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Offshore Helicopter Safety Inquiry
Newfoundland and Labrador • Canada

AUGUST 2010

Offshore Helicopter Safety Inquiry

Cougar Personnel Survey Report

Published by Aerosafe Risk Management

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About Aerosafe Risk Management

Aerosafe Group is a global aviation safety and risk management company which provides risk management services, support and tailored solutions to aviation companies around the world. With offices in North America, Australia, India, China and New Zealand, Aerosafe is recognized as an international leader in this important field. The Aerosafe Group has been invited to set standards with aviation regulators, industry groups and companies alike and operates at the operational, enterprise, sector and industry levels in the application of modern governance, safety oversight, risk management and safety management systems.

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The Cougar employee survey was carried out by Aerosafe Risk Management (Aerosafe) at the request of the Commissioner of the Offshore Helicopter Safety Inquiry as an extension to the passenger survey conducted into helicopter safety in May 2010.

The survey was issued over a short time frame and even in light of this limitation the survey attracted a very high level of employee participation. The results in this survey are reflective of an organization with employees that are confident in the safety of their helicopter operation. The openness of comment in the survey demonstrates a healthy safety culture with an open reporting culture.

I wish to express the thanks of Aerosafe to Cougar Helicopters and all of the Cougar employees whose cooperation made the survey possible.

Yours sincerely,

Kimberley Turner
Chief Executive Officer
30 August 2010

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August 10, 2010

Dear Cougar Personnel:

You will remember that in April the Inquiry engaged Aerosafe Risk Management to survey offshore workers on offshore helicopter safety issues.

It was suggested at the Inquiry that for completeness I should also survey Cougar personnel. I have asked Aerosafe to work with Cougar to issue a similar set of survey questions of Cougar's personnel. Enclosed you will find the survey which can be completed in about 10 minutes. Please take the time to complete the enclosed survey and deposit the completed survey into the secure box near the entrance to Cougar's heliport within 48 hours.

Your role as an employee of Cougar is quite different from the role of an oil operator employee, but nevertheless it would be helpful to have your perspectives. The survey is not an internal survey of Cougar's organization but is designed to get your opinions on offshore helicopter safety and ways in which you think it could be improved.

Yours sincerely,

Robert Wells, Q.C.
Commissioner

Note: If you have any questions regarding the survey please contact Michael Roberts at Aerosafe at 202-449-7693 or email: oshsi-survey@aerosafe.com.au.

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This Report was requested in June 2010 by the Commissioner, Offshore Helicopter Safety Inquiry (OSHSI), Newfoundland and Labrador, Canada, the Honourable Robert Wells, Q.C. This Report presents the information and viewpoints gathered by means of a survey about helicopter safety matters from employees of Cougar Helicopters Inc. (Cougar). Cougar provides helicopter transportation services to the offshore oil installations in the Newfoundland and Labrador offshore area. This survey was issued at the request of the Commissioner as an extension to the passenger survey conducted in April and May 2010. The results of the Cougar employee survey are to be read in conjunction with this initial survey report.

The survey was qualitative in nature and was given to employees of Cougar to complete voluntarily. Direct encouragement to participate was offered by the Commissioner in a letter which accompanied each survey. Similarly, the General Manager of Cougar sent a message supporting employee participation to company employees. The survey was distributed over a three-day period at the Cougar heliport in St. John's, Newfoundland. The survey attracted an excellent response rate which demonstrated a high level of interest of Cougar employees in participating in the Inquiry process.

It should be noted that slight modifications were made to the original survey issued to offshore oil workers so that it would be suitable for employees of a single aviation company. Most, if not all, Cougar employees who participated in the survey have a good working knowledge of aviation operations and safety management systems. This high level of aviation knowledge and experience provides the Inquiry with a different perspective from that of the passengers. The issues identified by Cougar employees were consistent with those identified by the workers in the passenger survey.

The results of the survey of the Cougar employees indicated that the employees viewed Cougar as a good employer that conducts safe operations. With that said, there is a level of concern with the current situation and the additional pressure of the circumstances that have followed the accident. The survey did not validate if these issues were real or perceived.

In addition to this, there was recognition by employees of Cougar that they work in a high risk environment as a result of factors such as difficult weather conditions, sea states and the hazards associated with night flying.

The open and informative responses in the questions with an open answer response field indicate an aviation organization that has a healthy and honest reporting culture. The reporting culture is a key element of an aviation safety management system. There is a useful level of detail in the suggested areas of improvement that provides the Inquiry with input from the perspective of the employees of the aviation provider.

Overall the results of the survey were consistent and extremely positive despite the awkwardness that these views could potentially create in the customer-service provider relationship. The survey results are reflective of an organization with a mature safety culture.

Accord Acts	The Canada-Newfoundland Atlantic Accord Implementation Act and the Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act.
Newfoundland and Labrador Offshore Area	The offshore area as defined in the Accord Acts.
Operator	A company which has been issued an authorization pursuant to the Accords Acts to conduct work or activity within the Newfoundland and Labrador Offshore Area.

Acronyms and Abbreviations

ASFQ	Unknown
BST	Basic Survival Training
CCR	Central Control Room
C-NLOPB	Canada-Newfoundland and Labrador Offshore Petroleum Board
ECC	Emergency Coordination Center / Emergency Control Center
EHIS	Environmental Health Information Services
ERT	Emergency Response Team
HSE	Health, Safety and Environment
HSEQ	Health, Safety, Environment and Quality
HUEBA	Helicopter Underwater Emergency Breathing Apparatus
HUET	Helicopter Underwater Escape Training
IR	Infrared
IRP	Industry Risk Profile
JOSHC	Joint Occupation Safety and Health Committ**ee**
OSHSI	Offshore Helicopter Safety Inquiry
PLB	Personal Locator Beacon
SAR	Search and Rescue
SHTR	Unknown
SMS	Safety Management System

AUGUST 2010

Offshore Helicopter Safety Inquiry

Introduction

Introduction

Following the fatal accident of Cougar Flight 491 on March 12, 2009 off the coast of St. John's, Newfoundland, the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) established the Offshore Helicopter Safety Inquiry (OSHSI). The purpose of the Inquiry is to

> determine what improvements can be made so that [C-NLOPB] can determine that the risks of helicopter transportation of offshore workers is as low as is reasonably practicable in the Newfoundland and Labrador Offshore Area. [Commissioner's Terms of Reference]

In order to solicit the views of the offshore helicopter passengers with respect to practices which may reduce the risks of helicopter transportation, a survey of passengers flying in the Newfoundland and Labrador Offshore Area was undertaken in April and May 2010. Following the public hearings in June 2010, Commissioner Wells requested that the same opportunity be given to the workers of the helicopter provider, Cougar Helicopters Inc. (Cougar).

In order to gather the views of the employees of Cougar at the St. John's base, a second survey was undertaken in August 2010. The survey of the staff at St. John's was almost identical to the Passenger Survey, with modifications to suit the different group of respondents. The results of this second survey are contained in this report, forming an addendum to the initial Passenger Survey Report. It is crucial that this Cougar Personnel Survey Report be read and considered in conjunction with the Passenger Survey Report, and not in isolation.

Overview

The survey of employees at Cougar's St. John's base provided to aircrew and to other Cougar employees involved in supporting flying operations the opportunity to contribute to discussions about the safety of offshore flying operations. The employee population included those that fly to offshore installations, as well as those who provide technical, operational and administrative support to the aircrew. This survey report enabled them to identify their concerns and suggestions for the improvement of offshore helicopter travel, as well as providing an overview of the current safety practices and culture in the industry.

The Cougar Personnel Survey was instigated following the OSHSI public hearing sessions in June 2010. During review of the Passenger Survey Report it became evident that soliciting the opinions of those personnel that are involved in the operation of helicopters in the offshore industry would be valuable to the Inquiry.

Survey Background

The Commissioner's Terms of Reference allow for the use of a survey as an instrument by which information can be gathered.

The survey is intended to identify any concerns or risks associated with offshore helicopter travel, as well as any practices which may reduce or eliminate the risks. It is intended that the survey gather information which depicts the safety culture of the helicopter operator and the safe operations of the helicopter, particularly with respect to escape, evacuation and rescue procedures when travelling by helicopter.

A survey is a method of gathering information from a population. The Aerosafe survey was available to all St. John's Cougar personnel. It provides a simple means for the population to contribute to the Inquiry and the improvement of the safety of personnel travelling offshore by helicopter.

Survey Objectives

The primary objective of the survey is to contribute to the Commissioner's report in respect of the Offshore Helicopter Safety Inquiry's Terms of Reference:

(a) Safety plan requirements for Operators and the role that Operators play in ensuring that their safety plans, as represented to and approved by the Board are maintained by helicopter operators,

(b) Search and rescue obligations of helicopters by way of contractual undertakings or legislative or regulatory requirements,

(c) The role of the C-NLOPB and other regulators in ensuring compliance with legislative requirements in respect of worker safety.

Aerosafe Risk Management constructed a survey which is designed to address these requirements by:

1. Collating information about helicopter operations and the safety of helicopter operations, and where relevant, training received prior to offshore flights

2. Collating information about Cougar's safety culture, including risk assessments and safety management systems, and

3. Collating risks and risk-reducing practices which have been identified by employees of Cougar.

Answers to these three requirements will contribute to the Commissioner's investigation into the existing safety regime in place within the Newfoundland and Labrador offshore oil and gas industry as well as identifying practices which may reduce the risks of helicopter transportation.

An additional objective is to provide a means for those who work in the offshore helicopter industry to make their opinions known to the Commissioner. While a number of stakeholders, including Cougar, have had an opportunity through a variety of measures to participate in the Inquiry, this survey allows all staff involved in helicopter transportation in the area to participate. This also reflects a consistency in approach whereby the passengers took part in a survey to gather their opinions, while their employers were recognized as a party with standing. Similarly, Cougar Helicopters Inc. is a recognized party in the Inquiry, and this survey gathers the opinions of potentially every individual who is involved in helicopter flights to offshore locations.

Assumptions & Limitations

This survey was developed within the context of the following assumptions:

1. The survey was done at the request of the Commissioner, Offshore Helicopter Safety Inquiry, Newfoundland and Labrador, Canada and addresses the requirements of the Inquiry.

2. The survey was independently developed and administered. The survey results were compiled independently and this process was free of any external influence.

3. There was regular liaison among the Commissioner, Inquiry Counsel and Aerosafe during all stages of survey development and administration.

4. It is assumed that all Cougar employees at the St. John's base received advance notice of the survey.

5. It is assumed that the information entered onto the survey was freely given, voluntary and supplied without coercion of any kind.

6. It is assumed that the information provided by survey participants is complete, true, correct and free of external influences.

7. The information is a true reflection of the eligible participant's response at a particular time to the set of questions asked on the survey.

8. There has been no disclosure of survey results by Aerosafe prior to the date of submission to the Commissioner.

9. It is assumed that the Report once submitted to the Commissioner will be made publicly available on the Inquiry website.

10. The original surveys are safely stored until direction is given to Aerosafe by the Commissioner for their complete destruction.

This OSHSI survey is subject to the following limitations:

1. The survey was made available to Cougar employees at the St. John's base over a short (two-day) period from 11 August to 12 August 2010.

2. Employees were requested to undertake the survey during working hours and were asked to dedicate 10 to 15 minutes of their time to complete the survey.

3. The Passenger Survey, on which the Cougar Personnel Survey was based, was made available on the Inquiry website and was therefore publically available at the time of the Cougar Survey distribution.

4. The results of the Passenger Survey were on the OSHSI website, presented at the public hearings and profiled in the media.

Survey Structure

In order to address the objectives, the Passenger Survey was constructed using a number of established Industry Risk Profile (IRP) techniques to identify risks in the offshore oil and gas helicopter transportation industry.

The survey was divided into the following five parts:

1. General Information
2. Helicopter Transportation and Operations
3. Employer's Safety Culture
4. Additional Information
5. Opportunities for Improvement

Each of these parts allows a specific aspect of the survey objectives to be achieved, e.g., the opening General Information captures demographic information about participants. A cross-tabulation of these results may then identify emergent trends which are specific to one or more groups categorized, for example, by age, job role, offshore installation, and so on.

Survey Administration

On Monday, August 9, 2010 the survey for Cougar employees was delivered to Cougar's heliport in envelopes containing a copy of the survey with the Commissioner's introductory letter.

The security arrangements for storing the completed surveys were found to be satisfactory. On the morning of Tuesday, August 10, 2010, Mr. Hank Williams, General Manager of Cougar, provided all Cougar employees with notice that the survey was being conducted. He provided a copy of the introductory letter from the Commissioner, and encouraged all personnel to participate in the survey.

The survey was conducted over a two-day period and took approximately 10 to 15 minutes to complete. 67 completed survey forms were delivered to Aerosafe. The response rate was found by Aerosafe to have been 59%, i.e., 67 responses out of 113 employees.

About this Report

The intention of this survey report is not to interpret the results, nor to draw conclusions. The report is intended to present the results in summarized form, which may allow conclusions to be drawn, if appropriate. The results for each question are provided as a percentage of the overall number of completed surveys. This enables the reader to comprehend the overall response, and may lead to future analysis of the results to identify trends or draw comparisons.

While the objective of the survey is to assist the Commissioner in reporting on the specific mandate of the Inquiry, the purpose of this report is not to provide an answer to each of the aspects. Rather this report will summarize the responses to each question and empower the audience to make an assessment of the helicopter transportation operations and the safety culture in the industry.

Report Structure

The results for each question are contained in the following section. This provides a tabulation of the results as well as a snapshot of the response characteristics. A number of Appendices are attached to provide a record of the responses to the free text questions.

In the case of Question 6, participants are asked to specify their safety appointment or job role, if any. A frequency count of each of the answers is included. Responses are included along with the statistics for Question 6. Question 9 asks the employee to identify any changes in the safety practices of helicopter operations if they have selected “yes” in the first part of the question. These extended answers are broadly categorised into 38 categories, and a frequency of response for each of the categories is included. The individual responses are contained in Appendix A.

The number of respondents who explained their answer to Question 24 was only three. Each of these responses is included in the discussion of the Survey Results.

The responses for Questions 34 and 35 form a significant segment of the survey. In order to present the data without alterations, each of the responses, as written on the surveys, is contained in Appendix B and C for Questions 34 and 35 respectively. These responses were broadly categorised in order to provide some indication of the frequency with which each of the concerns or suggestions was raised. The categories used parallel those used in the Offshore Worker Survey Report, with additions as needed. This frequency count is contained in the Survey Results, as well as a record of the number of times each category was listed as first, second and third on the surveys. In the case of Question 34, it is asked that each of the concerns is rated for how significant the concern is on a scale of 1 to 5. This rating is included in Appendix B.

Analysis Techniques

The results from the surveys were compiled in the Aerosafe survey database. In order to maintain consistency of technique and quality control, one person was responsible for data entry with an additional person conducting periodic checks of the data entry by a second Risk Advisor. The process was overseen by Aerosafe’s Chief Risk Officer, Mr. Michael Barron.

Where more than one response was given to a question requiring only a single answer, the responses were recorded but the answer was declared “invalid”. Similarly if the respondent had marked an answer which was not applicable, for example Question 16 which was only to be answered if the answer to Question 15 was ‘Yes’, the response was recorded as “invalid”.

In Part 2 of the survey respondents were asked to answer Questions 11 to 20 (inclusive) only if they indicated “Yes” or “Occasionally” in Question 10. If any respondent answered “No” in Question 10, then any responses in Questions 11 to 20 were recorded as “invalid”.

The analysis of the results is primarily descriptive in order to avoid data manipulation and drawing potentially misleading conclusions. The results illustrate both frequency of response and percentage of response. The combined number of unanswered questions and invalid responses are recorded for each question.

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Survey Results

Survey Results

The overall responses from the personnel are positive about both the helicopter transportation and operation and the employer's safety culture. The opportunity for personnel to identify concerns about helicopter transportation and any suggestions for improvement had a reasonable response rate. This enabled some overall grouping of the concerns and suggestions in order to provide an overview of the frequency with which topics arose. The categories used parallel those used in the Offshore Worker Survey Report, with additions as needed.

The results are presented to enable a summary of the personnel's opinions and are not analyzed for reasons as to why they may be held. Some description of the results is included in order to provide a method of comparison of results between questions.

Response Rate

The total participation rate was 59%. This sample size of 67 allowed a margin of error of 7.67%.

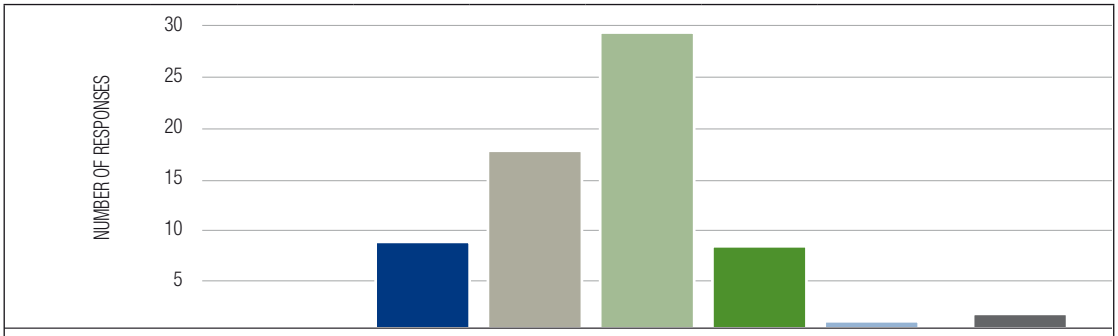
The overall response rate was high for the survey. The large number of results not only indicates the keenness of personnel to play an active role in improving the safety of offshore helicopter transportation, but it also enables accurate conclusions and observations to be made from the survey results.

Part 1 General Information

Part 1 of the survey provides an overview of the demographic breakdown of the respondents. Although an analysis of the results based on demographics is not included in this report, future evaluations may choose to undertake this task.

Q1: Age

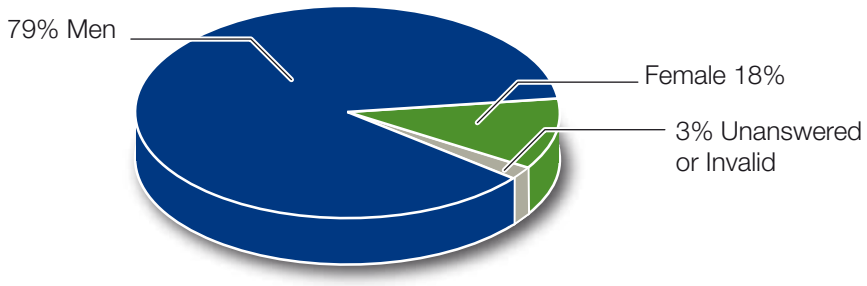
Forty three percent (43%) of respondents are aged between 40 and 49. This is followed by personnel aged between 30 and 39, who comprised 27% of the respondents. The median age range was 40-49.



ANSWER	TOTAL	<20	20-29	30-39	40-49	50-59	60+	UNANSWERED OR INVALID
Number of Responses	**67**	0	9	18	29	8	1	2

Q2 : Sex

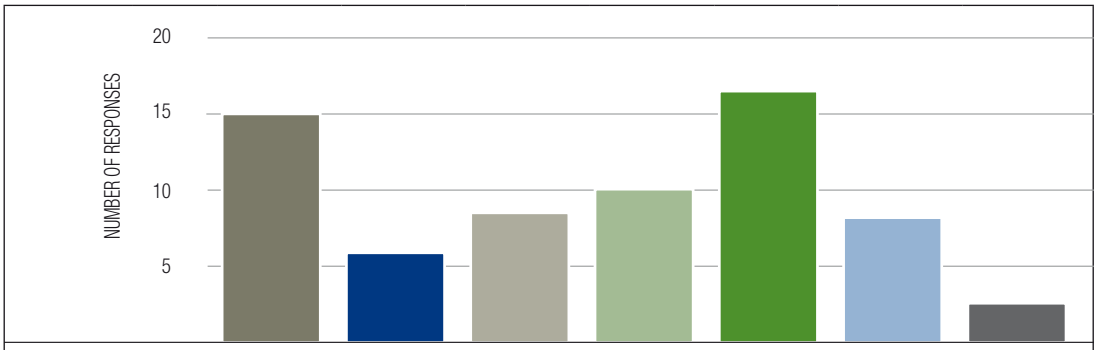
Of the 67 respondents, 79% were male and 18% were female. 3% of personnel did not answer this question.



ANSWER	TOTAL	MALE	FEMALE	UNANSWERED OR INVALID
Number of Responses	**67**	53	12	2

Q3: Job Role

The most frequently identified job role was “Administration/Finance”, constituting 24% of all respondents. 15 respondents, or 22%, are “Pilot” and 10 respondents identified themselves as “Maintenance Engineer”. The number of people identifying as “Executive/Manager” consisted of 13%.



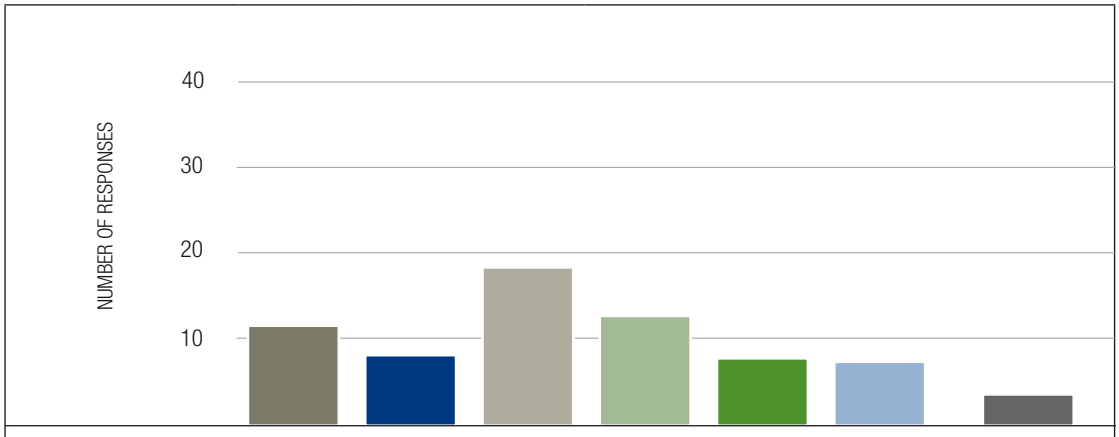
ANSWER	TOTAL	PILOT	RESCUE SPECIALIST	EXECUTIVE / MANAGER	MAINTENANCE ENGINEER	ADMINIS-TRATION / FINANCE	OTHER	UNANSWERED OR INVALID
Number of Responses	**67**	15	6	9	10	16	8	3

12% of respondents selected “Other.” The following is a list of the positions recorded.

JOB ROLE	NUMBER OF TIMES IDENTIFIED
Ramp / Security	2
Quality Control	1
Passenger Movement Controller [PMC]	1
Safety Coordinator	1
Safety Director	1
Search & Rescue [SAR] Pilot, Search Rescue Lead Pilot for St. John’s	1
Supervision	1
TOTAL	**8**

Q4: What area of the organization do you work in?

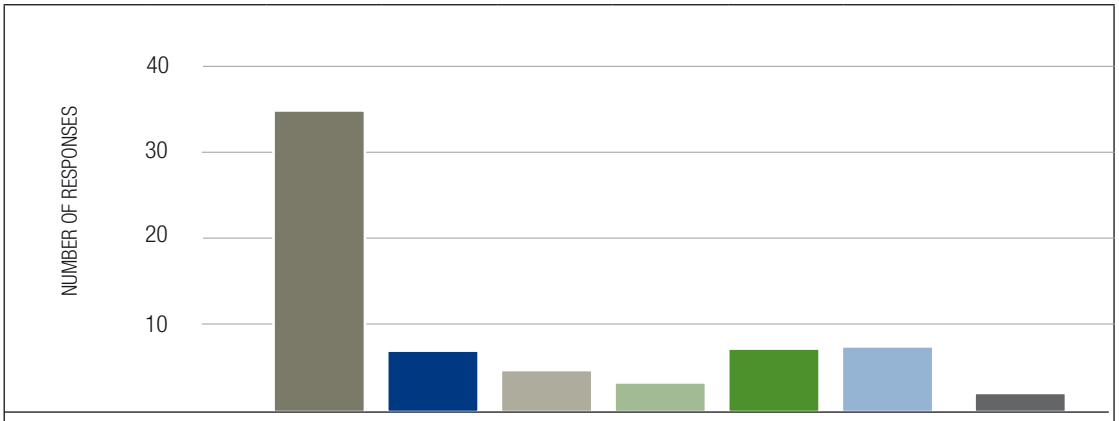
Twenty seven percent (27%) of respondents work in “Flight Operations” within the organization. 18% of respondents work in “Maintenance” and 16% work in “IT/Finance”.



ANSWER	TOTAL	IT / FINANCE	SEARCH & RESCUE / SAFETY	FLIGHT OPERATIONS	MAINTE-NANCE	PASSENGER MOVEMENT / OPERATION CONTROL (OCC)	OTHER	UNANSWERED OR INVALID
Number of Responses	**67**	11	8	18	12	7	7	4

Q5: How many trips to the rig/platform would you make each year?

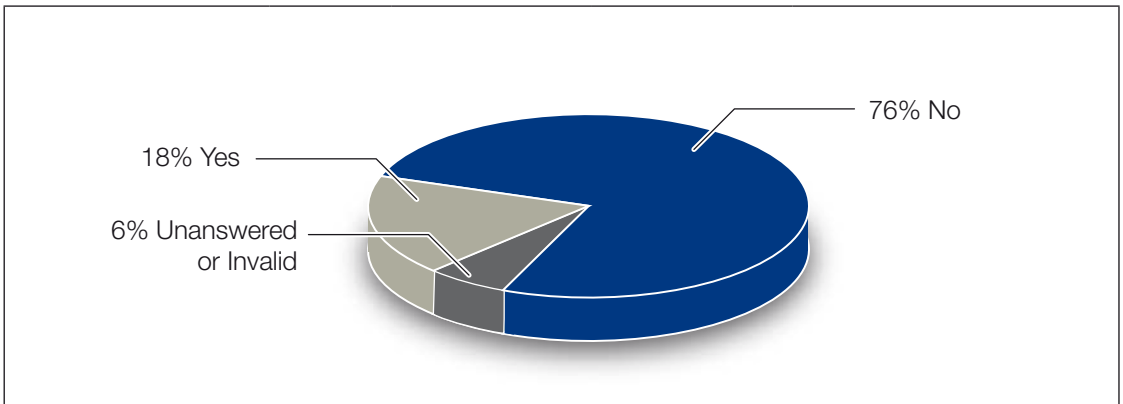
Fifty one percent (51%) of personnel do not make any helicopter trips in a year. 24% of personnel make more than 51 flights each year and 10% make between one and three trips per year.



ANSWER	TOTAL	NONE	1-3	4-12	13-50	51-100	>100	UNANSWERED OR INVALID
Number of Responses	**67**	34	7	5	3	8	8	2

Q6: Do you hold a specific safety appointment or role with your employer?

Eighteen percent (18%) of participants indicated they hold a specific safety position with their employer. 13 respondents identified their safety roles, which are tabulated on the following page.



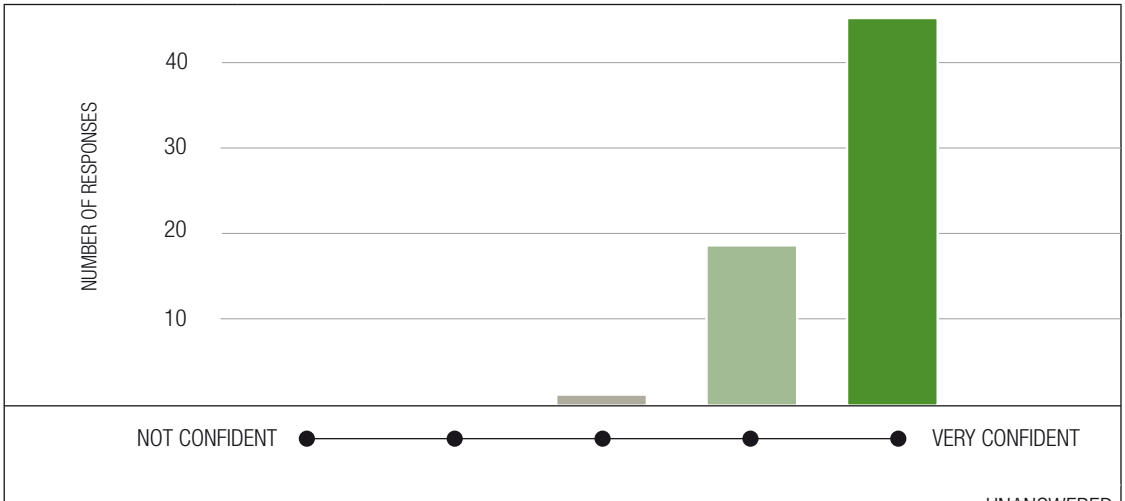
ANSWER	TOTAL	YES	NO	UNANSWERED OR INVALID
Number of Responses	**67**	12	51	4

GENERAL INFORMATION: QUESTIONS 1-6

SAFETY ROLE	NUMBER OF TIMES IDENTIFIED
SMS Committee Member	2
Chief Pilot Type-SK92	1
Director of Flight Operations	1
Director of SMS	1
Flight Data Monitoring	1
Helideck Inspector	1
Base Aviation Safety Officer	1
Safety Coordinator	1
Shift Lead	1
SMS Committee Chair	1
Training	1
Training Captain for Line ANS SAR	1

Q7: What is your level of confidence in respect to the safety of helicopter transportation?

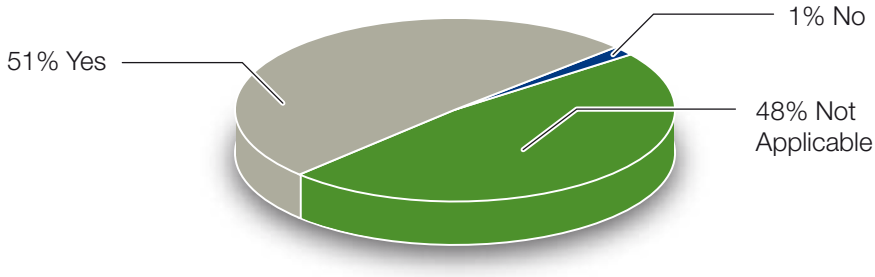
Of the respondents, 28% and 67% felt "confident" or "very confident" (respectively) about the safety of helicopter transportation. This total, 96%, indicates an overall confidence in helicopter travel safety. 4% of personnel indicated 3 out of 5. There were no responses indicating 1 or 2 on the scale, where 1 represented "not confident".



ANSWER	TOTAL	1	2	3	4	5	UNANSWERED OR INVALID
Number of Responses	**67**	0	0	3	19	45	0

Q8: Do you feel safe when travelling in helicopters to and from the rig/platform?

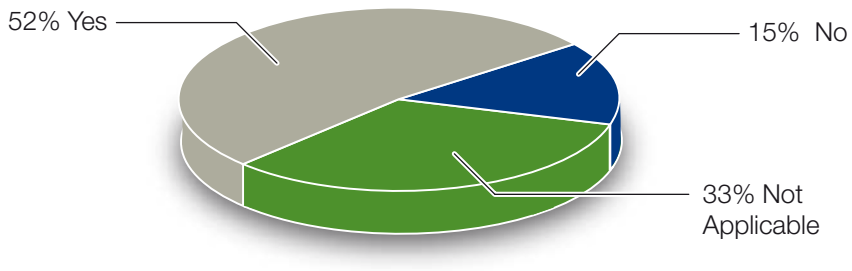
Thirty two (32) respondents indicated that this question was not applicable to them. 34 or 51% of all respondents answered "Yes". This is equivalent to 97% of respondents to who this question applies to. 1 respondent answered "No".



ANSWER	TOTAL	YES	NO	N / A	UNANSWERED OR INVALID
Number of Responses	**67**	34	1	32	0

Q9: Following the Flight 491 accident, have you noticed any changes in safety practices of helicopter transportation?

Thirty five (35) respondents indicated that they had noticed changes in safety practices following the Flight 491 accident. 22 people, or 33% of personnel, indicated that this question was not applicable. 15% of respondents answered "No".



ANSWER	TOTAL	YES	NO	N / A	UNANSWERED OR INVALID
Number of Responses	**67**	35	10	22	0

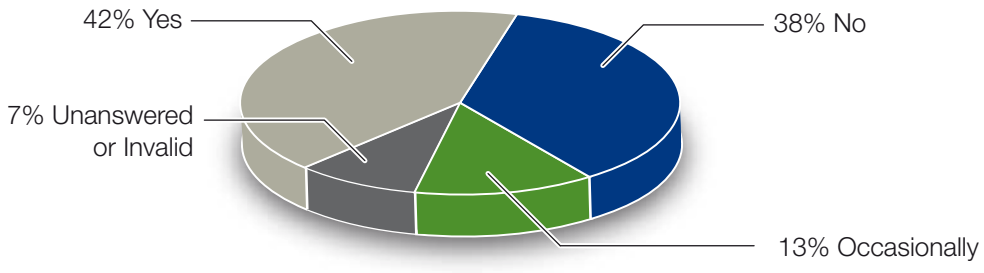
The following provides a summary of the frequency which safety changes were identified by respondents. The recorded changes are included verbatim in Appendix A.

SAFETY CHANGE OBSERVED	NUMBER OF TIMES IDENTIFIED
Flight limitations (visibility/weather/fog/night) closely adhered to	12
New/better suits/better suit fit/fitted better	11
HUEBA/HEEBS implementation (and associated training)	8
Concern for safety more evident/safety at forefront/ safety precautions	6
Improved SAR	6
Training	6
Flying at lower altitude	4
Helicopter maintenance procedures more rigorous/more downtime for maintenance	3
Pre-flight briefing changes/more detailed	3
General S-92 performance	3
New rules and equipment	3

SAFETY CHANGE OBSERVED	NUMBER OF TIMES IDENTIFIED
Closer or more inspections/pre-tests/safety checks/ greater attention to detail/more attentive	2
Passengers/crew more aware about safety/emergency procedures	2
Increased security/screening	1
Better flotation gear	1
All safety issues have been increased and improved	1
Tracking and recording of flight data information	1
More personnel to perform tasks	1
Company directives flying schedules	1

Q10: Does your role require you to fly in the helicopter?

A total of 55% of participants said “yes” or “occasionally,” and a total of 45% answered “no” or did not answer the question.



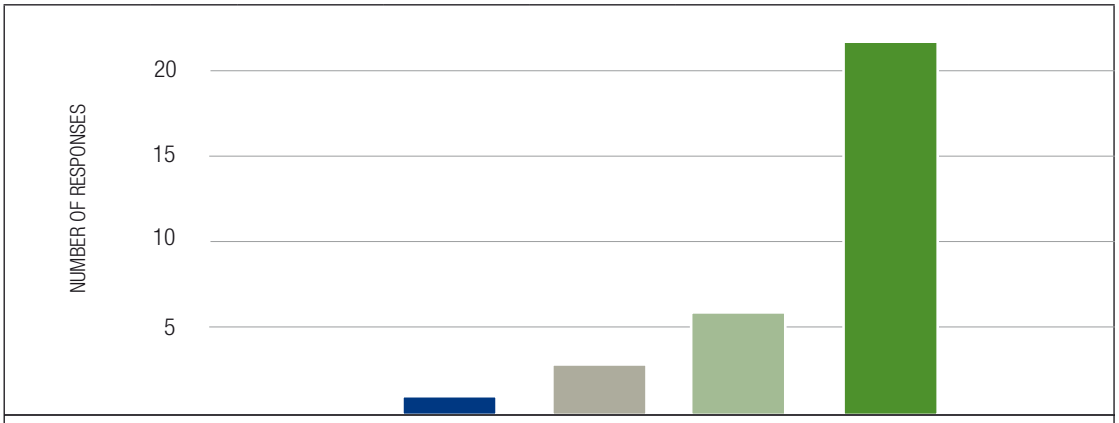
ANSWER	TOTAL	YES	NO	OCCASIONALLY	UNANSWERED OR INVALID
Number of Responses	67	28	24	9	6

IMPORTANT SURVEY NOTE

The following 10 questions were taken only by people who answered “yes” to question 10 and were those whose roles require them to fly offshore. For the purposes of calculating percentages, the total number of respondents for Questions 11-20 is assumed to be 37 (the number of respondents who answered “yes” or “occasionally” to Question 10).

Q11: How capable do you feel to respond to an emergency situation in a helicopter?

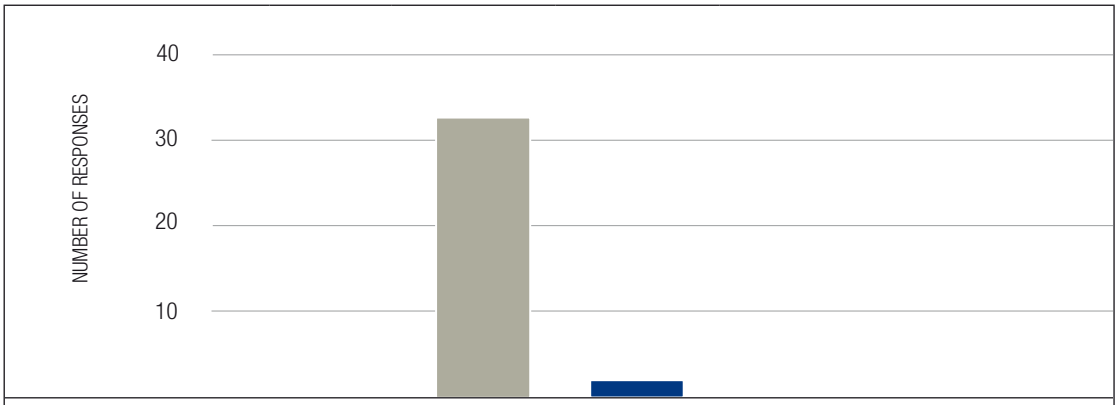
Of the respondents whose roles require them to fly offshore as indicated by their response to Question 10, 16% and 59% felt capable or very capable of responding to an emergency situation in a helicopter, as indicated by an answer of 4 or 5 out of 5. This total, 76%, indicates that the majority of respondents feel that their emergency response capability is high. 8% of respondents indicated 3 out of 5, a neutral response, to the capability level. In total 3% of respondents (one response) did not feel capable, scoring 2 out of 5.



ANSWER	TOTAL	1	2	3	4	5	UNANSWERED OR NOT APPLICABLE
Number of Responses	67	0	1	3	6	22	35

Q12: Have you received training for emergency situations in helicopter operations?

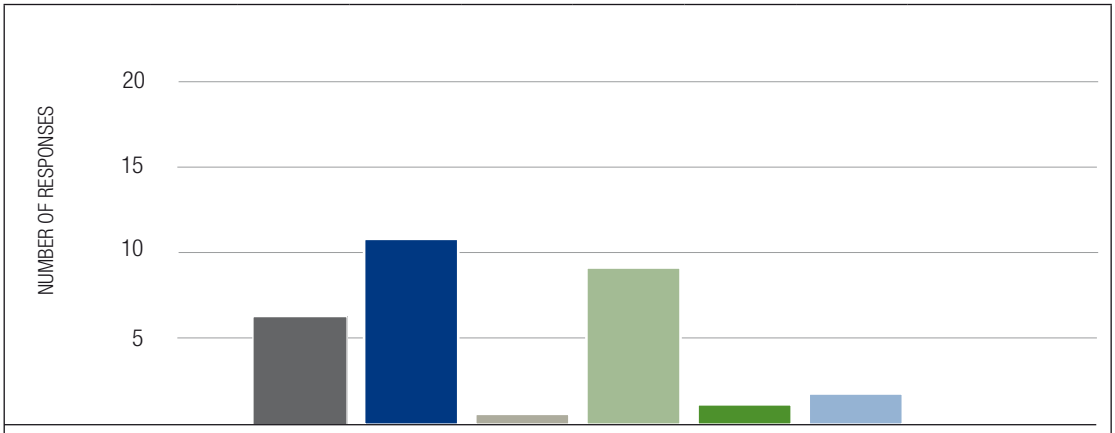
Of the respondents whose roles require them to fly offshore as indicated by their response to Question 10, 84% indicated that they had received training for emergency situations in helicopter operations. A couple of personnel had indicated “no.”



ANSWER	TOTAL	YES	NO	UNANSWERED OR NOT APPLICABLE
Number of Responses	67	31	2	34

Q13: How often do you receive recurrent/refresher helicopter safety training?

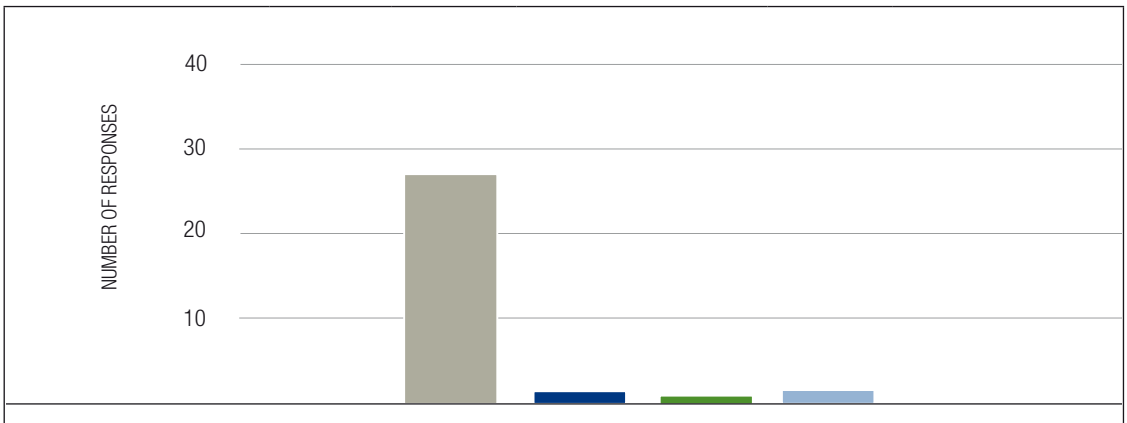
Of the respondents whose roles require them to fly offshore as indicated by their response to Question 10, 30% of respondents indicated that they received recurrent or refresher helicopter safety training once every year. A total of 46% of personnel whose role requires them to fly in a helicopter receive helicopter safety training at least once per year.



ANSWER	TOTAL	TWICE A YEAR	ONCE A YEAR	EVERY TWO YEARS	EVERY THREE YEARS	CAN'T REMEMBER	N / A	UNANSWERED OR NOT APPLICABLE
Number of Responses	**67**	6	11	1	9	2	3	35

Q14: Did the helicopter safety training involve physical drills or exercise?

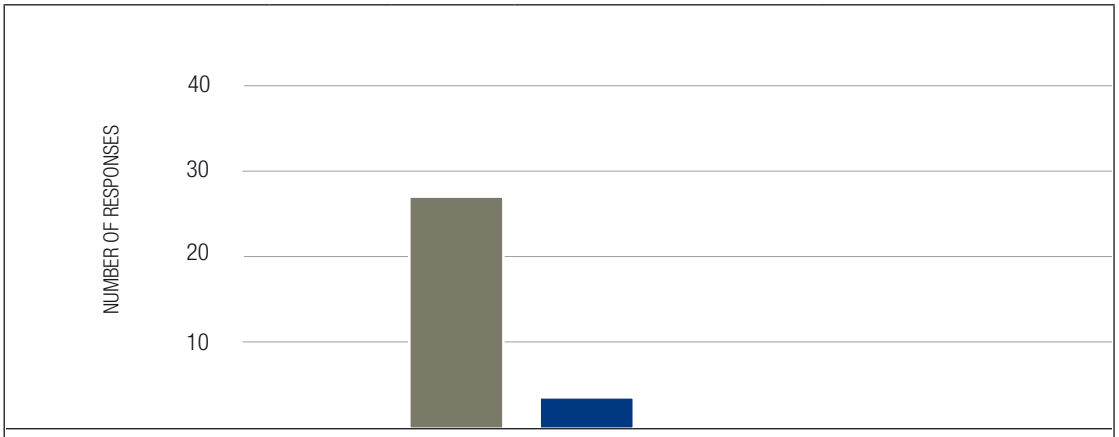
Of the respondents whose roles require them to fly offshore as indicated by their response to Question 10, 73%, indicated that the helicopter safety training involved physical drills or exercises. 6% said no to this question.



ANSWER	TOTAL	YES	NO	DON'T KNOW	N / A	UNANSWERED OR NOT APPLICABLE
Number of Responses	**67**	27	2	1	2	35

Q15: Have you undertaken Helicopter Underwater Escape Training (HUET) training?

Of the respondents whose roles require them to fly offshore as indicated by their response to Question 10, 76%, or 28 employees, have undertaken HUET training.

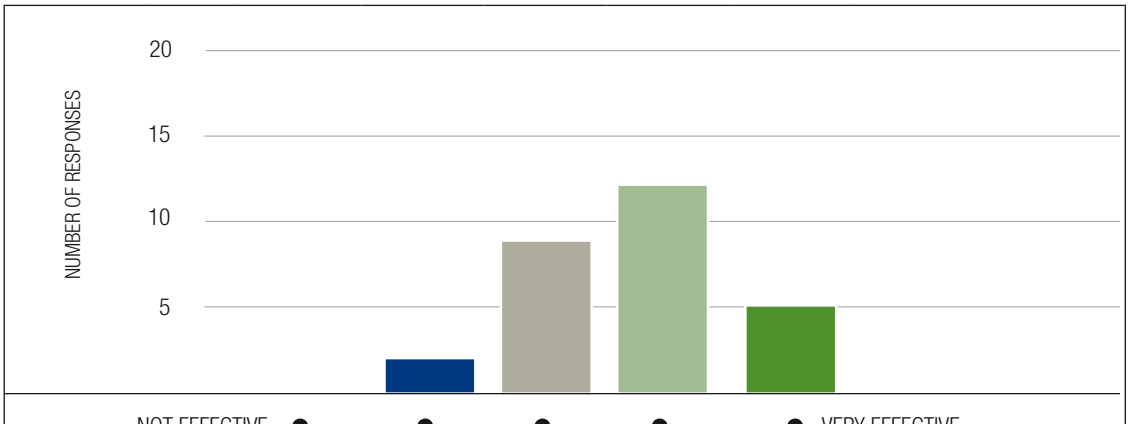


ANSWER	TOTAL	YES	NO	DON'T KNOW	UNANSWERED OR NOT APPLICABLE
Number of Responses	**67**	28	4	0	35

The following question was taken only by people who answered "yes" to Question 15, those who have undertaken HUET training. Percentages for Question 16 have been calculated using 28 as the total number of respondents.

Q16: How effective is the HUET training?

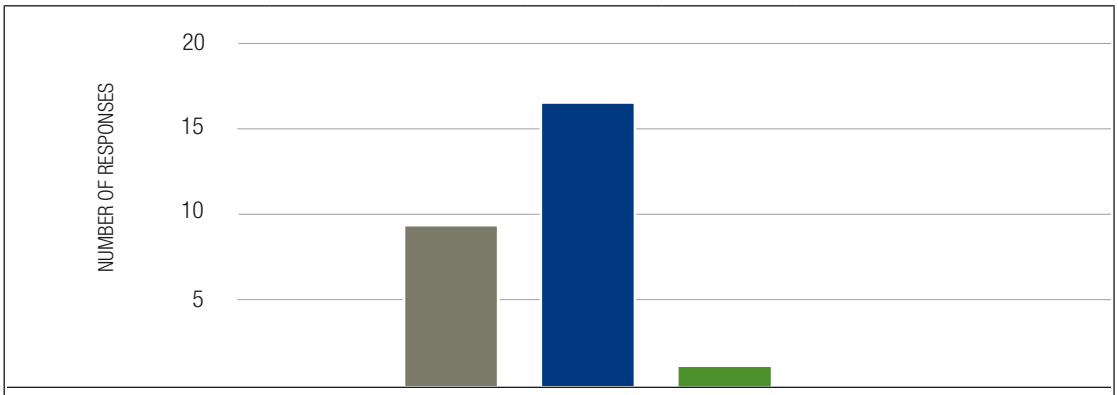
Of the respondents who indicated in Question 15 that they have undertaken HUET training, when asked to rate the effectiveness of the HUET training on a scale of 1 to 5—with 5 being very effective—36% of passengers scored it as 4; 54% of passengers rated the HUET training as 4 or 5 out of 5. 28% of respondents indicated 3 out of 5.



ANSWER	TOTAL	1	2	3	4	5	UNANSWERED OR NOT APPLICABLE
Number of Responses	**67**	0	2	9	12	5	39

Q17: Do you have any concerns with the breathing device, PLB or other personal safety equipment issued to you at the heliport?

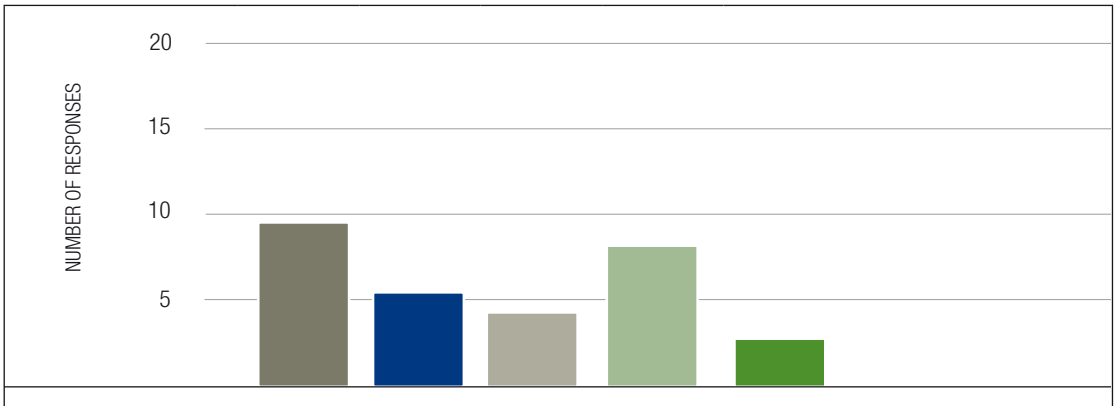
Of the respondents whose roles require them to fly offshore as indicated by their response to Question 10, the most frequently identified response to this question was "no" with 46% of participants indicating that they are not concerned with the safety equipment issued to them. 24% of respondents indicated "yes" to this question.



ANSWER	TOTAL	YES	NO	DON'T KNOW	UNANSWERED OR NOT APPLICABLE
Number of Responses	**67**	9	17	2	39

Q18: Do you have any concerns with your survival suit?

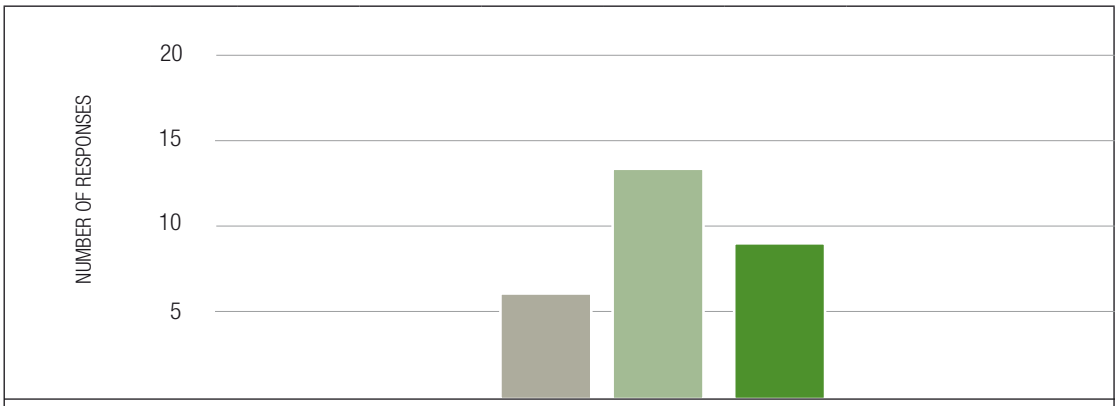
Of the respondents whose roles require them to fly offshore as indicated by their response to Question 10, the most commonly identified response was 1 out of 5, indicating no concern with survival suits. This response was selected by 24% of personnel. Combining the responses for 1 and 2, i.e. not concerned, comprises 38% of responses. The responses at the other end of the scale, indicated by 4 or 5 out of 5, correspond to 27% of all respondents.



ANSWER	TOTAL	1	2	3	4	5	UNANSWERED OR NOT APPLICABLE
Number of Responses	**67**	9	5	4	7	3	39

Q19: How satisfied are you with the adequacy of the training and procedures on how to use the safety equipment?

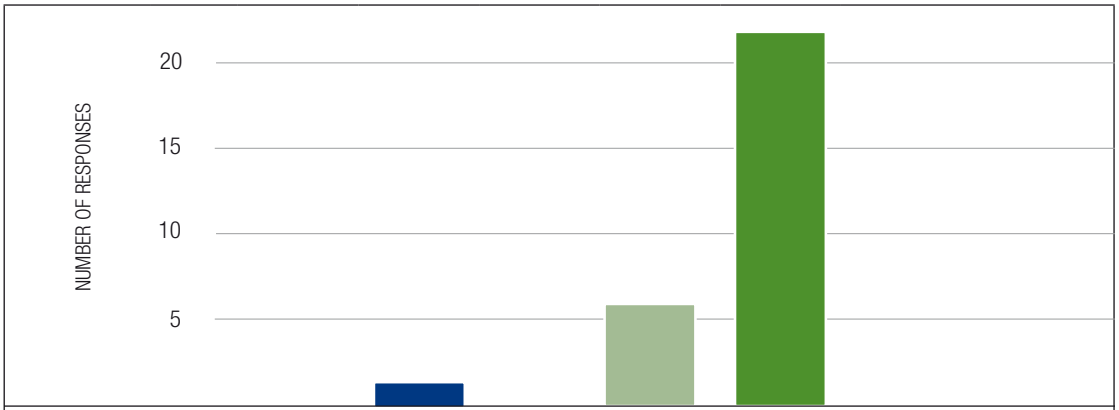
Of the respondents whose roles require them to fly offshore as indicated by their response to Question 10, a total of 59% of personnel are satisfied with the adequacy of training and procedures on how to use safety equipment. No respondents scored 1 or 2 out of 5 for this question, indicating that no respondents are dissatisfied with safety equipment training and procedures.



ANSWER	TOTAL	1	2	3	4	5	UNANSWERED OR INVALID
Number of Responses	**67**	0	0	6	13	9	39

Q20: When you are travelling by the helicopter how satisfied are you that you get the right amount of information about helicopter operations?

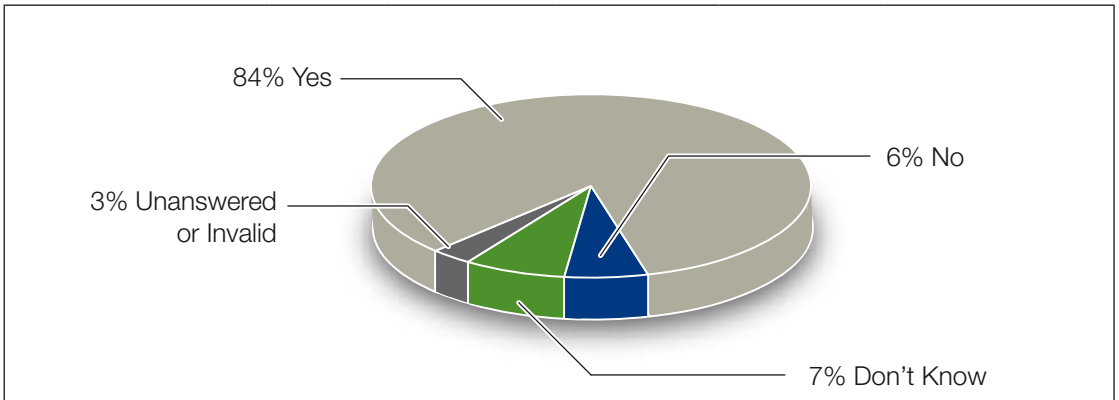
Of the respondents whose roles require them to fly offshore as indicated by their response to Question 10, 62% of personnel indicated that they are very satisfied with the amount of information they receive when travelling by helicopter. Combined responses for satisfied and very satisfied, 4 and 5 out of 5, comprise 78% of all responses. Only 1 respondent indicated dissatisfaction with the amount of information received.



ANSWER	TOTAL	1	2	3	4	5	UNANSWERED OR NOT APPLICABLE
Number of Responses	**67**	0	1	0	6	23	37

Q21: Do you believe there is an adequate level of overseeing of safety (safety oversight) for helicopter transportation?

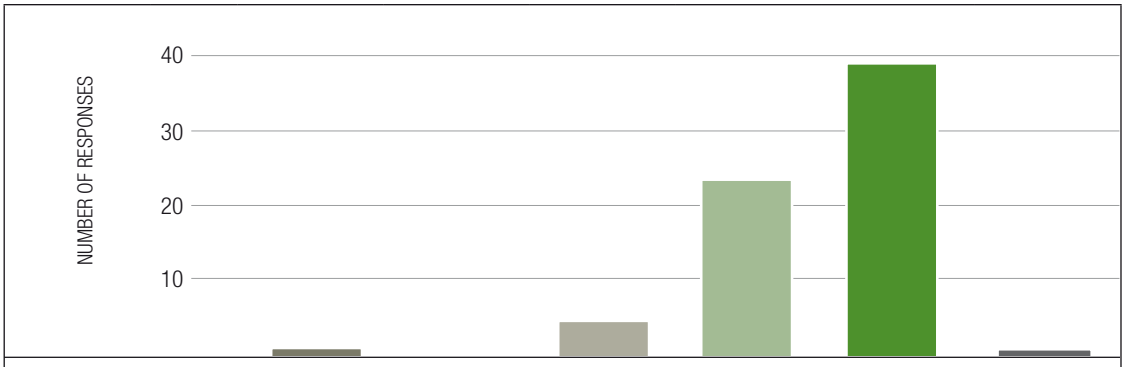
Fifty six (56) personnel, or 84% of respondents, indicated that they believe there is adequate safety oversight for helicopter transportation. 6% of personnel selected "No", and 7% of personnel indicated "Don't Know".



ANSWER	TOTAL	YES	NO	DON'T KNOW	UNANSWERED OR INVALID
Number of Responses	**67**	56	4	5	2

Q22: Please rate your organization's safety culture?

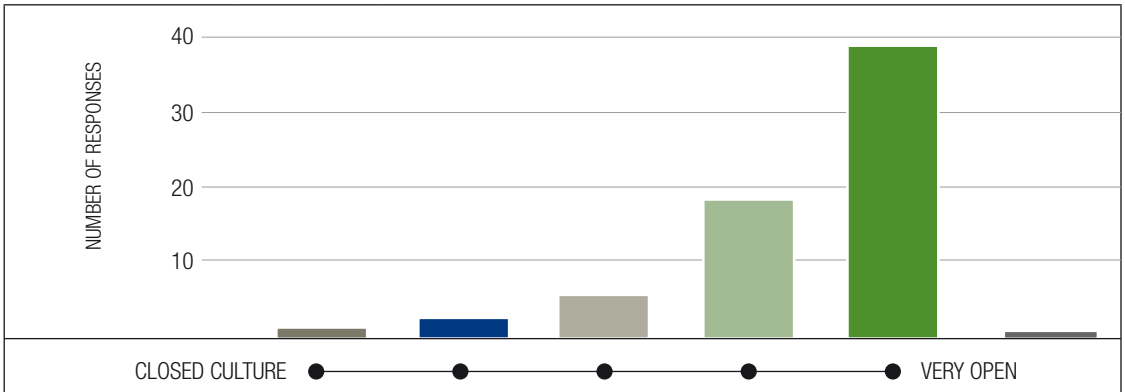
Thirty nine (39) personnel, or 58% of respondents, rated their organization's safety culture as "Excellent". A further 33% indicated 4 on the scale of 5. This equates to 91% of respondents rating the safety culture as 4 or 5 out of 5, where 5 represents excellent. 6% indicated 3 out of 5, and 1% rated it 1, where 1 indicates a "poor" safety culture.



ANSWER	TOTAL	1	2	3	4	5	UNANSWERED OR INVALID
Number of Responses	**67**	1	0	4	22	39	1

Q23: Do your consider your organization/employer to have an open reporting culture?

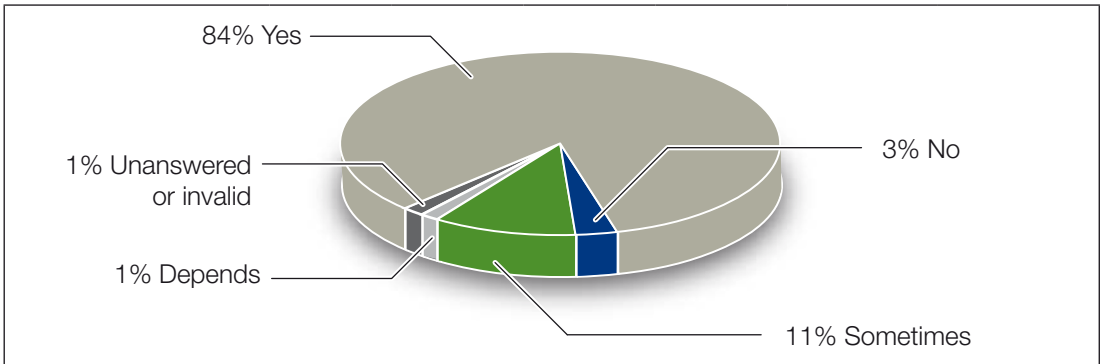
A "very open" reporting culture was identified by 58% of participants. 28% of personnel indicated 4 on the scale of 5, and 7% indicated 3 out of 5. 4% of respondents indicated either 1 or 2 on the scale, where 1 represented "closed culture".



ANSWER	TOTAL	1	2	3	4	5	UNANSWERED OR INVALID
Number of Responses	**67**	1	2	5	19	39	1

Q24: Are you comfortable that you are able to personally raise your safety concerns?

Eighty four percent (84%) of respondents indicated they feel comfortable to personally raise their safety concerns. 11% of respondents indicated "Sometimes". The explanations given in response to this question are included below.

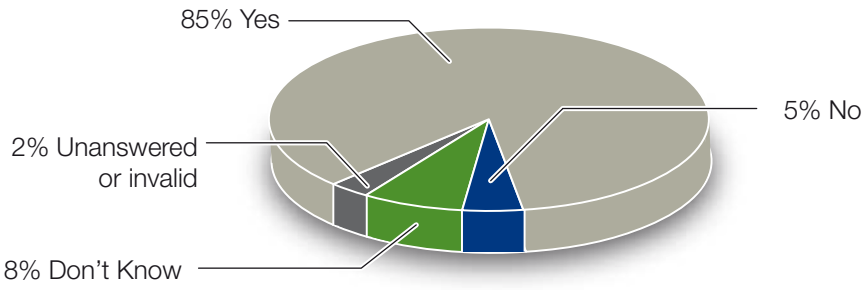


ANSWER	TOTAL	YES	NO	SOMETIMES	DEPENDS	UNANSWERED OR INVALID
Number of Responses	**67**	56	2	7	1	1

Answer	Explanation
It Depends	As long as it doesn't prevent flying
Yes	But I am in a position to make changes anyway
No	It has improved over the past year, but there is still room for improvements. Pilot concerns are pushed aside, people that do not fly offshore make light of our safety concerns, comes down to the cost!

Q25: Does your organization/employer have a confidential reporting system for safety?

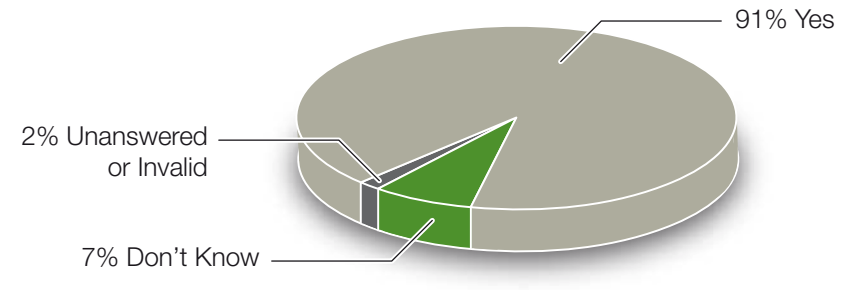
Fifty seven (57) or 85% of personnel responded "Yes" to this question. 12% of all respondents indicated either "No" or they "Don't Know" about the existence of a confidential reporting system.



ANSWER	TOTAL	YES	NO	DON'T KNOW	UNANSWERED OR INVALID
Number of Responses	**67**	57	3	5	2

Q26: Does your organization/employer have a Safety Management System?

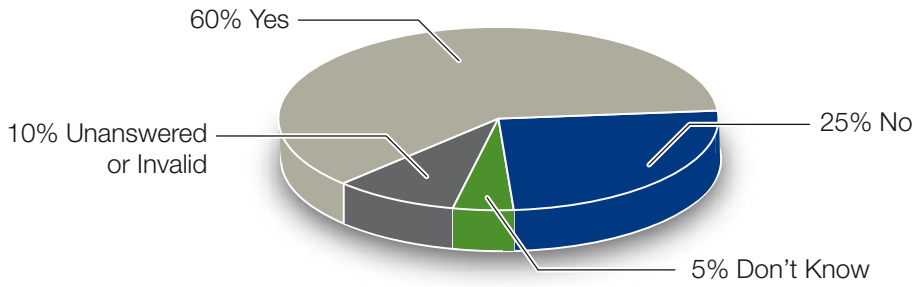
Ninety one percent (91%) of respondents confirmed that their organization or employer has a Safety Management System (SMS). 7% of respondents indicated that they "Don't Know".



ANSWER	TOTAL	YES	NO	DON'T KNOW	UNANSWERED OR INVALID
Number of Responses	**67**	61	0	5	1

Q27: Have you received training on the Safety Management System?

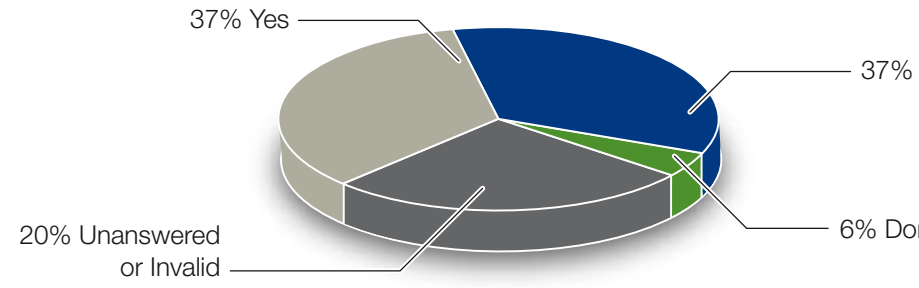
Sixty seven percent (67%) of personnel have received training on their organization's SMS. This is over two-thirds of the people who indicated in the Question 26 that their organization had an SMS. More than 27% of employees have not received training in their organization's SMS. 6 respondents had an invalid response to this question, as they had answered "No" in Question 27.



ANSWER	TOTAL	YES	NO	DON'T KNOW	UNANSWERED OR INVALID
Number of Responses	**67**	41	17	3	6

Q28: Do you regularly use the Safety Management System?

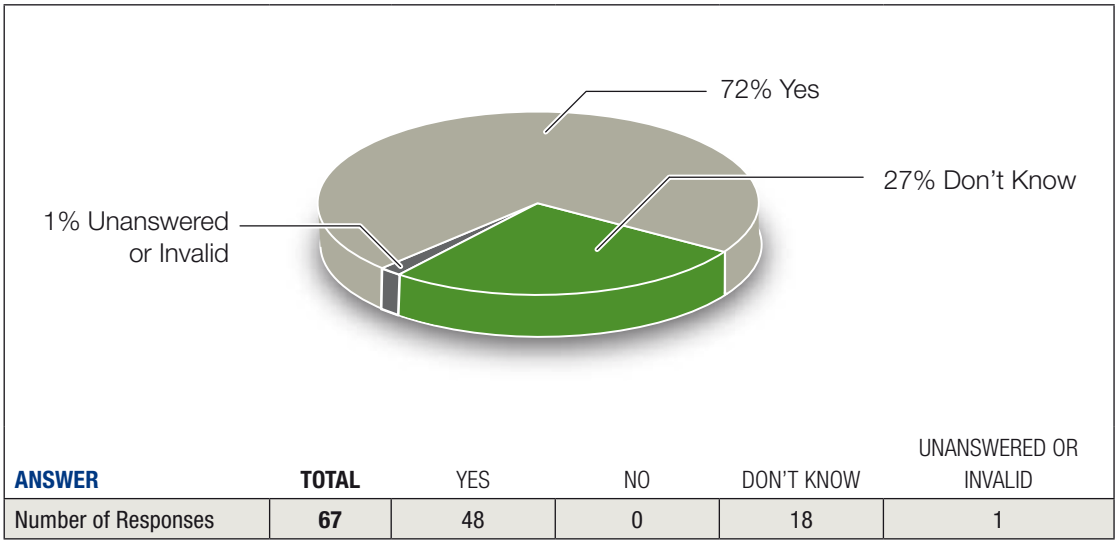
Equal numbers of people answered "Yes" and "No" to this question, with 23 responses for each. 18 respondents indicated this question was not applicable and therefore did not answer.



ANSWER	TOTAL	YES	NO	DON'T KNOW	UNANSWERED OR INVALID
Number of Responses	**67**	23	23	3	18

Q29: Does your organization/employer do risk assessments?

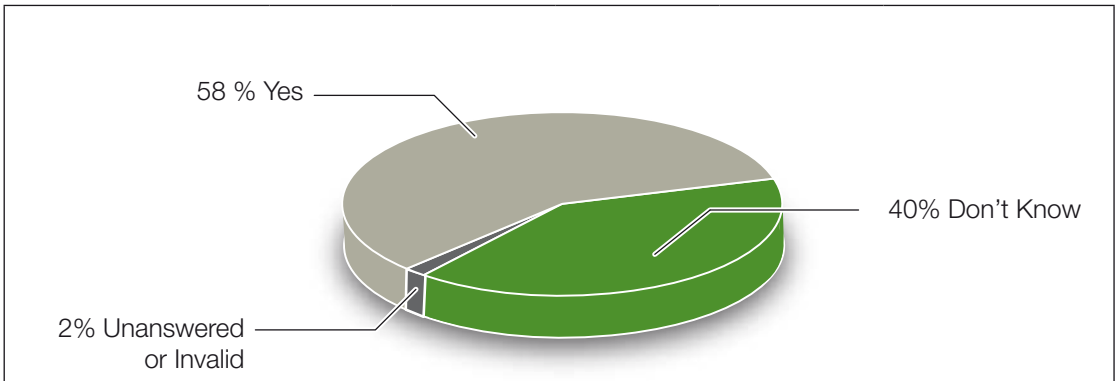
Forty eight (48) or 72% of participants indicated that their employer or organization undertook risk assessments. 27% of respondents did not know if risk assessments were undertaken.



ANSWER	TOTAL	YES	NO	DON'T KNOW	UNANSWERED OR INVALID
Number of Responses	**67**	48	0	18	1

Q30: Does your organization/employer have a risk assessment on helicopter transportation?

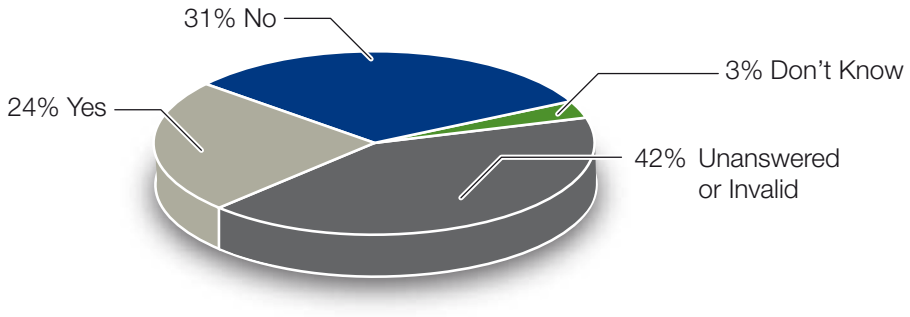
Fifty eight percent (58%) of participants indicated that their organization had a risk assessment on helicopter transportation. 40% did not know whether or not their organization had a risk assessment on helicopter transportation.



ANSWER	TOTAL	YES	NO	DON'T KNOW	UNANSWERED OR INVALID
Number of Responses	**67**	39	0	27	1

Q31: Have you seen a copy of the risk assessment on helicopter transportation?

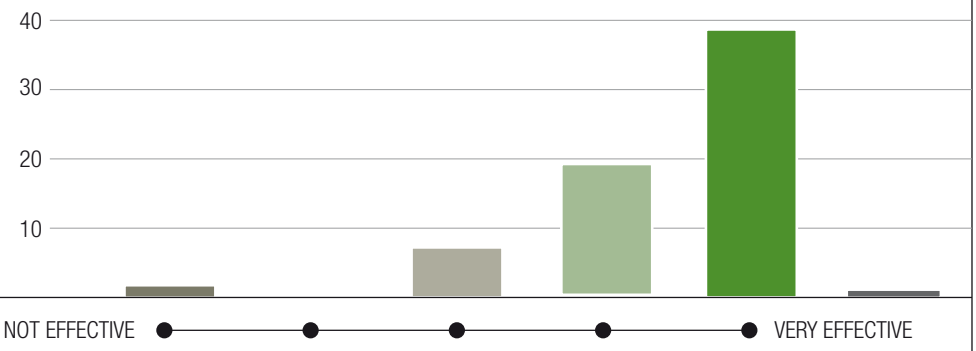
Twenty four percent (24%) of personnel have seen a copy of the risk assessment on helicopter transportation. 76% of personnel did not give a positive answer of "yes." 42% answered not applicable or invalid as they had answered no to the previous question.



ANSWER	TOTAL	YES	NO	DON'T KNOW	UNANSWERED OR INVALID
Number of Responses	**67**	16	21	2	28

Q32: How effective do you believe your safety committee is in addressing safety concerns?

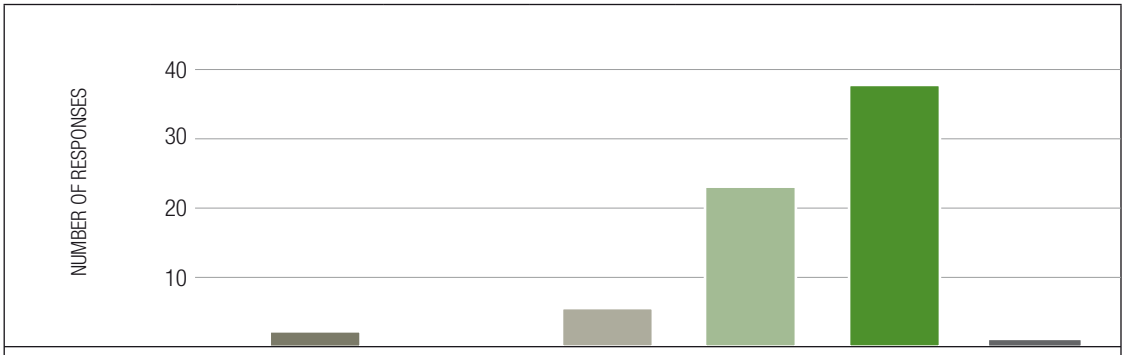
When asked to rate the effectiveness of the organization's safety concerns, 57% selected 5 out of 5 on the scale, where 5 represented "Very effective". The total of 57 participants, or 85%, chose either 4 or 5, indicating an effective safety committee. 10% indicated 3 on the scale, and less than 3% answered either 1 or 2 on the scale of 5, where 1 indicated "not effective".



ANSWER	TOTAL	1	2	3	4	5	UNANSWERED OR INVALID
Number of Responses	**67**	2	0	7	19	38	1

Q33: How satisfied are you with the level and amount of information regarding helicopter safety available to you?

The most frequently identified response is 5 on the scale of 1 to 5 and with 5 representing “very satisfied”, comprising 55% of all responses. 88% of personnel answered either 4 or 5 on the scale, and 3% answered 1 or 2, where 1 indicated “not satisfied”.



ANSWER	TOTAL	1	2	3	4	5	UNANSWERED OR INVALID
Number of Responses	**67**	2	0	5	22	37	1

Q34: Additional Information

Thirty three (33) respondents identified at least one concern in this part of the survey. In total 78 concerns were identified. These were broadly grouped in 19 fields in order to provide an indication of how frequently similar concerns were identified. The frequency is shown below. Each individual response is contained in Appendix B. Respondents were asked to identify how significant each concern is, with 5 indicating they are "extremely concerned" and 1 indicating "not a big concern." The most frequently identified concerns dealt with survival suits and SAR capability.

		FREQUENCY						
			TOTAL FREQUENCY AS CONCERN SIGNIFICANCE					
		EXTREMELY CONCERNED						NOT A BIG CONCERN
	CONCERN GROUP	TOTAL	5	4	3	2	1	CONCERN NOT RATED
1	Suits	9	4	1	2	1	1	0
2	SAR (location, rescue response time, availability)	8	2	5	0	1	0	0
3	Oversight of safety / regulations / safety enforcement	7	3	2	1	1	0	0
4	Safety as a priority / timely implementation of safety measures	6	4	0	1	0	0	1
5	Training	6	2	1	2	1	0	0
6	Flying in bad weather / visibility / sea states / proper limitations in place for these	5	1	4	0	0	0	0
7	Inadequate personnel numbers, long shifts, fatigue	5	1	1	1	0	0	2
8	Pilot and crew procedures, experience and decision-making skills / response in emergency	5	2	1	1	1	0	0
9	Night flying	4	2	1	0	1	0	0

FREQUENCY

TOTAL FREQUENCY AS CONCERN SIGNIFICANCE

	CONCERN GROUP	TOTAL	EXTREMELY CONCERNED 5	4	3	2	1	NOT A BIG CONCERN CONCERN NOT RATED
10	Amount and level of information / transparency / communication about helicopter operations	4	0	1	1	0	0	2
11	OTHER	4	2	0	1	0	0	1
12	HEEDS / HUEBA	4	3	1	0	0	0	0
13	Gearbox	3	2	1	0	0	0	0
14	Ditching (including flotation)	2	0	0	1	0	1	0
15	Helicopter maintenance / mechanical failure / equipment failure / inspection / reliability	2	1	1	0	0	0	0
16	Communication inside helicopter	1	0	1	0	0	0	0
17	Human factors (size / reaction)	1	0	1	0	0	0	0
18	Number of flights for each passenger	1	1	0	0	0	0	0
19	S-92A performance / choice of helicopter	1	0	0	0	1	0	0

Q35: Opportunities for Improvement

The final part of the survey asked respondents to suggest three opportunities for improvement in helicopter transportation. A summary of the results is included below. Each individual response is contained in Appendix C. The frequency column in the table below indicates the total number of times each suggestion topic was identified.

	SUGGESTION FOR IMPROVEMENT	NUMBER OF TIMES IDENTIFIED
1	Training / training updated / more frequent / more realistic	13
2	Safety regulations / regulator improved	9
3	Improved suits – fit / thermal protection / gloves / hood / seal / mobility / comfort / customized	7
4	Improved SAR (location / response time / availability)	7
5	Improved communication frequency / level / amount between Cougar and Operators to passengers regarding all aspects of helicopter operations (including flight line)	3
6	Use different helicopter model	3
7	Pilots well trained / correct emergency procedures in place	3
8	Increase medical / physical requirements for offshore workers	3
9	Allow air operators to manage transportation-related issues	3
10	Better scheduling for employees (more advance notice) to reduce stress / fatigue	3
11	Better working conditions, increase morale	2
12	Additional helicopter(s) / crew	2
13	Fly only in limited sea states / weather / visibility / strict limitations for these	2

	SUGGESTION FOR IMPROVEMENT	NUMBER OF TIMES IDENTIFIED
14	Improved maintenance / inspections procedures	2
15	Improved aircraft capabilities	2
16	HUEBA / HEEDS	2
17	Increase weather information / accuracy	2
18	Resolve all mechanical problems / reliability	1
19	General improvement to safety	1
20	No night flights	1
21	Bring back night flying (with appropriate measures in place)	1
22	Proactive information campaign	1
23	Compare east coast of Canada to other areas with safe practices and adopt as appropriate	1
24	Lower payloads on the helicopter	1

AUGUST 2010

Offshore Helicopter Safety Inquiry

Appendices

The contents of the following Appendices are a presentation of the raw data submitted by survey respondents. In the interest of full transparency, comments made by survey participants were transcribed as submitted. Typographical errors have not been amended in the interest of maintaining accuracy of comment.

APPENDIX A: QUESTION 9 RESPONSES

Changes in safety practices following the Flight 491 accident

SURVEY RESPONSE	CHANGES IDENTIFIED
Yes	1. Too much focus on data that passengars cannot use distract us from focusing on other saftey areas. 2. Better flotation gear. 3. Helmets. 4. Better Emergency checklist and procedures.
Yes	A restrictive set of guidelines from the offshore operations sikorsky amndments to the MGB practices and operation
Yes	All safety issues have been increased and improved.
Yes	Altitude restriction, HEEDS (Emergency breathing device). No flight at night
Yes	Better suits, more training in emerg. Procedures and Awareness
Yes	Briefing video, suit change
Yes	Enhanced SAR posture, enhanced safety diligence. Enhanced training and focus.
Yes	Flight planning, night currency for pilots, briefings of passengers, new suits (offshore) SAR response within Cougar, tracking and recording of flight datas information
Yes	HUBA bottles for pilots, additional SAR training and crews.
Yes	HUEBA for Pax and Pilots, redesigned PAX suits, increased SAR response and capability
Yes	HUEBA implemenation
Yes	I have seen numerous safety initiatives post 491, ie: alititude, crew suits, emergency egress devices, crw life vests etc…
Yes	If feel safety practices within the maintenance dept. were very good pre-accident.
Yes	increase in SAR
Yes	It's always been very safe. Safety has always been first
Yes	Less pressure to depart when weather is bad.
Yes	Lower Att and no night flights
Yes	Major improvements, more security for passenger, better training for pilots, more attention to small details, better understanding of the risk involved in flying overwater.
Yes	Many new initiatives from aircrew/passenger/maintenance and original SMS implementation
Yes	More awareness fo the passenger safety more personnel to perform tasks and more personal training
Yes	More Awareness of practices already in place-better communication/info
Yes	New immersion suits, HEEDS helicopter SOP's, company directives flying schedules, flights of nigh, SAR.
Yes	New risk management assements, no passenger movements during nights. More thought put in to the risk before sending a flight offshore.
Yes	New safety equipment has been added to the survival suits
Yes	New suits, new rules, new equipment
Yes	night flying has stopped, more emphasis is put on safety when performing maintenance tasks.

APPENDIX A: QUESTION 9 RESPONSES

Changes in safety practices following the Flight 491 accident

SURVEY RESPONSE	CHANGES IDENTIFIED
Yes	Night flying restriction. Less customer pressure to launch when weather conditions are relatively unfavorable.
Yes	No night flights pax air bottles transmissions improvements, pilot air bottles, etc.
Yes	No night flights to rig
Yes	No night flying
Yes	No night passenger movements
Yes	RS numbers up, RS dedication chopper, new suits
Yes	Sea state 6 modification, HUEBA, Survival suit issues addressed, A/C modifications, increased training and awareness
Yes	Survival suits, focus on training
No	We have only changed the altitude. Nothing needed to be scheduled it is a very safe and professional company!!

APPENDIX B: QUESTION 34 RESPONSES

Concerns with helicopter transportation

CONCERN NUMBER	CONCERN	SIGNIFICANCE LEVEL
1	As a pilot, the immersion suit is great, however Cougar supplies standard cotton underwear for under the suit. This is unacceptable for this type of suit. Also the HEEDS bottle should have a hose attached to the bottle not just the mouthpiece attached to the bottle on egress, bottle weight would pull the mouthpiece from the mouth.	**5**
1	Colour and effectiveness of pilot survival suits.	**5**
1	Flying the S-92 in sea state conditons that is designed to handle. There are many ways and many factor's are need to determine sea states. The oil companies and my employer have not developed any type of procedure to aid pilots in determining what sea states are on a given day. To give you an example, I put this concerns into our SMS and they got dismissed by the director of flight operations.	**5**
1	Inability of S92 transmission to operate without oil	**5**
1	Lack of a "dedicated" (not for passenger use!) helicopter for SAR operations. An A/C designed "specifically" for SAR/	**5**
1	Mechanical problems	**5**
1	Night flying (should not be done to the possibility of an effective rescue)	**5**
1	None, oil operators should allow the helicopter companies to conduct their own business.	**5**
1	Not being able to fly at night. This was never a concern to me before but now that we have been told that we cannot fly at night currency and proficency is a concern to me. I don't understand why we cannot fly at night?	**5**
1	Onshore aviation weather observers are required, legally, to be trained/examined/certified to environment canada standars. Many if not most of the ofshore aviation weather observers do not have this level of training and are certainly not examined and certified in environment canada. Why is this?	**5**
1	Some personel equipment used for protection, like survival suit or breathing device are not the beast on the market. More research needs to be done.	**5**
1	With increased oil production offshore. The number of people have and will continue to increase travel offshore. Thus increasing the element of risk. The highest level of safety must be attained to eliminate any safety issues.	**5**
1	Passengers have far too much access to information regarding a snag or problem with the aircraft. This causes too much anxiety among group s of passengers, resulting in unstable mindsets while traveliing on the helicopters.	**4**

APPENDIX B: QUESTION 34 RESPONSES

Concerns with helicopter transportation

CONCERN NUMBER	CONCERN	SIGNIFICANCE LEVEL
1	Q 16 and Q17 HUET is completed in a controlled environment, it will probably never be like the pool. Breathing devices along with goggles give passengers a FALSE sense of security, both items are focused on too much.	**4**
1	Qualified and trained SAR crews are maintained.	**4**
1	Rectifying the S92 Gearbox issues	**4**
1	Fatigue due to long duty days (14hrs) while wearing an uncomfortable (very worn) survival suit.	**4**
1	Flights conducted at extreme end of duty day in marginal weather.	**4**
1	Adequate thermal protection under immersion suit.	**3**
1	Mis-information of industry	**3**
1	Rescue specialits require a better survival suit one that is more breathable and better suited for intence work/ swimming.	**3**
1	The HUET training is every 3yrs. I believe that it should be a yearly requirement, every 3 years you are not comfortable with the skills on exiting the helicopter underwater. It will certainly increase the skill level required if there is ever a time needed for this skill.	**3**
1	Turn arounds	**3**
1	Survival suit and training	**2**
1	Well built aircraft (see p. 4)	**2**
1	Last minute changes provide operational pressure yet customers still want on time.	**2**
1	Level of Pilot training/experience	**2**
1	no concerns	**-**
1	Only new, don't know the industy enough yet to make valid concerns.	**-**
1	As a company, I have no concerns	**-**
1	I have no concerns. If our crews are willing to operate/ fly our fleet of helicopter then I would have no issues flying with them.	**-**
1	I have no serious concerns with Helicopter transporation	**-**
1	Lack of AMEs, need more guys, lack of communication, better shift rotation between days and nights don't always practise what they preach!	**-**
2	Aux fule tanks mounted internally are no issue to passengers. Up until 2005 the Super Pumas also had internal Aux tanks wich blocked access to 2 window and up to 3 passengers sat on for the entire flight. The aux tank is a requirement for this location and there is no other aircraft available that can do the job without aux tanks.	**5**

APPENDIX B: QUESTION 34 RESPONSES

Concerns with helicopter transportation

CONCERN NUMBER	CONCERN	SIGNIFICANCE LEVEL
2	Crew rest- flight crews are often subjected to vey long days (14hrs) 10hrs of which could be spent sitting at the hangar on weather hold. This leaves the pilots feeling lethargic and tired making it difficult to focus. There is no quiet place for aircrew to rest while on hold at the COugar heliport.	**5**
2	During HUET training flight suits leaked terribly.	**5**
2	Lack of adequate/appropriate HUET training for SAR crews. Crew trg should be a dedicated intensive program for air crews in a simulated environmental condition.	**5**
2	Living conditions for touring pilots are unacceptable. 5 pilots are crammed into residential home. Schedule often means pilots are coming and going at all hours. Disrupting rest patterns often it is unclean and damp in the basement. The basement rooms do not meet occupancy code. Very little is done to address these concerns.	**5**
2	Search and rescue readily available (24/7)	**5**
2	SMS (safety management system. On several occasions concerning items have been entered into the SMS. On some occasions management will access the system and change what they have written, and the person will get called into the office and told not to write it again. We were told thatthis system was to be non punitive but believe me that is not the case.	**5**
2	The breathing device, the pilots wear a different device companred to the passengers. Pilots wear the bottles that is incertified into the life jacksts. Due to costs of replacing these jackets (that's what we are told) we are stuck using this device. The HEEDs bottle are much more cumbersome and more room for errors, companred to what the passengers wear. I would like to see the pilots get the bottles that are attached to the suit with the breathing hoses. The safety department are made up of people that do not regularly fly offshore; no pilot to represent the pilots concerns, therefore our requests are pushed asside due to costs!	**5**
2	To much focus on crews trying to appease pas. You do not see airline (pilots) appeasing pax with written reports for delays. This is taking away the pilot's focus.	**5**
2	Training: some of the training, like the HUET is not realistique of the condition that we are flying in. Higher cover of training is required to improve confidence and give you technics for survivals.	**5**
2	With regards to the helicopter and its operators what issue's they are having with gearboxes and compenents. I am very concerned.	**5**
2	Weather	**4**

APPENDIX B: QUESTION 34 RESPONSES

Concerns with helicopter transportation

CONCERN NUMBER	CONCERN	SIGNIFICANCE LEVEL
2	SAR. I think that SAR should be a governemnt controlled service, not left to cougar as most people are not trained proficiently.	**4**
2	Night flights should not be conducted exept for emergency	**4**
2	Oil companies are large, powerful and in reality contorl overall safety of cougar flight operations. I feel that cougar management is very reluctant to challenge any customer wishes and directors. This is driven completely by commercial interest.	**4**
2	Passengers are (some of them) too large and unfit to be reasonablly capable of escaping helicopter.	**4**
2	New aircraft not as servicable as they should be.	**4**
2	Current SAR posture and effectiveness	**4**
2	Pressure/ rules sictated by oil companies temd to dictate air operators, with little/ no knowledge in aviation	**3**
2	Uneducated perceptions of safety	**3**
2	Water landings	**3**
2	Night flights	**2**
2	SAR response time	**2**
2	Low Moral and motivation, working night night is proven that it affects your health. 12 hour shift are too long.	**-**
3	(S.A.R) Although the SAR program is moving forward in my opinion it is currently taking the wrong path. As pilots some of us are currently forced to SAR standby even though we are not properly trainged to do so . We are current according to the regulations, but many of us are not capable of doing what would be expected of us it (God forbdi) another helicopter crashed in the ocean. To perform SAR missions over water safely takes a lot training, and pilots are put in the position where they may have to. This is not a position that I enjoy being put in.	**5**
3	Attitude: Before the accident every one, expect the flight crew, thought that going on the helicopters was like taking the train or bus. NO one in the oil industry was listening the consern of Cougar.	**5**
3	Insufficent operational control or independence of SAR operations from passendger movement operations lack of knowledge of SAR operation by key management personell.	**5**
3	Oil companies need to worry about getting the oil out of the ground and let the "helicopter" company worry about the helicopters. I use to work for an aviation company, now I work for a bunch of "know it all who if they weren't so cheap when it comes to safety we wouldn't be going through all of these issues. How come no one asked about safety on the rigs/ platforms.	**5**

APPENDIX B: QUESTION 34 RESPONSES

Concerns with helicopter transportation

CONCERN NUMBER	CONCERN	SIGNIFICANCE LEVEL
3	People do not embrace "personal accountabilty for their own survivaly. For example, the want the offshore salary and lifestyle but do not like the suit or survival training.	**5**
3	Flying over stormy sears where there is no chance of surviving an otherwise ditching at sea	**4**
3	Lack of adequate and effective SAR response; if weather conditions (visibilty and sea state) preclude a timely and effective rescue once has to question why passengers and travelling offshore on that given day.	**4**
3	P/A system in A/C and its reliability to brief passengers in an emergency	**4**
3	SAR program at Cougar is no where near what is expected by the oil companies. Having come from DND SAR program, much needs to be directed before any SAR could be performed, MEDEVAC excluded.	**4**
3	Too many inexperienced flight crew in the system now	**4**
3	Survival suits/ more in depth training marine institute.	**3**
3	There is much emphasis put on the passenger comfort and safety, but there is a a huge disconnect when it come to crew safety! A review of the qualification and experience levels of the SAR crews. The use of flight crews and level of fatigue due to shorages of crews. my concern is the SAR crew qualifications, they are the people that we depend on as they have the experience and capability to do the job and the use of flight crews there is an ongoing shortage of crews. Flight crews duty days are switched around so frequently, and the rest times are limited.	**3**
3	Woule the A/C stay afloat in the North Atlantic	**1**
3	NO meeting between crew chiefs and management! Crew Chiefs should have regular meeting with their guys to voice opinions and concerns. This should be relayed by crew chiefs in meeting with management. Need more meetings.	**-**

APPENDIX C: QUESTION 35 RESPONSES

Opportunities for improvement

NUMBER	SUGGESTION
1	A dedicated "SAR only" aircraft "not" to be reconfigured for passenger use.
2	A schedule that allows you to know what you're doing at least a few days ahead of time.
3	A source of weather information every 50-60 min to the offshore field.
2	Additional enhanced SAR training for EFR crews.
2	Allow night flying while having the government cover night rescue on a 30 minute or 1 hour response time.
3	Anonymity of the SAR department with total operational control and sell dispatching capabilities.
2	Appoint an independent industry safety overseer/regulator which can operate objectively and without concern for commercial perceptions. C-NLOPB is clearly not a good choice.
3	Attitude change: from ACC management in the industry. Oil industry and off smore flying industrie.
1	Attitude change: Realizing the risk involved and doing everything to reduce it. Training, equipment, SAR aircraft.
1	Basically, I would like to see less malfunctions with the S-92. I feel that people had more reliability in the Super Power's that we had for the first few years.
2	Better aircraft (eurocopter EC 225)
1	Better aircrafts (old technology/lots of minor issues on the S92)
2	Better communation on both sides
2	Better definition of roles: Air operators: operate/manage the aircrafts; oil companies: operate/manage oil-related issues
1	Better emergency training for crews and passengers which would hopefully instill more confidence and comfort during flight. Also some sort of seminar for passengers outlining the nature of most aircraft deficiencies and how they are dealt with (safely). As well as the challenges present in operating these aircraft offshore St. John's
1	Better satalite coverage to view fog during summer fog season and better weather forecasts for offshore
2	Better training for every one. Oil worker, suppervisor, air crew.
1	Boost moral, company is making money lets see some profit sharing cheques bring pizza in for the night shift once in a while, its done on day shift. Treat people fai anything to boost moral.
2	Company allow money to purchase own thermal protection rather than using the one they think is appropriate.

APPENDIX C: QUESTION 35 RESPONSES
Opportunities for improvement

NUMBER	SUGGESTION
3	Compare the East Coast of Canada to the GOM when it comes to safe practises and then pass it on. Remember this entire event albeit tragic was not a controlled event therefore the statistics go way up when it comes to not surviving. If this was a controlled ditching vs "crash" and we lost all those people I would agree that we have a problem...it was a "crash" @ 20+G's! The only problem that day was a catastrophic failure that the flight crew were unable to diagnose.
1	Correct the immersion suit issue. Correct the HEEDs issue.
2	Correct the living conditions to a standard that exists else where.
2	Customers (oil operators) must use their own aviation advisors to convey helicopter and operations issues to passengers.
1	Different flight suits for pilots. The ones that they have are dark in color and are not very visible if something happend and they needed to be rescued.
2	Ensure all flight survival suits are water tight with perhaps some sort of internal heat source.
1	Ensure offshore aviation weather observers are trained to environment Canada standards and are examined and certified by environment Canada.
2	Final thoughts. Although this survey is not long enough to address all of my concerns. I do appreciate the opertunity in touching on some of the more important ones. I think this company as grown to big to fast, and safety has been sacrificed to do so. I give you an example, I cannot remember the last time there was a saftey meeting. I can assure you it was long before the crash of flight 491.
3	General overhaul of dispatch requires additional people to relieve heavy work which will mitigate mistakes in flight planning.
3	Have transport Canada regulate more rules.
1	Helly Hansen should take over suit issuance within Cougar at the Heliport to ensure passengers are getting info from the people who provide and work hands on with the suits 365 days a year.
1	HUET/ Underwater training more often (once a year)
1	I don't have any suggestions for improvements in helicopter transportation.
1	I would like to fly in conditions that would allow for a reasonable chance in ditching successfully, and allowing passangers and crew to exit safely. I would like to see a non punitive way of addressing our concerns. I think SMS entries should do to an outside source to get analized. I would like to see a higher level of training with regards to safty equipment (Personal equip).
3	Implement an effective SAR response capable of timely and successful rescue driving all scenarios when passenger flights are taking place.
3	Improved offshore approaches to be able to land in 1/4 mile visilibity
3	Improved TC regulation concerning night shifts.
1	Improved Transport Canada requirements and regulations for AME recurrent training. Move recurrent training for type endorsements and equipment (i.e. hoist training) mandatory by TC.

APPENDIX C: QUESTION 35 RESPONSES

Opportunities for improvement

NUMBER	SUGGESTION
1	Improvement can be made if we (pilots) have a representative in the safety department to put forth our concerns. At the moment people that do not fly offshore are representing us, therefore due to costs in changing things such as breathing devices, goggles, safety equipment, suits are pushed aside. They are more concerned about wearing safety equipment around the hander than where our work place as pilots is over the Atlantic ocean, that's where our concern is!! We nee someone to represent our issues! Perferbly to an outside agency not cougar safety department!
1	Keep on top of new improvements on the SK 92
1	Less False information about the industry in the media! Perhaps a pro-active information campaign.
2	Less payloads on the helicopter, oil companies want bigger machines, more capacity, instead of putting more helicopters in service.
3	Mandatory stop flying at least 1 day per week to do extra maintenance checks on helicopters. (Ex- no flying on Sunday)
2	Manpower requirement. Regulated by T.C. So there are enough AME's endorced on the A/C type during a shift.
3	Manfactures to ensure all major issues with any new helicopters and corrected and addressed before they are released for purchase.
1	More aircraft in the "pool" so we can get the job done on time.
3	More captain's for the base and less as a training base for now fist officers that are to be employed at other company bases.
2	More hands on training
1	More hangar space and less clutter in the hangar to effectively and comfortably perform maintenance duties.
1	More strict medical and physical requirement for working in this harsh environment.
1	More training and safety training so all are issues are fully addressed
1	More training Marine institute instead of recurrent being 3 yrs, should be 18 months.
1	New Hire, don't know the industry well enough yet to make valid suggestion for improvements
2	Night time passenger flights should not resume.
1	On-going safety improvements are taking place at all times
2	Possibility for personal to schedule his/her own recurrent training above the minimum requirement if required.
1	Proper color and certifies pilot suits as used in north sea.
3	Recurrent type course training on specific aircraft.
2	Remind oil workers that the company who they work for chose the S92 and like any new piece of machinery or equipment there are growing pains.

APPENDIX C: QUESTION 35 RESPONSES

Opportunities for improvement

NUMBER	SUGGESTION
1	Require a level of physical fitness of passengers who regularly fly offshore. I believe this would benefit the individual and their fellow passengers safety in the event of an emergency.
1	Re-visit flight time/ daily duty periods for flight crews with respect to the challenge we offshore environment and physical discomfort and related fatigue caused by wearing a very worn survival suit.
2	SAR crew specific training (e.g.) HUET for military SAR crews offered by survival systems.
1	SAR should be independent or monitored by independent agency.
1	Stop question the "professionals"…No one demands to hear from the Air Controls captain as to why we are departing for Europe after a 2 hr mechanical delay!
2	The HUET training is an extremely importantly skills, yet the program is developed for people that work on the rigs. There is no program that directly hit the air crew. We are expected to take care of the aircraft and passengers during an emergency situation over the Atlantic ocean. There is no program to this date that directly geared towards how to handle these situations. I believed there should be a specific program developed for pilots, again with a pilot to help develop this program!
3	There have been some improvements since the crash of flight 491. We have received HEEDS bottles. Other than the Heeds bottles and some changes in emergency procedures, I have not seen any other changes that could improve the safety of our company. I once again thank you for the opportunity to express my concerns, and wish you the best of luck with the inquiry, and I look forward to seeing positive changes for the future. Thank you.
3	There needs a regular schedule made up for the flight crews. Due to shortage of crews, and short notices on changes in the schedule, there are regular and daily occurances where pilots have to remind the scheduler and planners what duty day rest is needed. Australia have a very strict fatigue matrix that we could certainly benefit from! more of an indepth look at crew fatigue, and the benefits of crew rest should be researched!!
1	To educate the people who are being transported to the rigs for work on the abilities of the sar componant of Cougar
2	Type C dispatch is a good way to mitigate risk related to weather.
1	Weather (Sea state limits) the operators have no consistancy.
2	Working at Cougar you see a lot of people going offshore that you wonder how they passed their medical and training. I thnk they should look into what is involved in their actual medicals, and how they evaluate them.

Offshore Helicopter Safety Inquiry
Passenger Survey

AEROSAFE RISK MANAGEMENT

EMPLOYEE CONFIDENTIALITY:
Your responses will be kept strictly confidential and no information released will identify individual respondents.
If you are uncomfortable answering any of the questions below, please leave that question blank.

Aerosafe Risk Management has been engaged by the Commissioner of the Offshore Helicopter Safety Inquiry to conduct an independent survey of helicopter transportation. This survey is your opportunity to provide direct input into the Inquiry process – your voice will be heard!

We expect that this survey should take 10-15 minutes and we look forward to your response. The results of the survey will be available on the inquiry website **www.oshsi.nl.ca** from August 31, 2010. If you have any questions regarding the survey please contact Aerosafe by phone 202 449 7693 or email oshsi-survey@aerosafe.com.au

Thank you for your time and participation in this extremely valuable activity.

PART 1: GENERAL INFORMATION

Q1 **Age** ☐ <20 ☐ 20-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60+

Q2 **Sex** ☐ Male ☐ Female

Q3 **Job Role** ☐ Pilots ☐ Rescue Specialists ☐ Executive/Manager
☐ Maintenance Engineer ☐ Administration/Finance ☐ Other

If "Other" checked above please specify: _____

Q4 What area of the organization do you work?
☐ IT/Finance ☐ Search & Rescue/Safety ☐ Flight Operations ☐ Maintenance
☐ Passenger Movement/Operation Control (OCC) ☐ Other

If "Other" checked above please specify: _____

Q5 How many trips to the rig/platform would you make each year?
☐ None ☐ 1-3 ☐ 4-12 ☐ 13-50 ☐ 51-100 ☐ >100

Q6 Do you hold a specific safety appointment or role with your employer?
☐ Yes ☐ No If yes, please specify _____

PART 2: HELICOPTER TRANSPORTATION & OPERATIONS

Q7 On a scale of 1-5, what is your level of confidence in respect to the safety of helicopter transportation?
(not confident) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (very confident)

Q8 Do you feel safe when travelling in helicopters to and from the rig/platform?
☐ Yes ☐ No ☐ N/A

Q9 Following the Flight 491 accident, have you noticed any changes in safety practices of helicopter transportation?
☐ Yes ☐ No ☐ N/A

If you answered yes, what have been the changes you have seen? _____

continued on page 2

Q10 Does your role require you to fly in the helicopter? (If you do not fly offshore go straight to Question 21)

☐ Yes ☐ No ☐ Occasionally

Q11 On a scale of 1-5, how capable do you feel to respond to an emergency situation in a helicopter?

(not capable) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (very capable) ☐ N/A

Q12 Have you received training for emergency situations in helicopter operations?

☐ Yes ☐ No ☐ N/A

Q13 How often do you receive recurrent/refresher helicopter safety training?

☐ Twice a Year ☐ Once a Year ☐ Every Two Years ☐ Every Three Years ☐ Can't Remember ☐ N/A

Q14 Did the helicopter safety training involve physical drills or exercises?

☐ Yes ☐ No ☐ Don't Know ☐ N/A

Q15 Have you undertaken Helicopter Underwater Escape Training (HUET) training?

☐ Yes ☐ No ☐ Don't Know ☐ N/A

Q16 On a scale of 1 to 5, if you answered "Yes" to Q16, how effective is the HUET training?

(not effective) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (very effective) ☐ N/A

Q17 Do you have any concerns with the breathing device, PLB or other personal safety equipment issued to you at the heliport?

☐ Yes ☐ No ☐ Don't Know ☐ N/A

Q18 On a scale of 1-5, do you have any concerns with your survival suit?

(not concerned) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (very concerned) ☐ N/A

Q19 On a scale of 1-5, how satisfied are you with the adequacy of the training and procedures on how to use the safety equipment?

(not satisfied) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (very satisfied) ☐ N/A

Q20 When you are travelling by the helicopter, on a scale of 1-5 rate how satisfied are you that you get the right amount of information about helicopter operations?

(not satisfied) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (very satisfied) ☐ N/A

PART 3: EMPLOYER'S SAFETY CULTURE

Q21 Do you believe there is an adequate level of overseeing of safety (safety oversight) for helicopter transportation?

☐ Yes ☐ No ☐ Don't Know

Q22 On a scale of 1 to 5, please rate your organization's safety culture?

(poor) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (excellent)

Q23 On a scale of 1 to 5, do you consider your organization/employer to have an open reporting culture?

(closed culture) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (very open)

Q24 Are you comfortable that you are able to personally raise your safety concerns?

☐ Yes ☐ No ☐ Sometimes ☐ It depends *(explain below)*

_____

_____

continued on page 3

Q25 Does your organization/employer have a confidential reporting system for safety?

☐ Yes ☐ No ☐ Don't Know

Q26 Does your organization/employer have a Safety Management System?

☐ Yes ☐ No ☐ Don't Know

Q27 If you answered "yes" in the last question, have you received training on the Safety Management System?
(If you answered "No" in Q26, go straight to Q29)

☐ Yes ☐ No ☐ Don't Know

Q28 If you answered "yes" to the last question, do you regularly use the Safety Management System?

☐ Yes ☐ No ☐ Don't Know

Q29 Does your organization/employer do risk assessments?

☐ Yes ☐ No ☐ Don't Know

Q30 Does your organization/employer have a risk assessment on helicopter transportation?

☐ Yes ☐ No ☐ Don't Know

Q31 If answered "yes" to Q30, have you seen a copy of the risk assessment on helicopter transportation?

☐ Yes ☐ No ☐ Don't Know

Q32 On a scale of 1-5, how effective do you believe your safety committee is in addressing safety concerns?

(not effective) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (very effective)

Q33 On a scale of 1-5, how satisfied are you with the level and amount of information regarding helicopter safety available to you?

(not satisfied) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (very satisfied)

PART 4: ADDITIONAL INFORMATION

Q34 What are your top 3 concerns with helicopter transportation?

Concern 1:

On a scale of 1-5, how significant is this concern? (not a big concern) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (extremely concerned)

Concern 2:

On a scale of 1-5, how significant is this concern? (not a big concern) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (extremely concerned)

continued on page 4

Concern 3:

On a scale of 1-5, how significant is this concern? (not a big concern) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 (extremely concerned)

PART 5: OPPORTUNITIES FOR IMPROVEMENT

Q35 What improvements would you like to see in helicopter transportation?

Opportunity for improvement – Suggestion 1:

Opportunity for improvement – Suggestion 2:

Opportunity for improvement – Suggestion 3:

APPENDIX E: MEMO TO EMPLOYEES INTRODUCING SURVEY

Good afternoon:

As you are aware, the C-NLOPB has appointed Commissioner Robert Wells, Q.C., to conduct a public inquiry into the helicopter transportation of workers to/from the Newfoundland & Labrador offshore. The objective is to ensure that the risks of helicopter travel are as low as reasonably practicable.

As part of this Inquiry, Commissioner Wells has already surveyed the workers traveling by helicopter to the offshore and would now like to have the views of Cougar's personnel regarding helicopter safety. The survey of Cougar personnel will be conducted by Aerosafe, an aviation expert retained by the Commissioner. Completed surveys will be seen only by Aerosafe; identities will remain confidential and will not be known by Aerosafe, the Inquiry or Cougar.

Aerosafe advises that it will take approximately ten minutes to complete the survey. The Commissioner's office has delivered the surveys and they will be distributed throughout the building later today. Individual surveys will be provided to staff in a self-sealing return envelope, addressed to Aerosafe. We are informed that the Commissioner's office has made arrangements to retrieve the secure box containing completed questionnaires on Thursday, August 12 at 5:00 p.m. When you receive your survey, take the time to complete it and deposit it into the box located in the lunchroom.

If you are not scheduled to be at the St. John's base this week, but are in the St. John's area and wish to participate, you may drop by and pick up a questionnaire from the Payroll office. I emphasize, however, that we have been informed the secure box with completed surveys will be picked up on Thursday, August 12 at 5:00 p.m. by the Commissioner's office for return to Aerosafe.

On behalf of the Wells' Inquiry, Cougar Helicopters encourages all personnel who are available to participate in this survey to support the objective of the Inquiry. Attached is an introductory letter from Commissioner Wells for your information.

Thank you for your participation and cooperation in this effort.

Hank Williams
General Manager
Enclosure

P.S. Please note the secure box is located in the lunch room, and not at the entrance to the heli-port as mentioned in the attached letter.

DEVELOPED BY

EXHIBIT/P-00228

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Offshore
Helicopter
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