

All documentation and/or records, either in paper or electronic form, shall be leg ble, dated (with dates of revisions), readily identifiable, maintained in an orderly manner, and retained for a specified period as determined by Island Express Helicopters (and in accordance with regulatory oversight organization requirements). The current versions of relevant documents will be made available at all locations where operations essential to the effective functioning of the SMS are performed and obsolete documents and/or records will be promptly removed from all points of use or otherwise assured against unintended use.

2.9 Safety Awards Program

Island Express Helicopters sponsors a series of awards to recognize exemplary dedication to the safety of this operation. The awards vary from nominal in cost, to items of significant value to the recipient and his family. Awards are given at the discretion of the Safety Committee, who will determine the value of the items to be awarded. Examples of actions that could be rewarded are:

1. Identification of hazard(s) (An act or suggestion which prevents damage or injury);
2. Assisting in conducting an investigation or evaluation;
3. Accomplishing a safety training course that leads to an advanced qualification;
4. Performing research on a topic of safety interest to Island Express Helicopters, and writing a report or article for employees' use.

Awards will be presented in a public forum, preferably by the Director of Operations, or at a Safety Committee meeting. The goal is not only to reward the employee for safety vigilance and for potentially or actually preserving company resources, but also to show by example that an investment in safety consciousness pays off in conserved resources that might otherwise be lost to accidents. The preservation of the story behind each awarded act also helps to spread the exemplary behavior pattern throughout Island Express Helicopters and enhances safety promotion.

3 Safety Risk Management

A hazard is a condition, event, or circumstance that could lead to or contribute to an unplanned or undesired event. Risk is an expression of the impact of an undesired event in terms of event severity and event l kelihood. Throughout the risk management process, hazards are identified, risks analyzed, assessed, prioritized, and results documented for decision-making. The continuous loop process provides for validation of decisions and evaluation for desired results and/or the need for further action.

Safety risk management (SRM) at Island Express Helicopters is comprised of the following focus areas:

a. System and task analysis;
b. Change management;
c. Hazard identification;
d. Hazard reporting and management; and
e. Validation and control.

As a general statement, it is important that the SRM process be continually applied to all phases of operation at Island Express Helicopters to include the initial designs of systems, organizations, and/or products and to the development of operational procedures.

Using various techniques descr bed in this section, Island Express Helicopters has defined acceptable and unacceptable levels of safety risk. Descriptions have been established for severity and l kelihood levels (descr bed in Section 3.5), to include authority for safety risk acceptance decisions. These risk decisions may apply in the short-term while safety risk controls/mitigation plans are developed and executed.

Note: The SRM process shall not preclude Island Express Helicopters employees from taking interim immediate action to eliminate or mitigate existing safety risk when and where it is recognized that urgent action is required.

3.1 System and Task Analysis

Safety risk management must examine system design. That means looking at what we do and how we do it. System and task evaluations shall be proactively carried out to the level of detail necessary to identify hazards present at Island Express Helicopters.

Whether it is a physical system such as an aircraft or an operational system such as scheduling, flying or maintaining aircraft, it needs to be analyzed. A system or task description should completely explain the interactions among the hardware, software, liveware and environment that make up the system in sufficient detail to identify hazards and perform risk analysis. System and task analysis at Island Express Helicopters will consider the following, at a minimum:

a. Any interactions with other systems in the air transportation system (e.g. airports, air traffic control);
b. The functional components descr bed in Section 1.2 of this manual;
c. Employee tasks required to accomplish the functional components in Section 1.2 of this manual;
d. Required human factors considerations of the system (e.g. cognitive, ergonomic, environmental, occupational health and safety) for operations and maintenance;
e. Hardware components of the system;
f. Software components of the system;
g. Related procedures that define guidance for the operation and use of the system;
h. Training requirements (existing and potential);
i. Ambient environment;

j. Operational environment;
k. Maintenance environment;
l. Contracted and purchased products and services;
m. The interactions between items or issues defined in the list above; and
n. Any assumptions made about the systems, system interactions, and existing safety risk controls/mitigation.

Island Express Helicopters management required action:
Each respons ble manager is required to continually evaluate the systems and processes under their cognizance, measure performance, identify hazards, and assess related risk. Examining the probable threats and areas of common errors in these systems and processes will provide increased clarity into the hazards affecting Island Express Helicopters.

The results of the analysis performed by responsible managers, whether done independently or in conjunction with other SMS activities, will be documented in their respective files, with a copy provided to the Safety Managers for SMS documentation.

3.2 Management of Change in Terms of Risk

The following items **shall not** be fully implemented at Island Express Helicopters until the associated risks of each change is determined to be acceptable using the risk assessment procedures contained in this manual:

a. New system designs;
b. Changes to existing system designs;
c. New operations/procedures; and
d. Modified operations/procedures.

This determination will be done via a formal risk assessment that will be initiated and documented by the Safety Manager, with participation from applicable subject matter experts. The Safety Committee will review all formal risk assessments and forward to the functional manager for approval. All formal risk assessments will be reviewed quarterly by the Director of Operations. The formal risk assessment process to be used for Island Express Helicopters is defined in this chapter of the SMS Manual.

3.3 Hazard Identification

Identify Hazards and Consequences: Potential hazards may be identified from a number of internal and external sources. Hazard scenarios may address the following: who, what, where, when, why, and how, regarding the hazard that is causing concern, as well as its potential consequences. This provides an intermediate product that expresses the condition and the consequences that will be used during risk analysis.

Hazards shall be identified for the entire scope of the system that is being evaluated, as defined in the system description, and documented using the hazard reporting form. Once a hazard has been identified and documented, the information shall be tracked and managed as descr bed in the procedures following.

3.3.1 Island Express Helicopters Hazard Identification Requirements and Procedures

To formalize the hazard identification process, the following requirements are established for Island Express Helicopters:

a. System and process hazards as described in section 3.1 will be proactively identified and communicated through SMS activities by all managers;
b. All employees are responsible for continued vigilance to identify hazards they observe or experience via the performance of their duties at Island Express Helicopters;
c. The Safety Manager is responsible for collecting submitted reports and maintaining hazard information so as to facilitate analysis and trending;
d. Applicable subject matter experts at Island Express Helicopters will be involved in analyzing identified hazards at the direction of the Safety Managers;
e. The PRISM HazRep Program reports will be used by the Safety Manager to increase the volume of hazard report information in order to evaluate potential hazards at Island Express Helicopters;
f. The Safety Manager shall use all available resources to monitor common industry hazards and evaluate the potential exposure of Island Express Helicopters to these hazards. This evaluation shall be recorded as a submission into the Island Express Helicopters hazard reporting program using the existing hazard report form for tracking, corrective action assignment, and documentation.

3.4 Hazard Reporting and Management

From a reporting perspective, a hazard is anything that, in the eyes of the employee or customer, threatens the safety of people or resources of Island Express Helicopters. When hazards are reported, safety is enhanced. All employees of Island Express Helicopters are charged with the responsibility to report any hazard they observe or experience using the reporting method described in this manual. Hazards can be reported on one of the forms appended to this manual. Additionally, a duplicate report can be submitted via the NASA Aviation Safety Reporting System (ASRS) for flight oriented reports. Employees may submit reports anonymously, but are encouraged to include their name on submitted reports to allow for follow-up questions and feedback.

Employees are charged with bringing unsafe or unhealthy, or adverse environmental conditions to management for resolution via the Island Express Helicopters hazard reporting program. If these hazards are identified to managers in any other way, they are then required to evaluate the need for a hazard report submission, and to subsequently submit the report on behalf of the employee. ***No reprisal or discriminatory actions will be brought against any employee who communicates these observations***. Island Express Helicopters fosters a “Just Culture” environment in which hazard reporting is deemed vital to a robust SMS.

Any reported event that has the reasonable appearance of criminal activity, substance abuse (controlled or uncontrolled), or willful negligence will be investigated outside of safety purview and handled according to law and company policy. If the report is determined to not involve any of these activities it will be referred back to the Safety Manager for safety investigation.

3.4.1 Island Express Helicopters Hazard Reporting Procedures

To formalize hazard reporting, the following requirements are established for Island Express Helicopters:

a. Reports may be submitted online using existing IT resources or via paper using the hazard reporting forms contained in Chapter 7 of this manual.
b. Reports submitted on paper will be entered in to the Island Express Helicopters hazard tracking record by the Safety Manager. The original paper report will be kept on file in the Island Express Helicopters safety records.
c. Reports should be clear, concise, and contain all necessary detail.
d. Reports may be submitted anonymously, but employees are encouraged to include their name on submitted reports to allow for follow-up questions and feedback.
e. The Safety Manager shall ensure paper hazard report forms and electronic reporting access are available to all applicable employees.
f. Reported hazards will be evaluated by the Safety Manager or a designated representative within 72 hours. For reports of a severe nature, it is expected that employees will notify managers that immediate action may be required.
g. If the report contains the submitter's name, the Safety Manager shall notify the submitter at the earliest practical opportunity that the report has been received and is being evaluated.

3.4.1.1 On Line Hazard Reporting

Anonymous on line hazard reporting using the PRISM Hazard Reporting Tool is the preferred hazard reporting method for Island Express Helicopters.

1. All appropriate hazard reporting documentation will be accessible via www.aviationresearch.com
2. Island Express Helicopters employees will have a unique and individual login to access these forms from a computer or utilizing the PRISM iPad® App. Their login credential will be their email address on file with Island Express Helicopters and the password will be assigned via email.
3. Hazard reports submitted via the online hazard reporting system will be automatically routed to the safety manager for the corrective action and approval process.
4. Online hazard reporting allows Island Express Helicopters employees to report actual and perceived hazards 24/7 from any location.

3.4.2 Island Express Helicopters Hazard Analysis and Processing Procedures

A three step process will be used to analyze and document hazards to establish relevance to Island Express Helicopters. The objectives of this analysis process are to determine what additional information is needed, ascertain factors underlying safety deficiencies, and reach valid conclusions. These analyses are expected to apply both quantitative and qualitative analytics.

To formalize hazard analysis and processing, the following requirements are established for Island Express Helicopters:

a. The Safety Manager is responsible for maintaining all documentation related to analysis.
b. The Safety Manager may assign other employees to assist in the analysis or be completely responsible for the analysis.
c. The Safety Committee will review all completed hazard analysis.
d. A four step process shall be used to format the hazard analysis:
    i. Identify the generic hazard, or top level hazard, to simplify tracking and trending.
    ii. Break down the generic hazard into specific components that will likely have a different set of causal factors.
    iii. Determine and document the root cause of the hazard or deficiency prior to implementing long term corrective action.

iv. Link specific hazards to specific consequences for risk management decision making and corrective action assignment.

3.4.2.1 Example of a formal hazard analysis:

A new construction project at a frequent destination airport is announced. Refer the following steps:

Step 1 – Identify the generic hazard- Ground handling/flight crew.
Step 2 – Identify specific hazards of the generic hazard- construction equipment and aircraft collision, closed runways and taxiways leading to incursion, etc.
Step 3 – Determine root cause- crew confusion, no communication with construction crews, etc.
Step 4 – Link specific hazards to specific consequences- aircraft colliding with construction equipment, runway incursion, etc.

a. A corrective action assignment will result from the hazard analysis. Employees perceived to have the best opportunity to develop and implement a corrective action that will remedy exposure to the hazard and thereby reduce the risk will be assigned by the Safety Managers or another manager.
b. The Safety Manager will review all corrective actions, verify application, and evaluate any risk remaining after the corrective action is taken.
c. The hazard report can be closed after the analysis and corrective action is complete.
d. An assurance check will be performed approximately 90 days after a hazard report is closed to verify the hazard status and effectiveness of the implemented corrective action. This assurance check may be delegated for completion at the discretion of the Safety Managers.

3.4.3 Island Express Helicopters Hazard Documentation Procedures

Appropriate documentation management regarding hazard identification is as important as the formal procedures in order to translate raw operational safety information into hazard-related knowledge. Continuous compilation and formal management of this hazard-related knowledge becomes the “safety library” for Island Express Helicopters. In order to develop knowledge on hazards and thus build the safety library, it must be remembered that tracking and analysis of hazards are facilitated by standardizing:

a. Definitions of terms used;
b. Understanding of terms used;
c. Validation of safety information collected;
d. Reporting (i.e. what the organization expects);
e. Measurement of safety information collected; and
f. Management of safety information collected.

Given the potential for misuse of safety data that have been compiled strictly for the purpose of advancing aviation safety and performance at Island Express Helicopters, hazard documentation management must begin with protection of the data. The Safety Manager must consciously balance the need for data protection with that of making data access ble to those who can advance aviation safety.

To formalize hazard documentation, the following requirements are established for Island Express Helicopters:

a. The Safety Manager is responsible for collecting and maintaining all documentation related to hazards at Island Express Helicopters. This documentation shall be maintained in the safety l brary in a secure and orderly manner.
b. All corrective actions associated with identified hazards and assurance checks, including tracking of the assignments and actions taken for completion shall be documented.
c. Both electronic and paper documentation is acceptable for inclusion into Island Express Helicopter’s safety library.

d. Only individuals who have a need to know as determined by the Director of Operations shall have unlimited access to the safety documentation contained in the safety library. The Safety Manager is granted this unlimited access.
e. Specific limited access to hazard documentation is determined by the Safety Manager on a case-by-case basis.

3.5 Safety Risk Management Procedures

Safety risk management is a generic term that encompasses the assessment and mitigation of the safety risks linked to the consequences of hazards that threaten the capabilities of an organization, to a level As Low As Reasonably Practicable (ALARP). The objective of safety risk management at Island Express Helicopters is to provide the foundation for a balanced allocation of resources between all assessed safety risks and those safety risks for which control and mitigation are viable. In other words, safety risk management assists in resolving the dilemma of balancing protection and production. Safety risk management is therefore the core component of the Safety Management System. Its added value, however, lies in the fact that it is a data driven approach to resource allocation, thus defensible and easier to explain.

The significant concepts regarding safety risk management discussed throughout this section can be summarized as follows:

a. There is no such thing as absolute safety – in aviation it is not poss ble to eliminate all safety risks.
b. Safety risks must be managed to a level “As Low As Reasonably Practicable” (ALARP).
c. Safety risk mitigation must be balanced against:
    i. time;
    ii. cost; and
    iii. the difficulty of taking measures to reduce or eliminate the safety risk (i.e. managed).

Effective safety risk management seeks to maximize the benefits of accepting a safety risk (most frequently, a reduction in either time and/or cost in the delivery of the service) while minimizing the safety risk itself. The rationale for safety risk decisions must be communicated to the stakeholders affected by them, to gain their acceptance.

A key part of the safety risk management process is the involvement of the Island Express Helicopters employees who will be affected by a decision; their expertise is often critical to decision making. There are significant benefits to using this decision process to deal with risk issues including:

a. Avoiding costly losses in the decision making process;
b. Ensuring that all aspects of the risk problem are identified and considered when making decisions;
c. Ensuring that the legitimate interests of all affected stakeholders are considered;
d. Providing the decision makers with a solid defense in support of decisions;
e. Making decisions easier to explain;
f. Providing a standardized set of terminology used to describe risk issues contributing to better communication about risk issues; and
g. Providing significant savings in time and money.

The safety risk management process at Island Express Helicopters shall include a review of any existing safety risk controls, such as written policies, checklists, and standard operating procedures (SOP). This review will be conducted via an ongoing internal evaluation program. Special emphasis reviews may be required if circumstances dictate.

To formalize risk management, the following requirements are established for Island Express Helicopters:

a. The Safety Manager is responsible for collecting and maintaining all documentation related to risk management at Island Express Helicopters. This documentation shall be maintained in the safety library in a secure and orderly manner.
b. The Safety Manager shall review all identified hazards and determine if a formal risk assessment is required.
c. Both electronic and paper documentation of the formal risk assessment is acceptable for inclusion into Island Express Helicopters safety library.
d. Specific limited access to hazard reporting documentation is determined by Safety Manager on a case-by-case basis.
e. The Safety Manager will coordinate with the Safety Committee members to assign formal risk assessments to individuals or teams.
f. Formal risk assessments will follow the format defined in this chapter of the SMS manual.
g. The Safety Manager is responsible for tracking formal risk assessments to completion. This includes monitoring employed controls and measuring their effectiveness in risk management terms.
h. The Safety Manager has full authority to initiate a special emphasis risk assessment based on emerging circumstances.

3.5.1 Safety Risk Probability

Safety risk probability is defined as the likelihood that an unsafe event or condition might occur during operations at Island Express Helicopters. This probability of occurrence is based on analysis considering the following:

a. Is there a history of similar occurrences to the one under consideration, or is this an isolated occurrence? Occurrences at Island Express Helicopters and across aviation will be considered, as applicable.
b. What other equipment or components of the same type might have similar defects?
c. How many personnel are following, or are subject to, the procedures in question?
d. What percentage of the time is the suspect equipment or the questionable procedure in use?

In assessing the likelihood of the probability that an unsafe event or condition might occur, reference to historical data contained in the safety documentation of Island Express Helicopters is paramount in order to make informed decisions. It follows that an organization which does not maintain and utilize safety documentation can only make probability assessments based, at best, on industry trends and, at worst, on opinion.

The following taxonomy shall be used at Island Express Helicopters to standardize the assignment of probability:

Probability	Meaning	Value
Frequent	Likely to occur many times (has occurred frequently)	5
Occasional	Likely to occur sometimes (has occurred infrequently)	4
Remote	Unlikely to occur, but possible (has occurred rarely)	3
Improbable	Very unlikely to occur (not known to have occurred)	2
Extremely improbable	Almost inconceivable that the event will occur	1

3.5.2 Safety Risk Severity

Safety risk severity is defined as the possible consequences of an unsafe event or condition, taking as reference the worst foreseeable situation. The assessment of the severity of the consequences of the hazard if its damaging potential materializes during operations can be determined by answering questions such as:

a. How many lives may be lost (employees, passengers, bystanders and the general public)?
b. What is the likely extent of property or financial damage (direct property loss to the operator, damage to aviation infrastructure, third-party collateral damage)?
c. What is the likelihood of environmental impact (spillage of fuel or other hazardous product, and physical disruption of the natural habitat)?
d. What are the likely political implications and/or media interest?

Based on the considerations related to the risks impacting operations at Island Express Helicopters, the severity of the possible consequences of an event or condition, taking as reference the worst foreseeable situation, can be assessed using the following safety risk severity table.

The following taxonomy shall be used at Island Express Helicopters to standardize the assignment of severity:

Severity of Occurrence	Meaning	Value
Catastrophic	- Equipment destroyed - Fatal injury - Property loss greater than $1 million	**A**
Critical	- A large reduction in safety margins, physical distress or a workload such that the operators cannot be relied upon to perform their tasks accurately or completely - Serious injury resulting in disability - Major equipment damage - Property loss greater than $100k	**B**
Major	- A significant reduction in safety margins, a reduction in the ability of the operators to cope with adverse operating conditions as a result of increase in workload, or as a result of conditions impairing their efficiency - Serious incident - Injury resulting in lost work time - Property loss greater than $10k	**C**
Minor	- Nuisance - Injury resulting in no lost work time - Use of emergency procedures - Minor incident	**D**
Negligible	- Little consequences	**E**

3.5.3 Safety Risk Tolerance

Once the safety risk of the consequences of an unsafe event or condition has been assessed in terms of probability and severity, the third step in the process of bringing the safety risks of the consequences of the unsafe event or condition under organizational control is the assessment of the tolerability of the consequences of the hazard if its damaging potential materializes during operations at Island Express Helicopters. This is known as assessing safety risk tolerability.

This is a two-step process. First, it is necessary to obtain an overall assessment of the safety risk. This is achieved by combining the safety risk probability and safety risk severity tables into a safety risk assessment matrix. This risk matrix for Island Express Helicopters is depicted below.

Second, the safety risk index obtained from the safety risk assessment matrix must then be exported to a safety risk tolerability decision matrix that descr bes the tolerability criteria. The defined criteria for Island

Express Helicopters are listed in the tolerability matrix, and shall be adhered to without exception. In the event the Director of Operations is not available, decision making authority is delegated to Phillip G. DiFiore/President; Whitney Bagge/VP; Gary Michelsen/Chief Pilot in the order listed.

3.5.4 Risk Assessment Matrix

FREQUENCY OF OCCURRENCE	HAZARD CATEGORIES				
	A CATASTROPHIC	B CRITICAL	C MAJOR	D MINOR	E NEGLIGIBLE
5 FREQUENT	5A	5B	5C	5D	5E
4 OCCASIONAL	4A	4B	4C	4D	4E
3 REMOTE	3A	3B	3C	3D	3E
2 IMPROBABLE	2A	2B	2C	2D	2E
1 EXTREMELY IMPROBABLE	1A	1B	1C	1D	1E

3.5.5 Risk Tolerability Decision Matrix

COLOR ZONE	SCORE	DECISION REQUIREMENTS
Red	5A, 5B, 5C, 4A, 4B	Unacceptable under the existing circumstances. The action or event must not be undertaken. Imperative that risk be reduced if action or event is to proceed.
Yellow	5D, 5E, 4C, 3B, 3A, 2A	The action or event may only proceed with the approval of the Director of Operations. This may be a standing approval if associated with a previous risk assessment.
Green	4D, 4E, 3C, 3D, 3E, 2B, 2C, 1A, 1B	The action or event may only proceed with the approval of management if there is no standing policy or procedure containing existing controls for this action or event.
Blue	2D, 2E, 1C, 1D, 1E	The action or event is always acceptable.

3.5.6 Safety Risk Control

While the risks inherent throughout Island Express Helicopters will be continually assessed, experts within Island Express Helicopters can implement one or more risk control measures designed to reduce or eliminate the assessed risk.

In the fourth and final step of the process of bringing the safety risks of the consequences of an unsafe event or condition under organizational control, control/mitigation strategies must be deployed.

There are three general strategies for safety risk control/mitigation:

a. ***Elimination.*** The operation or activity is cancelled because safety risks exceed the benefits of continuing the operation or activity. An example of an elimination strategy:
    i. Operation into an airport surrounded by complex geography is cancelled.

b. ***Mitigation.*** The frequency of the operation or activity is reduced, or action is taken to reduce the magnitude of the consequences of the accepted risks. An example of a mitigation strategy:
    i. Operation into an airport surrounded by complex geography is limited to daytime, visual conditions.

c. ***Residual risk exposure.*** Action is taken to isolate the effects of the consequences of the hazard or build in redundancy to protect against them via mitigation. The remaining risk is evaluated and determined to be acceptable or requiring additional mitigation. An example of a strategy based on residual risk exposure:
    i. Operation into an airport surrounded by complex geography is limited to aircraft with specific performance navigation capabilities and flight crews with specific experience in addition to daytime, visual conditions limitations.

A risk strategy shall be defined for each identified hazard with unacceptable risk as defined by the Island Express Helicopters risk matrix, or in other situations as determined by the Director of Operations. If the status of a risk should change or the mitigating action does not produce the intended effect, a determination must be made as to what modifications may be necessary. Safety risk controls shall be clearly descr bed and evaluated to ensure that the risk reduction requirements have been met and are ready to be used in the operational environment for which they are intended.

Residual risk shall be evaluated after creation of safety risk controls/mitigations. This secondary evaluation may determine employed controls are not adequate. In this circumstance, additional controls or modification is necessary to bring the risk to an acceptable level for Island Express Helicopters.

3.5.7 Island Express Helicopters Risk Assessment Documentation Procedures

To formalize risk management documentation, the following requirements are established for Island Express Helicopters:

a. The Safety Manager is responsible for all risk assessment documentation.
b. The Safety Manager is granted authority to assign risk assessments and control strategies to other Island Express Helicopters employees, to include managers.
c. To ensure standardized procedures, all risk assessments shall use the Island Express Helicopters Risk Assessment Form included in the Forms section of this manual. This form may be paper or electronic format. Any online risk assessment options on the PRISM website are also authorized for use.
d. This form must be filled out in entirety for each risk assessment performed and must contain all of the required analysis and follow-up. Attach files via paper or electronically to support the risk assessment.
e. Employed controls shall be monitored using the risk assessment form as a documentation tracker.
f. Risk assessment forms shall be maintained indefinitely in the Island Express Helicopters safety l brary.

3.5.8 Company Risk Profile

Capturing the prominent risks faced by Island Express Helicopters and evaluating the controls employed to eliminate or mitigate those risks is the objective of the company risk profile. The company risk profile helps to form the focus of formal risk management. Described as a "map that charts the contours of higher risk," a risk profile should heighten awareness, direct resource allocation, and improve SMS focus. The form used to construct the company risk profile is contained in the Forms section of this manual.

To formalize company risk profile development and documentation, the following requirements are established for Island Express Helicopters:

a. The company risk profile will be used to document and track prominent risk exposure faced by Island Express Helicopters. This documentation may be paper or electronic.
b. The risk zones evaluated at Island Express Helicopters are Aircraft Operations, Aircraft Maintenance, Facilities, and Human Factors. Every risk assessment performed will be placed into one of these four zones.
c. Each zone in the profile is divided into risk areas. These areas will describe the highest level of risk at Island Express Helicopters based on the exposure in that area.
d. The "Status" column will indicate complete or incomplete risk assessment for the specific details listed. If the risk assessment is complete for a specific detail listed, the mitigation or elimination employed shall be referenced here.
e. The profile will be updated quarterly after Safety Committee review, or at other more frequent intervals as risks emerge.
f. The Safety Manager is responsible for maintaining the Island Express Helicopters Company Risk Profile.
g. The Director of Operations will review the profile at least annually, or after an update.
h. The historical and current profiles will be maintained in the safety library.

3.5.8.1 Example Company Risk Profile

[Company Name] Risk Profile **6/2/2009**

RISK AREA	RISK EXPOSURE (VERY HIGH, HIGH, MEDIUM, LOW)	SPECIFIC DETAILS	STATUS
Aircraft Operations			
Departure	High	The XYZ departure has an high instance of clearance deviation. This often results in violations, and NMAC/TCAS alerts at his airfield. Our company pilots must perform this specific departure in the simulator twice each year to be assigned PIC duties at this airport.	Risk assessment complete
Arrival	Choose an item.		Choose an item.
En-route	Choose an item.		Choose an item.
Ground movement	Very High	Our home base airport has a high instance of taxiway lighting problems that create confusion when taxiing during darkness hours. We are working with the airfield manager to resolve. All pilots are constantly briefed and kept aware.	Risk assessment incomplete

3.5.9 Flight Risk Analysis Program

Every flight conducted by Island Express Helicopters has hazards and some level of risk associated with it. It is critical that appropriate management and pilots are able to differentiate, in advance, between a low risk flight and a high risk flight using a risk assessment tool that allows schedulers and pilots to see the risk profile of a flight in its planning stages. Island Express Helicopters will determine an acceptable level of risk for its flights based on the type of operation, environment, aircraft used, crew training, and overall operating experience. When the risk for a flight exceeds the defined acceptable level for Island Express Helicopters, the flight will be further evaluated and risk decisions made by appropriate Island Express Helicopters leadership.

A flight risk analysis tool will be developed using the resources provided in PRISM. When developing the Island Express Helicopters flight risk analysis template 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? In the Island Express Helicopters risk assessment tool, this evaluation has been completed, including the addition of items that are unique to the Island Express Helicopters operation.

Using this tool to create numerical thresholds will trigger additional levels of scrutiny to ascertain the risk associated with each flight subjected to evaluation. These thresholds should be created to help ensure that the safety standards of Island Express Helicopters are maintained. It is important that realistic thresholds are created. If every flight is within the acceptable range under any condition, it is likely that the thresholds have not been set correctly. Periodically evaluating the trends identified in completed flight risk analyses can identify high risk exposure and training targets for Island Express Helicopters.

To formalize flight risk analysis procedures and documentation, the following requirements are established for Island Express Helicopters:

a. Flight risk analysis forms will be used to document and track prominent risk exposure faced by Island Express Helicopters as specifically pertaining to individual flights. This documentation may be paper or electronic.
b. The construct of the form will define two distinct risk thresholds: elevated and high. These thresholds have specific decision requirements as defined below.
c. The Safety Manager (with input from Maintenance, Pilots, and Ground Crew) are respons ble for the construction and standardization of the Island Express Helicopters flight risk analysis form. Only risk analysis forms validated by the Safety Manager (with input from Maintenance, Pilots, and Ground Crew) will be utilized by Island Express Helicopters. The form shall be subject to revision control to ensure standardization.
d. It is expected that the flight risk analysis form will require modification. The form shall be reviewed by the Safety Manager (with input from Maintenance, Pilots, and Ground Crew) quarterly, or at other more frequent intervals as risks emerge, to ensure its effectiveness. When changes are made, the Safety Manager (with input from Maintenance, Pilots, and Ground Crew) shall ensure the correct form version is utilized throughout Island Express Helicopters.
e. When a specific flight risk analysis yields a result that eclipses an elevated risk point threshold, the Base Manager shall be informed and concurrence required for the flight to proceed without risk mitigation controls lowering the analysis score.
f. When a specific flight risk analysis yields a result that eclipses a high risk point threshold, the Chief Pilot or Director of Operations shall be informed and concurrence required for the flight to proceed without risk mitigation controls lowering the analysis score. (however they cannot approve their own flight)
g. Historical risk trends derived from flight risk analysis forms shall be calculated and evaluated to help determine training strategies for Island Express Helicopters and for updating the Company Risk Profile, as descr bed in prior sections of this manual.

h. The historical and current risk analysis forms will be maintained in the safety library, as determined by the Safety Manager. The form will not be maintained as part of this manual, as it is subject to frequent changes

THIS PAGE INTENTIONALLY LEFT BLANK

4 Safety Assurance

Safety management at Island Express Helicopters requires feedback on safety performance to complete the safety management cycle. Through monitoring and feedback, SMS performance can be evaluated and any necessary changes to the Island Express Helicopters system effected. In addition, safety assurance provides stakeholders at Island Express Helicopters an indication of the level of safety performance affected by the Safety Management System.

Safety assurance demands Island Express Helicopters actively monitor systems and processes to continuously identify new hazards, measure the effectiveness of aircraft operations and maintenance, and monitor risk controls that have been implemented in order to ensure compliance with internal and external requirements.

4.1 Assurance Component Description

The safety assurance objectives for Island Express Helicopters are designed using the following principles and include procedures for monitoring the performance of critical aspects of the organization. The safety assurance objectives of Island Express Helicopters shall be comprised of these elements:

a. monitoring of risk and effected controls;
b. internal evaluation and external audits;
c. corrective action requirements;
d. safety performance analysis; and
e. management reviews.

4.2 Monitoring of Risk and Effected Controls

Island Express Helicopters shall monitor the effectiveness of implemented risk controls in the manner described in Chapter 3 of this manual.

4.3 Internal Evaluation Program (IEP) and External Audits

4.3.1 Continuous Monitoring

Island Express Helicopters shall monitor organizational performance utilizing a proactive internal evaluation program designed with the following objectives:

a. Assess conformity with internal and external requirements;
b. Measure the effectiveness of safety risk controls;
c. Monitor products and services received from vendors and contractors;
d. Assess Island Express Helicopters system and process performance; and
e. Identify hazards and deficiencies.

4.3.2 Internal Evaluation Auditor Selection Criteria

If feasible Island Express Helicopters IEP auditors should have training and/or experience in recognized quality management auditing, systems analysis, root cause analysis, and risk assessment, as well as evaluation principles and techniques.
Selecting the auditors is a critical part of creating and sustaining a successful IEP at Island Express Helicopters. Experience, training, and personality are critical qualities in an auditor role. Auditor training can be accomplished in a formal course setting, via OJT with another experienced auditor, or using appropriate distance resources (websites, books, etc.).

To formalize internal evaluation auditor selection procedures and documentation, the following requirements are established for Island Express Helicopters:

a. The Director of Operations is responsible for selecting and assigning the internal evaluation auditors for each specific evaluation.
b. The Director of Operations will ensure each auditor has the requisite training and experience to properly conduct the evaluation, to the maximum extent possible.
c. The auditor assigned shall be documented on the evaluation checklist.
d. Auditors will not be assigned to independently evaluate their own work product or area of assigned responsibility to prevent conflict of interest bias.
e. Subject matter experts may assist assigned auditors in the evaluation. This assistance does not relieve the auditor from personally conducting the evaluation. The auditor has the responsibility to identify and document findings.
f. The Director of Operations shall maintain an updated rolling twelve month internal evaluation schedule that is available to all Island Express Helicopters managers.

4.3.3 Internal Evaluations

The internal evaluation program is a continuous evaluation process that examines the effectiveness of processes, programs, and procedures integral to each functional area of Island Express Helicopters.

PRISM will supply a monthly checklist which will be used as a guide to examine the critical functions of Island Express Helicopters. Additional checklists should be utilized when required in order to ensure a holistic evaluation of the entire operation. Any findings, or deficiencies, discovered during internal evaluations will enter a corrective action process descr bed below.

Completed evaluations and corrective actions will be internally documented. If serious violations of Federal Aviation Regulations (FARs) are uncovered during these internal evaluations, then the Director of Operations will determine if notification to FAA officials for self-disclosure is required.

To formalize internal evaluation procedures and documentation, the following requirements are established for Island Express Helicopters:

a. The Director of Operations is responsible for all facets of the internal evaluation program and associated documentation.
b. The Director of Operations is granted authority to assign internal evaluation audits to other Island Express Helicopters employees, to include managers.
c. The Director of Operations shall maintain an updated rolling twelve month internal evaluation schedule that is available to all Island Express Helicopters managers.
d. When directed by the Director of Operations and the Safety Manager, the Director of Operations shall schedule a special emphasis evaluation. This requirement for this evaluation will be circumstantial, and it will be conducted according to the IEP procedures descr bed in this manual section.
e. To ensure standardized procedures, all internal evaluations shall use audit checklists approved by the Director of Operations. This checklist may be paper or electronic format.

f. Internal evaluations will be conducted at least monthly, or more frequently when required.
g. These checklists must be filled out in entirety for each internal evaluation performed and must contain all of the required analysis and follow-up. The checklist may be completed via paper or electronically.
h. Any discovered findings, or discrepancies, shall be thoroughly documented by the auditor. Any suggested corrective action should be included in the finding documentation.
i. Completed evaluation checklists will be forwarded to the Director of Operations for review and further action. If the checklist is not completed satisfactorily, the Director of Operations may re-issue the evaluation to the same auditor, or may select another auditor to complete the evaluation.
j. Completed checklists will be maintained in paper or electronic form by the Safety Manager in the safety l brary.

4.3.4 External Audits

External audits (and inspections) will be conducted periodically for a variety of reasons. It is important to capture the results of all audits in the Island Express Helicopters SMS. External auditors offer a perspective that is unique and apart from that of Island Express Helicopters internal auditors. Every finding resulting from these external audits will follow the procedures listed for internal evaluation findings and corrective action in their entirety. These results will be combined with internal evaluation results in establishing trends and evaluating the organization.

4.4 Internal Evaluation Corrective Action Requirements

When an internal evaluation checklist is completed and submitted to the Director of Operations, each finding (discrepancy) must be analyzed and a corrective action plan be developed. The finding may require validation, especially if the auditor has some doubt concerning the relevant standard as it applies to the IEP checklist question. Resources in the company or external research are both appropriate to vet results that have any degree of uncertainty. This may be a good role for the Safety Committee. It is entirely appropriate at this point to perform a risk assessment for significant findings, and determine if significant risk is present resulting from the discovered deficiency.

A corrective action plan for each finding shall be developed, and include the respons ble party, and an assigned due date to complete the action. The respons ble party for the functional area associated with a particular finding should also be responsible for correcting that finding. Consider performing a root cause analysis to determine what really caused the problem.

To formalize internal evaluation corrective action procedures and documentation, the following requirements are established for Island Express Helicopters:

a. A corrective action assignment will result from every internal evaluation finding. Employees perceived to have the best opportunity to develop and implement a corrective action that will remedy the deficiency will be assigned by the Director of Operations or another manager, as appropriate.
b. The Director of Operations will review all corrective actions, verify application, and evaluate any risk or other potential problems remaining after the corrective action is taken.
c. The finding can be closed after the analysis and corrective action is complete.
d. An assurance check will be performed between 90 and 120 days after a finding is closed to verify the finding status and effectiveness of the implemented corrective action. This assurance check may be assigned to employees for completion at the discretion of the Director of Operations.

4.5 Safety Performance Analysis

The primary task of safety assurance is monitoring and control. This is achieved through safety performance monitoring and measurement, the process by which the safety performance of Island Express Helicopters is verified in comparison with the current safety policies and approved safety objectives. Safety assurance is achieved by monitoring and measuring the outcomes of activities that operational personnel must engage in for the delivery of services by Island Express Helicopters. Information for safety performance and monitoring comes from a variety of sources, including formal auditing and evaluation, investigations of safety-related events, continuous monitoring of day-to-day activities related to the delivery of services, and input from employees through hazard reporting systems. Each of these types of information sources exists to some degree at Island Express Helicopters. The safety library, maintained by the Safety Manager, is the primary source of data for safety performance measurement, and will be utilized by managers at Island Express Helicopters to evaluate risks and performance in their respective areas of responsibility.

The Safety Manager shall analyze data that has been acquired through the SMS process to demonstrate the effectiveness of risk controls throughout Island Express Helicopters. Additionally, using SMS data Island Express Helicopters managers shall evaluate where improvements can be made to existing organization systems, processes, and procedures.

To formalize safety performance analysis procedures and documentation, the following requirements are established for Island Express Helicopters:

a. Utilizing the safety library, the Safety Manager shall make reports available to managers.
b. Hazard reports will be categorized to facilitate trend identification.
c. IEP results will be recorded and analyzed in a manner that measures the performance results of checklists individually and cumulatively. Additionally, performance trends will be identified across all of the IEP questions completed. The finding can be closed after the analysis and corrective action is complete.
d. A safety performance report for the Director of Operations will be prepared quarterly; the contents of this report are dynamic and at the direction of the Director of Operations.
e. A safety performance report for the employees of Island Express Helicopters will be prepared semi-annually; the contents of this report are dynamic and at the discretion of the Safety Manager. This report will be disseminated via all practical means to maximize employee awareness.

4.5.1 Safety Investigation

The sole objective of the internal investigation of an incident involving Island Express Helicopters personnel, facilities, and equipment is the prevention of future accidents and incidents. The purpose of any investigation activity conducted by Island Express Helicopters is not to apportion blame or liability.
Internal incident investigations are carried out in order to:

a. Better understand the events leading up to the occurrence;
b. Identify hazards and conduct risk assessments;
c. Make recommendations to reduce or eliminate unacceptable risks; and
d. Communicate the safety messages to the appropriate stakeholders.

The extent of any internal investigation conducted by Island Express Helicopters should depend on the actual or potential consequence or hazard. Incidents that indicate high risk potential should be investigated in greater depth than those with lower risk potential. Although the investigation should primarily focus on the factors that are most likely to have influenced action, the dividing line between relevance and irrelevance is often blurred. Data that initially may seem to be unrelated

could later prove to be relevant once the relationships between the different elements of an occurrence are better understood.

Investigation and analysis of safety occurrences is an essential ingredient of the overall risk management process at Island Express Helicopters. Effective safety management systems largely depend on the quality of the investigation of reported accidents, incidents and safety issues. Incident investigations will be initiated at the discretion of the Safety Manager.

4.5.1.1 Investigation Phases

The investigation process may triggered by a hazard notification (report) submitted in accordance with established hazard reporting at Island Express Helicopters, or simply by employee observation of an incident.

The basic phases of an incident investigation conducted at Island Express Helicopters are:

a. **Set up of the investigation team** with the required skills and expertise. The size of the team and the expert profile of its members depend on the nature and severity of the occurrence being investigated. The investigating team may require the assistance of other specialists. Often, a single person is assigned to carry out internal (to the concerned organization) investigation of an incident considered to have limited potential to cause harm.

b. **Gathering of factual information** that is pertinent to the understanding of the circumstances and the events leading to the incident. A variety of information sources can be used to collect the necessary data for the reconstruction of the event. To ensure the continued availability of such data for the purpose of aviation safety improvement, information sources need to be protected. Guidance on the protection of safety information sources used for investigations is provided by ICAO Doc 9859 - Safety management manual, Second Edition 2009.

c. **Event reconstruction** in order to establish the exact sequence of events leading to the safety occurrence with its causal and contributory factors. The output of the reconstruction phase should be a set of events that agrees with recorded information and which unifies the views of the various persons who were involved in these events immediately before and after the occurrence.

d. **Analysis of the information** to assess the risk and provide explanation of the technical and operational factors, and underlying (including organizational) factors and issues. The analysis shall provide argumentation about why the incident happened and enable the drawing of conclusions and identification of safety actions to eliminate or mitigate the risk.

e. **Drawing conclusions** on the basis of collected and analyzed information, generally presented by the following categories:
   i. Main (direct) cause(s) and contributing factors leading to the occurrence;
   ii. Findings that identify additional hazards which have risk potential but have not played a direct role in the occurrence;
   iii. Other findings that have potential to improve the safety of operations or to resolve ambiguity or controversy issues contributed to the circumstances surrounding the occurrence.

   Identifying the lessons to be learned from a safety occurrence requires an understanding of not just what happened, but why it happened. Therefore, the investigation should look beyond the obvious causes and aim to identify all the contributory factors, some of which may be related to weaknesses at Island Express Helicopters.

f. **Identification** of safety recommendations and actions to be taken in order to eliminate or mitigate the safety deficiencies identified by the investigation. The safety recommendations are the main product of any incident investigation and are to be made in an incident final report. The incident final report shall be maintained in the safety library.

g. **Communication of safety messages** to those who have the authority to implement the safety recommendations and to the aviation community in general by means of safety information exchange and lesson dissemination.

   For maximum effectiveness, the outcome of the internal investigation should focus on determining hazards and risks rather than identifying individuals to blame and punish. The way the investigation is conducted influences the overall safety culture at Island Express Helicopters. Accordingly the investigation shall in no case be concerned with a goal of appointing blame or liability. The objective of investigations is accident prevention through the evaluation of relevant information relating to accidents and incidents and the promulgation of related safety information.

4.6 Management Reviews

With a focus on continuous improvement and in order to evaluate safety management implementation and performance at Island Express Helicopters, the Director of Operations will direct a review of the Safety Management System. The review will be conducted annually by the Director of Operations or a designated representative and is a management study into the status and allocation of resources applicable to the Island Express Helicopters Safety Management System. The Safety Manager shall be provided feedback on the results of the SMS management review to facilitate continuous improvement.
The format of the review and subsequent report is entirely at the discretion of the Director of Operations. The management review report will be maintained by the Director of Operations, with access limited to specific approval from the Director of Operations.

4.6.1 Safety Survey

As a component of the annual SMS management review, Island Express Helicopters shall conduct a survey of all personnel focused on safety climate and awareness. This survey can be obtained from PRISM, and used in its original form or modified as required to fit the specific needs of Island Express Helicopters. The survey responses shall be collected and analyzed by the Safety Manager for review by the Director of Operations.

5 Safety Promotion

The safety efforts at Island Express Helicopters cannot succeed by mandate or strictly through mechanistic implementation of policies. Safety promotion sets the tone that predisposes both individual and organizational behavior and fills in the blank spaces in the organization's policies, procedures and processes, providing a sense of purpose and direction.

Many of the processes and procedures specified in this manual relating to safety policy and objectives, safety risk management, and safety assurance components of the Island Express Helicopters SMS provide the structural building blocks. However, Island Express Helicopters must also set in place processes and procedures that allow for communication among employees and with management. Island Express Helicopters must make every effort to communicate objectives, as well as the current status of SMS activities and significant events. Likewise, Island Express Helicopters must strive to create and maintain a channel of upward communication in an environment of openness.

Safety promotion at Island Express Helicopters includes:

a. Training and education, including safety competency; and
b. Safety communication.
c. SMS Awards (Monetary or Other)

5.1 Training and Education

As part of the Island Express Helicopters safety promotion activities, a safety training program ensuring personnel are trained and competent to perform their SMS duties will be developed by the Safety Manager. The training content shall be reviewed at least annually by the Safety Manager to verify currency. The scope of the safety training shall be appropriate to the individual employee's involvement in the SMS.

Safety training should follow a building-block approach and will be conducted initially as part of employee indoctrination training. Refresher training will be conducted annually thereafter. All safety training shall be specifically documented in each employee's training record.

The specific requirements are outlined in the sections below.

5.1.1 Safety Training for Employees

Safety training for employees will address:

a. Safety responsibilities, including following all operating and safety procedures, and recognizing and reporting hazards.
b. The Island Express Helicopters safety policies and SMS fundamentals and overview. The contents should include the definition of hazards, consequences and risks, and the safety risk management process.
c. Safety roles and responsibilities to include safety reporting and the Island Express Helicopters safety reporting methods.

5.1.2 Safety Training for Managers

In addition to the training objectives established for employees, training objectives for managers and supervisors will address:

a. Safety responsibilities, including promoting the SMS and engaging employees in hazard reporting.
b. A detailed knowledge of the safety process, hazard identification and safety risk assessment and mitigation, and change management.
c. Safety data analysis.

5.1.3 Safety Training for Senior Managers

In addition to the training objectives established for employees and managers, training objectives for senior managers will address:

a. Safety responsibilities as assigned in this manual including compliance with national and organizational safety requirements.
b. Allocation of resources, ensuring effective inter-departmental safety communication and active promotion of the SMS.
c. Safety assurance and safety promotion, safety roles and responsibilities, and establishing acceptable levels of safety.

5.1.4 Safety Training for the Director of Operations

Training should provide the Director of Operations with a general awareness of the Island Express Helicopters SMS. Safety training for the Director of Operations will address:

a. SMS roles and responsibilities.
b. Safety policy and objectives.
c. Safety risk management.
d. Safety assurance.

5.1.5 Safety Training for the Safety Managers

Formal academic courses are available in the field of aviation safety. In addition, PRISM will provide periodic learning material for the Safety Manager to broaden their knowledge in selected subjects related to safety management. It is recognized that training is an ongoing effort, and should not preclude appropriate individuals from assignment as the Safety Manager. As a minimum the Safety Manager should strive to be trained in the following subjects:

a. Formal SMS training;*
b. Accident and incident investigation;
c. Human factors;
d. Aviation safety management;
e. Risk management;
f. Occupational safety and health;
g. Quality management; and
h. Hazardous Materials/Dangerous Goods.

*Formal safety management training for the Safety Manager will be attained as soon as practicable.

5.2 Safety Communication

Clear and regular communication of safety policy, goals, objectives, standards, and performance will be made to all employees of Island Express Helicopters. An effective employee safety feedback system that provides confidentiality as is necessary shall be established.
Communication of the Island Express Helicopters SMS objectives and procedures to all personnel is critical to the overall success of the operation. The SMS should be visible in all aspects of Island Express Helicopters' operations.

The Safety Manager shall communicate the performance of the Island Express Helicopters SMS through widely available bulletins and briefings. The Safety Manager should also ensure that lessons learned from investigations and case histories or experiences, both internally and from other organizations, are distributed widely. Communication should flow between the Safety Manager and operational personnel throughout the organization. Safety performance will be more efficient if operational personnel are actively encouraged to identify and report hazards.

Safety communication therefore aims to:

a. Ensure that all staff are fully aware of the SMS;
b. Convey safety-critical information;
c. Explain why particular actions are taken;
d. Explain why safety procedures are introduced or changed; and
e. Convey "nice-to-know" information.

5.2.1 Safety Communication Materials

PRISM provides a variety of materials that are designed to enhance safety communication. The Safety Managers are responsible for distributing these items to Island Express Helicopters personnel.

To formalize safety communication procedures and documentation, the following requirements are established for Island Express Helicopters:

a. The Safety Manager will ensure all personnel have access to applicable PRISM materials via distr bution or website access.
b. The Safety Manager will ensure all personnel have access to applicable Safety Committee meeting information materials via distribution or electronic access.
c. Formal meetings shall be held at least annually to communicate and discuss safety information with all employees.
d. Any safety communication materials utilized for required training will be documented in individual employee training records.

THIS PAGE INTENTIONALLY LEFT BLANK

6 Accidents/Incidents

Island Express Helicopters accidents and incidents are defined by classification and by category. Before they can be reported, it is necessary for the manager to classify and categorize the occurrence so the proper procedures for reporting and investigation can be followed. When in doubt, use the highest classification.

6.1 Classification for Notification and Reporting

a. **Major Accident:** An accident that results in substantial property damage, serious injury or illness that requires immediate emergency medical care, or death. For aircraft accidents, the term "substantial damage" is per the definition in the NTSB Part 830 rules.
b. **Minor Accident:** An accident that results in minor property damage, or which results in injury of illness requiring medical care.
c. **Incident:** Any other occurrence which results in injury or illness requiring first-aid care, or which results in property damage; a near-miss episode with minor consequences that could have resulted in greater loss.
d. **High accident potential:** Events or on-going situations that have a high potential for causing injury, illness or damage to property if they recur.

6.2 Categories for Notification and Reporting

a. **Aircraft:** Occurrences involving aircraft, whether in-flight or on the ground. This includes aircraft parked on a ramp or in a hangar. In addition to reporting/notification guidelines in this manual, procedures in the Island Express Helicopters Emergency Response Program (ERP) should be followed.
b. **Employee:** Occurrences involving injury or illness to an employee. If the employee injury or illness is sustained in operations involving aircraft, GSE, or facilities, report under those categories as well.
c. **Facilities:** Occurrence involving this operation's facilities - example, fire or other catastrophe in a building owned or leased by Island Express Helicopters.
d. **Ground Support Equipment (GSE):** Property damage to GSE or caused by GSE. Also personnel injury or illness caused by GSE. If GSE is involved in an aircraft accident or incidents report under that category as well.
e. **Non-Employee:** Occurrences involving injury or illness to either a customer or non-customer. If injury or illness is sustained in operations involving aircraft, GSE, or facilities, report under that category as well.

The first actions of management personnel at the scene of an accident, incident or high accident potential occurrence will be to take any measures necessary to prevent further injury or illness. This includes emergency medical care. It is essential that this occur prior to any other actions, including notification/reporting.

Notification is a brief communication concerning the accident or incident. It should contain enough information to identify the classification, category, time, location, and a brief description of the occurrence and suspected cause. Do not delay initial notification in an attempt to gather comprehensive information.

6.3 Accident Investigation Response

6.3.1 Aircraft Accident

If an aircraft accident occurs, the company must rely upon prepared and practiced responses. In addition to devoting every available resource to avoiding immediate injury and damage, Island Express Helicopters must quickly begin the actions outlined in the Emergency Response Program (ERP). A key function of the Safety Manager is to ensure the ERP is always up to date, with current management personnel and locator data, as well as numbers to call for all related offices.

Once the accident response has been brought under control, coordination with the NTSB becomes the focal point of the company's investigation of the accident. The operator is an authorized participant in the investigation, under NTSB and international, ICAO Annex 13 rules. The investigating agency will call upon Island Express Helicopters to provide various areas of expertise as part of the investigation team. Island Express Helicopters should expect to deploy a "Go Team" to represent and gather information for later assessment. The deployment and equipping of this team is addressed in the ERP. The functions of various team members can be researched through the US National Transportation Safety Board.

Since the objective of the investigation is to examine all aspects of the accident to determine the root causes, there is no opportunity for putting the operators "spin" on the findings. Lawyers and consultants are generally not permitted on the team, only those with substantial knowledge or expertise to contribute.

Employees involved in a major accident are required to undergo a drug and or alcohol test. A drug and/or alcohol test should also be considered in a minor accident, incident, and high accident potential cases if, in the managers judgment, there is reasonable suspicion that the employees' actions may have been the result of drug and/or alcohol use. If a drug or alcohol test was performed on any employee, it must be noted on any report forms.

6.3.2 Non-Aircraft Accidents

These accidents will be investigated by management personnel under these accident investigation guidelines:

Initiate the investigation into a major or minor accident, or an incident resulting in personnel injury or illness, within 24 hours after the occurrence. If it becomes apparent that more than 72 hours will be required to investigate the occurrence, then submit a preliminary report to the Director of Operations and follow up with status reports until the final report is complete. Investigations of incidents with only minor damage and no injury or illness should commence as soon as circumstances permit. Complete the investigation and submit the report within five working days.

Employees involved in a major accident are required to undergo a drug and or alcohol test. A drug and/or alcohol test should also be considered in a minor accident, incident, and high accident potential cases if, in the managers judgment, there is reasonable suspicion that the employees' actions may have been the result of drug and/or alcohol use. If a drug or alcohol test was performed on any employee, it must be noted on any report forms.

6.3.3 Corrective Actions

Corrective actions are the end result of a successful investigation. It should be indicated on the report whether these actions are recommended, planned, or completed. Actions should be specific, doable, and consist of one of three types as follows:

a. Actions to eliminate the cause or causes of the accident or incident.
b. Actions to control the circumstances that caused the accident or incident.
c. Personnel actions such as improved procedures, increased or enhanced training, or actions to discipline employees involved in the occurrence. Discipline is mandatory in those instances where employee carelessness or willful disregard of safety rules or company procedures results in an accident. It should also be considered anytime an employee exh bits conduct which shows a lack of concern for safe operating procedures even if no accident results.

Proposed corrective actions will be reviewed by applicable managers. In the event of disagreement as to causes or solutions, the matter will be resolved in discussions with the Safety Manager. Corrective actions, as agreed to an annotated on the investigation report, should be carried out by the appropriate managers. The final report should be communicated to all employees to prevent a similar occurrence. The Safety Manager will monitor the corrective action via an assurance check, as described in Section 3.4.2.

THIS PAGE INTENTIONALLY LEFT BLANK

7 Forms

Hazard Report

All Hazard Reports will be assessed by the Safety Manager and reviewed by the Safety Committee. Feedback and corrective action updates will be provided to the submitter and all applicable personnel. Anonymous reports are accepted, however, this inhibits follow-up action. See the SM~~SM~~ for more information on company hazard reporting procedures and non-reprisal reporting policy.

Hazard reports may also be submitted online at prism.aviationresearch.com (Ask the Safety Manager for your username and password).

Report # :

Name (Optional):

Date:

Severity of Hazard:

- ☐ Negligible — Probably would not affect personnel safety, but is in violation of a standard
- ☐ Marginal — May cause minor injury or property loss less than $10,000
- ☐ Critical — May cause severe injury or property loss greater than $10,000
- ☐ Catastrophic — May cause death or property loss greater than $1,000,000

Hazard/Event/Concern:

Suggested Corrective Action:

Identified Hazard or Hazard Report			
Root Cause(s)			
Root Cause: Analysis Details:			
Risk Matrix Results			
Probability:	Severity:	Recommended Action:	
Risk unacceptable? Describe the unacceptable outcome.			
Risk Control:	Risk Mitigation	Risk Elimination	Operation Cancellation
Control 1: (Existing or New)			
Control 2: (Existing or New)			
Control 3: (Existing or New)			
Residual Risk			
Matrix results after controls are employed:		Included in Company Risk Profile?	
Probability:	Severity:	☐ Yes ☐ No Risk Zone: Risk Area:	
Details of residual risk and/or unintended consequences:			
Monitoring Risk Control			
Control Employed:	Effective?	Costs:	Date:

Island Express Helicopters Risk Profile
Date:

RISK AREA	RISK EXPOSURE (VERY HIGH, HIGH, MEDIUM, LOW)	SPECIFIC DETAILS	STATUS
Aircraft Operations			
Departure			
Arrival			
En-route			
Ground movement			
Weather			
Airports			
Security			
Equipment			
Aircraft performance			
Procedures			
Aircraft Maintenance			
Ground movement			
Weather			
Equipment			
Security			
Maintenance performance			
Procedures			
Off-site maintenance			
Tool control			
Aircraft inspection			
Facilities			
Personal injury hazards			
PPE/safety equipment			
Weather			
Equipment			
Security			
Conditions			
Human Factors			
Fatigue			
Company culture			
Air Crew experience / qualifications			

RISK AREA	RISK EXPOSURE (VERY HIGH, HIGH, MEDIUM, LOW)	SPECIFIC DETAILS	STATUS
Mechanic experience / qualifications			
Training			
Manning levels			
Air Crew performance			
Mechanic performance			

CERTIFICATE

of TRAINING

This certifies that

[redacted]

6/5/2018

DATE

has successfully completed the training program requirement for

SMS EMPLOYEE TRAINING

PRISM SOLUTIONS

CERTIFICATE

of TRAINING

This certifies that

[redacted]

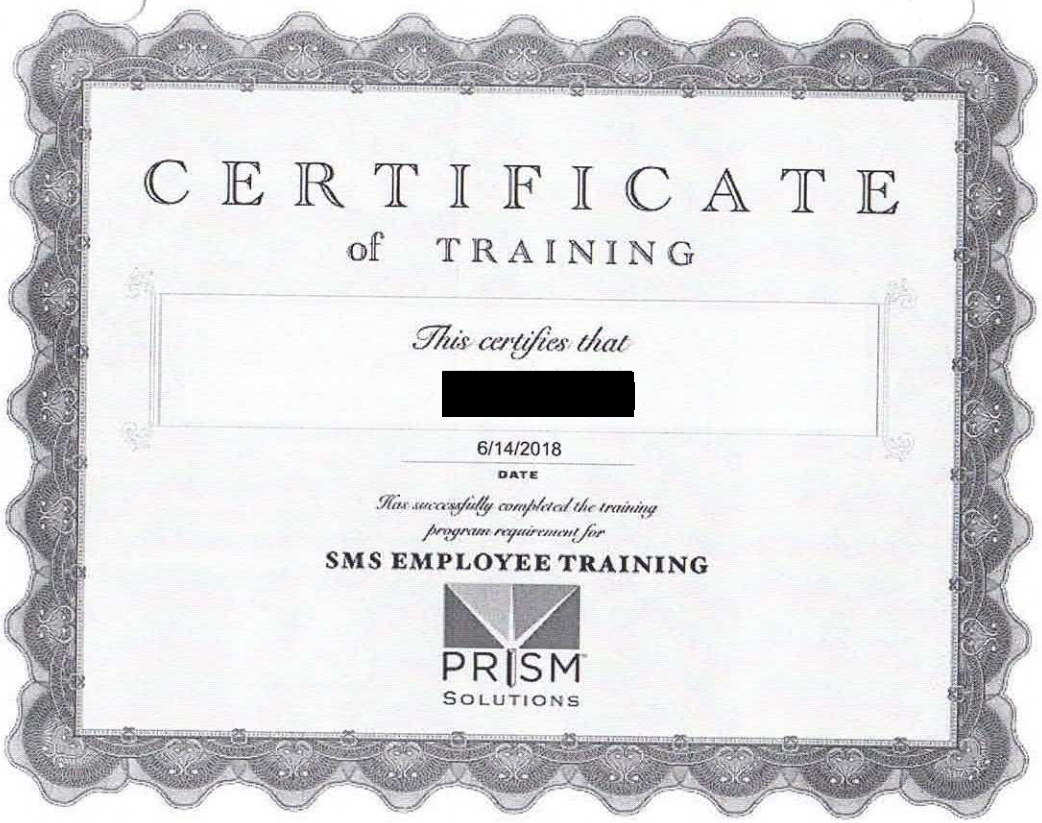
6/13/2019

DATE

has successfully completed the training program requirement for

SMS EMPLOYEE TRAINING

PRISM SOLUTIONS



CERTIFICATE

of TRAINING

This certifies that

[redacted]

6/14/2018

DATE

Has successfully completed the training program requirement for

SMS EMPLOYEE TRAINING

PRISM SOLUTIONS

CERTIFICATE

of TRAINING

This certifies that

[redacted]

6/5/2018

DATE

Has successfully completed the training program requirement for

SMS EMPLOYEE TRAINING

PRISM SOLUTIONS

CERTIFICATE

of TRAINING

This certifies that

[redacted]

6/5/2018

DATE

Has successfully completed the training program requirement for

SMS EMPLOYEE TRAINING

PRISM SOLUTIONS

CERTIFICATE

of TRAINING

This certifies that

[redacted]

6/5/2018

DATE

Has successfully completed the training program requirement for

SMS EMPLOYEE TRAINING

PRISM SOLUTIONS


CERTIFICATE
of TRAINING
This certifies that
[redacted]
6/4/2018
DATE
Has successfully completed the training
program requirement for
SMS EMPLOYEE TRAINING
PRISM
SOLUTIONS

December 2018.

Safety Meeting
Page 1

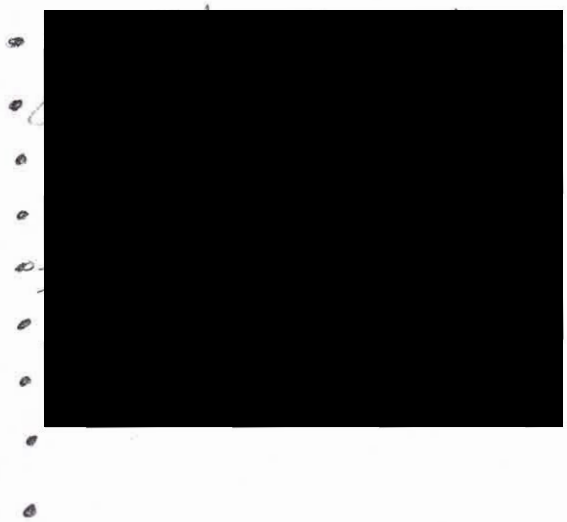
DECEMBER 12TH

[redacted]

[redacted] 9:31 PM

Pilots take your time on your preflight there is no need to be in a rush. Please use a ladder it's makes your preflight way more efficient to see in the MGB area and engine area and other locations. Before you go to climb into the aircraft the red cyclic cover should be on to remind every pilot to do your final walk around checks. There could be a cowl unlatched or the wheel chocks or doors not closed all the way. It could be anything. After maint has been performed on the aircraft always check afterwards. Even if the mechanic says it's good to go always check what was done. Check your surroundings what's around, front, behind, and to the sides. Poles, light poles, people, aircraft, maybe something sticking up out of the ground which could cause dynamic rollover. For new or old landing spots remember to always make your high recon and your low recon checks to see if it is safe to land at the LZ. If you feel it's not safe DO NOT LAND. If you feel rushed Slow down what your doing and rethink. There is no need to be in a hurry. Safety Meetings every month will be over the phone. In the hanger each mechanic rotates on finding an article about safety, dirty dozens, stress, fatigue , accidents, maint errors, human factors, it could be anything you would like to share. We can talk about the topic you picked over the conference call. After if you can leave the article in the hanger by the safety board for everyone to read and sign. For December Ara is the first to be assigned on a topic and he found a good one which next week we will go. ALSO a reminder please remember your CTSYS. Please reply to this message that you read this. If you dont I'll assume you didnt read the message. Thanks everyone!

Pilots Sign:



The National Transportation Safety Board released its preliminary report for the agency's investigation of the crash of a Liberty Helicopters AS350B2 into New York City's East River. The report includes an interview with the pilot, Richard Vance, who provided more details about the crash.

According to Vance, some of the passengers during the flight removed their restraints but stayed in their harnesses, while others turned sideways to take photographs. The passenger in the front seat of the helicopter also had his restraint hanging from the seat at one point before he was told to put it back on.

Vance also provided in-depth details about what occurred right before the crash. He said that while they were flying along the eastern side of Central Park, the passenger in the front seat turned sideways and slid across the double bench seat toward the pilot. The passenger then leaned back and extended his feet to take a photograph of his feet outside the helicopter.

While initiating a right pedal turn to head south, that's when Vance noticed the helicopter was turning right faster than he expected and also heard a low rotor rpm in his headset. The engine pressure and fuel pressure warning lights then lit up, and Vance "believed he had experienced an engine failure," the report said. At that point, he lowered the collective pitch control and let the nose turn toward the right. He considered landing in Central Park, but decided against it because there were "too many people," the report said.

"Due to the helicopter's airspeed, he was not sure he could make it to the East River and reduced rotor rpm so he could "glide better." Once he was in an established autorotative glide, he attempted to restart the engine but was unsuccessful," the NTSB report said.

After attempting to start the engine again unsuccessfully, the pilot checked the fuel control lever and observed that it was still in detent for normal operation. At an estimated altitude of 800 ft agl, Vance told investigators he "committed to impact." Upon reaching for the emergency fuel shutoff, he saw that it was already in the off position with a portion of the front seat passenger's tether positioned underneath it.

Once the helicopter descended through about 600 ft agl, Vance said he attempted to restart the engine again and positioned the fuel shutoff lever into the on position. Immediately he saw positive indications on the engine instruments, although the engine was not starting back up fast enough.

"Passing through between 100 and 50 ft, he began the cyclic flare in an extended glide configuration, but he 'did not get a lot of rpm back.' He performed a flare reduction at 10 to 15 feet. He pulled the collective pitch control up 'as far as it would go.' The helicopter then impacted the water at 5° to 10° nose-up attitude," the report said.

The NTSB noted that the preliminary report contains "no analysis" and does not discuss probable cause. It is subject to change as the investigation continues.

Pilot Meeting 01/10/2019

Meeting was held at 1330 at the Pebbly.

Present in person were: Ara, David, Lorenzo, Eric
Present via conference call were: Garret, Jared, Josh and Adam

- Ara opened the meeting by thanking all pilots for being on time for their 8AM flight. Huge improvement
- There will be Taxiway improvements by Aeroplex on Jan 13rd, 24th & 25th. We will be affected, but we are not sure to what extent. We may reposition aircraft to the Pacific Jet Center. The access road will be rerouted and no longer will do the loop!
- CTS reminder
- Eurosafety AS350 scheduled for March 11th ground and flight training 12th-15th
- Eurosafety S76 scheduled for April 1st ground and flight 9th & 10th (Not Confirmed)
- Cell phone use policy coming into effect for all employees but is really important for employees doing safety related work i.e. Mechanics, pilots and Ramp Crew-members. For pilots no cell phone use while blades are turning! It's a distraction
- S76 – while enroute only pull 70% torque
- When writing up a discrepancy please take a picture of flight log with write up and either text or [redacted]
- Adam mentioned that its important to be aware of your environment. Please don't land aircraft without EAPS or barrier filter in a dusty or area where FOD is a factor
- Eric asked about Empire and 2 Harbors. Ara said that they are good now, but we need to monitor in the summer.
- Both Josh and Adam working on a steps solution as they are damaging floats and damaging paint on the skids
- Garret email everyone a link to all pilots. Please read! "The Human Factor: Dangerous Distractions, People in Aviation are as susceptible to electronic distractions as anyone else" https://www.flyingmag.com/technique/proficiency/human-factor-dangerous-distractions

Meeting concluded 1355. Thanks to everyone for attending

IEX HELICOPTERS

Pilot Meeting
02/25/2019

Attended via Conference Call: Ara, Josh, Garret, David, Jared and Lorenzo

- 12:06: Ara opened the meeting thanking everyone being on time for the 8am flight including the rigs. Big improvement – Thanks everyone

- Busy season is just around the corner so please everyone be on your game and be safe!

- Coachella coming up in April 12-15, 19-22, 26-29. Please everyone be available as we will be busy. Even if you are only AS350 qualified we may use you as copilot in S76

- Life Vests: Please only use vests that are both FAA approved and listed on our Ops Specs. These are only the yellow lap vests and the blue vests. We also encourage pilots to use the blue ones as in an emergency these are much easier to use!

- Reminder of cell phone policy: No use of cell phone while the blades are turning

- Josh: All pilots were advised on ETW to do Prism training on Hearing, H2S and First Aid. After completing please print certificates and give to Ara or Josh.

- Link to Prism: [redacted] once logged in go to "Training" on top left, then "Employee Safety Training" then "Videos and Interactive Courses" please scroll down and complete ASAP Hearing, H2S and First Aid

- Each pilot meeting, we will have a pilot give a quick safety presentation. This meeting it was Lorenzo: Lorenzo talked about an incident a couple weeks ago – After lifting from 2 harbors with 5 pax he flew direct to KSNA. About 2 miles offshore he got an Engine Chip Light. The emergency procedure calls to land immediately but taking all aspects of the flight conditions at that time he decided to fly to PBX. He climbed in-case of engine failure. He relayed all info on company radio. He advised his pax that he is making a precautionary landing, nothing serious and another helicopter is on its way to pick them up.

- Ara asked that all pilots look at ETW more. If you could get in the habit of checking once a day. After 6.30 pm is a good time as reservations will have posted the next days scheduled flights including aircraft and pilot.

[redacted]

- David asked if we could get a pilot computer to aid with pilot training and general administrating – Josh looking into it

- Please all pilots Full-time and Part-time it's important that we have everyone's participation in these pilot meetings and our SMS.

Meeting concluded – Thanks everyone and Be Safe!

[redacted]

Pilot Meeting 03/25/2019

Meeting held via conference call at 1200.
Present on the call: Josh, David, Lorenzo, Kyle, Eric and Garret (Ara was flying).

Garret: There will be ramp repairs at KLGB on April 4th 4am – April 5th 6am. The road will no longer go around by flying boats. It will continue past signature west bound all the way to Pacific Jet Center. While the repairs are scheduled the transient pad will be closed. Our 3 pads will be open. We will try only use the 2 south pads. Please use care and do not overfly any people or equipment.

Garret: Please check ETW at least once a day. ETW has a lot of operational information including safety information. A good time to check is 1830-1900 as that is when the reservations updates the next day's line up!

Josh: Dress code – please have charter close available should a charter pop up. Also please no blue jeans.

David: Discussed the chip light that Lorenzo experienced. According to Maintenance the chip light was probably as a result of coaking in the engine caused by us bring the engine to idle every time we land. When we fly the rigs, we do not bring the aircraft to idle. It was also discussed that most other companies doing similar type work do not bring the aircraft to idle. Moving forward the policy is that we keep the FFC in the flight gate after landing except when shutting down. Please read the following notes!

- After landing please make sure that the frictions are on and the controls are properly secured.
- Give Ground Crew signal to approach the aircraft
- If comfortable feel free to assist the Ramp Crewmember with passengers
- If not comfortable please guard controls and let Ramp Crewmembers do their job assisting passengers
- Please leave Hydraulics on – therefore avoiding inadvertently taking off with Hydraulics off!
- If for whatever reason feel that this is unsafe, and you would like to bring the engine to idle please feel free to do so.
- If you see Ramp Crewmember without hearing or eye protection, please bring to Peter or Garret's attention

David: Hazmat – reminder that we do not carry hazmat. We have the ability to carry comat but not while passengers are onboard the aircraft.

Josh: If anyone has any interesting safety related articles or videos please upload to ETW. Please see Josh and he will assist.

Meeting concluded 1230

[redacted]

IEX HELICOPTERS

Pilot Safety Meeting

4/26/19

Conference Call: Josh, Ara, Garret, David, Lorenzo

Time: 12:00-12:20pm

Josh- There was a Hazard report submitted on Prism about the safety concerns of leaving the FFCL in the flight position vs the flight idle position while on the ground.

The Safety Officer is working on a written procedure for leaving the FFCL in the flight position while on the ground. Safety Officer and Upper Management have some ideas to protect the controls from the front seat passengers.

It's the PIC's decision to leave the FFCL in the flight position or in the idle position while on the ground.

Keep a close eye on the passengers when they are approaching and exiting the aircraft.

No Bags or purses allowed in the front seat. If you do see a purse or bag please ask one of the ramp agents to store the purse or bag in the luggage department.

David- When the S76 is at EBAY the Ramp agents need to be aware of the rotor disk.

[redacted]

IEX HELICOPTERS

Pilot Meeting 5-24-19

Meeting held via conference call at 12:30pm-12:45pm

Present on the call: Josh, Ara, Garret, Lorenzo, David, Kyle

- Reminder if you're feeling fatigue shut down and take a short break. Grab something to eat and some fluid to stay hydrated.
- The Dual front seat make sure the seat belts are buckled on Echo flights. The buckle can fall down by the collective.
- 135 Check rides coming due

Safety Topic by Kyle

- Kyle talked about Ground Resonance and how he has gotten into it in the canyon.
- When the aircraft is at 100% on the ground make sure the ground crew is careful about stepping onto the steps. It could cause ground resonance or if the ground is uneven.

Garret

- Article from HAI LAND THAT DAM HELICOPTER
- Garret also talked about weather deviation with passengers on board. If you must divert then do it. Land That Dam Helicopter call a taxi for the passengers. If the pilot has to get a hotel room then get room.

-
-

[redacted]

IEX HELICOPTERS

Pilot Safety Meeting 6-19-2019

Meeting held on PBX via conference call at 12:00-12:20pm

Present - Josh, Ara, Garret, David, Lorenzo, Alec

Josh- The Pilot landed at PBX and the ramp agent opened the rear sliding door to help the passengers out. The passenger in the front seat climbed over the seat to exit out of the back-sliding door. The passenger that climbed over the seat could have easily hurt someone or bumped the flight controls.

All pilots need to give a short briefing before they land

- Please keep your seat belts buckled until the ramp agent opens the doors
- Once we land a ramp agent will open the doors and escort you to the waiting area. The Ramp agent will bring your bags to you.
- Thank you for flying with IEX Helicopters

Ara was taking off from LGB in the B2 and he noticed the pedals felt weird. He started to notice the pedals felt not as smooth. He turned around and went straight back to the airport to have a mechanic look at it.

- Importance of Good Decision Making

[redacted]

Before you depart LGB always call QWY for an update.

- This will help save Starts and Cycles on the Aircrafts

If a child is sitting in the front seat of the Astar they must be with an adult.

- The adult must be sitting next to the door.
- Age limit for child to be seated upfront
- The Passenger needs to be able to open the door or use the Jettison handle in case of an emergency. This would be tough for a young child to do.

[redacted]

IEX HELICOPTERS

July's meeting.

Pilot Safety Meeting 8-1-19

Meeting Held via conference call at 12:00pm-12:25

Present on the call: Josh, Garret, Ara, Lorenzo, Alec

Josh- Thank you everyone for the Hard Work, and for being safe and professional.

Shop Rags and Tool Control

- Mechanic's are accountable for all their tools and rags. After aircraft Maintenance the Mechanic will go over what was worked on with a pilot. In the process the Mechanic and the pilot will inspect the areas for tools and rags. The helicopter will not be released to fly until all tools and rags are accounted for.

- Shop Rags will be in the clean room with a sign out sheet. If you need a rag you must sign out how many rags you will be using.

- The S76B will have two rags one in each rear luggage door. There will also be one Screwdriver in the luggage door.

- S76A will have a Rag and a Screwdriver located behind the Pilots seat in the bin.

- Astar's will have no rags under the seats

- The Golf cart will not be stored with rags.

- All loose items should be removed before you climb up onto the aircraft.

- Red Cyclic Cover please put over the Cyclic after every shutdown. The cover is there for personnel awareness. Its to remind you to walk around the aircraft to check for the wheel chocks, pins, blade tie downs, cowls closed and latched etc.

- If a Mechanic works on the Heli always inspect and make sure there is no tools left behind these are called "FLY TOOLS"

- If you have ideas for new Risk Assessment Questions, please let me know.

- Fuel Receipts please put in Ara's box

[redacted]

- Ramp Agents are doing a very good job. Just a reminder not to rush.

- Ramp agents are doing a good job on monitoring on who they put in the front seats.

- If the mechanics are doing maintenance, please no hovering over them. This causes the mechanics to feel pressured. After the mechanic is finished, they will call you over to inspect the area. Its ok to stand with the mechanic if they need help or to visually inspect something. Example hey can you watch me torque this bolt.

IEX HELICOPTERS

Pilot Safety Meeting 8-29-19

Meeting held via conference call at 11:45am-12:15pm

Present on the call: Josh, Garret, Ara, Lorenzo, David, Alec

Josh – Be aware of intoxicated passengers. Catalina has some events coming up in a few weeks. If a passenger appears to be intoxicated the Ramp Agent and the Pilot will not let the passenger fly.

Thank you everyone for being professional and being safe. Reminder to always do a good preflight, and always perform a walk around before you start up.

Ara – Aircraft soap when low please let Ara know so he could order more.

During the slow season the second pilot will clock in later in the morning and standby at the hanger for any charters.

Pilots no CELL PHONES being used while behind the flight controls.

Garret – On the weekends when there is no mechanic please make sure to get your fuel sample before you depart LGB for the day.

Pilots must clock out and back in for there 30 min lunch break. The break must be taken within the 5th hour

Example: Clock in at 7:00am the pilots needs to clock out by 12:00pm

Do not use the Rotor Brake on the S76 unless you must (High Winds, Emergency) Please let the blades coast down to a stop. This will help minimize rotor brake wear. The client can wait another minute.

S76- While enroute only pull 70% torque

David – I pad holders for the aircraft, Staying night current

Lorenzo – Possibly getting a USB port for charging in 4MX

[redacted]

[redacted]

IEX HELICOPTERS

Pilot Safety Meeting 9-26-19

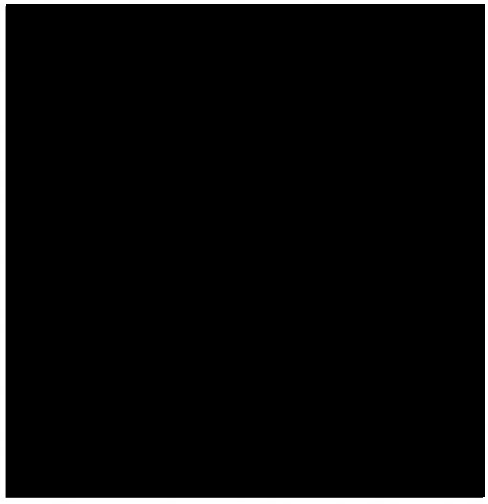
Meeting held via conference call at 12:20-12:35pm

Present on the call: Josh, Garret, Ara, David, Lorenzo, Alec

1. Discussed the YouTube video with the passenger who walked into the tail rotor of an astar helicopter.
   - Watch who is on the ramp or approaching the Helicopter or exiting the helicopter. The pilot might catch something that the ramp agent didn't see. The ramp agent should also be wearing their headsets to communicate with the pilot.

   - Example Pilot from IEX had a passenger exit the helicopter and walk around the nose of the helicopter to the Pic side the ramp agent didn't even notice. (This could have been a fatal accident. If this had happened with the S76 the main rotor blades could have killed the passenger. The passenger also could have easily walked towards the tail rotor.

2. Fire Extinguisher Training



IEX HELICOPTERS

Pilot Safety Meeting 10-30-19

Meeting held via conference call at 8:35am-9:00am

Present on the call: Josh, Garret, Ara, Lorenzo, Alec

- On the SMS Prism Frat report will have new questions soon will go over on next safety meeting.
- Starting to move the old hanger over to the new location. A meeting will be held with the control tower on the name and flight routes into the new facility.
- QWY has fire extinguisher training with the ramp agents' pilots are welcomed to join

- Fly Neighborly be courteous to the neighbors follow the routes and altitudes
- USC Helipad in downtown is a new location IEX will be landing out. Chief Pilot or the DOO will be training the pilots before landing there.

-

- When PBX is busy possibly have another ramp agent there to help.

- Thank you Everyone for being Professional and Safe and using good Decision Making. At any time if you feel the flight cannot be flown safely and Professional than NO GO.

IEX HELICOPTERS

Pilot Safety Meeting

11-27-19

12:30pm-12:55pm

Present on the call: Josh, Garret, Ara, Lorenzo, Alec

- Discussed any safety concerns with leaving the FFCL at 100% while on the ground. Always have your hands on the flight controls and your feet on the pedals. Guard your flight controls.
- No pictures allowed of the helicopters while under maintenance for social media.
- No pictures of the Clients
- IEX helicopters signs an NDA (Nondisclosure Agreement) Be Professional with the Customers/Clients
- We can now use Island Express Helicopters when making radio calls to the LGB Tower
- Use caution for people on the ramp. Be aware of taxing planes or parking by the planes. If you flip a plane the PIC is responsible.
- LED Lights will be getting installed around the hanger.

Please Read and Sign:

IEX HELICOPTERS

Page 1

Pilot Meeting

Attended via Conference Call: Josh, Ara, Garret, David, Lorenzo, Alec (Partial Meeting: Whitney)

12/20/2019

12:30pm-12:55pm

Josh opened the meeting with thank you everyone for being professional and safe.

- Wait for the thumbs up that you are clear to lift off from the ramp agent. DO NOT TAKE OFF UNTIL THE RAMP AGENT HAS DOUBLE CHECKED THE HELICOPTER, THE SURROUNDING AREA AND HAS GIVEN YOU A THUMBS UP THAT YOU ARE CLEAR TO LIFT OFF AND DEPART.
- Please Check ETW daily
- While keeping a close eye on the passengers as they approach the helicopter check their life vest to make sure there not upside down. If you see a vest upside down, please have the ramp agent fix the vest on the passenger.
- No bags or purses allowed in the front seats

Whitney

- It is your responsibility to take your breaks. This is the last time I will be warning you, the next time will be a write up.
- Pilots if you are not flying there is a lot of stuff that could be done in the hanger. Helicopters need to be washed daily. Help keep the hanger clean by sweeping and mopping. If you can't find something to do ask Josh, Ara, Adam. This is IEXs new home and we need everyone's help to keep it looking clean and professional.
- While on the clock pilot must have the aircraft ready to go and the pilot MUST STAY AT THE HANGER while clocked in. If they leave for whatever reason, Ara or Garret must be notified prior to leaving and time clock adjusted accordingly if leaving for personal business.

Pilots

- Suggestions/Ideas on Emmy updating weight and balance
- While flying the Rigs leave QWY with 40% if you need to go back to QWY for fuel while flying the rigs then go back and get fuel.
- Pilots possibly having a chance to pull the float lever in the hanger when the floats are due for the inspection.
- Sometimes the aircrafts are updated wrong on ETW and Alpro.

[redacted]

- If Alpro is not available always call QWY first and check schedule
- The DOM and DOO needs to update Alpro and ETW at the end of the day when signing off operational control for the next day to verify aircrafts being scheduled.

[redacted]

[redacted]

Reporting Program Tracker : Submit Report

Quick Links

Submit Report

Print PDF

Print

Publish Report

View Existing Risk Assessments for this Report

Return to Report Search

Report Title: Flight Hazard Template

Header

Event Date/Time 04/03/2019 04:16 GMT

Name (Optional)

Severity

Negligible	○ Probably would not affect personnel safety or health, but is in violation of a standard, or property loss less than $10K.
Marginal	○ May cause minor injury, minor illness or property loss greater than $10k.
Critical	○ May cause severe injury, severe illness, or property loss greater than $100k.
Catastrophic	◉ The hazard may cause death, or property loss greater than $1 mil.

Detailed Description of the Hazard/Event/Concern

Format Font Family Font Size

Reduce cycles but I think we need to do some seat belt modifications and control cover first and all safety measures

Thank you for looking into this

Location

[redacted]

Location All locations | Aircraft Type all AS350

Category

Wildlife Strike ☐ TCAS/NMAC ☐ GPWS Alert ☐ Clearance Deviation ☐ CRM ☐ Equip. Failure ☐
Evacuation ☐ Unstabilized Flight/Approach ☐ Personal Injury ☐

Flight Phase

Taxi ☐ Takeoff ☐ Climb ☐ Cruise ☐ Descent ☐ Approach ☐ Landing ☐
Missed Approach ☐

Weather Factors

IMC ☐ VMC ☑ Icing ☐ Snow ☐ Rain ☐ Turbulence ☐ Fog ☐ Windshear ☐ Day ☐
Night ☐

Aircraft Equipment

Paragraph | Font Family | Font Size

Date Submitted

4/2/2019

Assigned To

Select a user

Date Due

4/2/2019

Corrective Action

Paragraph | Font Family | Font Size

times. The ground crew will help the passengers with their seat belts, headsets and doors. All pilots always have the option to bring the FFC back to idle should they have any concerns loading pax etc.

11/27/2019: Pilot safety meeting and all pilots stated they are all happy with new procedure. They were reminded by Director of Safety that they always have the option to bring the FFC back to idle or shut down if they have any safety concerns.

Root Cause

Risk Level

Risk Status

Reduced

[redacted]

Date Closed

11/27/2019

Attach Files to this Hazrep

Submit Report

[redacted]

[redacted]

Reporting Program Tracker

Report Title: Flight Hazard Template

Date Submitted	Date Due	Date Completed	Assigned To
4/2/2019	4/2/2019	11/27/2019	

Header

Event Date/Time	04/03/2019 04:16 GMT

[redacted]

[redacted]

Detailed Description of the Hazard/Event/Concern

Safety concern in regards to leaving the RPM in the AS350 at 100% all dayMaintenance requested IA Adam that all pilots to leave the RPM at 100% all day unless we are shutting downThis way we will save cycles on the engine.My concerns are :Our flight controls are not protected or covered From the front bench seat pax, also in the Astar the pilot sitting in the right side , if we put 2 passengers in the front seat one of them will be so close to the pilot hand and the collective and the fuel control and it is wide open area

Seats belts in the front seat are 4 points seat belts and it is really hard for a first time passengers flying in helicopter to figure it out so they will need help but the pilot can not helpThe rampers will help but the front bench seat

Is not that wide seat and it is really hard to get in and out especially when when have 2 paxI understand keeping the RPM at 100% will help to Reduce cycles but I think we need to do some seat belt modifications and control cover first and all safety measuresThank you for looking into this

Severity

Selected Fields	Catastrophic

Location

Location	All locations
Aircraft Type	all AS350

Weather Factors

Selected Fields	VMC

[redacted]

[redacted]

Corrective Action

5/13/19- Management is looking into ideas on protecting the collective and the FFCL from passengers. 317EX The B2 that IEX just brought down to add to the fleet has a different seat belt harness style. The Dual front seat has a rail attached to the side of the seat to protect the collective and the FFCL. This helps with passengers from being able to slide over onto the collective and the FFCL.

The PIC should have their hands and feet on the flight controls at all times. When on the ground the PIC should have the frictions set on the collective and the cyclic and have their hands and feet on the flight controls at all times. The ground crew will help the passengers with their seat belts, headsets and doors. All pilots always have the option to bring the FFC back to idle should they have any concerns loading pax etc.

11/27/2019: Pilot safety meeting and all pilots stated they are all happy with new procedure. They were reminded by Director of Safety that they always have the option to bring the FFC back to idle or shut down if they have any safety concerns.

Root Cause	Risk Level	Risk Status

[redacted]

[redacted]

Reporting Program Tracker

Report Title: IEX Ground Hazard Template

Date Submitted	Date Due	Date Completed	Assigned To
8/22/2019	8/22/2019	10/30/2019	

Header

Event Date/Time	08/22/2019 22:58 GMT
Name (Optional)	Garret DAlton

[redacted]

Detailed Description of the Hazard/Event/Concern

On preflight of 71EX I found part of a bright blue trash bag on the compressor guard on Engine #2. The aircraft had had a daily inspection and this was not discovered. I had maintenance do an inspection of the engine. They also checked if any other inspections were required by the manufacturer. We did an engine power check and it passed. I did a ops check flight without any passengers and everything was ok.

Location

Location (Facility)	KLGB

Weather Factors

Selected Fields	Day

Event Details

On preflight of 71EX I found part of a bright blue trash bag on the compressor guard on Engine #2. The aircraft had had a daily inspection and this was not discovered. I had maintenance do an inspection of the engine. They also checked if any other inspections were required by the manufacturer. We did an engine power check and it passed. I did a ops check flight without any passengers and everything was ok.

Corrective Action

This is why a pilot should perform a preflight check. Also the importance of doing your final walk around checks before starting up again through out the day.

Report Title: IEX Flight Incident Template

Date Submitted	Date Due	Date Completed	Assigned To
11/3/2019	11/14/2019	11/14/2019	Dalton, Garret

Header

Event Date/Time	11/03/2019 03:47 GMT
Name (Optional)	David

[redacted] Description of the Incident

Today, in clear weather, while approaching to land at Pebbly Beach from Queensway at 3:25 pm in an AStar, pulse lights flashing, I noticed a parasail several miles out. It appeared to be slightly above my altitude of 500'. I continued on my normal course southbound and noticed the green boat pulling the multicolored parasail was turning to head directly towards me. As I approached one mile out from landing, the parasail occupants were directly at my level, with the parasail extending above my altitude. The boat obviously saw and heard the helicopter but made no effort to drop the parasail or alter course. I took evasive action in a safe distance to avoid the parasail and descend for landing. Yesterday, a similar situation took place with a white boat towing an orange parasail. This has been an ongoing problem for years. One time coming into Pebbly during foggy conditions at 300', a parasail appeared at least 100' above and very close.

Severity

Selected Fields	Catastrophic

Location

Location	PBX
Aircraft Type	AS350

Category

Selected Fields	Personal Injury

Flight Phase

Selected Fields	Approach

Weather Factors

Selected Fields	VMC, Day

Event Details

Today, in clear weather, while approaching to land at Pebbly Beach from Queensway at 3:25 pm in an AStar, pulse lights flashing, I noticed a parasail several miles out. It appeared to be slightly above my altitude of 500'. I continued on my normal course southbound and noticed the green boat pulling the multicolored parasail was turning to head directly towards me. As I approached one mile out from landing, the parasail occupants were directly at my level, with the parasail extending above my altitude. The boat obviously saw and heard the helicopter but made no effort to drop the parasail or alter course. I took evasive action in a safe distance to avoid the parasail and descend for landing. Yesterday, a similar situation took place with a white boat towing an orange parasail. This has been an ongoing problem for years. One time coming into Pebbly during foggy conditions at 300', a parasail appeared at least 100' above and very close.

Corrective Action

Garret and Ara talked to the 2 Parasailing companies located at Avalon. We educated them on our operation and our approach and departure path to and from Pebbly Beach Heliport. We asked if they could keep clear of our approach and departure path.

Report Title: Copy of Flight Hazard Template

Date Submitted	Date Due	Date Completed	Assigned To
1/12/2020	1/12/2020		

Header

Event Date/Time	01/12/2020 21:58 GMT
Name (Optional)	Capitano

Detailed Description of the Hazard/Event/Concern

317EX still no AC, vent is inefficient and aircraft is very hot with afternoon sun in your face. Pax are complaining. Functioning AC falls under category C per MEL

Severity

Selected Fields	Marginal

Location

Location	pBX
Aircraft Type	AS350

Category

Selected Fields	Equip. Failure

Flight Phase

Selected Fields	Cruise

Weather Factors

Selected Fields	Day

Event Details

317EX still no AC, vent is inefficient and aircraft is very hot with afternoon sun in your face. Pax are complaining. Functioning AC falls under category C per MEL

Corrective Action

Chevron

human energy®

Island Express Helicopters Long Beach, CA

Chevron Aviation Safety Assurance
October 2019

Version	Date	Originator
Revision 1	15 Jan 2020	Scott Legocki

contents

CONFIDENTIALITY STATEMENT

This document is confidential and intended for the sole use of Chevron Corporation or its affiliates. The information and any assessments contained within are based on the information provided by the aircraft operator and the observations made during the visit. The report relates to specific operations only and may not reflect the aircraft operator's ability to meet Chevron Corporation standards at other locations, on different operations, or at some other time in the future. Notwithstanding the contents of this Report, Chevron Corporation (or its affiliates) is not liable for any loss, damage or injury caused by or as a result of or activities of or the negligence of a third party claiming to be relying on this Report. This Report shall not be disclosed to or used by any third party without first obtaining written permission from Chevron Corporation, Aviation Services.

The intent of our report is not to approve or reject the air operator or air carrier. Our intent is that this report will be used in conjunction with other sources of information, as part of a project management team's decision-making process, regarding the operator.

1 general

1.1 Authorization

A requested audit was authorized by El Segundo Refinery and was performed by Chevron Corporate Aviation Services of Island Express Helicopters (IEX) in Long Beach, CA.

1.2 Objectives

The objective is to determine the effectiveness of IEX Aircraft Operations, to include Management, Operations, Safety, and Maintenance, and to determine a level of regulatory compliance. The focus is on the ability of the operator to provide onshore helicopter services in Long Beach, CA.

1.3 Briefings

In-Briefing - In briefing was conducted on 31 Oct 2019 with IEX at their Queensway Heliport.

Out-Briefing - Out briefing was conducted on 1 Nov 2019 with IEX at their facility at the Long Beach airport.

1.4 Team Composition

1.4.1 Audit Team

Scott Legocki – Aviation Advisor – Chevron Corporation
Scott is an ATP rated pilot with 17 years international corporate aircraft experience and type ratings in the Gulfstream II/III, IV, and V and Bombardier Global Express. He previously served as Captain on the G550 with Chevron Aviation Services in Oakland, CA flying domestic and international routes. He also has M.S. and B.S. degrees in Aeronautical Science from Embry Riddle Aeronautical University.

[redacted] – Chevron Corporation
Gabriel has over 34 years' experience in aviation maintenance and operations. He is a holder of FAA Airframe and Power plant certificates with an Inspection Authorization. FAA Part 107 Remote Pilot. ISO 9001 Certified Auditor. He served as the Aviation Expert for Chevron North America. He served as Director of Maintenance for the Houston Jet Operations. He served as Director of Maintenance for the Gulf of Mexico Aircraft Operations. He has performed domestic and international aviation audit reviews.

1.4.2 Guests and Chevron Representatives

NONE

1.5 Methods and Standards

The criteria used for the evaluation of IEX consisted of a number of documents including the company Operations Manuals, U.S. Federal Aviation Regulations (FARs) as well as ICAO annexes, aircraft maintenance and operational manuals, Chevron Standards, and accepted standards and safe practices normally adhered to in the industry.

The format of our audit is based on the outline of the International Oil & Gas Producers Forum Checklist for Aviation Advisors. This document represents the best practices of aviation operations engaged in support of oil exploration activities.

1.6 Report Format

The report format is as follows and is designed to provide the reader with progressive levels of detail as needed

1.0 General

- 1.1 Authorization
- 1.2 Objectives
- 1.3 Briefings
- 1.4 Team Composition
- 1.5 Methods and Standards
- 1.6 Report Format

2.0 Executive Summary

3.0 Findings and Recommendations

2 executive summary

We would first like to thank IEX for their hospitality during our visit and their receptiveness to our suggestions.

Safety Management

Island Express Helicopters (IEX) has a Safety Management Systems (SMS) and an approved manual in place with all the components listed in detail. Some of the components listed in the manual are not currently performed.

One example is their Management of Change Process (MOC). There is a MOC process, but no examples could be provided for recent personnel changes, operations to new locations, or an upcoming move to a new facility.

The Safety Manager has been in the role for about two years, but has never received formal safety training. The workforce receives a one time safety training through PRISM.

There are three Non-Conformances with Chevron Standards and four Observations found during this review. All are detailed in the report below.

Flight Operations

Island Express Helicopters (IEX) operates a fleet of helicopters out of Long Beach, CA. Their fleet consists of three Sikorsky S-76 (one S76A and two S76B) and three Airbus Helicopters AS350 (2 AS350B2 and one AS350BA) helicopters. For current Chevron projects they use the AS350s, for day VFR operations, with one pilot.

For Chevron operations out of the El Segundo Refinery, IEX will load passengers at a heliport on the refinery grounds.

Training for all the aircraft they operate is conducted in the aircraft and pilots do not attend simulator training. Once a year an outside vendor conducts training in the aircraft onsite with IEX. After training is completed, crews receive checkrides using IEX check airmen. IEX performs only annual checkrides, but there is currently no contract in place.

IEX also conducts offshore operations for another oil company typically twice a week. They are also on contract with an oil spill response company to provide a float equipped twin engine helicopter with two crewmembers. Offshore capabilities were included as part of this audit.

There were two Non-Conformances with Chevron Standards and three Observations found during this review. All of these are detailed in the report below.

Maintenance

The maintenance department of Island Express was reviewed on October 31 and November 01, 2019. The maintenance staff was very receptive during the review and provided the documentation requested.

Island Express maintenance operates under FAR Part 135 Air Taxi Certificate No. ISHA094F and performs required daily maintenance at their Long Beach Airport facility with the major inspections and maintenance being conducted by Rotorcraft Support Inc (RSI) at their maintenance facility in Van Nuys, California.

The maintenance facility at the Long Beach airport was very well maintained and fit for purpose. They are in the process of moving into a new hangar and facility at the same airport. The new facility and offices were very organized and clean. There were three mechanics employed at the time of the review and were available for interviews. Their maintenance program and procedures were of good quality with extensive oversight from RSI to track aircraft maintenance, components and work orders. There was no Non-Conformance to Chevron Standards and five Observations listed in the report.

Conclusion

Based upon this review, this operator is approved for Day VFR onshore helicopter operations using appropriately rated pilots in AS350s or Garret Dalton, David Harvey, and Ara Zobayan in a S-76. IEX's offshore operations were also reviewed as part of this audit. They are approved for day VFR offshore operations within 10 nm of the coast using a float equipped AS350 where all passengers have life vests. They can also provide day VFR offshore using an offshore equipped S-76 with only Garret Dalton, David Harvey, and Ara Zobayan serving as pilots. We recommend that the next review be conducted in 12 months. There is no contract in place with IEX and handling findings from this audit will have to be determined at a later date. The regional Aviation Expert will establish contact with IEX and perform semi-annual reviews.

3 findings & recommendations

Non-Compliance with Regulations

None

Non-Conformance with Standards

1	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.6
Reference	Chevron Standards 2.1
Criteria	The Operator shall develop and maintain a formal process that ensures analysis, assessment, and control of the safety risks and the consequences of identified hazards. The Operator shall develop and maintain the necessary processes to monitor and measure the safety performance of the organization and to validate the effectiveness of safety risk controls.
Evidence	IEX fills a flight risk assessment before every flight, but there is no proactive hazard analysis

2	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.7
Reference	Chevron Standards 2.1
Criteria	The Operator shall develop and maintain a formal process for the Management of Change (MOC)
Evidence	MOC is listed in SMS manual, but MOC process not being used.

3	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.9
Reference	Chevron Standards 2.1
Criteria	The Operator shall develop and maintain a safety training program that ensures that personnel are trained and competent to perform their SMS duties.
Evidence	The Safety manager has not received formal SMS training

4	3.8 - Line Operations - 3.8.1
Reference	Chevron Standards 4.4.3.3
Criteria	Onshore and Offshore day VFR – 2 SM
Evidence	Visibility minimums of 1nm in controlled and uncontrolled airspace for all FAR 135 flights (excluding Offshore Oil and Gas (IOGP)) are listed in the operation's manual.

5	3.8 - Line Operations - 3.8.2
Reference	Chevron Standards RW 4.3.4
Criteria	RW VFR - taxi, trip, +5%, alternate + 20, extra as req'd
Evidence	There are no fuel planning minimums listed in the Operations Manual other than a mention of when they should begin making low fuel radio calls to declare minimum and emergency fuel states.

Observations

1	4.2 - Initial/Continuation Training - 4.2.1
Area of Concern	The Director of Maintenance and the two maintenance technicians do not have factory schools on the aircraft they maintain.
Recommendation	Consider training on the aircraft maintained.

2	4.7 - QA/QC - 4.7.1
Area of Concern	The Quality Manual is integrated in the General Maintenance Manual. Island Express does not have a designated Quality Manager. They have quality support from Rotorcraft Support Incorporated.
Recommendation	Recommend identifying a Quality Manager and defining their duties in the QA/QC section of General Maintenance Manual.

3	4.7 - QA/QC - 4.7.4
Area of Concern	RII/Duplicate Inspections are in place, but at the current maintenance technician staffing levels they are unable to provide good RII/Duplicate Inspection signoff.
Recommendation	Ensure RII/Duplicate Inspections are completed at remote locations.

4	4.14 - Fueling Program - 4.14.2
Area of Concern	Internal tank inspections are not being performed. No specific gravity testing or equipment.
Recommendation	Perform internal tanks inspections and specific gravity testing.

5	4.10 - Tooling & Calibration - 4.10.3
Area of Concern	Maintenance Technicians use their personal tools for aircraft maintenance. Tool control needs improvement to reduce the potential for tool-FOD mishaps.
Recommendation	Account for all tools at the maintenance facility and consider adding a robust tool control program to reduce FOD mishaps.

6	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.3
Area of Concern	Action items are not tracked to completion.
Recommendation	Consider tracking all actions to completion.

7	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.8
Area of Concern	There was no evidence of Internal Evaluations as detailed in SMS manual 4.3 being performed.
Recommendation	Recommend performing internal evaluations as detailed in the SMS manual.

8	2.4 - Chevron Reporting - 2.4.1
Area of Concern	IEX has no Chevron aviation contact.
Recommendation	Provide IEX with an appropriate Chevron aviation contact

9	2.6 - ERP Rehearsals - 2.6.1
Area of Concern	An ERP drill was conducted in July 2019. Training items were listed, but there were no lessons learned or action items listed. A statement was made that they need to perform them more often and they will be conducting them twice per year.
Recommendation	Recommend identifying any action items and tracking them to completion.

10	3.7 - Aircrew Evaluation and Check Rides - 3.7.1
Area of Concern	IEX performs only annual checkrides. There is currently no contract in place, requiring semi-annual checkrides.
Recommendation	Consider semi-annual checkrides.

11	3.8 - Line Operations - 3.8.5
Area of Concern	The scales at Queensway Heliport are not periodically calibrated.
Recommendation	Periodically calibrate the scales to ensure accurate measurements.

12	3.8 - Line Operations - 3.8.7
Area of Concern	There is no policy in place for carrying lithium batteries or procedures dealing for lithium battery fires.
Recommendation	Consider a lithium battery policy including dealing with battery fires

human energy®

Island Express Helicopters Long Beach, CA

Chevron Aviation Safety Assurance
August 2018

Version	Date	Originator
Original	24 August 2018	Patrick Niven

contents

CONFIDENTIALITY STATEMENT

This document is confidential and intended for the sole use of Chevron Corporation or its affiliates. The information and any assessments contained within are based on the information provided by the aircraft operator and the observations made during the visit. The report relates to specific operations only and may not reflect the aircraft operator's ability to meet Chevron Corporation standards at other locations, on different operations, or at some other time in the future. Notwithstanding the contents of this Report, Chevron Corporation (or its affiliates) is not liable for any loss, damage or injury caused by or as a result of or activities of or the negligence of a third party claiming to be relying on this Report. This Report shall not be disclosed to or used by any third party without first obtaining written permission from Chevron Corporation, Aviation Services.

The intent of our report is not to approve or reject the air operator or air carrier. Our intent is that this report will be used in conjunction with other sources of information, as part of a project management team's decision-making process, regarding the operator.

1 general

1.1 Authorization

At the request of Chevron El Segundo Refinery, a scheduled audit was performed by Chevron Corporate Aviation Services of Island Express Helicopters (IEX) in Long Beach, CA.

1.2 Objectives

The objective is to determine the effectiveness of IEX, to include Management, Operations, Safety, and Maintenance, and to determine a level of regulatory compliance. The focus is on the ability of the operator to provide onshore and offshore helicopter services in California.

1.3 Briefings

In-Briefing – In-briefing was conducted on 23 August 2018 with IEX at their Long Beach, CA base.

Out-Briefing – Out-briefing was conducted on 24 August 2018 with IEX at their Van Nuys, CA Maintenance base.

1.4 Team Composition

Patrick A. Niven - Aviation Advisor - Chevron Corporation
Mr. Niven has been a professional pilot for over 30 years. A Military Aviator who holds an FAA ATP, CFI and CFII, he is also a certified Lead Auditor, Accident Investigator and has extensive SMS training. Mr. Niven has served in training, standardization and supervisory roles in Chevron Aircraft Operations in the United States and abroad.
[redacted]

Kenneth G. Huete – Aviation Advisor – Chevron Corporation
Mr. Huete has over 40 years of experience in aircraft operations. He holds an FAA Airframe and Powerplant certificate. He is also a licensed Pilot. He has served as Director of Maintenance for Chevron's Gulf of Mexico Business Unit, and as Director of Maintenance for Chevron's Southern Africa Business Unit. He has conducted Aviation Reviews of various Fixed Wing and Rotor Wing Operations in 22 different Countries across the globe.
[redacted]

1.5 Methods and Standards

The criteria used for the evaluation of IEX consisted of a number of documents. The company Operations Manuals, US Federal Aviation Regulations as well as ICAO annexes, aircraft maintenance and operational manuals, Chevron Standards, and accepted standards and safe practices normally adhered to in the industry.

The format of our audit is based on the outline of the International Oil & Gas Producers Forum Checklist for Aviation Advisors. This document represents the best practices of aviation operations engaged in support of oil exploration activities.

1.6 Report Format

The report format is as follows and is designed to provide the reader with progressive levels of detail as needed

2 executive summary

We would first like to thank IEX for their hospitality during our visit and their receptiveness to our suggestions.

Safety Management

IEX employs a Safety Management System (SMS) that contains all elements required by the Standards. Their SMS is accessed through Prism, a commercially available product that allows online access for such functions as Hazard & Incident Reporting, distribution of Safety Notices, Management of Change tracking and Key Performance Indicator tracking.

The Safety Program at IEX is currently managed by a newly appointed Safety Officer who lacks formal SMS training. Recent management changes have necessitated a restructuring of the Safety Committee, resulting in a lack of properly structured Safety Meetings, as outlined by the SMS. Historical meeting minutes were evidenced in the audit; however, no meetings have yet been conducted under the new Safety Committee membership.

A Management of Change process and formal tools to measure the effectiveness of the SMS are available through the Prism software but are not fully utilized.
An Emergency Response Plan is in place, but no exercises of the plan were evident.

Two Observations and one Non-Conformance with Standards were recorded in the area of Safety Management and are detailed in the report below.

Flight Operations

IEX is an FAA Part 135 operator, primarily focused on tour operations and shuttle activity to islands near Long Beach, CA. Their fleet consists of Airbus H-350 (AS-350) and Sikorsky S-76 helicopters, most of which are configured for offshore operations, consistent with the Standards requirements.
Pilots are trained in-house and conduct line and proficiency checks in the aircraft annually. Most of the S-76 pilots have previous experience in the aircraft prior to hiring

with IEX. Although no simulator training is conducted for the S-76 crews, instrument proficiency training is conducted in the aircraft as part of annual training.

As most passengers flown by IEX are untrained in helicopter operations, their ground services crews are well trained in passenger management and safe heliport operating procedures, as evidenced by their Hazard Reporting participation.

IEX utilizes Spidertracks satellite-based flight following to monitor flights in real time.

Two Standards Non-Conformances were recorded in Flight Operations and are detailed in the report below.

Maintenance

Island Express conducts their maintenance under an FAA approved Part 135 on-demand air taxi certificate. All helicopters operate with 9 passenger seats or less. The maintenance facility at the Long Beach Airport was reviewed along with the fueling station at the Long Beach heliport next to the Queen Mary. All heavy maintenance and QA functions are provided by the parent company, Rotorcraft Support Inc (RSI) at their maintenance facility in Van Nuys, California.

The Director of Maintenance was interviewed at the Long Beach airport facility located at Signature FBO. The facility was very well maintained and fit for purpose. IEX employs an electronic risk assessment program that is used daily by every maintenance technician. The risk assessment program is very effective and unique among aviation maintenance facilities. A Physical Review of one of the two S-76B helicopters was performed at the Queen Mary Heliport and was found to be in excellent condition. There were no regulatory Non-Compliances, no Non-Conformances to the Chevron Standards. There were 2 Observations which are noted below.

Conclusion

Based upon the above, this operator is approved for ‘ad-hoc’ use contingent on closure of audit findings within 90 days. This audit approval is based on occasional use: VFR overland, single pilot for the H-350; and VFR overland and offshore with two pilots for the S-76. Offshore is defined as dedicated flights to/from an offshore location, such as a ship, platform or island that includes takeoff and landing at these locations. Short duration, near shore overwater flight conducted by the H-350 is not precluded in this approval, provided the passengers are wearing PFDs during the overwater operations, and the aircraft is equipped with emergency flotation equipment and a life raft.

We recommend that the next review be conducted in 12 months. Aviation Safety Assurance will perform the functions of Regional Aviation Advisor for IEX and should be consulted promptly and directly, should the mission profiles change or frequency of use increase. The authors of this report are the points of contact.

3 findings & recommendations

Standards

1	2.6 - ERP Rehearsals - 2.6.1
Reference	Chevron Standards 2.4.2
Criteria	The Operator shall ensure that the ERP is rehearsed and documented at least annually, both to familiarize personnel and to reveal any deficiencies. The report of the exercise will be jointly reviewed by the Operator's responsible officer and the Chevron Aviation Advisor.
Evidence	Annual ERP training is conducted; however, ERP exercises are not conducted on an annual basis.

2	3.8 - Line Operations - 3.8.1
Reference	Chevron Standards - 4.4.3.3 VFR ceiling and visibility minimums
Criteria	Offshore Day / Overland Day - 2 SM visibility
Evidence	General Operations Manual allows 1 mile visibility in Class G airspace.

3	3.10 - Aircraft Scheduling - 3.10.6
Reference	Chevron Standards - 4.2.3.1 Definitions
Criteria	Duty time commences when the pilot reports for duty and ends when he or she is no longer on duty.
Evidence	No policy in place to ensure office time is logged as duty time for pilots with management responsibilities.

Observations

1	4.2 - Initial/Continuation Training - 4.2.1
Area of Concern	The Director of Maintenance (DOM) located at the Long Beach airport signs off on the job training (OJT) forms for the maintenance technicians at his facility. The DOM does not have a completed OJT form from the RSI factory trained technician. All major maintenance functions other than routine inspections are conducted by properly trained technicians located at the RSI facility in Van Nuys.
Recommendation	We recommend that the DOM receive job appropriate OJT training for maintenance items which are normally be conducted at the Long Beach maintenance facility.

2	4.4 - MEL/CDL - 4.4.4
Area of Concern	There was no formal process observed that tracks repetitive unserviceable items.
Recommendation	We recommend that RSI employ an appropriate system to track chronic and repetitive unserviceable items.

3	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.3
Area of Concern	Safety Committee is not fully functional at present but is being rebuilt under the direction of the new Director of Operations and several new employees.
Recommendation	Appoint the new members to the Safety Committee and conduct and record regular Safety Committee meetings.

4	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.9
Area of Concern	Safety Officer has no aviation-specific SMS training.
Recommendation	Schedule SMS training for the Safety Officer as a high priority item.

Positives

1	4.4 – Fatigue Management - 4.4.8
Area of Concern	In addition to a fatigue management program, Island uses an effective electronic risk assessment program that is used daily by each maintenance technician.
Positive Aspect	Numerous samples of completed risk assessment forms were reviewed and found to be highly effective to mitigate many of the daily hazards associated with conducting aircraft maintenance.

Island Express Helicopters

Long Beach, California, USA

Lead Auditor – Rusty Politz
Aviation Advisor

Auditor – Scott Legocki
Aviation Advisor

August, 2015

CONFIDENTIALITY STATEMENT

This document is confidential and intended for the sole use of Chevron Corporation or its affiliates. The information and any assessments contained within are based on the information provided by the aircraft operator and the observations made during the visit. The report relates to specific operations only and may not reflect the aircraft operator's ability to meet Chevron Corporation standards at other locations, on different operations, or at some other time in the future. Notwithstanding the contents of this Report, Chevron Corporation (or its affiliates) is not liable for any loss, damage or injury caused by or as a result of or activities of or the negligence of a third party claiming to be relying on this Report. This Report shall not be disclosed to or used by any third party without first obtaining written permission from Chevron Corporation, Aviation Services.

The intent of our report is not to approve or reject the air operator or air carrier. Our intent is that this report will be used in conjunction with other sources of information, as part of a project management team's decision-making process, regarding the operator.

TABLE OF CONTENTS

1.0 GENERAL

1.1 AUTHORIZATION

A scheduled audit was performed by Chevron Corporate Aviation Services of Island Express in Long Beach, California.

1.2 OBJECTIVES

The objective is to determine the effectiveness of Island Express Helicopter Operations, to include Management, Operations, Safety, and Maintenance, and to determine a level of regulatory compliance. The focus is on the ability of the operator to provide helicopter services to Chevron Shipping and the El Segundo Refinery in Southern California to include offshore area operations as needed.

1.3 BRIEFINGS

In-Briefing - In briefing was conducted on August 3, 2015 with Island Express at their heliport in Long Beach, California

Out-Briefing - Out briefing was conducted on August 3, 2015 with Island Express at their heliport in Long Beach, California.

1.4 TEAM COMPOSITION

Rusty Politz – Aviation Advisor – Chevron Corporation
Mr. Politz has over 36 years' experience in aircraft operations and maintenance. He holds an FAA Airframe and Powerplant certificate with an Inspection Authorization and is also a licensed fixed wing Pilot. He has served as Chief Inspector and Quality Control Supervisor for Chevron's Gulf of Mexico Business Unit Aircraft Operations. In addition he has performed reviews of aircraft operations in the continental United States, Canada and overseas during the last several years.

[redacted]

Scott Legocki – Captain G550 - is a ATP rated pilot with 15 years international corporate aircraft experience and type ratings in the Gulfstream II/III, IV, and V and Bombardier Global Express. He has an M.S. and B.S. degrees in Aeronautical Science from Embry Riddle Aeronautical University and is currently a Captain with Chevron Aviation Services based in Oakland, CA USA.

[redacted]

1.5 METHODS and STANDARDS

The criteria used for the evaluation of Island Express Helicopters consisted of a number of documents. The company Operations Manuals, US Federal Aviation Regulations as well as ICAO annexes, aircraft maintenance and operational manuals, Chevron Standards, and accepted standards and safe practices normally adhered to in the industry.

The format of our audit is based on the outline of the International Oil & Gas Producers Forum Checklist for Aviation Advisors. This document represents the best practices of aviation operations engaged in support of oil exploration activities.

1.6 REPORT FORMAT

The report format is as follows and is designed to provide the reader with progressive levels of detail as needed

1.0 General

- 1.1 Authorization
- 1.2 Objectives
- 1.3 Briefings
- 1.4 Team Composition
- 1.5 Methods and Standards
- 1.6 Report Format

2.0 Executive Summary

3.0 Findings and Recommendations

2.0 EXECUTIVE SUMMARY

We would first like to thank Island Express Helicopters for their hospitality during our visit and their receptiveness to our suggestions.

Safety Management

Island Express has a Safety Management System (SMS) in place along with the online tools. With the loss of one of their mechanics, the acting safety manager has been primarily tied up with maintaining aircraft at the expense of performing SMS duties. There have been no entries in the online tool since late 2014 or evidence of recent SMS activity. Although Island Express has an SMS and the tools in place, it is not considered to be effective. There were no regulatory non-compliances found, but the non-conformances with Chevron standards are listed in the Findings Section.

Flight Operations

Island Express operates a Sikorsky S-76A and Airbus AS350 helicopters under FAR Part 135 on an as required basis. They conduct all their training in the aircraft and their Chief Pilot is a designated Check Airman with the FAA. Their operations were found to have no regulatory non-compliances, but there was one non-conformance to Chevron Standards and two observations made during this audit. There was also one positive area found. These are detailed in the Findings Section.

Maintenance

Island Express maintenance operates under FAR Part 135 Air Taxi Certificate No. ISHA094F and performs required daily maintenance at their Long Beach Airport facility with the major inspections and maintenance being conducted by Rotorcraft Support Inc (RSI) at their maintenance facility in Van Nuys California.
The maintenance facility at the Long Beach airport was very well maintained and fit for purpose. There were two mechanics employed at the facility at the time of the review and were available for interviews. Their maintenance program and procedures were of good quality with extensive oversight from RSI to track aircraft maintenance, components and work orders. A Physical Review of their S-76 was performed at the Queen Mary Heliport and was found to be in good condition. The maintenance program at Island Express was found to have no regulatory non-compliances, no non-conformances to the Chevron Standards. There were several observations noted and are discussed in the finding section of this report with one being a repeat finding.

Conclusion

Based upon the above, this operator is approved for use. We recommend that the next review be conducted in 12 months with follow-up by ASA group in 6 months.

3.0 FINDINGS & RECOMMENDATIONS

Audit Date	03 Aug 15		Response Due	03 Nov 15

Non-compliances are regulatory and must be address by the Response Date

Non-conformances are differences from Chevron Standards and must be addressed before contract award for new contracts and by Response Date for existing contracts

Observations are recommendations made that do not require action

Regulatory Non-Compliances

None

Non-Conformance with Standards

1	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.2
Reference	Chevron Standards 2.1
Criteria	The Operator shall establish a Safety Review Board (SRB), or equivalent, chaired by the Accountable Executive. Senior managers, including line managers responsible for functional areas, shall be appointed to the SRB. Appropriate strategic functions shall be assigned to the SRB.
Evidence	No logged meetings.

2	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.4
Reference	Chevron Standards 2.1
Criteria	The Operator shall develop and maintain a Safety Management Systems Manual (SMSM) to communicate the organization's approach to safety throughout the organization.
Evidence	SMS in place, but isn't in full use.

3	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.6
Reference	Chevron Standards 2.1
Criteria	The Operator shall develop and maintain a formal process that ensures analysis, assessment, and control of the safety risks and the consequences of identified hazards. The Operator shall develop and maintain the necessary processes to monitor and measure the safety performance of the organization and to validate the effectiveness of safety risk controls.
Evidence	No entries or assessment of Hazards in PRISM.

4	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.7
Reference	Chevron Standards 2.1
Criteria	The Operator shall develop and maintain a formal process for the Management of Change
Evidence	No MOC Process.

5	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.8
Reference	Chevron Standards 2.1
Criteria	The Operator shall develop and maintain a formal process to identify causes of substandard performance of the SMS, determine the implications on its operations, and rectify situations involving substandard performance in order to ensure continuous improvement of the SMS.
Evidence	No evidence of continuous improvement program in use.

6	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.9
Reference	Chevron Standards 2.1
Criteria	The Operator shall develop and maintain a safety training program that ensures that personnel are trained and competent to perform their SMS duties.
Evidence	No Safety Training Program in place.

7	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.10
Reference	Chevron Standards 2.1
Criteria	The Operator shall develop and maintain formal means for safety communication.
Evidence	No evidence of identified hazards and/or solutions are communicated back to the workforce.

8	2.6 - ERP Rehearsals - 2.6.1
Reference	Chevron Standards 2.4.2
Criteria	The Operator shall ensure that the ERP is rehearsed and documented at least annually, both to familiarize personnel and to reveal any deficiencies. The report of the exercise will be jointly reviewed by the Operator's responsible officer and the Chevron Aviation Advisor.
Evidence	No evidence of ERP drills.

9	2.6 - ERP Rehearsals - 2.6.1
Reference	Chevron Standards RW 4.2.1
Criteria	For new contracts, qualified pilots shall fly no more than two types of multi-engine aircraft.
Evidence	Two Pilots operate three aircraft types, though only two helicopter types are operated on Chevron contracts

10	
Reference	Chevron Standards RW 4.3.2
Criteria	Under no circumstances shall the controls of a helicopter be left unattended while either engines are running or rotors are turning.
Evidence	General Operations Manual (GOM) R8a states crew swaps may occur with rotors turning if no passengers are aboard.

11	3.5 - Aircrew Flight Training - 3.5.3
Reference	Chevron Standards 3.2.6
Criteria	Where available for the type, the use of approved Synthetic Training Devices for aircrew on sole-use long term contracts (12 months or greater) or repetitive short term contracts (2 or more per year) shall be at a frequency of not more than 18 months (may be adjusted to 24 months through the variance process).
Evidence	No simulator training program, all training performed in the aircraft.

Observations

1	4.4 - MEL/CDL - 4.4.1
Area of Concern	4.4.1 MEL not being used at this time. The process is in the OpSpecs but not being used due to lack of FAA oversight issues.
Recommendation	The audit team recommends operating MEL in accordance with FAR Part 135.179. Consult with local FAA controlling district office and resolve oversight issues.

2	4.6 - Maintenance Program - 4.6.2
Area of Concern	4.6.2 Identification of RII Maintenance tasks are not fully defined and were observed as being in progress.
Recommendation	The audit team recommends continue to identify RII Task and revise manual and check sheets.

3	4.7 - QA/QC - 4.7.1
Area of Concern	4.7.1 Quality manual is integrated in the GOM no Quality manager with no Quality manager defined.
Recommendation	The audit team recommends identifying a Quality Manager and duties in the QA/QC section of GOM.

4	4.7 - QA/QC - 4.7.2
Area of Concern	4.7.2 Internal evaluation program for 9 or less not being adequately maintained.
Recommendation	The audit team recommends maintaining Internal Evaluation program as written in the GOM.

5	4.7 - QA/QC - 4.7.4
Area of Concern	4.7.4 RII program in place but at current mechanic levels unable to provide a true RII signoff.
Recommendation	The audit team recommends increasing the mechanic levels to provide a true RII signoff.

6	4.10 - Tooling & Calibration - 4.10.3
Area of Concern	No Positive tool control program in place.
Recommendation	The audit team recommends following HSAC-RP-2009-01 available at www.hsac.org.

7	4.11 - Spares & Materials - 4.11.4
Area of Concern	4.11.4 Stock room is locked and secured but not climate controlled.
Recommendation	Provide Air-conditioning or Dehumidifier for stock room.

8	4.11 - Spares & Materials - 4.11.6
Area of Concern	4.11.6 Shelf life program in place but not effective.
Recommendation	Ensure that shelf life program is being managed as it is written in the GOM.

9	4.14 - Fueling Program - 4.14.1
Area of Concern	4.14.1 No PPE was observed in use during Hot Refueling procedure.
Recommendation	Recommend PPE for refueling (aviation style goggles and rubber gloves).

10	2.3 - Accident/Incident Reporting - 2.3.3
Area of Concern	No evidence of Hazards or Incidents being entered in PRISM or being followed up to closure.
Recommendation	The audit team recommends ensuring that hazards are identified and controls to mitigate these risks are put in place. Evaluate the effectiveness of these periodically and ensure documented process is used.

11	3.9 - Flight Manuals/Docs/Data Control - 3.9.1
Area of Concern	Revision 66 is the most current, but three different copies had three different revisions.
Recommendation	The audit team recommends that if printed version of manuals are to be used, make sure all copies are up to date. If electronic versions are to be used, do not bother printing copies of the manual.

Positive

1	3.7 - Aircrew Evaluation and Check Rides - 3.7.1
Positive Aspect	Unannounced, random check rides are performed on a frequent space available basis, so each pilot has check rides conducted more frequently than required.

Island Express Helicopters

Long Beach, California, USA

Kenneth Huete
Aviation Advisor

Patrick Niven
Aviation Advisor

July 2013

CONFIDENTIALITY STATEMENT

This document is confidential and intended for the sole use of Chevron Corporation or its affiliates. The information and any assessments contained within are based on the information provided by the aircraft operator and the observations made during the visit. The report relates to specific operations only and may not reflect the aircraft operator's ability to meet Chevron Corporation standards at other locations, on different operations, or at some other time in the future. Notwithstanding the contents of this Report, Chevron Corporation (or its affiliates) is not liable for any loss, damage or injury caused by or as a result of or activities of or the negligence of a third party claiming to be relying on this Report. This Report shall not be disclosed to or used by any third party without first obtaining written permission from Chevron Corporation, Aviation Services.

The intent of our report is not to approve or reject the air operator or air carrier. Our intent is that this report will be used in conjunction with other sources of information, as part of a project management team's decision-making process, regarding the operator.

TABLE OF CONTENTS

1.0 GENERAL

1.1 AUTHORIZATION

Chevron Shipping and Chevron El Segundo Refinery have requested Chevron Corporation, Aviation Services to provide a review of Island Express Helicopters and Rotorcraft Support Inc. (RSI) in Long Beach and Van Nuys California.

1.2 OBJECTIVES

The focus is to determine the effectiveness of Island Express Helicopters operations along with their maintenance support organization, Rotorcraft Support Inc. (RSI) to include Management, Operations, Safety, and Maintenance, and to determine a level of regulatory compliance. The focus is on the ability of the operator to provide Helicopter services to both Chevron Shipping and El Segundo Refinery in the Southern California area to include the offshore area.

1.3 BRIEFINGS

In-Briefing - In briefing was conducted on 23 July with Island Helicopters at their heliport in Long Beach, California.

Out-Briefing - Out briefing was conducted on 24 July with Rotorcraft Support Inc. (RSI) at their office in Van Nuys, California.

1.4 TEAM COMPOSITION

Kenneth G. Huete – Aviation Advisor – Chevron Corporation
Mr. Huete has over 37 years experience in aircraft operations. He holds an FAA Airframe and Powerplant certificate. He is also a licensed Pilot. He has served as Director of Maintenance for Chevron's Gulf of Mexico Business Unit, and also as Director of Maintenance for Chevron's Southern Africa Business Unit. He has conducted Aviation Reviews of various Fixed Wing and Rotor Wing Operations in 15 different Countries across the globe.

[redacted]

Patrick A Niven- Aviation Advisor- Chevron Corporation
Mr. Niven has been a licensed pilot since 1983. A Military Aviator and FAA ATP, CFI and CFII, he is also trained in SMS and Accident Investigation. In addition to extensive training and standardization experience within Chevron, Mr. Niven has served in

Supervisory roles in Aircraft Operations both domestic and abroad. [redacted]

1.5 METHODS and STANDARDS

The criteria used for the evaluation of Island Express Helicopters consisted of a number of documents. The company Operations Manuals, US FAA regulations as well as ICAO annexes, aircraft maintenance and operational manuals, Chevron Standards, and accepted standards and safe practices normally adhered to in the industry.

The format of our audit is based on the outline of the Oil & Gas Producers Forum Checklist for Aviation Advisors. This document represents the best practices of aviation operations engaged in support of oil exploration activities.

1.6 REPORT FORMAT

The report format is as follows and is designed to provide the reader with progressive levels of detail as needed

1.0 General

- 1.1 Authorization
- 1.2 Objectives
- 1.3 Briefings
- 1.4 Team Composition
- 1.5 Methods and Standards
- 1.6 Report Format

2.0 Executive Summary

3.0 Findings and Recommendations

2.0 EXECUTIVE SUMMARY

We would first like to thank Island Express Helicopters and Rotorcraft Support Inc. for their hospitality during our visit and their receptiveness to our suggestions.

Safety Management

Island Express Helicopters has a Safety Management System in place, administered through Prism. The system is very new, and none of the key personnel are trained in SMS duties, although training is scheduled.

Flight Operations

Island Express Helicopters is an FAA Part 135 Operator based in Long Beach, CA. Their fleet of aircraft includes the AS-350. Additionally, they can operate an S-76A and a Bell 206B3 under a partnership arrangement with their sister Company. Island has some offshore Oil and Gas support experience.
An audit was conducted at their main facility in Long Beach, CA. All of the principle company personnel were made available to us and were very cooperative, professional and customer focused.
There were no findings of Non-Compliance.
Three findings of Non-Conformance with Chevron Standards were recorded, as well as several Observations and one Positive finding, all detailed in the report below.

Maintenance

A review of Island Express Helicopters was conducted on July 23rd, 2013. Island utilizes their own maintenance personnel to perform the majority of their day to day maintenance at Long Beach Airport. The fuel system owned and maintained by Island located at the Queen Mary helipad was also reviewed. Since Island Express Helicopters is now owned by Rotorcraft Support Inc., it was determined that due diligence would require a review of RSI since they also provide additional maintenance support for the helicopters operated by Island Express.

Island Express operates their maintenance primarily under their FAA Part 135 Air Taxi Certificate. They employ 3 Airframe and Powerplant Technicians to conduct their routine scheduled and un-scheduled maintenance. Their maintenance program and procedures were determined to be of good quality. The helicopters were well equipped and maintained in accordance with the current applicable maintenance program and procedures.

Rotorcraft Support Inc. purchased Island Express approximately 1 ½ years ago. The owner of RSI, along with the Chief Inspector, were interviewed at their Maintenance Facility in Van Nuys, California. RSI has extensive capabilities in almost all phases of helicopter maintenance and repair. RSI is an authorized Bell Helicopter Repair Center. They also are approved by the FAA to conduct maintenance on many different types of helicopters and equipment. The facility, maintenance processes and procedures were found to be of good quality.

There were no findings of non-compliance with FAA Regulations and there were 3 findings of non-conformance with Chevron Aviation Standards.

Conclusion

Based upon the above, this operator is approved for use. We recommend that the next review be conducted in 12 months.

3.0 FINDINGS & RECOMMENDATIONS

Audit Date	24 July 2013		Response Due	18 Nov 2013

Non-compliances are regulatory and must be address by the Response Date

Non-conformances are differences from Chevron Standards and must be addressed before contract award for new contracts and by Response Date for existing contracts

Observations are recommendations made that do not require action

Regulatory Non-Compliances

None

Non-Conformance with Standards

1	4.1 - Management System - 4.1.4
Reference	Chevron Standards 5.1.2
Criteria	The Operator shall have a process for the delegation of duties within the management system for maintenance operations that ensures managerial continuity is maintained; The Operator shall ensure an assignment of authority and responsibility….for liaison with regulatory authorities OEM's, etc.
Evidence	The Island Express Part 135 Maintenance Manual does not have a Delegation of Authority for the Director of Maintenance.

2	4.5 - Auditor Training Requirements - 4.5.1
Reference	Chevron Standards 5.5.5
Criteria	The Operator shall ensure each maintenance organization that performs maintenance for the Operator has a training and qualification program for auditors used in the QA Program.
Evidence	There was no Auditor Training Program found in the Company Maintenance Manual.

3	4.23 - Fueling Program - 4.23.2
Reference	Chevron Standards 8.1
Criteria	The Operator shall document the procedures necessary for fuel quality control.
Evidence	There is a procedure manual to maintain the fuel system at the Long Beach Heliport located adjacent to the Queen Mary. There is no documented procedure to verify the proper reading of the Differential Pressure Indicator.

	Additionally, there is no documented internal cleaning of the bulk storage tank.

4	2.1 - Elements of SMS (>1 Year) 2.1 - 2.1.9
Reference	Chevron Standards 2.1
Criteria	The Operator shall develop and maintain a safety training program that ensures that personnel are trained and competent to perform their SMS duties.
Evidence	2.1.9: SMS provided by Prism is very new and no key personnel are yet trained in SMS duties.

5	2.6 - ERP Rehearsals - 2.6.1
Reference	Chevron Standards 2.4.2
Criteria	The Operator shall ensure that the ERP is rehearsed and documented at least annually, both to familiarize personnel and to reveal any deficiencies. The report of the exercise will be jointly reviewed by the Operator's responsible officer and the Chevron Aviation Advisor.
Evidence	No evidence of ERP drills.

6	3.8 - Aircraft Scheduling - 3.8.1
Reference	Chevron Standards FW 4.1.3 Chevron Standards RW 4.2.3.1
Criteria	FW - Single Pilot - 8 hrs/day, 35 hrs/7-day, 100 hrs/28-day, 1000 hrs/yr. Dual Pilot - 10 hrs/day, 50 hrs/7-day, 120 hrs/28-day, 1200 hrs/yr
Evidence	3.8.1: Published calendar year flight time maximum exceeds CVX max for rolling 365 day period.

Observations

1	4.6 - Maintenance Control - 4.6.2
Area of Concern	An Excel spreadsheet is used to track all Aircraft maintenance and components.
Recommendation	We recommend auditing the entire program at regular intervals to ensure that all inspection and component times are accurate.

2	4.20 - Tooling & Tool Calibration - 4.20.3

Area of Concern	There was no tool control program in place.
Recommendation	A recommended practice (HSAC-RP-2009-01) is available at www.hsac.org

3	3.2 - Aircrew Flight Training - 3.2.3
Area of Concern	3.2.3: No simulator training program.
Recommendation	Consider a simulator training program that includes instrument proficiency training.

4	3.8 - Aircraft Scheduling - 3.8.7
Area of Concern	3.8.7: No policy for management pilots to include office time as duty time.
Recommendation	Implement a policy requiring management pilots to include office time in that day's FDP when scheduled to fly.

5	3.4 - Line Operations - 3.4.1
Area of Concern	Published minimums below CVX Standards.
Recommendation	Create a 'Chevron Standards' document with CVX weather minimums for pilots to review prior to flying for Chevron.

6	3.5 - Aircrew Evaluation and Check Rides - 3.5.1
Area of Concern	Checkrides performed annually.
Recommendation	Consider bi-annual checkrides, particularly if no simulator program is in place.

Positives

1	1.4 - Drug & Alcohol Program - 1.4.4
Area of Concern	1.4.4: Just culture environment includes an EAP for self disclosing employees.
Positive Aspect	Rare for a small operator to include this resource, Island should be commended for taking this step to enhance Safety and retain quality employees.

Island Express Helicopters

Long Beach, California

Clyde Christensen
Aviation Advisor

Rusty Politz
Aviation Advisor

June, 2011

CONFIDENTIALITY STATEMENT

This document is confidential and intended for the sole use of Chevron Corporation or its affiliates. The information and any assessments contained within are based on the information provided by the aircraft operator and the observations made during the visit. The report relates to specific operations only and may not reflect the aircraft operator's ability to meet Chevron Corporation standards at other locations, on different operations, or at some other time in the future. Notwithstanding the contents of this Report, Chevron Corporation (or its affiliates) is not liable for any loss, damage or injury caused by or as a result of or activities of or the negligence of a third party claiming to be relying on this Report. This Report shall not be disclosed to or used by any third party without first obtaining written permission from Chevron Corporation, Aviation Services.

The intent of our report is not to approve or reject the air operator or air carrier. Our intent is that this report will be used in conjunction with other sources of information, as part of a project management team's decision-making process, regarding the operator.

TABLE OF CONTENTS

1.0 GENERAL

1.1 AUTHORIZATION

Chevron Shipping and El Segundo Refinery has authorized Aviation Safety Assurance to conduct a review of Island Express Helicopters in Long Beach, California.

1.2 OBJECTIVES

The focus is to determine the effectiveness of Island Express Helicopters operations, to include Management, Operations, Safety, and Maintenance, and to determine a level of regulatory compliance. The focus is on the ability of the operator to provide helicopter support services to Chevron Shipping and El Segundo Refinery in California.

1.3 BRIEFINGS

In-Briefing - In briefing was conducted on 17 June 2011 with Island Express Helicopters at their heliport in Long Beach, CA.

Out-Briefing - Out briefing was conducted on 17 June 2011 with Island Express Helicopters at their heliport in Long Beach, CA.

1.4 TEAM COMPOSITION

Clyde C. Christensen – Aviation Advisor – Chevron Corporation
Mr. Christensen has over 36 years experience in aircraft operations. He is rated in both helicopter and fixed wing aircraft. He holds an Airline Transport Pilot and Flight Instructor certificate. He has served as Training Coordinator and Check Airman for Chevron's Gulf of Mexico Business Unit, and as an FAA Designated Pilot Examiner and Pilot Proficiency Examiner.

[redacted]

R.P. Politz - Aviation Advisor, Chevron Corporation
Mr. Politz has over 30 years experience in aviation maintenance and inspection of helicopters. He is the holder of FAA Airframe and Powerplant certificates with an Inspection Authorization and is also a licensed Pilot. He has performed internal and external audits for Part 135 Air Carrier Operation and Part 145 Repair Stations.

[redacted]

1.5 METHODS and STANDARDS

The criteria used for the evaluation of Island Express Helicopters consisted of a number of documents. The company Operations Manuals, Federal Aviation Regulations as well as ICAO annexes, aircraft maintenance and operational manuals, Chevron aviation standards, and accepted standards and safe practices normally adhered to in the industry.

The format of our audit is based on the outline of the Oil & Gas Producers Forum Checklist for Aviation Advisors. This document represents the best practices of aviation operations engaged in support of oil exploration activities.

1.6 REPORT FORMAT

The report format is as follows and is designed to provide the reader with progressive levels of detail as needed

1.0 General

- 1.1 Authorization
- 1.2 Objectives
- 1.3 Briefings
- 1.4 Team Composition
- 1.5 Methods and Standards
- 1.6 Report Format

2.0 Executive Summary

3.0 Findings and Recommendations

4.0 Audit Worksheets

5.0 Physical Review

2.0 EXECUTIVE SUMMARY

We would first like to thank Island Express Helicopters for their hospitality during our visit and their receptiveness to our suggestions.

Background

Island Express Helicopters operates from an exclusive use heliport near the Queen Mary in Long Beach, CA. They have been operating tours, charters and exclusive Catalina Island trips for 25 years. Three six-passenger AS 350 single-engine helicopters are use for these flights. Their maintenance facility is located on the Long Beach Airport. The El Segundo Refinery has utilized the services of Island Express Helicopters in the past for aerial surveillance.

Safety and Operations

The safety and operations review of Island Express Helicopters was conducted in one day at the heliport in Long Beach, CA. Their management and personnel were professional and open. There were no non-compliance findings.

Island Express Helicopters has subscribed to the Baldwin Aviation Safety and Compliance internet based service to manage the Safety Management System (SMS). Their online Baldwin site includes the appropriate SMS information, forms, completed documents and reports. The Safety Manager will use the online site to manage many of the elements of the SMS, to include safety reports, internal audits, management of change, and risk assessments. Each employee will have access to the site for information reference, and completion of the safety reports and daily risk assessments.

The Island Express Helicopters' minimum pilot qualification & experience requirements, weather minimums, and fuel planning requirements do not comply entirely with the Chevron aviation standards. This is typical when there is not a contract in place. These differences are documented in the report as non-conformances to ensure awareness. A document titled "Requirements for Chevron Operations" was added to the appendix of this report. It contains the applicable Chevron requirements for these items, and was added to inform Island Express Helicopters of the requirements. An exception to these requirements can be request from Aviation Services.

We were informed just prior to completing this report that Island Express Helicopters has new ownership. According to John Moore, he will remain the Director of Operations, and the AOC, operating approval, staff and operation will remain the same. It was mentioned the new owners had capital to invest if Chevron was looking to put a helicopter on contract.

Maintenance

Island Express Helicopters maintains a maintenance facility with 3 A&P mechanics, one with an Inspection Authorization, at the Long Beach Airport in support of 3 turbine powered helicopters that are based at the Queen Mary helipad in Long Beach. At the time of this audit the Director of Maintenance was on vacation which had been scheduled before the audit dates were final and was not available to take part in the interview process. The Mechanic on duty at the time of the hangar visit was made available for the interview but was unable to produce some of the documents that were requested during the onsite observations. Island Express operates with a FAR Part 135 Certificate (#ISHA094) maintaining a current GOM in its 58th revision. The manual observed during the audit process was manual # 4.

Maintenance control and planning is accomplished in house and conducted once weekly with AD's and Service Bulletins researched through Avantext online service. Technical manuals are being controlled through the Baldwin system and revised on a regular interval. One concern with the revision process is that the GOM states that a Document of Custody form will accompany the revision with the receipt portion filled out and returned to the Director of Operations to be filed at the Base of Operations. This part of the process is not being done at this time which is contrary to its manual.

Island Express at the time of this audit was in the process of writing a Training manual to include a written training program outlining RII and Human Factors requirements. The operator had an up to date Quality Control manual with the appropriate audit checklist and evidence of their completion. Island Express is using the Baldwin system to manage their safety and quality program.

The facilities at Island express were adequate providing a comfortable working environment for the technicians. The spare parts area was located in the hangar overhead loft which was exposed to the areas climatic changes and humidity. This arrangement is less than adequate and does not provide the proper storage for aircraft parts. On site observation revealed that some packaging had already started to deteriorate due to the conditions. A random check of parts on the shelf revealed a transponder that is no longer applicable to the existing aircraft had no serviceable paper work and was removed from the area immediately. A parts receiving inspection process is in place and seems to be effective. The shelf life program could use some attention. During a walk around the hangar floor it was observed that a bench grinder was not bolted down to the work bench. This could have the potential for a serious injury. The fueling program is very good with a procedures and training manual in place with annual training of the fuel systems and procedures with grounding points visually checked daily and tested monthly.

A physical review was performed on aircraft N3604T at the heliport in Long Beach and the discrepancies are listed in the observation section of this report.

Conclusion

Based upon the above, this operator is **approved** for use in accordance with the applicable Chevron business unit's contracting process and procedures. We recommend that the next review by Aviation Safety Assurance be conducted in **24** months.

3.0 FINDINGS & RECOMMENDATIONS

Audit Date	17 Jun 2011		Response Due	31 Oct 2011
Non-compliances are regulatory and must be address by the Response date Non-conformances are differences from Chevron Standards and must be addressed before contract award Observations are recommendations made that do not require action				

Regulatory Non-Compliance

NONE

Non-Conformance with Standards

1.	Pilot Qualification and Experience	Checklist Section 3.2.1
Area of Concern: The documented minimum pilot qualification and experience requirements are less than those in the Chevron aviation standards. A review of the current Island Express pilot experience revealed only one pilot did not meet the Chevron requirements.		
Recommendation: Inform Island Express Helicopters of the minimum pilot qualification and experience requirements to operate for Chevron. *Reference: Chevron Aviation Standards Appendix 2*		

2.	Weather Minimums	Checklist Section 3.3.2
Area of Concern: The documented weather minimums for operations under visual flight rules are a ceiling of 300 feet and 1 mile visibility. This weather minimum is less than the Chevron aviation standard, which specifies a minimum ceiling of 500 feet and 2 miles visibility during the day, and a ceiling of 1000 feet and 3 miles visibility during night.		
Recommendation: Inform Island Express Helicopters of the weather minimum requirements to operate for Chevron under visual flight rules. *Reference: Chevron Aviation Standards 5.3.3*		

3.	Fuel Planning	Checklist Section 3.3.5
Area of Concern: A fuel reserve of 20 minutes is planned for flights operated under visual flight rules. There is not a requirement to plan any contingency fuel. The Chevron aviation standards specify that contingency fuel equal to 5 % of the trip fuel be planned for flights operated under visual flight rules.		
Recommendation: Inform Island Express Helicopters of the fuel planning requirements to operate for Chevron under visual flight rules. *Reference: Chevron Aviation Standards 7.3*		

Observations

1.	Operating Approval	Checklist Section 1.3.2
Observation: Aircraft N301EX has been sold but is still listed on the Operations Specifications.		
Recommendation: Initiate the process to remove aircraft N301EX from the Operations Specifications.		

2.	Operations Manual	Checklist Section 3.4.1
Observation: There was an FAA approval letter of revision 56 to the General Operations Manual (GOM) available. The current GOM revision is 58 and there was not any FAA approval, such as a letter or stamped list of effective pages available.		
Recommendation: Obtain the appropriate approval verification of revision 58 to the General Operations Manual from the assigned FAA POI.		

3.	Manual Control	Checklist Section 4.3.3
Observation: Operator is not using documented manual receipt process outlined in GMM under Revision Control.		
Recommendation: Follow the written procedures outlined in GMM concerning revision control and the use of the Document of Custody Form.		

4.	Training	Checklist Section 4.4.4
Observation: No documented auditor training / qualification program.		
Recommendation: Include auditor training in new training manual currently being written.		

5.	Housing	Checklist Section 4.6.3
Observation: New aircraft parts are stored upstairs in an unsecured open loft style area which is exposed to climatic changes and humidity.		
Recommendation: Store new aircraft parts in secured climate controlled environment to reduce the opportunity for theft and contamination.		

6.	Shelf life program	Checklist Section 4.6.4
Observation: Found old no longer used Transponder on shelf with 2007 certification date. Unit was removed immediately from shelf for evaluation.		
Recommendation: Monitor consumables and shelf life items on regularly scheduled basis.		

7.	Emergency Response program	Checklist Section 4.10.3
Observation: Emergency response numbers are not posted.		
Recommendation: Post emergency response numbers on bulletin boards and near all phones in the facility.		

8.	Power Equipment	Checklist Section 4.10.6
Observation: Bench grinder on workbench in hangar was not secured to the bench in any way.		
Recommendation: Secure grinder to workbench using bolts or other conventional means of security.		

9.	Aircraft Physical review	Checklist Section 5.0
Observation: Aircraft N3604T: • Engine oil leak at output shaft • Corrosion on antenna mounted on left side of aircraft		
Recommendation: Repair discrepancies as required		

4.0 AUDIT WORKSHEETS

1.0 Organization and Management

1.1 COMPANY INFORMATION

NAME:	**ISLAND EXPRESS HELICOPTERS, INC.**	**TELEPHONE:**	[redacted]
[redacted]			
OWNERSHIP:	**JOHN MOORE / KEN PUTNAM**		

1.2 MANAGEMENT

NAME	TITLE	YEARS WITH COMPANY
JOHN MOORE	**DIRECTOR OF OPERATIONS**	**29**
PATTI MOORE	**VICE-PRESIDENT/HR/ACCOUNTING**	**23**
RYAN GROEGER	**DIRECTOR OF MAINTENANCE**	**6**
GARY MICHAELSON	**CHIEF PILOT**	**9**
BERNARD HOENE	**SAFETY MANAGER**	

1.2.1	Obtain Copy of Organization Chart	☒

1.3 Approval Information

1.3.1	Regulatory Authority Followed:	FAA

1.3.2	What is the Approval Document that authorizes the requested work
Operator Response	**None**

Previous Audit Comments	**On-Site Review Items**	**Requirement**
None **Document Review Notes**	Obtain copy of AOC and Ops Spec. Assure work is within scope of approval and limitations are followed	**ICAO** ICAO Annex 6 4.2.1.1 4.2.1.2 **Contract** Body 2.5 (B) 1
On-site Observations Operating Certificate is ISHA094F reissued 26 Jan 1988 for an address change. There is no expiration date. Approved to conduct On-Demand VFR day/night operations in the AS350BA and AS350D helicopters. The approved area of operations is the 48 contiguous United States and the District of Colombia.		

Aircraft N301EX has been sold but is still listed on the operations specifications.	Observation

1.3.3	Identify any Quality Assurance accreditations	
Operator Response	**None**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** List any accreditations and list accreditation organization and period of validity	**Requirement** **None**
On-site Observations None		Conforming

1.4.1	What are the insurance liability limits maintained for the operation and aircraft?	
Operator Response	**$6,000,000.00**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Provide copy of cover letter, assure liability limits are sufficient – US$25MM CSL	**Requirement** Body Section 12.2 (E)
On-site Observations The insurance policy has a CSL of 6MM.		More Information Needed

1.4.2	What is the expiration date of the insurance policies?	
Operator Response	**June 2012**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items**	**Requirement** Body Section 12.2 (E)
On-site Observations The effective date of the insurance policy is 31 May 2011.		Conforming

1.5.1	Describe the company Drug & Alcohol policy and program.	
Operator Response	**In a consortium since 1987**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Assure policy is in place and effective as well as program to identify abuse and correct	**Requirement** **Annex 1 1.2.7.1** **Contract** Exhibit C
On-site Observations Island Express has an FAA approved anti-drug and alcohol misuse program. They are in a consortium.		Conforming

1.5.2	What Drug & Alcohol testing is conducted?
Operator Response	**Drug and alcohol pre employment, random after hire**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Assure testing is conducted for all safety-sensitive positions (20% of staff annually) unless proh bited by local regulations	**Annex 1 1.2.7.1 Contract** Exhibit C
On-site Observations The FAA approved anti-drug and alcohol misuse program includes pre-employment, random, post accident, reasonable cause, return to duty, and follow-up testing of personnel performing safety-sensitive job functions. The minimum annual random testing percentage of personnel is 25% drugs and 10% alcohol.		Conforming

1.6	Are pre-hire background checks performed for safety-sensitive personnel?
Operator Response	

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Assure adequate pre-hire check are performed to identify candidates that may have malicious intent	**Best Practices**
On-site Observations Complies with the FAA requirements for background checks on pilots and mechanics. Personnel who work at the Long Beach airport are required to obtain an airport security identification card.		Conforming

1.7 Fleet Information

Registration Number	Make/Model	Year Manufactured	Serial Number	Owned /Leased	# Seats	A/C Hours
N114MX	Eurocopter 350 BA	1984	1747	owned	6	2800
N3604T	Eurocopter 350 D	1982	1158	owned	6	9000
N234AH	Eurocopter 350 BA	1991	2489	owned	6	10,500

Are flight deck layouts standard for each aircraft?	Yes ☒	No ☐
Explain any differences		

2.0 Safety Program

2.1 Safety System

2.1.1	Do you have a written aviation safety policy and program? Is it a Safety Management System?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Attach policy, describe program and attach description	Annex 6 3.2 **Contract** 1.6

On-site Observations	
There is a written aviation safety policy and program. The program is documented in the Safety Management System Manual. A Safety Manager has been designated. Island Express is in the process of implementing all of the SMS elements. They have subscribed to Baldwin Aviation Safety and Compliance to help with the implementation and management of the SMS. The personnel have started completing the online risk assessments for RW flight, technical, and ramp/helipad operations. The internal audit checklists are available on online, along with the completed audits.	Conforming

2.1.2	Are the following elements of the SMS in place: 1. Published safety accountabilities of managers and key staff 2. A designated safety manager 3. The ability to demonstrate that it generates a positive safety culture throughout the organization 4. Documented business policies, principles and practices in which safety is inherent 5. Commitment to a safety oversight process which is independent of line management 6. Regularly reviewed safety improvement plans 7. Formal safety review processes.
Operator Response	**In process**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Attach policy, describe program and attach description	CAP 712 **Contract** 1.6

On-site Observations	
These elements are documented, with some still in the process of implementation.	Conforming

2.1.3	What items are reviewed in the Safety Management System?
Operator Response	

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	List the major sources of data collected, reviewed, and actioned by Safety Program	**ICAO** Annex 6 3.2 **Contract** 1.7, 1.9
On-site Observations The items reviewed and maintained on their Baldwin online site include Safety/QA reports, internal audits, change management, and the technical, RW flight, and ramp/helipad daily risk assessments.		Conforming

2.1.4	Is a Safety Committee established?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	If so, attach list of members	Best Practice **Contract** 1.11
On-site Observations The safety committee was recently established. The membership includes the Director of Operations, Director of Maintenance, Safety Manager, Chief Pilot, and Heliport Manager.		Conforming

2.1.5	Are regular meetings held?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Review sample minutes of recent meetings	Best Practice
On-site Observations Reviewed minutes of the recent meeting.		Conforming

2.2 Safety Investigation

2.2.1	Are accident/incident reporting procedures established in writing?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Review sample reports for content and reasonable number of submissions	**ICAO** Annex 6 4.5.3 **Contract** 1.8
On-site Observations Appropriate accident/incident reporting procedures are in place.		Conforming

2.2.2	Is there follow up action?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**		Best Practice **Contract** 1.7
On-site Observations Appropriate follow-up action is completed.		Conforming

2.3 Accident Prevention	
2.3.1	Is there an accident prevention program in place?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Review program	Best Practice **Contract** 1.12
On-site Observations The proactive elements of the SMS include hazard identification, risk assessments, internal auditing and change management.		Conforming

2.3.2	Is there a flight data analysis program in place?
Operator Response	**FDM is beginning, equipment installed, trng done**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Recommended by ICAO to be part of SMS	**ICAO** Annex 6 3.2.6 **Contract** 1.12
On-site Observations As indicated in the above operator's response. Using the Appareo 2000 Flight Data Monitoring device.		Conforming

2.4 Emergency Management	
2.4.1	Is there a written emergency response plan?
Operator Response	

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Verify it is coordinated with OPCO and other agencies involved. Note Revision number and date	**ICAO** Annex 6 4.2.1.1 4.2.1.2 **Contract** 1.17
On-site Observations There is a written Emergency Response Plan.		Conforming

2.4.2	Is there a local professional rescue service? If so, provide name.
Operator Response	

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Look for documentation of coordination training and exercises	**ICAO** Annex 6 9.4.3.2 **Contract** 1.18

On-site Observations There is a fire station located next to the Island Express heliport. Search & rescue will be coordinated by the Rescue Coordination Center (RCC). They have access to the available government and civilian rescue services in the area.		Conforming

2.4.3	Are other aircraft available for emergency response? 24/7	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Identify limitations and medevac plans	**Requirement** Best Practice **Contract** 1.18
On-site Observations There are no dedicated aircraft and flight crews on contract to respond to a Chevron emergency. If Island Express is asked to respond, they would have to rely on using the aircraft and flight crews that may be available at the time.		Conforming

2.4.4	Do you have an aircraft equipped with a winch?	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Examine if available – determine readiness to deploy	**Requirement** Best Practice
On-site Observations Island Express does not have any aircraft equipped with a winch.		Conforming

2.4.5	Do you have written SAR procedures?	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review procedures, check for coordination with OPCO, agencies. Applies only if operator conducts SAR – then see "SAR as a secondary role" guidance	**Requirement** Best Practice
On-site Observations Island Express does not conduct primary or secondary search & rescue. Their emergency response plan is appropriate for the operation.		Conforming

2.4.6	Is there rescue equipment placed in a crash box? If so, specify location(s) and training provided the personnel.
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Are rescue equipment and personnel available and trained?	Best Practice
On-site Observations Island Express does not have rescue equipment placed in a crash box at their heliport. A fire station is located next to the heliport.		Conforming

2.5	Safety Statistics						
	Accident Data for the past 5 years						
Year	A/C Type	# Accidents	# Fatal Accidents	# Serious Incidents	# Fatalities	Annual Flt Hrs	Annual Takeoffs
YTD							
2010							
2009							
2008	**AS350**	**1**	**1**		**3**	**2400**	**5500**
2007							
2006							

On-site Observations	
The NTSB factual report and probable cause report for the Island Express fatal accident on 24 May 2008 was reviewed. The accident was found to be the result of a failure of the engine power turbine section at low altitude. The pilot likely had to trade off rpm to maintain altitude needed to clear the obstacles and reach the open field. This resulted in a lack of sufficient rotor rpm to arrest the helicopters descent rate as it approached the ground. Island Express was not found to be at fault in the investigation. The engine manufacturer issued two service bulletins requiring removal and inspection of the turbine assemblies to address the power turbine cracking problem. The report indicated that there are two FAA Airworthiness Directives pertaining to this issue pending.	Conforming

3.0 Operations

3.1 Organization and Management

Flying Staff	Name	Years Co.	Years Flying
Director of OPS	John Moore	29	35
Chief Pilot	Gary Michaelson	8	14
Chief Training Capt.	Gary Michaelson	8	14
Flight Safety Officer	Bernard Hoene	3	8

3.2 Pilot Qualifications and Training

3.2.1	Do you have written hiring and qualification standards for all pilots?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Should be in Ops Manual and should include check of qualifications and employment history. Also check for standards for initial, upgrade, type change, return from leave, etc.	**ICAO** Annex 6 4.2.3.1

On-site Observations	
The qualification and experience standards are documented in the operating manuals. The helicopter pilots are required to have an instrument rating or currently enrolled in a course, 1000 hr total time, 100 hr X-C, and 25 hr night X-C. These experience requirements are less than the Chevron aviation standards. A review of the current Island Express pilot experience revealed that only one pilot did not meet the Chevron requirements.	Non-Conformance

3.2.2	Are free-lance or contract pilots used?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Observe that qualifications have been verified and performance has been tested.	**Best Practice**

On-site Observations	
The pilot qualifications are verified in accordance with the FAA requirements. They complete all the required training and checking.	Conforming

3.2.3	Provide Summary of Pilot Qualifications, Experience, and Currency – Including Flight Physicals
Operator Response	**1000 hours, instrument rating, commercial license, 1st Class medical**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Verify tracking of hours flown Verify that Company pilot experience has been documented Verify Contractor pilot experience and currency has been verified and documented	**ICAO** Annex 6
On-site Observations Verified the tracking of hours flown, and the documentation of experience. A Pilot Tracking Information sheet is maintained. The form is in the GOM.		Conforming

3.2.4	Do you use a Company Training Program?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Verify presence of written training program including contractors. Look for effective tracking mechanism	**ICAO** Annex 6 9.3.1
On-site Observations The training manual is revision 9 dated 10 Mar 2010. The FAA approval is dated 16 March 2010.		Conforming

3.2.5	Are training records maintained in appropriate folders? Do they record medical renewals?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Verify tracking mechanism for medical currency and training. Obtain summary copy	**Best Practice**
On-site Observations The training records are maintained in appropriate folders. They include a pilot annual resume and copy of the current medical certificate.		Conforming

3.2.6	Do you have a Simulator Training Program? If yes, with whom and how frequently?
Operator Response	**No**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	If simulator is used, verify that it is approved by governing CAA	**ICAO** Annex 6 9.3
On-site Observations Planning to start attending the Flight Safety International simulator training in Arizona every other year. They have a level 6 FTD. Currently, three of the five pilots have attended training provided by Eurocopter. The pilots who are qualified to fly on the Shell contract attend training at Eurocopter annually. The plan is for all five of the pilots to start rotating between the Eurocopter training and FSI		Conforming

simulator training annually. One of the pilots who have not attended the Eurocopter training is planned to be the first to attend the FSI simulator training. The other pilot is a new-hire and needs to obtain the required hours on type.	

3.2.7	Do your pilots attend Cockpit Resource Management (CRM)/Aeronautical Decision Making (ADM) training? If yes, how often?	
Operator Response	**Yes, yearly**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Obtain copies of training records that include CRM/ADM (CRM for crews, ADM for single-pilot)	**Requirement** **ICAO** Annex 6 9.3.1
On-site Observations Pilots attend in-house CRM training annually.		Conforming

3.2.8	Does it include LOFT? If provided by third party, how is curriculum monitored?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Sim training as crew over normal routes with normal, abnormal and emergency procedures.	**Requirement** **ICAO** Annex 6 9.3.1
On-site Observations LOFT is planned to be included in the FSI simulator training.		Conforming

3.2.9	Do you have a night and IFR currency program? If yes, does it include landings at remote airstrips/offshore helidecks (if applicable)?	
Operator Response	**No**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify night/IFR currency and note whether company or CAA check is used	**Requirement** **ICAO** Annex 6 9.4.4
On-site Observations The pilots comply with the FAR Part 91 night currency requirements. Their flight hours and number of landings are being tracked. Island Express is not approved to conduct flight operations in accordance with instrument flight rules (IFR).		Conforming

3.2.10	Do you perform semi-annual check rides? Are they accompanied by written tests?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Verify currency, tests corrected to 100%	**ICAO** Annex 6 9.4.4
On-site Observations The pilots receive flight checks in accordance with FAR Part 135.293 and 135.299.		Conforming

3.2.11	Do you perform annual line/route checks? For the purposes of maintaining pilot-in-command route qualification, does the operator require that a pilot make at least one trip between terminal points of a route or on a nearby route over similar terrain within the preceding 12 months as an operating crewmember or as an observer?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Determine the criteria for when route/airport checks are required	**Requirement** **ICAO** Annex 6 9.4.3
On-site Observations The pilots complete annual line checks in accordance with FAR Part 135.299.		Conforming

3.2.12	Is aircraft emergency equipment training and drills completed? How often? Annual	
Operator Response	**Yes, quarterly**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify compliance – note whether flight attendants are trained as part of the crew.	**Requirement**
On-site Observations The pilots complete the emergency situation and drill training in accordance with FAR Part 135 and the approved training manual.		Conforming

3.2.13	Is Helicopter Underwater Escape Training (HUET) conducted? How often?	
Operator Response	**Yes, every 4 years**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Note requirements for crew and passengers; location of training and similarity of trainer to equipment used	**Requirement** Best Practice
On-site Observations The pilots attend HUET every four years.		Conforming

3.2.14	Is dangerous goods training completed?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify dangerous goods training completed (identification training if none are carried)	**Requirement** **ICAO** Annex 18, Annex 6 9.3
On-site Observations Dangerous goods training is completed annually. Island Express Helicopters is a Will-Not Carry operator.		Conforming

3.2.15	If cabin crew is used, is there a formalized course of training - Describe	
Operator Response	**No**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Observe if cabin crew training is conducted with cockpit crews and coordination addressed.	**Requirement** **ICAO** Annex 6 12.4
On-site Observations Cabin crew is not used.		Conforming

3.3 Line Operations		
3.3.1	List authorized geographic areas and nature of operations: Date of last inspection by CAA	
Operator Response	**California**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify authorization matches operation. Review results of CAA inspection if available	**Requirement** **Info**
On-site Observations Operations Specification B50 lists the authorized area of operation as the 48 contiguous United States and Washington, D.C.		Conforming

3.3.2	Weather minimums – please state	
Operator Response	**300-1**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify that OPS manual minimums are =or> than ICAO (VFR and IFR) Identify is Cat II or Cat III are used (should have requirement for RVR)	**Requirement**
On-site Observations The documented weather minimums for operations under visual flight rules are a ceiling of 300 feet and 1 mile visibility. This weather minimum is less than the Chevron aviation standard, which specifies a minimum ceiling of 500 feet and 2 miles visibility during the day, and a ceiling of 1000 feet and 3 miles		Non-Conformance

visibility during night.	

3.3.3	How are flight plans filed and with whom? (describe)	
Operator Response	**Company manifests**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Observe filing, obtain copy	**Requirement** **ICAO** Annex 6 4.3.3.2
On-site Observations Company flight plans are filed by the pilots using the VHF radio.		Conforming

3.3.4	Briefly describe your flight following system	
Operator Response	**Constant contact with certain reporting points**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Assure that a mechanism exists for overdue flights and that it is understood by all. Must fit with ERP	**Requirement** **Best Practice**
On-site Observations Flight following is by VHF radio. The procedures are documented in the GOM. A flight following log is maintained. The appropriate ERP information was available to the dispatcher/flight follower.		Conforming

3.3.5	Fuel Reserves (minutes): VFR 20 minutes IFR	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify that OPS manual meets or exceeds specification	**Requirement** **ICAO** Annex 6 4.3.6.2.1 4.3.6.3.1
On-site Observations A fuel reserve of 20 minutes is planned for flights operated under visual flight rules. There is not a requirement to plan any contingency fuel. The Chevron aviation standards specify that contingency fuel equal to 5 % of the trip fuel be planned for flights operated under visual flight rules.		Non-Conformance

3.3.6	Are NOTAMS and certified weather briefings available?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Observe that information is available and used	**Requirement** **ICAO** Annex 6 4.3.5

On-site Observations Appropriate weather briefings and NOTAMs are available.	Conforming

3.3.7	Are Passenger Manifests prepared for each flight?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify manifesting, obtain copy. Procedure should exist to leave a copy at each departure point	**Requirement** **Best Practice**
On-site Observations Appropriate passenger manifests are prepared for each flight.		Conforming

3.3.8	Is a Weight & Balance calculated for each flight?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify W&B calculations, obtain copy	**Requirement** **ICAO** Annex 6 4.3.1
On-site Observations Appropriate weight & balance calculations are completed prior to each flight.		Conforming

3.3.9	Flight crew duty time and rest period limitations: Daily Flight Time 8 hours max Daily Duty Time 12 hour day	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review limitations against Annex 6 attachment A and CT/OGP standards Are extensions allowed, procedure How is it tracked, rolling totals?	**Requirement** **ICAO** Annex 6 9
On-site Observations Pilots are working 4 & 3 schedules. The maximum daily duty time is 12 Hours. Appropriate rolling totals of the pilot flight time are manually calculated from the daily sheets.		Conforming

3.3.10	How many models can be flown by each pilot	
Operator Response	**2**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Should be no more than 2	**Requirement** **Best Practice**
On-site Observations Operate only two similar models of the AS 350 helicopter.		Conforming

3.3.11	Are the effects of heat and cold considered in establishing flight and duty times?	
Operator Response	**No**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items**	**Requirement** **Best Practice**
On-site Observations The two AS 350BA helicopters have air conditioners installed. All the helicopters have heaters installed. The flight & duty limits are appropriate for the climate, equipment and work schedule.		Conforming

3.3.12	Do you have standardized flight procedures (crew coordination, takeoff, enroute, landing, emergency, etc.)? If yes, are checklists used to support these procedures?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify procedures in place, communicated to all crews and that all checklists	**Requirement** **Best Practice**
On-site Observations Appropriate standardized flight procedures and checklists are in place.		Conforming

3.4 Flight Manuals/Documents/Data Control		
3.4.1	Is a Flight Operations Manual published?	
Operator Response	**Manuals for offshore are published**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify method to assure all manuals are same version, Obtain copy of approval page	**Requirement** **ICAO** Annex 6 4.2.2
On-site Observations There was an FAA approval letter of revision 56 to the General Operations Manual (GOM) available. The current GOM revision is 58 and there was not any FAA approval, such as a letter or stamped list of effective pages available.		Observation

3.4.2	Are FSIs/Operations notices used for new announcements/orders? How is notification to each pilot verified?	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify that acknowledgement is documented	**Requirement** **ICAO** Annex 6 4.2.3.1

On-site Observations Appropriate operations notices are utilized and distributed.		Conforming

3.4.3	Are locally produced approach plates used?	
Operator Response	**No**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** If used, verify that they are approved – Obtain copy Assure rig plates have required information	**Requirement** **ICAO** Annex 6 App 2
On-site Observations No locally produced approach plates are used.		Conforming

3.4.4	Are voyage reports raised and used? Contents: I —Airplane nationality and registration. II — Date. III — Names of crew members. IV — Duty assignments of crew members. V —Place of departure. VI — Place of arrival. VII — Time of departure. VIII — Time of arrival. IX — Hours of flight. X —Nature of flight (private, aerial work, scheduled or non-scheduled). XI — Incidents, observations, if any. XII — Signature of person in charge	
Operator Response	**No**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify content matches criteria, note VOT checks, trend monitoring, etc. Obtain representative copy.	**Requirement** **ICAO** Annex 6 11.4.1
On-site Observations Appropriate documentation of each flight is completed.		Conforming

3.4.5	Are challenge and response checks used?	
Operator Response	**No**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Critical item – assure all checklists are the same, investigate procedure for modifying checklists	**Requirement** **ICAO** Annex 6 4.2.5
On-site Observations Operations are single pilot.		Not Applicable

3.4.6	Describe the document control process?
Operator Response	

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Insure checklists are included in update process.	**Requirement** **ICAO** Annex 6 4.2.5 6.1.3
On-site Observations The Chief Pilot controls the operations documents. Signed return receipts are used during the distribution of the revisions.		Conforming

3.4.7	Are Minimum Equipment Lists (MEL) used?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Check MEL revision date and distribution list – check logs to assure proper use	**Requirement** **ICAO** Annex 6 6.1.2
On-site Observations No MEL is currently used. It was said that an AS350 MEL has been developed and is with the FAA awaiting their approval and issuance of the Operations Specification.		Conforming

3.5 Aircraft Performance		
3.5.1	Does the operator provide the crew with all-engine climb gradient information?	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Assure data is in Ops Manual as well as AFM. If copied performance charts are used in the cockpit, assure that they are controlled and updated	**Requirement** **ICAO** Annex 6: 4.2.3.3
On-site Observations Appropriate aircraft performance information is in the Flight Manual carried in the aircraft. The aircraft are single-engine helicopters operated performance class 3.		Conforming

3.5.2	With respect to aircraft performance, does the Operator consider all significant factors including weight, operating procedures, pressure altitude, temperature, wind, runway gradient, and runway contamination (water, slush, etc.)?	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Assure these conditions are addressed in Ops Manual/SOP and AFM	**Requirement** **ICAO** Annex 6: 5.2.6
On-site Observations Appropriate factors affecting aircraft performance are considered.		Conforming

3.5.3	Does the Operator ensure that takeoff weight and estimated landing weight will not exceed maximum weights as specified in the flight manual?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Assure landing weights are calculated for destination and alternates	**Requirement** **ICAO** Annex 6: 5.2
On-site Observations Appropriate weight & balance calculations are completed before each flight.		Conforming

3.5.4	Does the Operator schedule takeoff performance such that, in the event of failure of the critical engine, the aircraft will be able stop on the remaining runway or continue the takeoff and clear all obstacles by an adequate margin?	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify that takeoff performance is part of pre-flight planning process as indicated	**Requirement** **ICAO** Annex 6: 5.2.8 5.3.1
On-site Observations The aircraft are single-engine helicopters operated performance class 3.		Conforming

3.5.5	Does the Operations Manual contain departure contingency procedures?	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Look for criteria specifying when a take-off alternate is required	**Requirement** **ICAO** Annex 4: 3.4.1.1
On-site Observations Not applicable. Operations under instrument flight rules are not conducted.		Not Applicable

3.5.6	Does the Operator ensure that, if the critical engine is lost en-route, the aircraft will be able to continue flight to a suitable landing airport without flying below the minimum flight altitude at any point?	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Assure requirement has been addressed – leads to ETOPS	**Requirement** **ICAO** Annex 6 5.2.9

On-site Observations The aircraft are single-engine helicopters operated performance class 3.	Conforming

3.5.7	Does the Operator ensure that destination and alternate airports will have runways such that the aircraft will be able to stop within the confines of the runway after clearing all obstacles by a safe margin and after allowances have been made for variations in landing technique?	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Assure alternates are adequate	**Requirement** **ICAO** Annex 6 : 5.2.11
On-site Observations The aircraft are single-engine helicopters operated performance class 3 under visual flight rules. Appropriate airports and heliports are used.		Conforming

3.5.8	Does the Operations Manual contain instructions for control of weight and balance?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Assure item contained in GOM and pre-flight planning. – may include limitations due to oxygen supply	**Requirement** **ICAO** Annex 6 : 4.3.1d
On-site Observations Appropriate instructions concerning aircraft weight & balance control are in the operating manuals and documents.		Conforming

3.6 Scheduling		
3.6.1	Does the operator maintain current records of crewmember flight, duty, and rest periods?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Obtain sample of records Verify that scheduling aligns with requirements in 3.3.9 above	**Requirement** **ICAO** Annex 6 : 4.2.10.3
On-site Observations Current and appropriate records of the pilot flight & duty time are maintained and available to the scheduler (Chief Pilot).		Conforming

3.6.2	Does the operator have a means to ensure that a pilot will not be assigned to act as pilot-in-command or co-pilot unless that pilot has made at least three takeoffs and landings in the preceding 90 days

	in the airplane type?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Verify procedure used to track currency for scheduling	**ICAO** Annex 6 : 9.4.1 9.4.2
On-site Observations This pilot recency of experience is a regulatory and company requirement. It is tracked on the pilot flight & duty records.		Conforming

3.6.3	Does the operator maintain records to ensure that each pilot-in-command maintains required route and airport qualification
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Verify route and airport records are current and available to scheduler	**ICAO** Annex 6 : 9.4.3.1 9.4.3.4
On-site Observations There are no specific route and airport qualification requirements.		Conforming

3.6.4	Are scheduling procedures automated in any way?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Describe system	Best Practice
On-site Observations Scheduling is not automated in any way. It is completed by the Chief Pilot.		Conforming

3.6.5	Does the company consider crew experience when scheduling trips?
Operator Response	

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Verify procedures are effective	**ICAO** Annex 6 4.2.1.1 4.2.1.2
On-site Observations The pilots are scheduled in accordance with their qualification(s).		Conforming

3.6.6	Is there a policy in place to ensure that management pilots include office time as duty time?
Operator Response	**Yes**

Previous Audit Comments None Document Review Notes	On-Site Review Items Verify policy is in Ops Manual	Requirement Best Practice
On-site Observations The management pilots include office time as duty time on the flight & duty record.		Conforming

4.0 Engineering and Maintenance

4.1 Authorization and Management

Position	Name	Years with Company	Years Experience
Accountable Manager	John Moore	29	44
Maintenance Manager	Ryan Groeger	6	6

4.1.1	Regulatory Authority (name)	FAA

4.1.2	What is the Approval Document that authorizes the operator to perform maintenance on the aircraft?	
Operator Response	**FAA authority**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Check Approval document and obtain copy – verify work is within scope and limitations and that maintenance program is specified. Needs to have name, location, term, and date of issue	**Requirement** **ICAO** Annex 6 8.7.1.2 **Contract** 6.2
On-site Observations 135 Maintenance manual Certificate # ISHA094F Rev. 58 Observed manual #4		Conforming

4.1.3	Does the operator employ a person or group of persons to ensure that all maintenance, including contract, is carried out in accordance with the maintenance control manual?	
Operator Response	**3 mechanics, procedures in place**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Assure Accountable Manager is identified. Indicate what maintenance is performed in-house and which is contracted (control of contract maintenance addressed later)	**Requirement** **ICAO** Annex 6 3.1.3 8.1.4 **Contract** 6.1
On-site Observations Accountable manager is John Moore who is President of company. IEX performs Inspections, preventative maintenance and components are sent out to external vendors		Conforming

4.2 Technician Qualification and Training

4.2.1	Does the maintenance organization employ the necessary personnel to plan, perform, supervise, inspect, and release the work to be performed?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Determine adequacy of staff. Indicate Technician-to-aircraft ratio	**Requirement** Annex 6 8.7.5.2 **Contract** 6.1

On-site Observations 3 Technicians, 3 Aircraft	Conforming

4.2.2	Does the operator establish the competence of maintenance personnel in accordance with a procedure and to a level acceptable to the State granting the approval?
Operator Response	**Yes**

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Examine competency of staff/new hires – verify engineers meet CVX contract requirements	**Requirement** Annex 6 8.7.5.3 **Contract** 6.31
On-site Observations Operator uses manufacturer's maintenance manual for technical training data and quiz's.		Conforming

4.2.3	Does the maintenance organization ensure that all maintenance personnel receive initial and continuation training appropriate to their assigned tasks and responsibilities?
Operator Response	**Yes**

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Assure written training program is in place and followed. Verify process for training selection – Copy training schedule	**Requirement** Annex 6 8.7.5.4 **Contract** 6.31
On-site Observations Yes but no written training program is in place yet		Conforming

4.2.4	Does the training program established by the maintenance organization include training in knowledge and skills related to human performance, including coordination with other maintenance personnel and flight crew?
Operator Response	**Not currently**

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify human factors is included – should be recurring at least each 2 years	**Requirement** Annex 6 8.7.5.4 **Contract** 6.34
On-site Observations Not currently, waiting on training manual to be complete		Conforming

4.2.5	Are there special training requirements for specific tasks such as RII, incoming parts inspections, or special equipment (ETOPS, RVSM, hoists, etc)?
Operator Response	**Yes**

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review requirements and certification records – also look at HES training, dangerous goods, life vests, etc Special focus on NDT if performed	**Requirement** **ICAO** Annex 6 8.7.5.4 **Contract** 6.31
On-site Observations RII training will be addressed in new training manual. IEX however does have a fuel system training manual (special equipment)		Conforming

4.2.6	Does the operator train and document training for contract maintenance employees?	
Operator Response	**No we have none**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Need to assure that any maintenance contractors meet requirements of Maintenance Exposition if they return aircraft or components to service	**Requirement** **ICAO** Annex 6 8.7.5.4 **Contract** 6.34
On-site Observations No contract maintenance employees on staff.		Conforming

4.3 Maintenance Control		
4.3.1	Does the operator provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance control manual acceptable to the State of Registry?	
Operator Response	**Yes, MPM**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Determine that there is adequate access to manual and that revision control is good. Determine if it is approved by local CAA	**Requirement** Annex 6 8.2.1 **Contract**
On-site Observations Yes all manual online, uses the Baldwin system		Conforming

4.3.2	Does the procedures manual provided contain the following information: 1. A general description of the scope of work authorized under the organization's terms of approval; 2. a description of the organization's procedures and quality or inspection system 3. a general description of the organization's facilities; 4. names and duties of the key personnel 5. a description of the procedures used to establish the competence of maintenance personnel *[4.2.2]* 6. a description of the method used for the completion and retention of the maintenance records *[4.5.1]* 7. a description of the procedure for preparing the maintenance

	release and the circumstances under which the release is to be signed; 8. the personnel authorized to sign the maintenance release and the scope of their authorization; 9. a description, when applicable, of the additional procedures for complying with an operator's maintenance procedures and requirements; *[4.3.16]* 10. a description of the procedures for complying with service information reporting 11. A description of the procedure for receiving, amending, and distributing within the maintenance organization all necessary airworthiness data from the type certificate holder or type design organization. *[4.4.8]* 12. A description of the administrative arrangements between the operator and the approved maintenance organization including completing and signing a maintenance release 13. a reference to the maintenance program to be used 14. a description of the procedures for monitoring, assessing, and reporting maintenance and operational experience 15. a description of procedures for assessing continuing airworthiness information and implementing any resulting actions *[4.4.2]* 16. a description of the procedures for implementing action resulting from mandatory continuing airworthiness information *[4.4.2]* 17. a description of establishing and maintaining a system of analysis and continued monitoring of the performance and efficiency of the maintenance program, in order to correct any deficiency in that program; *[4.4.2]* 18. a description of aircraft types and models to which the manual applies; 19. a description of procedures for ensuring that unserviceabilities affecting airworthiness are recorded and rectified; and a description of the procedures for advising the State of Registry of significant in-service occurrences *[4.3.7]*
Operator Response	**Yes, included in the GOM and MPM**

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Determine that all elements are in place	**Requirement** Annex 6 11.4 **Contract** 6.4
On-site Observations Yes		Conforming

4.3.3	Does the maintenance organization ensure that the procedures manual is amended as necessary to keep the information contained

	therein up to date?		
Operator Response	**Yes**		
Previous Audit Comments None **Document Review Notes**		**On-Site Review Items** Observe frequency of revision and distribution process – all copies of same revision status. Should have a receipt system and copies controlled	**Requirement** Annex 6 8.7.2.2 **Contract** 6.6
On-site Observations Maintenance manual are kept up online. 135 GOM is revised by the chief pilot when revisions are complete. Inserts revisions himself. No Receipt system in place			Observation

4.3.4	Does the operator maintain a list of approved agencies authorized to perform maintenance on the operator's aircraft, engines, components, or parts?		
Operator Response	**Yes**		
Previous Audit Comments None **Document Review Notes**		**On-Site Review Items** Review list – compare to list used to order parts and maintenance releases of parts in stores.	**Requirement** Best Practice
On-site Observations Yes kept in main office. Did not observe copy.			Conforming

4.3.5	Does the operator have a system for the surveillance of contracted maintenance? If so, what type? On-site Surveys ☐ Reliability Monitoring ☒		
Operator Response	**Yes**		
Previous Audit Comments None **Document Review Notes**		**On-Site Review Items** Review samples, verify frequency of reviews	**Requirement** **ICAO** ICAO Annex 6 4.2.1.1 4.2.1.2 **Contract** Body 2.5 (B) 1
On-site Observations Operator does not audit vendors.			Conforming

4.3.6	Does the operator have a maintenance control center or other organization responsible for approving, controlling, monitoring, and scheduling routine, non-routine and deferred maintenance activities, including MEL items?		
Operator Response	**No, taken care of in house**		
Previous Audit Comments None **Document Review Notes**		**On-Site Review Items** Review maintenance planning controls – critical item	**Requirement** **ICAO** Annex 6 11.4 **Contract** 6.17

On-site Observations Maintenance controls are done in-house using maintenance planning that is performed once weekly	Conforming

4.3.7	Is there a process in place to evaluate airworthiness information such as Airworthiness Directives and service bulletins and to track their scheduled compliance?	
Operator Response	**Yes, pg. 28-29 in MPM**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review program, assure that all ADs and Mandatory SBs are accomplished (including US Appliance ADs)	**Requirement** **ICAO** Annex 6 4.3.5 **Contract** 6.14
On-site Observations AD's are researched through Advantex. Program is adequate		Conforming

4.3.8	Is there a process in place to track non-airworthiness items and schedule their compliance?	
Operator Response	**Yes, component reports**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Assure that non-airworthiness items (torn upholstery, paint chips, etc) are controlled and rectified	**Requirement** Best Practice
On-site Observations Non-airworthiness items are scheduled for compliance during the 100 hr inspections.		Conforming

4.3.9	Does Approved Maintenance Program for each airplane contain the following information? 1. maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the airplane; 2. when applicable, a continuing structural integrity program; 3. procedures for changing or deviating from 1) and 2) above; and 4. when applicable, condition monitoring and reliability program descriptions for aircraft systems, components, and powerplants	
Operator Response	**No, currently being worked on**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review individual items, assure program is Approved by local CAA	**Requirement** **ICAO** Annex 6 11.3.1 **Contrac**t 6.10
On-site Observations No this item is currently in the process of being revised and reviewed for approval		Conforming

4.3.10	Does the operator include in the operations manual a minimum

	equipment list (MEL) approved by the State of the Operator?	
Operator Response	**Currently under FAA review**	
Previous Audit Comments None **Document Review Notes** If MMEL is being used must have a Letter of Authority from FAA. If not MEL can't be in aircraft and must use FAR 91.213	**On-Site Review Items** Review MEL including revision number and date – verify that MEL on aircraft is same revision. Assure deferral time limits (A,B,C,D) are tracked and followed. Are escalations permitted?	**Requirement** **ICAO** Annex 6 6.1.2 **Contract** 6.13
On-site Observations Operator is currently using FAR 91.213 for all MEL items		Conforming

4.3.11	Does the operator have a process to track chronic or repetitive items and provide troubleshooting history and instructions for corrective action?	
Operator Response	**No**	
Previous Audit Comments None **Document Review Notes** Part of SMS and CASS	**On-Site Review Items** Review process including tracking.	**Requirement** Best Practice **Contract** 6.16
On-site Observations None (Concern)		Conforming

4.3.12	Are there any other programs requiring specific maintenance actions (RVSM, MNPS, RPN, etc)? Also, maintenance actions for added equipment such as hoists, life rafts, ELTs, etc.	
Operator Response	**Added equipment tracked on component sheets**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review process for tracking these items	**Requirement** Operator's Maintenance Program **Contract** 6.20
On-site Observations Yes items are tracked on aircraft status sheets.		Conforming

4.4 Quality Assurance		
4.4.1	Does the maintenance organization ensure compliance with ICAO Annex 6 8.7.3.1 by either establishing an independent quality assurance system to monitor compliance with an adequacy of the procedures, or by providing a system of inspection to ensure that all maintenance is properly performed?	**ICAO** Annex 6 8.7.3.2 **Contract** 6.22
Operator Response	**Yes, discrepancy sheets in work orders ensure insp after maint is performed**	

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review QA process. If audit program is used, review schedule and records of completed audits and follow-up actions. CAS and Reliability programs feed SMS	**Requirement** **ICAO** Annex 6 8.7.3 (Recommended) **Contract** 6.23
On-site Observations Inspection sheets have sign-off blocks for items that require dual signatures. No specific RII program in place		Conforming

4.4.2	Is there an established Quality Assurance/Control Program that includes the following elements? 1. a continuous analysis and surveillance program 2. an internal audit/evaluation and surveillance program 3. an established audit schedule 4. a file of audit findings and corrective actions 5. assurance of appropriate corrective action
Operator Response	**No**

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review QA process. If audit program is used, review schedule and records of completed audits and follow-up actions. CAS and Reliability programs feed SMS	**Requirement** **ICAO** Annex 6 8.7.3 (Recommended) **Contract** 6.23
On-site Observations Operator has no formal CASS program in place.		Conforming

4.4.3	Does the operator have an up-to-date Quality Assurance/Quality Control (QA/QC) manual that details departmental duties, responsibilities, and reporting relationships?
Operator Response	**Yes, GOM Section A**

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review QA Manual. How does it fit with Maintenance Exposition? Are procedures approved by the CAA? Check for distr bution control including receipts for revisions	**Requirement** Best Practice
On-site Observations Operator has a section in the GOM that identifies these responsibilities and relationships. No separate QA manual observed.		Conforming

4.4.4	Is there a documented auditor training/qualification program?
Operator Response	**No**

Previous Audit Comments None **Document Review Notes**	Review program	**Requirement** **ICAO** ICAO Annex 6 4.2.1.1 4.2.1.2 **Contract** Body 2.5 (B) 1
On-site Observations No Auditor training program at this time		Observation

4.4.5	Does the operator have a process to ensure that the maintenance of its airplanes is performed in accordance with the maintenance program?	
Operator Response	**Yes, performed per manufacturers current revision the the Maint Program**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Determine how program is verified against State of Design. How often is Program data compared to source data?	**Requirement** **ICAO** I Annex 6 8.1.1 d **Contract** 6.10
On-site Observations Yes operator uses current online manufacturers maintenance manual for their maintenance program		Conforming

4.4.6	Does the operator have a process to ensure all modifications and repairs comply with airworthiness requirements acceptable to the State of Registry and are procedures established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained?	
Operator Response	**No**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Determine if airworthiness requirements for repairs from State of manufacture are met	**Requirement** **ICAO** Annex 6 8.6 **Contract** 6.15
On-site Observations Operator uses FAA form 337's for modifications and repairs.		Conforming

4.4.7	Does the operator maintain a list of RII (dual inspection) items each inspector is authorized to inspect? Does the inspection roster identify RII qualified/certified inspectors?	
Operator Response	**In process**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify that RII items are identified and are properly inspected	**Requirement** Operator's Maintenance Program
On-site Observations No. Inspection sheets have sign-off blocks for items that require dual signatures		Conforming

4.4.8	Is a maintenance release completed and signed to certify that the maintenance work performed has been completed satisfactorily and in accordance with the procedures described in the maintenance organization's procedures manual?
Operator Response	**No, sign offs are I.A.W. manufacturers recommendations.**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Verify that release is signed for entire aircraft (accounting for specialty releases)	**ICAO** Annex 6: 8.7.7 **Contract** 6.11
On-site Observations Maintenance is completed as per FAR Part 43 and manufacturers recommendations.		Conforming

4.5 Documentation and Records		
4.5.1	Does the operator ensure that the following records are kept for the required periods? 1. the total time in service (hours, calendar time and cycles, as appropriate) of the airplane and all life limited components; 2. the current status of compliance with all mandatory continuing airworthiness information; 3. appropriate details of modifications and repairs to the airplane and its major components; 4. the time in service (hours, calendar time and cycles, as appropriate since last overhaul of the airplane or its components subject to a mandatory overhaul life; 5. the current airplane status of compliance with the maintenance program; and 6. The detailed maintenance records to show that all requirements for signing of a maintenance release have been met.	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review records for each element	**Requirement** **ICAO** lAnnex 6: 8.4.1 Contract 6.15 6.27
On-site Observations Yes		Conforming

4.5.2	Does the maintenance release contain the following? 1. basic details of the maintenance carried out; 2. date such maintenance was completed; 3. when applicable, the identity of the approved maintenance organization 4. identity of the person or persons signing the release.	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review sample of Maintenance releases	**Requirement** **ICAO** Annex 6 8.7.2

On-site Observations Yes	Conforming

4.6 Spares		
4.6.1	Does the operator have a receiving inspection program that ensures in-coming material has required certification documentation and traceability and that materials are inspected for serviceability?	
Operator Response	**Yes, MPM pg. 10**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review incoming inspection process including qualifications and training of inspectors and availability of reference data.	**Requirement** Best Practice **Contract** 6.26
On-site Observations Operator has incoming parts process, no training for receiving inspectors.		Conforming

4.6.2	Does the operator have a method to separate serviceable and non-serviceable parts as well as have a quarantine area for rejected parts and materials awaiting disposition?	
Operator Response	**Yes, all non serviceable items are green tagged and kept behind locked gate**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Check that serviceable and unserviceable parts are clearly identified and that separate quarantine areas exist for rejected, repairable, and undocumented parts	**Requirement** Best Practice **Contract** 6.40
On-site Observations Yes Adequate		Conforming

4.6.3	Does the housing adequately protect parts, materials, and units form damage, theft, and contamination?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Check for temp and humidity controls, proper storage (tires vertical, instruments cushioned) and area secured	**Requirement** Best Practice **Contract** 4.38
On-site Observations Parts are kept in a loft area in hangar exposed to climatic changes and humidity. Some boxes that housed parts were in a state of deterioration. (Concern)		Observation

4.6.4	Does the operator have a shelf life program	
Operator Response	**Yes, MPM pg. 10 & 23**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Observe process – determine effectiveness. Good samples to check are altimeters (24-month life) and sealants	**Requirement** Best Practice **Contract** 6.39

On-site Observations Yes documented. Found old no longer used transponder on shelf dated 2007. Part was removed immediately for evaluation		Observation

4.6.5	Does the operator maintain a list of authorized vendors for parts and materials?	
Operator Response	**Yes, kept onfile @ PBX**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Check that parts on shelves come from vendors on list	**Requirement** Best Practice
On-site Observations Yes kept on file at main office. Did not observe copy		Conforming

4.6.6	Random check of parts	
Operator Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Verify parts are identified and required by operator's procedures and associated with certification documents	**Requirement** Operator's Manuals
On-site Observations Checked ok		Conforming

4.7 Technical Library		
4.7.1	Does the maintenance organization have the necessary technical data, equipment, tools and material to perform the work for which it is approved?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review that the appropriate technical manual are available for the scope of work authorized	**Requirement** **ICAO** Annex 6 8.7.4.2
On-site Observations Yes uses manufacturers online manuals		Conforming

4.7.2	Does the operator have a process to identify the current revision status of Technical Data?
Operator Response	**Yes**

Previous Audit Comments None Document Review Notes	On-Site Review Items Check process for assuring manuals are current and verify it is effective. Observe revision status of manuals in different locations and compare to current pubs status. Check for old photocopies in brake shops, etc.	Requirement Best Practice **Contract** 6.6
On-site Observations Yes by checking manufacturers online manual status sheets		Conforming

4.8 Tool Calibration Program		
4.8.1	Does the operator have procedures for controlling/preventing out-of-service and due-for-calibration tools and equipment being used that contain the following elements? 1. calibration date 2. identity of individual or vendor that performed calibration or check 3. Calibration due date? 4. a calibration certificate for each item calibrated by an outside agency? 5. Details of adjustments and repairs? 6. The P/N and S/N of the standard used to perform the calibration?	
Operator Response	**Yes, located in the office of the DOM**	
Previous Audit Comments None Document Review Notes	On-Site Review Items Verify tool calibration system and records. Assure that it applies to personal precision tools including multimeters	Requirement Best Practice **Contract** 6.35
On-site Observations Yes		Conforming

4.9 Facilities		
4.9.1	Are the facilities and working environment appropriate for the task to be performed including availability of needed tools and equipment?	
Operator Response	**Yes**	
Previous Audit Comments None Document Review Notes	On-Site Review Items Assure that facilities are appropriate for scope of work performed – consider human factors such as light, temperature, and work stands	Requirement **ICAO** ICAO Annex 6 4.2.1.1 4.2.1.2 **Contract** Body 2.5 (B) 1
On-site Observations Adequate		Conforming

4.9.2	Does the operator have a De-Ice program and properly trained personnel, if applicable? Is disposal proper?
Operator Response	**N/A**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Determine that available protection time is properly determined and communicated to flight crew. Determine if spent fluid is disposed of in an environmentally responsible manner	Annex 6: 8.7.4.1 **Contract** 6.19
On-site Observations N/A		Conforming

4.9.3	Are there storage facilities provided for parts, equipment, tools and material? Are the storage conditions such as to provide security and prevent deterioration of and damage to stored items?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Observe storage, tooling and back shops	**ICAO** Annex 6: 8.7.4.3 **Contract** 6.38
On-site Observations Yes. Conditions do not provide security and will not protect items from becoming damaged or deterioration. On the other hand tools are kept in a locked air-conditioned room.		Conforming

4.10 Industrial Safety and Environmental Protection	
4.10.1	Are fire protection devices inspected periodically to local fire code or fire department requirements? Are they accessible, identified, and in serviceable condition?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Observation – check tags	**Contract Exhibit B**
On-site Observations Yes		Conforming

4.10.2	Are eye wash stations and first aid kits required by local authority? Are they properly identified and serviced?
Operator Response	**Yes**

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Check for presence and service date	**Contract Exhibit B**
On-site Observations Yes up to date		Conforming

4.10.3	Are Emergency Response numbers posted and up-to-date?
Operator	**Yes**

Response		
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Observation – check language	**Requirement** **Contract Exhibit B**
On-site Observations Numbers are not posted. Operator uses 911		Observation

4.10.4	Are personnel adequately protected from the effects of the environment – both heat and cold?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Determine if quality of work may be compromised by exposure to heat, cold, of other conditions	**Requirement** **Best Practices**
On-site Observations Adequate, hangar is not climate controlled. Offices and back shops are climate controlled		Conforming

4.10.5	Are work stands and ladders provided with appropriate fall protection available for daily inspections as well as base maintenance?	
Operator Response	**No**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Observation	**Requirement** **Best Practices**
On-site Observations No fall protection or inspection program observed. Concern		Conforming

4.10.6	Are safety guards in place on power equipment?	
Operator Response	**Yes**	
Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Observation – bench grinders are frequent offenders	**Requirement** **Contract Exhibit B**
On-site Observations Bench grinder on work bench available for use not bolted to work bench		Observation

4.10.7	Are fluid dispensing cans and servicing units properly identified and secured to prevent contamination?
Operator Response	**Yes**

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Observation – Check language	**Requirement** **Contract Exhibit B**
On-site Observations Yes		Conforming

4.10.8	Are waste oil and bulk storage areas constructed to prevent leakage into ground
Operator Response	**No**

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Observation	**Requirement** **Contract Exhibit B**
On-site Observations Waste oil is kept in waste containers. Adequate		Conforming

4.11 Fueling Program **Note: For further Guidance, see CT Fuel Systems Manual**	
4.11.1	Does the operator have procedures and instructions regarding their fueling program?
Operator Response	

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review procedures for thoroughness and clarity	**Requirement** **CVX Fueling Manual**
On-site Observations Observed Fuel Manual #1 which is current through rev. 2 dated 7/29/2010. Training procedures are included in the Fuel Manual.		Conforming

4.11.2	Are there procedures and instructions that apply to the inspection of company fuel farms?
Operator Response	

Previous Audit Comments None **Document Review Notes**	**On-Site Review Items** Review procedures	**Requirement** **CVX Fueling Manual**
On-site Observations Yes		Conforming

4.11.3	Does the fuel provider have a copy of the operator's fueling procedures manual?
Operator Response	

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Review procedures – verify operator is assuring quality of fuel received	**CVX Fueling Manual**
On-site Observations Yes		Conforming

4.11.4	Are grounding points checked periodically?
Operator Response	

Previous Audit Comments	On-Site Review Items	Requirement
None **Document Review Notes**	Review records	**CVX Fueling Manual**
On-site Observations Yes. Documented daily visual and tested monthly.		Conforming

5.0 AIRCRAFT PHYSICAL REVIEW - HELICOPTER

GENERAL INFORMATION						
Operator	Island Express Helicopters					
Date of Inspection	6/17/2011					
Place of Inspection	Long Beach Queen Mary Heliport					
Aircraft Type	AS350 D					
Registration Number	N 3604T					
Serial Number	1158					
Aircraft Total Time	Hours	11272.0	Cycles	43691	Mfg Date	
Next Maintenance	Hours		Cycles		Calendar	
Engine Model	LTS 101-600A2		TBO		HSI Interval	
LH Times	TSN		TSO		TSHSI	
RH Times	TSN		TSO		TSHSI	

INTERIOR			
Item	Requirement	Conforming	Comments
Seating Capacity		☐	4 + 1 Pilot
Layout		☐	2+3 with liferaft in fourth outboard rear seat
Condition		☐	Good
E-Exits - Number		☐	2
Location		☐	Each side of aircraft
Condition		☐	Good
Markings (Language)	English + National	☐	Ok
Lighting (EXIS)	M Offshore night	☐	
Baggage/Cargo - Number		☐	2 Compartments
Location		☐	Each side of aircraft
Condition		☐	Good
Fire detect/suppression		☐	
Cockpit:			
Number of seats		☐	2
Cockpit condition		☐	Good (AD on Pacific Scientific seatbelts)

SAFETY/EMERGENCY EQUIPMENT			
Item	Requirement	Conforming	Comments
Fire Extinguisher (2)	M (gauge preferred)	☐	1 (AD on Kidde)
Upper torso Restraints on all seats (if available)	M	☐	Good
Hearing Protection	M	☐	None in Aircraft
Pop-out windows	M Offshore	☐	None
ELT (406mhz)	M	☐	
Survival Kit	A/R for environment	☐	
First Aid Kit (2 prefered)	M	☐	1 Inspected 3/15/2011
Life jackets with attached single devices, and water activated lights.	M Offshore	☐	4 ea Good
Pilot vest w/EPIRB	M Offshore and remote areas	☐	1 ea no epirb
Life rafts for all occupants with lanyard and EPIRB	M Offshore	☐	1 Raft with ELT
Externally mounted life rafts	R Offshore		None
Briefing cards	English + National	☐	Yes

Aircraft Flotation Equipment (Auto inflation recommended)	M Offshore	☐	Yes Apical
Sonar Pinger	M Offshore	☐	No
Search & Rescue Transponder (SART)	RLT	☐	No
Flashlights	1per crewmember	☐	1
Immersion Suits	M Offshore if required by CAA or risk assessment	☐	No
Cabin Heat	M for temps below 15C	☐	Yes
Mirrors for external situational awareness	M (if available)	☐	No
Other		☐	

DOCUMENTS			
Item	Requirement	Conforming	Comments
Flight Manual – Rev & Date	M	☐	Rev dated 11/9/2010
MEL – Rev, Date & MMEL	M	☐	
Weight & Balance - Date	M	☐	Weighed 3/16/2011
Airworthiness Certificate - Expiry	M	☐	Good No Expiry
Registration - Expiry	M	☐	Good No Expiry
Radio License - Expiry	M	☐	None
Insurance Policy - CSL Limit	M	☐	
Compass Correction Card - Date		☐	3/22/2011
Other Documents		☐	
AVIONICS			
Item	Requirement	Conforming	Comments
IFR Certified	M >9	☐	No
VHF Com	2M	☐	Duel Comm KY 196A
HF Com (If required by ATC)	M	☐	Yes
FM Com (if required by contract)	A/R	☐	No
VOR/ILS	2M IFR N/R VFR	☐	VOR no ILS
PA System	M	☐	No
Hailer	MLT Single Pilot		
DME	M IFR N/R VFR	☐	No
ADF	1M (2 if sole source) for IFR N/R for VFR	☐	Yes
XPDR (mode C or S)	M	☐	Yes mode C
Autopilot	M >9	☐	No
Flight Director		☐	No
Wx Radar	M IRF & Offshore N/R SE	☐	No
Radio Alt with audio and visual alert	M IRF & Offshore R SE Offshore	☐	No
IVSI	R	☐	No
GPWS (EGPWS preferred)	MLT IFR	☐	No

TCAS	MLT ME RLT SE	☐	No
FOQA Equipment	MLT	☐	No
Automatic Flight Following	MLT	☐	No
CVR (with pinger)	Per CAA	☐	No
FDR (with pinger)	Per CAA	☐	No
Pulselights/Strobe	MLT	☐	No
GPS (moving map preferred)(DB expiration)	M	☐	No
HUMS or UMS with vibration monitoring	MLT	☐	Yes
Other		☐	

EXTERIOR	
Airframe structure & surface	Good
Undercarriage	Good
Paint	Good
Leaks	Engine Oil leak at output shaft

MECHANICAL COND	
Powerplant 1	Oil leak at output shaft otherwise ok
Powerplant 2	
APU	None
Battery Compartment	ok
Technical Bays	A few cracks in fairing inside baggage compartment

NOTES:
Minor corrosion on Antenna left side of aircraft
Engine oil leak at output shaft

APPENDIX

REQUIREMENTS FOR CHEVRON OPERATIONS

I. Pilot Qualification and Experience Requirements:

	HELICOPTERS	
	MULT-ENGINE LESS THAN 5,700 kgs CTOM	**SINGLE ENGINE**
AIRCRAFT COMMANDER QUALIFICATIONS		
Licences	CPL(H)	CPL(H)
Type rating on contract aircraft	CURRENT	CURRENT
Instrument rating on contract aircraft	CURRENT	CURRENT
EXPERIENCE Not less than		
Total hours	2,000	1,500
Total hours in command	1,000	1,000
Total hours in command - multi-eng	500	
Total hours in turbine powered aircraft	500	
Total hours in command on contract type	100	100
ADDITIONAL REQUIREMENTS:		
Total Hours Previous 90 days	10 hours in aircraft category & class	
Recency Check	After 45 or more days absence from flying	
Medical Certificate appropriate for License	Current for ALL	
Night Recency Previous 90 days	3 cycles	
CRM or ADM, initial / refresher	Annual	
Dangerous Goods Awareness	Every 2 years	
Offshore Role Experience - Total time for operating to fixed and moving platforms - 300 hours (helicopters below 5,700kgs)		

Note: An instrument Rating is required for all passenger flights. While instrument currency is not required for VFR flight, proven and current instrument competence (i.e. Inadvertent IFR recovery training) is required at least annually for all pilots.

II. VFR ceiling and visibility minimums

Flight Regime	Minimum ceiling	Visibility (SM)	Requirements to fly given these VFR weather minimums
Offshore - Day	500 Feet	2 SM	
Overland – Day Single Engine Multi Engine	 500 Feet 300 Feet	 2 SM 2 SM	
All Night Ops	Night Flights will be flown using only IFR procedures and minimums where available, otherwise the VFR minimum shall be a ceiling of 1000 feet and 3 SM visibility.		Twin-engine IFR certified helicopter with dual IFR-night current crew. All night flights shall utilize IFR cockpit procedures for takeoffs and landings.

III. VFR Fuel Planning

Fuel planning shall be sufficient for the following:

- Start & taxi
- Trip
- Contingency
    - VFR – 5% of trip fuel
- Reserve
    - 20 minutes for VFR
    - Extra Fuel – As required by aircraft commander

Ground Risk Analysis Tool : View Report

Template Name: IEX Maintenance Risk Assesment:

Enter Information:

Date: 5/20/2020 **Shift:** MAINT

Submitted By: Adam Green

Notes

Total Trip Score: 48

General Outlook Remember Preference

1	Activity Type: Aircraft Maintenance	5	☑
2	Activity Type: Hangar-Facility Maintenance	2	☑
3	Activity Type: Lack of Time Available	5	☐
4	Activity Type: Working Away From Base	3	☐
5	Activity Type: Emergency Repairs	4	☐
6	Activity Type: Off Airport Repairs	6	☐
7	Weather/Enviornment/Today's Forecast: Working Temps greater than 90F	4	☐
8	Weather/Enviornment/Today's Forecast: Thunderstorm Activity	3	☐
9	Weather/Enviornment/Today's Forecast: High Winds	4	☐
10	Weather/Enviornment/Today's Forecast: Wet-Rain	3	☐
11	Weather/Enviornment/Today's Forecast: Working Temps less than 55F	5	☐

[redacted]

Total Factor Score: 7

Human Factors

Remember Preference ☐

12	Scheduled Duty Time: Less than 8 hours	2	☐
13	Scheduled Duty Time: 8-10 Hours	4	☑
14	Scheduled Duty Time: 10-12 Hours	6	☐
15	Scheduled Duty Time: Greater than 12 Hours	8	☐
16	Any Work in Time Period 2300-0600: Local Time	4	☐
17	Off-Duty Rest: Less than 8 hours	6	☐
18	Off-Duty Rest: 8-12 Hours	3	☐
19	Off-Duty Rest: Greater than 12 Hours	1	☑
20	Working Alone: Yes	10	☑
21	Working Alone: Emergency Notification Procedure -Cell Phone	-4	☑
22	Contract Maintenance Personnel: Yes	6	☐
23	Contract Maintenance Personnel: Hangar-Activity Briefing	-3	☐
24	Personnel Health(Anyone/Everyone): Good (Free of Covid-19 Symptoms)	-1	☐
25	Personnel Health(Anyone/Everyone): Minor Sickness (If any Covid-19 Symptoms STOP Call Director of Maintenance or DO)	2	☐
26	Personnel Health(Anyone/Everyone): Emotional-Family Concerns	5	☐
27	Personnel Health(Anyone/Everyone): Other-Serious	7	☐
28	IEX Experience: Greater than 3 Years	1	☑
29	IEX Experience: 1-2 Years	3	☐
30	IEX Experience: Less Than 1 Year	5	☐
31	AS350 Factory School Completed	-1	☐
32	Bell 206 Factory Course Completed	-1	☐
33	Job Experience: Greater than 3 Years	1	☑
34	Job Experience: 1-2 Years	3	☐
35	Job Experience: Less Than 1 Year	5	☐
36	Model Experience: Greater than 3 Years	1	☑
37	Model Experience: 1-2 Years	3	☐
38	Model Experience: Less Than 1 Year	5	☐
39	Do you have Sunscreen or protective clothing to protect your self from the environment	-1	☐
40	Do you have Food for the day and plenty of Fluid to stay hydrated	-1	☐

Total Factor Score: 14

General Conditions- Activities

Remember Preference ☐

41	First Aid Kit: Available	-2	☑
42	AED: Available	-2	☐

[redacted]

43	Lockout-Blockout Procedures: Used	-1	☐
44	Welding, Cutting and Brazing: Yes	3	☐
45	Use of Compressed Gas: Yes	3	☐
46	Use of Hoist Equipment: Yes	3	☐
47	Use of Industrial Trucks-Equip: Yes	3	☐
48	Entering Confined Spaces: Yes	5	☐
49	Use of Flammable/ Combustible Materials: Yes	3	☑
50	Use of Hazardous Checmicals: Yes	3	☑
51	Work in High Noise (85dBA+) Areas: Yes	3	☑

Total Factor Score: 7

Aircraft Maintenance Activity Remember Preference ☐

52	Technical Data Reviewed	-3	☑
53	Servicing: Fuel	3	☑
54	Servicing: Oils- Grease	3	☑
55	Servicing: Nitrogen	3	☐
56	Servicing: Tire Inflation	5	☐
57	Maintenance: Pre-Flight- Post Flight	2	☑
58	Maintenance: Scheduled Inspections	2	☐
59	Maintenance: Scheduled Maintenance	2	☑
60	Maintenance: Unscheduled Maintenance	4	☐
61	Tasks Involving: Removing/Installing Panels	2	☐
62	Tasks Involving: Electrical Systems	2	☐
63	Tasks Involving: Fuel System	4	☐
64	Tasks Involving: Engine Repair	2	☐
65	Task Involving: Transmission Removal-Installation	3	☐
66	Task Involving: Engine Removal-Installation	3	☐
67	Task Involving: Blade Removal-Installation	3	☐
68	Task Involving: Aircraft Run-Ups	5	☑
69	Tasks Involving: Hydraulics	6	☐
70	Tasks Involving: Pneumatics	3	☐
71	Tools and Equipment: Use of Work Platforms	2	☐
72	Tools and Equipment: Use of Ladders	4	☑
73	Tools and Equipment: Use Safety Harness	-4	☐
74	Work Inspected: By Peer	1	☑
75	Work Inspected: By Inspector/Supervisor	-1	☐
76	Aircraft Towing: Yes	7	☐
77	Aircraft Towing: Wing Walker(s)	-1	☐

[redacted]

78	Aircraft Towing: Whistles	-1	☐
79	Aircraft Jacking: Yes	5	☐
		Total Factor Score:	17

Ramp, Hangar and Tools Remember Preference ☐

80	Trip Support: Passenger Boarding-Deplaning	2	☐
81	Trip Support: Baggage Handling	4	☐
82	Trip Support: Cargo Handling	4	☐
83	Ramp Aera/AOA: Clear- Company Aircraft Only	-2	☑
84	Ramp Aera/AOA: Aircraft Movement under own Power	2	☐
85	Ramp Aera/AOA: Service Vehicle Activity	2	☐
86	Ramp Aera/AOA: Passenger Vehicle Activity	3	☐
87	Hanger: Clear- Clean	-1	☐
88	Hanger: 1 Aircraft	3	☐
89	Hanger: Greater than 2 Aircraft	5	☑
90	Hanger: Other Obstructions	3	☐
91	Hanger: Fall- Slip Hazards	4	☐
92	Ground Service Equipment: Inspected-Safe	-2	☐
93	Ground Service Equipment: GPU Cart- Cords in Use	2	☐
94	Ground Service Equipment: Hyd Cart-Cords in Use	4	☐
95	Specialty Tools: Trained in Use	-3	☐
96	Power Tools: Guards and Protection Installed and being used	-2	☐
97	Specialty Tools: Used Outside of Shop	4	☐
98	Tools: Use of Calibrated Tools	-1	☐
		Total Factor Score:	3

Other Considerations - Your Description	Risk Level
	0

Other Considerations - Risk Reduction	Reduction Level
	0

Ground event cancelled due to elevated risk ☐

Total Score:48

If score > 81 Safety Manager or Director of Operations must assess
If score > 100 No-Go

Reporting Program Tracker

Report Title: Copy of Flight Hazard Template

Date Submitted	Date Due	Date Completed	Assigned To
1/12/2020	3/31/2020	4/1/2020	Green, Adam

Header

Event Date/Time	01/13/2020 18:58 GMT
Name (Optional)	Capitano

Detailed Description of the Hazard/Event/Concern

317EX still no AC, vent is inefficient and aircraft is very hot with afternoon sun in your face. Pax are complaining. Functioning AC falls under category C per MEL

Severity

Selected Fields	Marginal

Location

Location	pBX
Aircraft Type	AS350

Category

Selected Fields	Equip. Failure

Flight Phase

Selected Fields	Cruise

Weather Factors

Selected Fields	Day

[redacted]

Corrective Action

Replace entire AC System - Delay due to difficulty getting kit from supplier. Kit has been replaced and the aircraft is back in service!

Root Cause	Risk Level	Risk Status

Ground Risk Analysis Tool

Quick Links

- Manage Templates
- View Risk Factor Summary
- View Comments
- Submit a Flight Risk Analysis

Create a New Report

Choose a Built-In Template

Select

--Or--

Choose a Custom Template

Select

No pending analyses found

Completed Analyses:

Filter Completed Analyses

Start Date 07/26/2019 End Date 05/23/2020 Template 1 selected

ID Shift Select Submitted By 1 selected

Report ID	Submit Date	Shift	Submitted By	Score	View	Delete
1224227	3/23/2020	maint	David Acevedo	51		
1223119	3/20/2020	maint	David Acevedo	53		
1222713	3/19/2020	maint	David Acevedo	48		
1222174	3/18/2020	maint	David Acevedo	50		
1221661	3/17/2020	maint	David Acevedo	54		

1221120	3/16/2020	MAINT	David Acevedo	59	
1219535	3/13/2020	MAINT	David Acevedo	55	
1218858	3/12/2020	mrng	David Acevedo	54	
1218124	3/11/2020	mrng	David Acevedo	52	
1217493	3/10/2020	mrng	David Acevedo	47	
1216928	3/9/2020	mrng	David Acevedo	58	
1215379	3/6/2020	mrng	David Acevedo	50	
1214673	3/5/2020	mrng	David Acevedo	42	
1214001	3/4/2020	mrng	David Acevedo	58	
1213361	3/3/2020	mrng	David Acevedo	46	
1212719	3/2/2020	mrng	David Acevedo	56	
1211319	2/28/2020	mrng	David Acevedo	46	
1209868	2/26/2020	mrng	David Acevedo	53	
1209200	2/25/2020	mrng	David Acevedo	44	
1208570	2/24/2020	mrng	David Acevedo	35	
1206831	2/21/2020	mrng	David Acevedo	48	
1206207	2/20/2020	mrng	David Acevedo	37	
1135466	10/21/2019	mrng	David Acevedo	62	
1127514	10/8/2019	mrng	David Acevedo	52	
1115186	9/19/2019	mrng	David Acevedo	62	
1110098	9/11/2019	mrng	David Acevedo	58	
1109394	9/10/2019	mrng	David Acevedo	54	
1104921	9/3/2019	mrng	David Acevedo	74	
1103375	8/31/2019	mrng	David Acevedo	54	
1102807	8/30/2019	mrng	David Acevedo	93	
1101979	8/29/2019	mrng	David Acevedo	64	
1100472	8/27/2019	mrng	David Acevedo	59	
1096457	8/22/2019	mrng	David Acevedo	51	
1090944	8/14/2019	mrng	David Acevedo	57	

1089607	8/12/2019	mrng	David Acevedo	56	
1086870	8/8/2019	mrng	David Acevedo	68	
1086086	8/7/2019	mrng	David Acevedo	63	
1082092	8/1/2019	mrng	David Acevedo	65	
1081284	7/31/2019	mrng	David Acevedo	51	

Ground Agent Meeting

Location: QWY

10-10-18

Minutes 11:50am-12:25pm

Attended

Safety officer

Peter, Angel, Heraclio, Efrain, Anthony, Jacob, Ivan, Ben, Ara

1. Passengers sitting in the front seat of the S76 no water bottles or drinks allowed and no bags.
2. Making sure the passengers are using the walking path for approaching and exiting the aircraft. Never walk to the front of the S76.
3. At PBX having the passengers wait in the holding Areas and having two at a time approach the aircraft while the others remain in the holding area but always keeping an eye out for all the passengers. Never approach the S76 from the front.
4. Having the pilot brief the front passenger of the S76 with the headsets on.
5. QWY letting PBX know how many taxis to call when the S76 is flying
6. SNA maybe part time ground agent for summer
7. Orange safety vest being used for large crowds
8. Size of luggage and bag weight 25lbs from passengers

9. If you notice a pilot flying Fast departures or fast approaches or flying out of the norm ‘HOT’ or distracted with a device while behind the aircraft controls to report to management.
10. Look over the aircraft before the helicopter departs doors closed, seat belts fastened on empty seats, cowl doors locked, fuel or oil leaking anything that looks like it could effect the safety of the flight please let the pilot know immediately.
11. Intoxicated passengers

IEX Ground Agent safety Meeting

January 22, 2019

Minutes: 1:00pm – 2:00pm

Phone conference call

QWY-Peter, Angel, Anthony, Jacob, Ivan,

PBX- Efrain, Rene

Pilots- Josh, Ara, Garrett

1. Reminder on how deadly the rotor system and tail rotor can be. Talked about an accident that just happened from the main rotor hitting someone. We're all experienced around helicopters but it can happen. Be careful and safe.
2. Keep a close eye on your passengers. Make sure they walk in the designated walkway to the aircraft and away. All passengers must stay in the holding area and wait there until they are giving the ok to approach the aircraft "two at a time"
3. New steps for locations are being worked on.
4. No passengers allowed in front seat unless there is 9.
5. No bags or purses allowed in the front seat.
6. Pet carrier 25 or less
7. More kids headsets

8. Time management bring the passenger bags outside early, play the safety video early if everyone is there. Have the vest ready. This will allow you to be organize. Come up with a plan.
9. Training for all ground crew
10. Possibly old seat belt for lobby to demonstrate to the passengers
11. New lock for fuel trailer
12. Doors closed when fueling

Ramp Agent Safety Meeting

4/25/19

Conference Call: QWY and PBX Ramp Agents

Time; 11:50am-12:15pm

Josh- Thank you everyone for doing a great job and being safe.

Were starting to get busy for the summer and using the S76 just a reminder to make sure the passengers stay away from the front of the Sikorsky and only enter and exit from the side.

A reminder was given was to keep a close eye on the passengers when they're on the ramp.

If a ramp agent sees a pilot showing signs of fatigue, tired, grumpy or missing radio calls or any signs they need to speak up and please call the Safety officer or the DOO, chief pilot or anyone in upper management. This also applies for the ramp agents.

Grant- A reminder No bags or purses allowed in the front seat of the helicopters

Ramp Agents like the new safety vest they are bright and visible.

Two new radio headsets for PBX and QWY will be ordered

Sink hole on PBX still hasn't been fixed. Waiting on the island company

Ramp Agent Safety Meeting 6-14-2019

Meeting held via conference call at 11:10am- 11:40am

Present on the call: Josh, Pete, Angel, Anthony, Jacob, Ivan, Efrain, Grant, Rene, Luis

1. Language in the work environment.
2. Cell Phones need to be put away.
3. Make sure to hold onto the doors while opening to help prevent wear and tear.
4. Close doors if a helicopter is landing or taking off.
5. Make sure the passengers don't grab the little rain gutter on the cabin roof.
6. Intoxicated passengers no fly
7. No purses or bags allowed in the front seat of the helicopter
8. Make sure passengers stay away from the front and rear of the helicopters.
9. Be careful with the steps on the skids. (Scratches and Dings)
10. Make sure the kids are under two years of age for riding on the lap. (Lap Child)
11. No passengers on the ramp without a ground agent.
12. No passengers on the ramp while refueling. All passengers must be 50' away in the sterile area (Fenced area at QWY, Behind the wall at PBX)
13. Headsets and safety vest being used while on the ramp.
14. Ear and Eye Protection always used while the aircrafts are running.
15. When the aircraft is at mid channel start carrying out the bags to the luggage area. (Time management)
16. Checklist being used for keeping the offices clean.
17. Make sure the Life Vest are not upside down.
18. Outside Trash Can empty everyday
19. Go over with the pilots on briefing the passenger's before they land.

Ground Agent Safety Meeting 8-28-19

Meeting held via conference call at 10:10am- 10:30am

Present on the call: Josh, Pete, Angel, Ivan, Jacob, Louis, Elena, Grant

Josh – Thank you everyone for being safe and professional.

Minimal Cell phone usage. Its very unprofessional when passengers walk up to the desk to check in or ask a question and the Ramp Agent is playing on there Phones. There is No Phones allowed when an aircraft is out flying.

No need to run on the ramp. Take your time and be safe. Look over the helicopter for leaks, check if all doors and engine/ transmission cowls are latched.

PBX Ramp Agents if your feeling rushed or overwhelmed please let QWY know so they can send another ground agent over to help. If the Schedule looks very busy and you think you need the extra help, please let QWY know.

Always keep a close eye on the passengers

New Steps for Qwy

Prism Training for New Employees please complete

Hearing/Noise Exposure

First aid safety

Whit needs everyone to clock out for their 30-minute lunch break. Must clock out before the 5th hour

If the passengers appear to be Intoxicated do not let them fly.

Thank you everyone for being safe and Professional.


IEX
HELICOPTERS

Ground Agent Safety Meeting 9-26-19

Meeting held via conference call at 8:35am-9:00am

Present on the call: Josh, Pete, Angel, Ivan, Luis, Elena, Grant, Rene

1. Discussed the YouTube video with the passenger who walked into the tail rotor of an astar helicopter.
   - Make sure all passengers are always escorted onto the ramp and off the ramp with an ramp agent.
   - Keep eyes on the customers entering and exiting the aircraft. Know ware your passengers are at all times.
   - Never let a passenger get behind you
   - An accident could also happen very easily if a passenger walks to the front of the S76.

2. Great Job to all the Ramp Agents for being safe and Professional
3. Pets must be in a carrier in the middle seat 24”/16”/18”
4. Produce an email to the commuters as a reminder to check in at least 15 min before the flight. (NO NEED TO RUSH AND COMPRIMISE SAFETY)
5. Reminder to wear Safety Vest while working on the ramp
6. Time Management when it comes to taking out luggage and not rushing
7. Fire Extinguisher Training at Qwy and Pbx

Safety Management vs SMS?

"Safety Management" is a generic term

"SMS" refers to a specific framework of Safety Management created in 2007 by ICAO.

What is SMS?

1. A way of doing business – **tailorable** to your unique organization…
2. …where you do specific activities to align with the ICAO / FAA "Four Pillars" and its 12 Elements:
3. …and where your organization strives to build and maintain a positive and just safety culture


SMS
Safety Policies & Objectives
Safety Risk Management
Safety Assurance
Safety Promotion
- Just Safety Culture -
- Top Level Commitment -

How Does Your Company "Do" SMS?

1. Policy.

- (1.1) Accountable executive safety policy statement (SMS Manual)
- (1.2) Appointment of key safety personnel (SMS Manual)
- (1.3) Safety accountabilities (SMS Manual)
- (1.4) Emergency Response Planning (ERP Manual)
- (1.5) SMS Documentation (PRISM SMS Tools)

How Does Your Company "Do" SMS?

2. Risk Management. (Red font depicts elements of SMS)

- (2.1) Hazard Identification (PRISM RPT)
- (2.2) Safety Risk Assessment and Mitigation
  - ✓Flight Risk Assessments (PRISM FRAT/GRAT/RPT)
  - ✓Deliberate Risk Planning (PRISM RAT)

How Does Your Company "Do" SMS?

3. Assurance. (Red font depicts elements of SMS)

- (3.1) Safety Performance Monitoring and Measurement
  - ✓ PRISM Corrective Action Assurance checks (IEP, RPT)
  - ✓ PRISM Internal Evaluation Program (IEP)
  - ✓ PRISM Safety Intelligence
- (3.2) The Management of Change
  - ✓ PRISM Project Manager plus Risk Assessment Tool (RAT)
- (3.3) Continuous Improvement of the SMS
  - ✓ PRISM Internal Evaluation Program (IEP)
  - ✓ PRISM Corrective Action Assurance checks (IEP, RPT)

How Does Your Company "Do" SMS?

4. Promotion. (Red font depicts elements of SMS)

(4.1) – Training and education

- ✓ Many topics under PRISM "Safety Materials" and "Training" dropdown menus.

(4.2) – Safety communication

- ✓ "Publishing" in PRISM ARMOR (RPT, RAT, IEP, FRAT)
- ✓ Read & Initial in PRISM ARMOR Safety Locker
- ✓ Safety Awards (SMS Manual)

FOUR PILLARS OF SMS IN ARMOR

PRISM's ARMOR tools fully support the ICAO "Four Pillars of Safety Management" concept and SMS framework.

SAFETY POLICY	RISK MANAGEMENT	SAFETY ASSURANCE	SAFETY PROMOTION
Safety Materials	Reporting Program Tracker	Internal Evaluation Program (IEP)	Safety Materials
Safety Locker	Flight Risk Analysis Tool (FRAT)	Corrective Action Assurance Checks (IEP, RPT)	Safety Locker
	Ground Risk Analysis Tool (GRAT)	Safety Intelligence	Training & Qualification Tracker
	Risk Assessment Tool (RAT)	Project Manager	Safety Training Elements
	Risk Profile	Read & Initial (Safety Locker)	Publisher Function (Safety Locker, Reporting Program Tracker , IEP)
	Safety Materials	Classic Dashboard	
	Classic Dashboard	Data Alerts	

Land the damn helicopter!: HAI’s Zuccaro

August 1, 2013

By Matt Zuccaro HAI president
Aug. 1, 2013, Alexandria, Va. - So, how is your day going? Mine was not that great. I spent it reading National Transportation Safety Board helicopter accident reports. I don’t know about you, but my level of frustration is at an all-time high.

August 1, 2013

By Matt Zuccaro HAI president

Topics

- Procedures
- Safety & Training

There were no surprises. No one has yet invented a new way to crash helicopters. The reports noted the usual suspects — fuel exhaustion, continued flight in marginal weather resulting in inadvertent IMC and, in the minority, mechanical failures. To round it out, there was a pilot under the influence of both prescription and over-the-counter medications with no reporting to the FAA.

In many accidents, there is prior knowledge that all is not well. With fuel exhaustion, most pilots are aware of low fuel and the uncertainty of reaching fuel. In weather-related incidents, pilots know they are in less-than-desirable weather conditions, with difficulty maintaining visual flight rules. Accidents caused by mechanical failures involve alerts by warning systems and abnormal noises or vibrations. In a medical incapacitation or under-the-influence case, the pilot is usually aware of his substandard performance and diminished abilities.

With the above in mind and assuming an acceptable landing site is available, why don't pilots exercise one of the most unique and valuable capabilities of vertical flight — namely, land the damn helicopter! In a high percentage of crashes, this simple act would break the chain of events and prevent the accident.

I once spoke to a pilot who had survived an accident and asked why he hadn't used his option to make a precautionary landing. He indicated he had not given it direct consideration and had focused instead on destination and mission completion. He admitted, though, that in the past he had worried about the scrutiny he would incur for making a precautionary landing. This didn't surprise me. In my early days of flying, I, too, pondered the same issues at times, although luckily I don't any more.

Pilots normally associate precautionary landings with the police showing up, their company incurring logistical and legal costs, upset passengers refusing to fly with them again, the FAA wanting an explanation, the press asking questions, and peers expressing opinions on their abilities.

Yes, these are all possibilities, but think about the reality of the available options. Option one: focus on the situation and its safety concerns, make the precautionary landing, prevent the accident, and have confidence that once you explain your decision, all those you were concerned about will support your actions. Option two: don't make the precautionary landing and instead kill everyone on the aircraft and maybe some on the ground. Call me crazy, but this seems like a no-brainer.

Obviously, your primary goal should be to not get into this situation in the first place. However, the last time I checked, none of us are perfect. Accordingly, when such landings occur, the industry and authorities should recognize the event as being part of a healthy, positive safety culture. Bottom line: when appropriate, “land and live.”

On a totally different topic, I have to share with you the best experience I have ever had in a helicopter. I recently participated in an aviation association CEO town hall in Tarkio, Missouri, sponsored by Congressman Sam Graves, chair of the congressional General Aviation Caucus and a true friend to general aviation. HAI member Chuck Aaron, pilot of the Red Bull aerobatic helicopter, was part of the associated air show.

Chuck was kind enough to invite me to fly with him for an aerobatic demonstration flight. Truth be told, I was buckled into the helicopter before Chuck even started walking toward it. Although I had flown aerobatics in fixed wing, like most helicopter pilots I had been told by all, “Don’t even consider such maneuvers in a helicopter unless you have a death wish.” Please note that I wouldn’t ride on such a flight with anyone but Chuck, who is the only certificated aerobatic helicopter pilot in the U.S.

My ride with Chuck was an amazing experience to be remembered forever. It was a pleasure watching a true safety-oriented, professional pilot in action as we rolled, looped, and split-S our way through the blue skies of Missouri. The only scary part was when Chuck let me fly back to the airport and land — now, that was something to behold!

As always, have a safe flight and fly neighborly.

Best regards — Matt