Internal audit handling on board Carnival Corporation ships

Improving audit results by minimizing stress during preparation and execution



Name: Sophie Vissia

Supervisors: J. van Berlo & P. Harts

Date: 26th of June 2017

Type of report: Research report

Version number: 3.0

Internal audit handling on board Carnival Corporation ships

Improving audit results by minimizing stress during preparation and execution

Source cover image: (Travel pulse, 2016)

Name: Sophie Vissia

Place of publication: Flushing

Institution: HZ University of Applied Sciences

Date: 26th of June 2017

Study year: 2016/2017

Semester: 8

Course component: Thesis

Supervisors: J. van Berlo & P. Harts

Principal: D. Toms

Table of Figures

Figure 1: The consistency of a RAAS-audit…………………………………………..12

Figure 2: Preparations made by the crew for the RAAS-audit…………………….. 13

Figure 3: Ideas and suggestions to help the crew prepare for RAAS…………….. 15

Figure 4: Stress amongst the crew for the RAAS-audit…………………………….. 18

Summary

This research was executed in response to the behaviour of many personnel during a Risk Advisory and Assurance Services (RAAS)-audit on board a R-class vessel of Holland America Line (HAL), one of the subsidiary companies of Carnival Corporation. A RAAS-audit is an internal audit performed by auditors hired by Carnival Corporation every twelve months on board each vessel of the fleet. It was observed many crewmembers exhibited elevated stress levels during a RAAS-audit. Because of this observation the main research question was developed:

*‘What is the best possible way for a crew on board a Carnival Corporation vessel to prepare for a RAAS-audit, in order to obtain a positive audit result and minimize the amount of stress?’*

On board the MS Amsterdam of HAL, managers with a supervisory role on board were interviewed to assess this problem. They were asked several questions regarding this subject that eventually led to many results. On average, the people that were interviewed had gained around 15 years of experience with the company.

Surprisingly, not all managers were aware of the meaning of a RAAS-audit or what the meaning or purpose was of the Health Environmental Safety and Security Management System (HESS-MS). Some managers admitted feeling stressed in preparation for the RAAS-audit or during the audit itself when questioned by the auditors.

Some suggestions by managers on board the Amsterdam highlighted areas that could be improved by Carnival Corporation to assist them to prepare in the best possible way while creating a positive audit result and a minimum amount of stress:

1. HESS-MS should be used on a daily basis for each crewmember. This should be checked by the HESS-MS app to see which crewmember logged in and for how long. The amounts of crewmembers that have opened the application logged in and have read the procedures should be checked by the managers.
2. Connect following the HESS-MS and all applicable laws and regulations to promotion.
3. Increase the manpower of the ship and the office in order to obtain a better way of communication between the ships and the office.
4. Increase the communication skills between the departments by organizing meetings between all the managers. Consequences should be attached when managers don’t show up or are not actively part of those meetings.
5. Crew members and office need to learn from mistakes / previous findings and reports and those need to be discussed with every team member.
6. Look at the workload of the managers by looking at the feasibility of following the HESS-MS and all regulations as it is now.
7. Use the Health Environmental Safety and Security - Management System (HESS-MS) only as the Safety Management System (SMS) of the ships as required by the ISM-code, don’t use additional procedures as well such as procedures for the Spa and Medical department on board.
8. The ships need more implementation time when a procedure comes out. A plan of action and a vision should be communicated and made well aware with everyone as well when changing something (this includes deck, engine, hotel and the office). Back up purchasing.
9. Make HESS-MS more user-friendly so it will save time for other things as well (improve the search button).
10. Judge and base the skills of crewmembers for their emergency function as well and not just only on their basic daily job.
11. Make the shipboard organization for each ship the same.
12. The vessel needs more help in auditing themselves for an audit by getting checklists on board or any other relevant tool that could contribute to that.
13. Schedules of officers should be taken into account, in such a way that officers do not board the ship right before a RAAS-audit is scheduled or the names of the managers on board previous to the RAAS-audit should be mentioned in the final report.
14. Newly embarked crew to be informed about HESS-MS and RAAS the day they come on board by the Human Resource Manager (HRM). Provide them with a folder that explains the importance of HESS-MS and RAAS and they must made well aware that it is applicable to ***every*** crewmember.

This research was the first research about this subject performed for Carnival Corporation and crew on board the vessels. This research was in contribution and conjunction with the research done by the head office of HAL located in Seattle. Hopefully the results and conclusions will inspire Carnival Corporation to change certain things on board the vessels and at the offices in order to move forward and increase the high level standards that come with working for Carnival Corporation.

# List with abbreviations

* HZ HZ University of Applied Sciences
* HRM Human Resource Manager
* ISM The International Code for the Safe Management and Operation of Ships and Prevention of Pollution
* MLC Maritime Labour Convention
* EMM Engine Maintenance Management engineer
* EQS Electronic Quality System
* ISPS International Ship and Port Facilities Security code
* RAAS Risk Advisory and Assurance Services
* MS Motor Ship
* NCO Non Compliance and Observations
* SOLAS Safety of Life at Sea
* IMO International Maritime Organization
* ISO International Organization for Standardization
* HESS-MS Health Environmental Safety and Security Management System
* SD1 Sanction Disciplinary 1
* SMS Safety Management System
* UK P&I United Kingdom Protection and Indemnity
* HAL Holland America Line
* TOP Table Of Personnel
* UK United Kingdom

Table of contents

[1) Introduction 1](#_Toc485036540)

[2) Theoretical framework 3](#_Toc485036541)

[2.1 The consistency of a RAAS-audit 3](#_Toc485036542)

[2.2 Preparations for a RAAS-audit carried out by crewmembers 4](#_Toc485036543)

[2.3 Problems that occur during the preparations 5](#_Toc485036544)

[2.4 Helpful tools for a RAAS-audit preparation according to a 2nd Officer, Lloyd’s Register and Byelex Multimedia 6](#_Toc485036545)

[2.5 Helpful tools for a RAAS-audit preparation according to the HAL-office and RAAS-company 7](#_Toc485036546)

[2.6 Solutions to handle stress 8](#_Toc485036547)

[3) Method 10](#_Toc485036548)

[4) Results 11](#_Toc485036549)

[4.1 The consistency of a RAAS-audit 11](#_Toc485036550)

[4.2 The preparations made by the crew for the RAAS-audit 12](#_Toc485036551)

[4.3 Ideas and suggestions to help the crew prepare for a RAAS-audit 14](#_Toc485036552)

[4.4 Stress amongst the crew for the RAAS-audit 17](#_Toc485036553)

[4.5 Predicted results for the RAAS-audits throughout the fleet in 2017 by crewmembers 19](#_Toc485036554)

[5) Discussion 20](#_Toc485036555)

[6) Conclusions and Recommendations 22](#_Toc485036556)

[6.1 Conclusions with each sub-question 22](#_Toc485036557)

[6.2 Conclusion of the main research question 23](#_Toc485036558)

[6.3 Recommendations by the managers on board the MS Amsterdam 23](#_Toc485036559)

[References 25](#_Toc485036560)

[Attachments 26](#_Toc485036561)

[Attachment 1: Data analysis RAAS-results 2016 26](#_Toc485036562)

[Attachment 2: The Power of AMOS 27](#_Toc485036563)

[Attachment 3: ISM & ISPS Deficiencies 28](#_Toc485036564)

[Attachment 4: Basis of the questionnaire interview 29](#_Toc485036565)

# 1) Introduction

Each vessel within Carnival Corporation has to conform to various standards and regulations, imposed by a Classification organization and Flag State. In order to assess the compliance, auditors from Carnival Corporation, as well as auditors from a recognized organization on behalf of the Flag State perform periodic audits. An internal Risk Advisory and Assurance Services (RAAS)-audit is conducted every twelve months by auditors hired by Carnival Corporation. According to a 2nd officer on board a R-class vessel of Holland America Line (HAL) ‘When an internal audit is scheduled like a RAAS-audit, the stress level on board increases. During the audit, the knowledge of many officers is tested. The stress level rises and the atmosphere on board becomes tense’ (Training-Officer, 2016). But where does this stress come from? Are the crew not prepared well enough for such an audit or is there something else causing this problem?

The purpose of this report was to gain an understanding and provide Carnival Corporation with advice, on how the crew of a Carnival Corp vessel can prepare itself, as well as possible for a RAAS-audit. This so, to obtain a positive audit result, while creating a minimum amount of stress.

This research looked into the preparations required for a RAAS-audit by the crew of a Carnival Corp vessel. A cruise ship has many personnel on board, based on the opinion of the director of RAAS, Mr. Firth, and the Senior Manager Audit and Compliance Management, Mr. Toms this research looked specifically at crewmembers, with a supervisory role on board:

Deck department: Engine department: Hotel department:

- Captain - Chief engineer - Hotel Director

- Staff Captain - Staff chief engineer - Executive Housekeeper

- 1/O - 1/E - Laundry Master

- Boatswain - Safety Engineer - Culinary Operational Manager

- Security Officer - EMM Engineer - Event manager

- Foreman - Cruise director

Auditors of RAAS, the director of the HESS-MS, the Senior Manager Audit and Compliance Management and the crew of the MS Amsterdam were all interviewed to assess this problem. The difference between the surveyors and crews opinion and a solution for the crew to obtain a positive audit result with a minimum amount of stress is examined in this report.

The main research question, therefore, is as follows:

*‘What is the best possible way for a crew on board a Carnival Corporation vessel to prepare for a RAAS-audit, in order to obtain a positive audit result and minimize the amount of stress?’*

The sub-questions that are associated with the main research question are:

* *What does a RAAS-audit consist of?*
* *How does a crew from a Carnival Corporation vessel currently prepare for a RAAS-audit?*
* *Are there ideas or suggestions that could help the crew prepare for a RAAS-audit?*
* *Why is the crew of a Carnival Corp vessel stressed for a RAAS-audit?*
* *Are there ideas or suggestions to reduce the amount of stress under the crew during a RAAS-audit?*

# 2) Theoretical framework

This chapter will contribute to answering all sub-questions related to the main research question, previously mentioned. Crew on board Holland America Line ships, those working for HAL’s main office and those working within the RAAS-company share their statements in this chapter. Besides the statements of these people, desk research has been used in order to find existing documents and additional information which could help answer these questions.

## 2.1 The consistency of a RAAS-audit

In this sub-section Lisa Hartkopf, Americas Internal Audit leader of RAAS-company shares her opinion of internal audits. Information from Carnival Corporation is used, in order to explain what a RAAS-audit consists of, why a RAAS-audit is carried out and how an audit is performed on board a vessel.   
  
First of all, it is important to understand what an internal audit actually is. An internal audit is a company resource designed to be a partner to the business and help drive continuous improvement. Many people confuse Internal Audit with other forms of audits that are out to find issues which can result in fines and penalties. Internal audits are there to help identify weaknesses for management to confirm, improve and to make the overall internal control environment of the company stronger according to Lisa Hartkopf, Americas Internal Audit leader of RAAS-company. (Hartkopf, 2016)

Risk Advisory and Assurance Services (RAAS) is a company hired by Carnival Corporation and performs audits on board vessels of Carnival Corp. The RAAS-audit is held annually for every ship. An auditor of RAAS will check and confirm compliance with:

1. The International Code for the Safe Management and Operation of Ships and Prevention of Pollution (ISM-code).
2. The International Ship and Port Facilities Security Code (ISPS-code).
3. The International Organization for Standardization (ISO).
4. ISO 14001 - Environmental Management Systems.
5. Policies, laws and regulations which could have significant impact upon the safe operations of a vessel
6. The Carnival Corporation and plc Health, Environmental, Safety and Security (HESS) Committee Charter.
7. Carnival Corporation & plc and Company Policy.

The audit will verify the compliance with these international maritime codes and regulations as well as the Carnival Corporation policies. This also includes procedural compliance within the HESS-MS which is the SMS on board Carnival Corporation ships, the ISM code, ISPS code, ISO 14001 and Carnival Corporate Policy. This includes policies and regulations not mentioned in this list such as regulations falling under MLC2006, SOLAS and MARPOL (see item number 5). Item number 5 is mentioned to make sure the captain of a Carnival Corp vessel cannot decline auditors of RAAS to check something on board of which the auditors think is relevant.

The audit is also there to verify the effectiveness and efficiency of the shipboard and shore side health, environmental, safety and security management systems (HESS-MS) like mentioned before is the SMS on board Carnival Corporation ships.

The audit scope therefore consists of three main aspects:

1. Visits to physical facilities
2. Review of records
3. Interviews with officers and crew

An audit team of RAAS consists of three auditors, who will attend each ship for at least seven days. The auditors of RAAS will use the first days on board to familiarize themselves with the vessel. They’ll have looked into the reports with findings of the vessel found by other auditors from previous years. Auditors will know exactly what to look for when they come on board a vessel (Corporation, 2016).

## 2.2 Preparations for a RAAS-audit carried out by crewmembers

To follow the order of the sub-questions mentioned in the introduction, it is important to know how the crew on board prepares for a RAAS-audit. The crew must be aware of what a RAAS-audit is, which items are checked during the audit, how they must prepare for them and what the possible consequences are if not found sufficient. It is important to know how the crew can show auditors that all regulations and policies are followed on board. In this sub-section an Engineer-Officer and a Deck-officer will share their opinions.

According to a third (safety) engineer of HAL, rank is what dictates how you prepare for an audit. The engine department, consisting of the chief, staff-chief, first engineer, engine maintenance management (EMM) engineer and safety engineer have a meeting together when a date is confirmed for the RAAS-audit.  
The EMM and safety engineer on board vessels of HAL are not used as watch keeping engineers. Instead, those engineers are in charge of all safety equipment within the engine room and lifeboats. The RAAS-auditors are interested in the ships safety equipment and if it is working properly. A meeting is held where all critical points that will be checked by the auditors is discussed and looked at. If one of these items is not working sufficiently, other ranks can assist the EMM and safety engineer to get it working before the auditors come on board.

The chief-engineer will divide these tasks over several ranks for assistance. The chief engineer also discusses findings from previous audits and will pay close attention that these items will not be repeated. (Safety-Engineer, 2016)

A First Officer of HAL states that the deck department prepares slightly differently for the audit, mainly focusing on the correct operation of all safety equipment. For the audit the main focus is all the paperwork and procedures that need to be in order and shown to the auditors. (First-Officer, 2016)

## 2.3 Problems that occur during the preparations

In this sub-section the First Officer, mentioned in the previous paragraph, will explain the problems he experiences during preparations with the deck department for a RAAS-audit. A retired captain of Holland America Line and now the director of the HESS-MS at Holland America group Mr. Van der Loo claims, to have the answers regarding the problems that the First Officer is experiencing during the preparations.

One of the main aspects of the audit is that the auditors will look at how the deck department performs, when executing drills. Every drill has its own procedure, but the First Officer thinks Carnival Corporation changes too many procedures in a too short period of time. If the deck department prepares for a RAAS-audit they practice drills beforehand to make sure every crewmember knows the correct procedure. Looking at the previous scores of RAAS-audits it turns out that most of the findings during the audits were found on ships because procedures weren’t followed (see attachment 1). (First-Officer, 2016)

Mr. van der Loo, explains the situation. A cruise ship provides frequent drills for their crew and passengers, as required by laws and regulations. Since many companies fall under Carnival Corporation the company introduced the Global HESS-MS. The HESS-MS is, nowadays, the SMS on board every vessel of Carnival Corporation. The mandate of the company was, and still is, that two vessels of Carnival Corporation can’t be berthed alongside each other while having different safety standards on board. The horrible accident of Costa Concordia in 2012 accelerated the process of creating the Global HESS-MS on board each vessel of Carnival Corp. Hundreds procedures in the HESS-MS were changed, the final update (containing 367 new procedures) for the HESS-MS took place the 1st of July 2016.

Each person on board has an emergency function as per the company emergency response plan. The only freedom that the subsidiary companies of Carnival Corp now have is that they can assign any rank for a certain emergency function. The only differences in the safety management systems amongst the vessels and companies are ship specific procedures required by ships type or Flag state. Due to the HESS-MS the crew encountered many different procedures, the results of the RAAS-audits show that most of the findings were found to be a failing to follow procedures correctly. (Loo, 2016)

## 2.4 Helpful tools for a RAAS-audit preparation according to a 2nd Officer, Lloyd’s Register and Byelex Multimedia

In this sub-section a Second Training-Officer explains why crewmembers use AMOS on board as a tool for a RAAS-audit preparation. Lloyd’s Register and Byelex Multimedia are claiming both to have a tool that could help crewmembers on board ships to prepare themselves for any kind of audit which will also be reviewed in this sub-section.

Besides showing that the crew can execute the procedures described by the company or other regulations, it is also relevant to all departments to show that all paperwork which is relevant for the audit is in order. To maintain the HESS-MS, but also the ISM-code, ISPS-code and ISO regulations, a program called AMOS is used on board ships of Carnival Corp (see attachment 2) (Spectec, 2016). Every officer on board a vessel has his own function and responsibility. This also means that every person (deck / engine department) has his/her own contribution by filling in AMOS. During a RAAS-audit an auditor will interview the crew to know whether they meet and follow all regulations and policies as required. The crew can use AMOS to show the auditor that for example, all required trainings are given to the crew members. This program gives a clear overview instead of filling in different pieces of paper which could go missing on board. (Training-Officer, 2016)

The Lloyd’s Register Group is a maritime classification society with a technical and business services organization. The main aim of Lloyd’s Register group is to enhance the safety of life, property and environment by validation, certification and accreditation to ensure the quality construction and operation of critical infrastructure. Lloyd’s Register did research together with UK P&I Club to analyse data from vessels all over the world where deficiencies were found relating to ISM & ISPS. In conjunction with an industry partner, the UK P&I Club, Lloyd’s Register has analysed data including deficiencies found by Port State Control Officers relating to ISM & ISPS. The result of this analysis is a convenient and re-usable checklist, highlighting the most common deficiencies. To help reduce these risks to a minimum, the items mentioned (see attachment 3) should be included as part of the final checks prior to voyage and port entry to ensure they continue to conform to international convention requirements.

It is strongly advised by Lloyd’s that all items in this aide memoire, are checked on an ongoing basis, to supplement the ships operational and maintenance procedures and Flag State’s requirements (Lloyd's Register, 2010).

Byelex, the Minsk Silicon Valley company, located in the Netherlands and Belarus developed a program called Electronic Quality System (EQS) in 1998 and is convinced that when crew on board vessels are using their program, having audits isn’t a problem for anyone on board anymore. The EQS application enables users to control management system documents such as quality manuals, operating procedures and work instructions. EQS also supports continuous improvement processes through management of corrective actions and audit tracking. The audit module of EQSs vast number of features, intuitive interface and strong integration capabilities make it the ideal choice for any company looking for auditing solutions that will carry well into the next century. The Audit module of EQS allows the crew to plan, implement and track audits with surprising ease. One of its innovative features is the ability to include the own vessels audit questions based on all the ships quality documentation. Furthermore it contains a closed-looped corrective action system, guaranteeing a paper-less transmission of corrective action requests and the ability to import and export audits from the ships main server to laptop computers (and vice versa). All these features makes the audit module of EQS the most powerful and versatile auditing system on the market. According to Byelex, audits have always been a very important part of everyday business operations. Especially now, in the age of the information-driven global economy, the need for effective auditing tools is absolutely vital. Mid-size and large companies and those in pursuit of ISO 9000/14000 certification in particular have to pay close attention to the increasingly complex endeavour of conducting and documenting internal audits (Byelex, 1998).

## 2.5 Helpful tools for a RAAS-audit preparation according to the HAL-office and RAAS-company

Mr. David Toms Senior Manager Audit and Compliance Management of HAL and Lisa Hartkopf from RAAS-company share their vision on what they think are relevant tools for the preparations of a RAAS-audit.

Mr. D. Toms says that the ships of Carnival Corp already use the Lloyd’s Register pocket guides on board. These pocket guides are there for the crew to help them prepare and go over these checklists before a RAAS-audit is held. But they are also there to help them prepare for an external ISM / ISPS audit. Lloyd’s has made many pocket guides regarding several subjects. The pocket guides that can be found on board vessels of Carnival Corp are all the ones that are relevant to a cruise ship: lifesaving equipment, ISM, ISPS, Marine Fire Safety, Marine Pollution Prevention, Port State Inspections etc. The RAAS-audit is a combination of many external audits done at once, the crew can use all these pocket guides individually as a reference to every item that is checked during the RAAS-audit (Toms, 2016) (Lloyd's Register, 2010).

Lisa Hartkopf, the Americas Internal Audit Leader of RAAS-company mentioned before preparing for an audit has mostly to do with the correct behaviour of the crew. She feels that when organizations view Internal Audit as the “police” over internal controls, the audits are much more contentious. ‘Being prepared and flexible is key’. Internal audits should provide information on scope and the crew should ask for many requests in advance as possible. This will allow the auditee to understand the nature of the review.  However, as Internal Audit learns more, they may make additional requests to be sure they are covering the full scope needed for their work.

The auditee needs to be flexible throughout the process and be as responsive as possible with any requested information.  When delays related to providing information or responses occur, it only serves to extend the audit period. Timely responses lead to timely audits. Providing information on the areas of concern by the auditee can also add value to the process. If there are areas where the auditee has concerns or knows issues exist, providing that information up front can be very valuable. The Internal Auditors won’t waste time looking for things the auditee is already aware of and the auditee may gain some insights in the areas they are curious. Ask for regular status updates.  Keeping the auditee informed throughout helps reduce the stress related to the internal audit. Having surprises at the end can create a negative connotation for internal audit. (Hartkopf, 2016)

## 2.6 Solutions to handle stress

The last two sub-questions mentioned in the introduction, are related to stress. Why are the crew stressed for the RAAS-audit and are there ideas or suggestions to reduce the amount of stress that come with an audit? Many people have studied the apparent cause of stress; students at the University of Nottingham investigated the influence of stress as well as a student at the Fontys University in Tilburg (the Netherlands). This sub-section will summarise the most important solutions to handle stress according to their findings.

Students from the University of Nottingham (UK), did research about developing and testing an internal audit tool of the psychosocial work environment in the oil and gas industry. Their research concludes that psychosocial risks have an important effect on organizations through employees’ health and behaviour. They claim that it is important that organizations have methods and tools to deal with this type of risk, implemented and integrated into their performance management systems. (University, 2015)

Sylvia Francken a human resource student at the Fontys University in Tilburg (The Netherlands) did research on how training about stress can have an influence on the employees at the municipality of Halderberge (Province of Brabant, The Netherlands).   
She claims that stress is the biggest occupational disease that exists. She states that people working with the municipality of Halderberge have a huge amount of work pressure due to their employees having a lot of tasks they need to perform during their work. The intervention that was devised for this problem is a training session about stress. This training focuses on reducing stress with the employees and how to recognize stress with other people. The aim is to raise the awareness of stress signals to other employees and to come up with possible solutions. The idea behind this exercise is that people help each other and work together in reducing stress. The training offers different methods to optimize the learning effect and to cope better while handling the stress in their daily work lives. (Francken, 2016)

# 3) Method

This research was qualitative. Crew of the MS Amsterdam of Holland America Line (HAL), one of the subsidiary companies of Carnival Corporation, were interviewed. In these interviews the crew (mentioned in the list in the introduction and below) were questioned on how they prepare for a RAAS-audit, if they experienced any problems with the preparations and what they thought was the best possible way for them to prepare for such an audit when problems occurred. This research also looked at the way the crew handled the situation when they would feel stressed for the audit. On how they cope, if they can talk about it with every rank and how they recognize stress with others.

The ranks that were interviewed for this research is as follows:

Deck department: Engine department: Hotel department:

- Captain - Chief engineer - Hotel Director

- Staff Captain - Staff chief engineer - Executive Housekeeper

- 1/O - 1/E - Laundry Master

- Boatswain - Safety Engineer - Culinary Operational Manager

- Security Officer - EMM Engineer - Event manager

- Foreman - Cruise director

In conjunction with the director of RAAS, Mr. Firth and the Senior Manager Audit and Compliance Management, Mr. Toms, the list mentioned above was developed. Each rank has a supervisory role, which means that they are in charge of a group of personnel on board. They need to make sure their group prepares as prescribed in the procedures of the HESS-MS for the RAAS-audit. (Firth, 2016) (Toms, 2016)

The head office of HAL located in Seattle has started a research regarding preparations for audits on board ships of Carnival Corporation to improve the results of the audits held on board. This research is in contribution and in conjunction with the research done by the head office in Seattle. The crew on board the vessels of Carnival Corp knew about this research and volunteered to be interviewed.

One of the appendices contains a questionnaire (see attachment 4) that formed the basis of the interviews per rank with the crew on board. Depending on the kind of rank a person had, selections of questions were chosen from this questionnaire. The answers given to these questions highlighted that there are problems with the preparations being made for the RAAS-audit. Solutions are reviewed to prepare the crew in a best possible way for the RAAS-audit in order to obtain that minimum amount of stress and positive audit result.

In order to protect the anonymity of the managers mentioned above this research has only used percentage data to show the results and has not mentioned any names or ranks.

# 4) Results

This chapter contains all the results collected on board the MS Amsterdam. All data described in this chapter is relevant in answering the main research question. This chapter will be divided into subparagraphs in order to answer all sub-questions mentioned earlier in the introduction as well.

In the introduction and method chapter, a list with persons with a supervisory role was mentioned. Of these, 16 persons (89%) were interviewed. 69% of these persons have more than 10 years of experience with Holland America Line. On average, the people that were interviewed had gained 15 years of experience with the company.

## 4.1 The consistency of a RAAS-audit

This subparagraph will describe the results regarding what a RAAS-audit consists of, the percentage of people who know what the meaning is of a RAAS-audit and how the managers actually look at the RAAS-audit.

46% of the managers interviewed had no idea that the RAAS-audit was an internal audit. 23% of the persons described that the RAAS-audit is there only to follow HESS-MS and no other regulations. So regarding the consistency of the RAAS-audit, 77% of the managers knew what to answer. Of those people, 76% were able to tell what HESS-MS is and 24% had never heard of it before.

54% of the managers know what a RAAS-audit consists of due to experience and not because they were told, trained or found it in the company policy. 31% of the managers mentioned that RAAS-audits appear punitive. This due to the fact that:

1. The result of the RAAS-audit affects bonuses.
2. The ship incurs point deduction due to mistakes made by the office whilst the crew on board has no influence on what happens ashore.

When the RAAS-audit is performed on board, the ship starts with an amount of 100 points. When the auditors find a major Noncompliance Observation (NCO) on board or at the office, the ship will be reduced by one point. The ship is meant to get a score of 98 points or higher. This means that it isn’t desirable that the auditors find any NCO’s on board.

See figure 1 for an overview of the consistency of a RAAS-audit.

Figure 1: The consistency of a RAAS-audit

## 

## 4.2 The preparations made by the crew for the RAAS-audit

In this subparagraph results will be shown of how the crew in general prepares for the RAAS-audit. This subparagraph is also used to describe if the managers feel well enough prepared for the audit when the auditors would walk in right now and why they think they are or aren’t since there are no guidelines of HAL on how to prepare for the RAAS-audit (see figure 2 for results as well).

70% of the managers are convinced that when you need to prepare for an audit the safety management system on board is ‘broken’. This due to the fact that the managers believe that a certain standard should be maintained on board every day. Therefore these 70% don’t ‘prepare’ especially for the audit but ‘prepare on a daily basis’. 15% however uses two months before the audit takes place to prepare and the other 15% uses two weeks before the audit takes place to prepare. They would like to see the preparations as fine tuning but are convinced right now they require this amount of time.

54% of the managers use findings of previous RAAS-audits to prepare their team for the audit. Only 15% observes their workplace as an auditor and not as an employee. 54% of these managers ‘prepare’ themselves for the audit just by sorting out paperwork only.

62% of the people interviewed felt well enough prepared to pass the audit with a positive result when they were asked how they would feel if the auditors would walk on the ship right now. This because of two reasons:

1. Because they feel they do their job properly
2. Due to experience, they know what to look for and now what to expect from the audit.

38% however still doesn’t feel convinced they would pass the audit with a positive result with their team if the auditors would show up unannounced. This due to the fact that:

1. There is not enough time to focus on RAAS.
2. There are too many items that need to be checked for regarding RAAS besides normal working activities.

Figure 2: Preparations made by the crew for the RAAS-audit

## 4.3 Ideas and suggestions to help the crew prepare for a RAAS-audit

In this subparagraph solution thought of by the managers will come forward. According to them, these solutions would help them prepare for a RAAS-audit in order to reduce the amount of stress and achieve a positive audit result (see figures 3 & 4).

While the interviews were held on board it became clear that 77% of the managers cannot keep up with the changes in HESS-MS. This is because the managers miss a plan of action and miss a clear vision on where the company wants to go to with this new HESS-MS. In order to be able to improve the problem that the managers cannot keep up with the changes in HESS-MS the managers came up with seven clear solutions and achieved a 100% score amongst them:

1. A reduction in procedures. HESS-MS to be only used as the SMS on board and not for all other procedures as well.
2. Before a procedure is amended or changed the managers would like the office to first test the procedure on different types of ships before the procedure is implemented.
3. Managers would like to see the HESS-MS more ships specific due to the fact that many procedures described in HESS-MS are physically impossible to follow due to the nature of the ship.
4. Managers would like to change the culture on board and for every crewmember to take the responsibility that comes with their jobs. Currently the mentality on board is that the company is a hotel with a ship underneath instead of a ship with a hotel on top. Crewmembers on board must be made more aware of the fact that work is performed on board a ship and not ashore.
5. The managers would like to see that the newly embarked crew are informed about HESS-MS and RAAS the day they come on board by the HRM. Provide them with a folder that explains the importance of HESS-MS and RAAS and they must made well aware that it is applicable to ***every*** crewmember.
6. They would like to see that the office makes more effort in taking schedules of managers into account. This is due to the fact that most managers come on board right before a RAAS-audit is scheduled. Therefore they don’t have a clear vision yet on what’s happening on board. The time to change things that are wrong on board is very limited when this happens and this will result in findings and a reduction in points for the ship. This should be taken into account or names of the managers that were on board the previous months should be mentioned in the final report of the RAAS-audit as well.
7. On board the MS Amsterdam no Lloyd’s pocket guides were found to help the crew prepare. 100% of the managers interviewed would like to see a way to audit themselves every day to make sure the standard on board becomes higher.

Many more ideas and suggestions were also brought forward by the managers in order to help them prepare for the audit:

Figure 3: Ideas and suggestions that could help the crew prepare for RAAS

* 69% of the managers would like to see that following the HESS-MS by every crewmember should be connected to the promotion program on board.
* 69% of the managers would like to see a reduction of applications (Efleet / AMOS / Homeport / HESS-MS). Efleet which is used to describe job descriptions, AMOS which is used as the Planned Maintenance System (PMS), Homeport which is used as the homepage of HAL and provides information about the fleet, and HESS-MS which is used as the SMS on board the ships.
* 85% of the managers interviewed would like to see someone over Table Of Personnel (TOP) that comes on board just focussing on RAAS only. A person that could help out in all three departments and actively help the ship prepare.
* 85% of the managers want the shipboard organization to change. This in order to prevent confusion with the auditors as well when they come on board. They want the shipboard organization and responsibilities that come with each function to be the same on each ship within the fleet.
* 85% of the managers would like to see that the HESS-MS becomes more user-friendly. Especially for crew which are new to Carnival Corporation and have to deal with a lot of information in the beginning. By making the search button more user-friendly it will also save a lot of time to search for certain documents or procedures.
* 77% of all managers interviewed are not satisfied with the way of communication now between the three departments on board (deck, hotel and engine) because they don’t inform each other about the progress each department makes in the preparations that are made for the audit.
* All managers that were interviewed know who is involved for the audit in their own department. 46% however have no idea who is involved for the audit regarding crew of other departments.
* 85% of the managers don’t know what the responsibilities are coming with each rank. They don’t know who is responsible for record keeping of certain documents on board the ship because this information cannot be found in black and white. Efleet one of the applications of Carnival Corporation does provide the job descriptions that come with each rank but doesn’t provide the information about who is responsible for record keeping of documents or preparations that need to be made for the audit.

The managers would like to see an improvement in communication, they want to know who is responsible for what and who is involved for the audit. When everyone knows this information they can help each other out and recognize faster when things aren’t correct on board.

## 4.4 Stress amongst the crew for the RAAS-audit

This sub-paragraph will explain the amount of managers that feel stressed by the preparations they need to make for the RAAS-audit and the reasons why. This sub-paragraph will also be used to explain how the managers train their team members in how to answer questions and not to be stressed for the RAAS-audit. Percentages of how the managers deal with the result of the audit will also be discussed.

38% of the managers feel stressed when they need to prepare for the RAAS-audit. This is because:

1. They feel they are responsible for too many items on board and know they get blamed when items are found that are insufficient.
2. When unexpected situations occur and when they have no experience to rely on.
3. When the managers have no faith in their crewmembers.
4. They consider nerves and stress as a normal reaction to a test.

62% however state that they aren’t stressed for the RAAS-audit:

1. Due to the experience that they have.
2. See it as an extra part of their job.
3. Because RAAS isn’t to be seen as a punishment but as a check for our own safety on board the ship.

100% of the managers feel capable to talk to every single rank on board, this because of:

1. Good communication within their own departments.
2. Feel comfortable to discuss stubborn superior ranks with the auditors.
3. This is the natural human element.

54% empower and encourage their team members to give honest answers to the questions that the surveyors might ask on board. They’ll also train them to say when they don’t know the answer, to come back to the surveyors later and figure out the correct answer first instead of making an answer up. This 54% of managers also train each team member to feel free to talk openly to every single rank and especially to the manager themselves.

When the managers need to answer the questions of the surveyors, 69% feel relaxed and 31% feel nervous or stressed. Managers feel relaxed because of:

1. Experience
2. Know where to find all the information
3. Feel capable to speak up and to be honest.

The 31% of the managers that feel stressed:

1. When they find out team members are not capable of answering questions they should be able to answer.
2. Because they don’t know the responsibilities of other departments and are worried the surveyors will ask them about it.
3. When the surveyors keep asking about personal weak items.

When the audit was held on board 85% received the results by reading the final report after the closing meeting. 77% of the managers actually sit down with their team to discuss the result and how to improve the things that were found. 85% of the managers feel that when they come with a solution for a finding they receive no feedback from the office or auditors.

Figure 4: Stress amongst the crew for the RAAS-audit

## 4.5 Predicted results for the RAAS-audits throughout the fleet in 2017 by crewmembers

This sub-paragraph will describe how crewmembers explain the major findings found in 2016 throughout the fleet (procedures not followed and lack of oversight). Attachment 1 (Data analysis RAAS results 2016) was used in order for the crew to explain the ‘procedures not followed’ and the ‘lack of oversight’. Percentages will also be shown in how the crew predicts what it will be like in 2017.

According to the crew, ‘procedures not followed’ is as big as it is due to:

1. Time pressure, to get everything done in time.
2. Lot of crewmembers prefer short cuts and miss motivation and commitment to the company, it is unclear where their **pride** comes from.
3. Because there are too many procedures.
4. Because there are many crew members in positions where they don’t belong (too inexperienced and lack of knowledge about procedures).
5. Lots of procedures are not described clearly and can be interpreted differently amongst the crew.

When the crew was asked to explain the ‘lack of oversight’ the following results were found:

1. Because as a manager they don’t have time to monitor everyone and everything on board.
2. Many managers focus on unimportant things instead of having the right focus.
3. Equivalent ranks don’t care enough or are too scared to correct each other.
4. People quickly assume to do the right thing because of experience, HESS-MS however is new so many managers don’t know it quite yet.
5. There is too much administration and emails for one day. It reduces the overview of the organization.
6. The volume and detail of information is too much to process and retain.
7. There are not enough managers in the shipboard or office organization to keep up with all the procedures.

54% of the managers predict that these two major findings will be reduced in 2017 and therefore will achieve better results in 2017.

# 5) Discussion

This chapter will describe the accuracy of all the results found on board the MS Amsterdam. It will also describe if things could have been done better while performing research on board. A suggestion to perform more research will be described as well.

Of the list of managers mentioned previously in the introduction, 16 persons were interviewed on board (89%). It was not possible to interview all 18 managers on board due to the amount of time that was available for the research and managers having different working and resting hour schedules. This of course had an influence on the percentages mentioned in the result chapter.

Because research on board ships of Carnival Corporation like this one has not been conducted before, it was difficult to distinguish at first which questions were more relevant than others. A basis for the questionnaire was used (see attachment 4) and selections of questions were chosen by rank. A couple of interviews were necessary at first to be able to determine which questions were more relevant than others, and this also had an influence on the result. If this research was to be conducted again on one of the Carnival Corporation ships the difference in the asked questions should be similar but constructed for yes/no answers to deliver easily analysed data.

In order to get these results even more accurate, more research is definitely necessary. It turns out that while Carnival Corporation is working on a global HESS-MS amongst the ships; the ships are still in full adjustments in trying to comply with all procedures prescribed in HESS-MS. A person should go to each single vessel of the fleet to perform the same kind of research to be able to say something about how the entire fleet is operating. With more data and more results, more accurate conclusions can be drawn on where the SMS on board the vessels is broken.

From a personal point of view, I didn’t expect to collect so many different results, ideas and suggestions with this research. When joining the vessel I had the idea of finding one best possible way. Surprisingly there were way more ideas of the managers on how this best possible way can be achieved. What surprised me most was that only 77% of the managers knew what to answer regarding the consistency of a RAAS-audit. 76% knew RAAS is used as an internal audit and therefore knew the purpose of it. These managers are in charge of the vessel and carry the most responsibility regarding the safety of the ship. These scores should be a 100% otherwise it is for them impossible to instruct their own team if the managers don’t even know it themselves.

The crew on board was very open about when and why they would feel nervous or stressed regarding RAAS. Therefore I am very satisfied with the results I collected regarding that subject.   
Furthermore the managers came with many ideas and suggestions to achieve the best possible way to prepare for a RAAS-audit. Of all suggestions I was most surprised to notice that all managers that were interviewed wanted to change the ‘culture’ on board. The attitude shouldn’t be, a hotel with a ship underneath but a ship with the hotel on top. Every rank must understand and made well aware that the safety of the ship is everyone’s responsibility. The ship isn’t a hotel, it remains a ship carrying many persons on board. Every department, deck, hotel and engine have their contribution on keeping the vessel safe.

# 6) Conclusions and Recommendations

This chapter will describe the conclusions that can be drawn now the research has been conducted. A conclusion will be drawn with each sub-question and eventually the main research question. The paragraph after that will describe the recommendations given by the managers on board, items that need to be carried out by Carnival Corporation in order to achieve the best possible way to prepare for the RAAS-audit with a positive result and the least amount of stress.

## 6.1 Conclusions with each sub-question

This research consisted of five sub-questions in order to answer the main question. This paragraph will shortly describe the conclusions that can be drawn with each sub-question.

1. **What does a RAAS-audit consist of?**

46% of the managers did not know that the RAAS-audit is an internal one. 77% of the managers knew what the RAAS-audit consisted of and 76% had heard of HESS-MS before and knew how to work with it. These managers are in charge of a group of personnel and carry the most responsibility on board. These numbers shown should all be a 100%. All managers should know the purpose and the consistency of a RAAS-audit, this in order to be able to instruct your own team about the importance of it.

1. **How does a crew from a Carnival Corporation vessel currently prepare for a RAAS-audit?**

70% of the managers try to maintain a certain standard on board so preparations aren’t really necessary. 15% uses 2 weeks and the other 15% uses two months to prepare. 54% of the managers use results of the previous audits to make sure that previous findings won’t reoccur and use their time to figure paperwork out only.

1. **Are there ideas or suggestions that could help the crew prepare for a RAAS-audit?**

There are many ideas and suggestions brought up by the managers that could help them prepare for a RAAS-audit. In paragraph 6.3 those are mentioned.

1. **Why is the crew of a Carnival Corp vessel stressed for a RAAS-audit?**

38% of the managers feel stressed because:

* They are responsible for too many items on board and know they get blamed when items are found that are insufficient.
* When unexpected situations occur and when they have no experience to rely on.
* When managers have no faith in their crewmembers.
* They consider nerves and stress as a normal reaction to a test.

1. **Are there ideas or suggestions to reduce the amount of stress under the crew during a RAAS-audit?**

As with sub-question number three, many ideas and suggestions were brought up to reduce the amount of stress. These are also mentioned in paragraph 6.3.

## 6.2 Conclusion of the main research question

The main research question of this research was:

*‘What is the best possible way for a crew on board a Carnival Corporation vessel to prepare for a RAAS-audit, in order to obtain a positive audit result and minimize the amount of stress?’*

Conclusion here is that there is not one best possible way to prepare for a RAAS-audit. Multiple ideas and suggestions were offered by the managers and all these items need to be carried out in order to achieve the goal of a positive audit result and minimize the amount of stress. All these ideas and suggestions are mentioned in the following paragraph.

## 6.3 Recommendations by the managers on board the MS Amsterdam

According to the managers interviewed on board the MS Amsterdam the following items need to be carried out by Carnival Corporation in order to achieve the best possible way to prepare for the RAAS-audit with a positive result and the least amount of stress:

1. HESS-MS should be used on a daily basis for each crewmember. This should be checked by the HESS-MS app to see which crewmember logged in and for how long. The amounts of crewmembers that have opened the application logged in and have read the procedures should be checked by the managers.
2. Connect following the HESS-MS and all applicable laws and regulations to promotion.
3. Increase the manpower of the ship and the office in order to obtain a better way of communication between the ships and the office.
4. Increase the communication skills between the departments by organizing meetings between all the managers. Consequences should be attached when managers don’t show up or are not actively part of those meetings.
5. Crew members and office need to learn from mistakes / previous findings and reports and those need to be discussed with every team member.
6. Look at the workload of the managers by looking at the feasibility of following the HESS-MS and all regulations as it is now compared to the available time each day.
7. Make HESS-MS only the SMS of the ships don’t combine it with other procedures as well.
8. The ships need more implementation time when a procedure comes out. A plan of action and a vision should be communicated and made well aware with everyone as well when changing something (this includes deck, engine, hotel and the office). Back up purchasing.
9. Make HESS-MS more user-friendly so it will save time for other things as well (improve the search button).
10. Judge and base the skills of crewmembers for their emergency function as well and not just only on their basic daily job.
11. Make the shipboard organization for each ship the same.
12. The vessel needs more help in auditing themselves for an audit by getting checklists on board or any other relevant tool that could contribute to that.
13. Schedules of officers should be taken into account, in such a way that officers do not board the ship right before a RAAS-audit is scheduled or the names of the managers on board previous to the RAAS-audit should be mentioned in the final report.
14. Newly embarked crew to be informed about HESS-MS and RAAS the day they come on board by the HRM. Provide them with a folder that explains the importance of HESS-MS and RAAS and they must made well aware that it is applicable to ***every*** crewmember.

# References

*Byelex*. (1998). Retrieved 1998, from http://www.byelex.com

Corporation, C. (2016, April 1). *HESS-MS Internal Audits.* Retrieved 2013, from http://www.carnivalcorp.com

First-Officer. (2016, August 16). Preparation Deck-department for a RAAS-audit. (S. Vissia, Interviewer)

Firth, R. (2016, December 1). Interesting ranks on board ships Carnival Corp. (S. Vissia, Interviewer)

Francken, S. (2016). *Innovatieve Interventie Opdracht.* Tilburg: Fontys Hogeschool Tilburg.

Hartkopf, L. (2016, May 23). Americas Internal Audit Leader. (S. Vissia, Interviewer)

IMO. (1998). *ISM-Code.*

Lloyd's Register. (2010). *Lloyd's Register ISM & ISPS Pocket Guides*. Retrieved 2010, from http://www.lloydsregister.com

Loo, A. v. (2016, October 16). HESS-MS explanation. (S. Vissia, Interviewer)

Safety-Engineer. (2016, July 16). Safety Engineer R-class vessel HAL. (S. Vissia, Interviewer)

*Spectec.* (2016). Retrieved 1986, from http://www.sales@spectec.net

Toms, D. (2016, June 30). Solutions to help the crew prepare for a RAAS-audit. (S. Vissia, Interviewer)

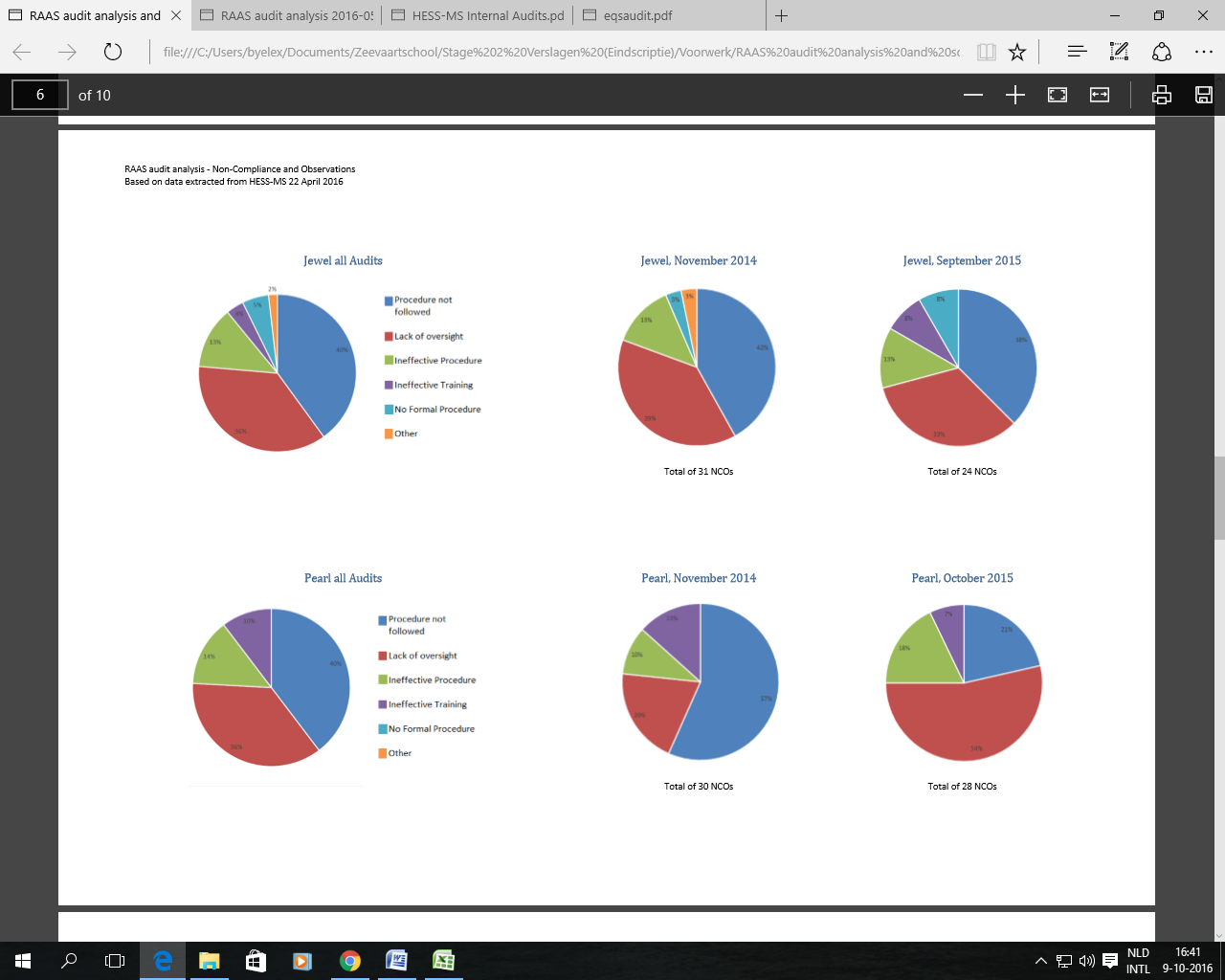
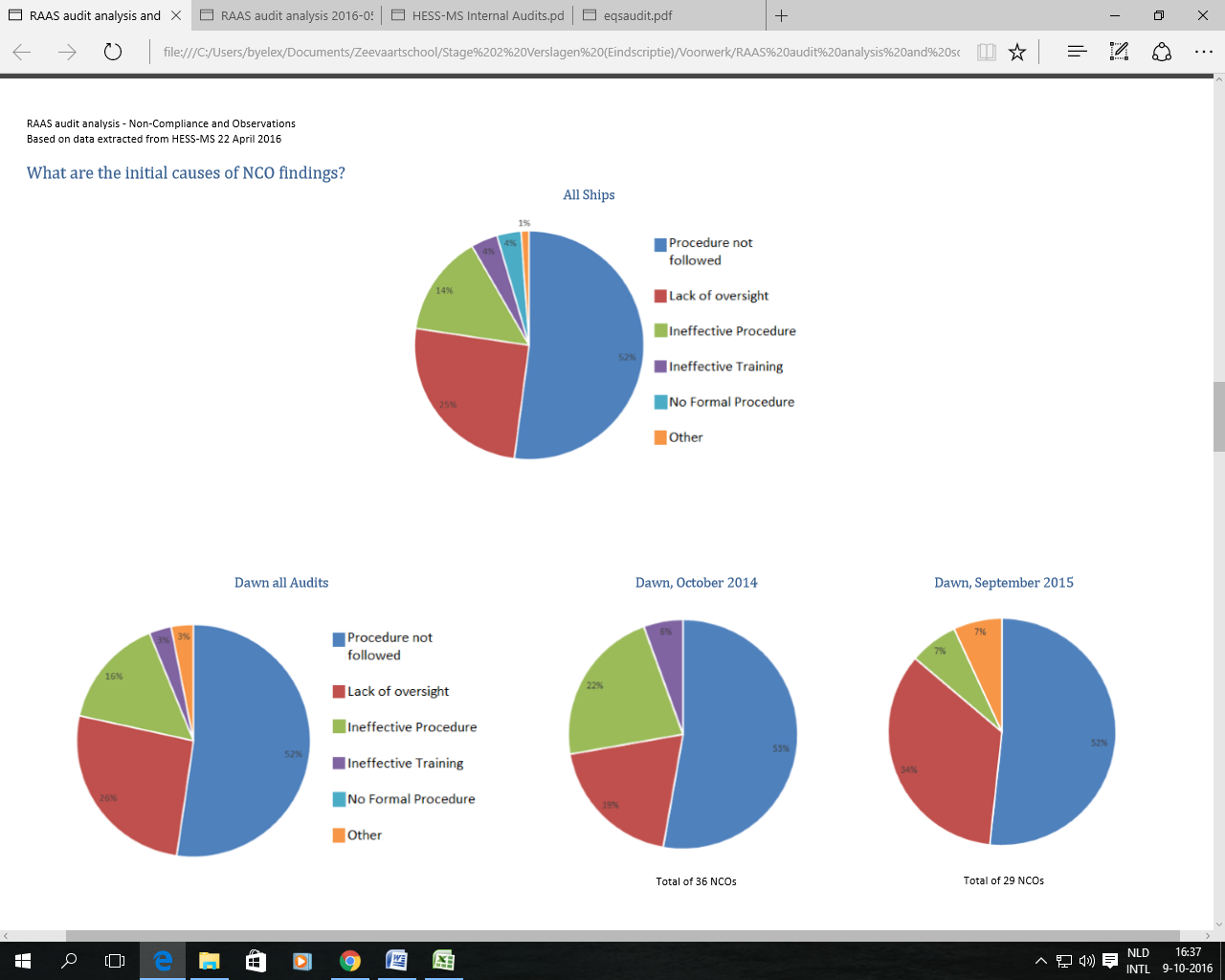
Training-Officer. (2016, April 3). 2/O Training Officer R-class HAL. (S. Vissia, Interviewer)

*Travel pulse*. (2016, January 4). Retrieved from http://www.travelpulse.com/news/cruise/carnival-corp-announces-four-new-cruise-ships-for-three-brands.html

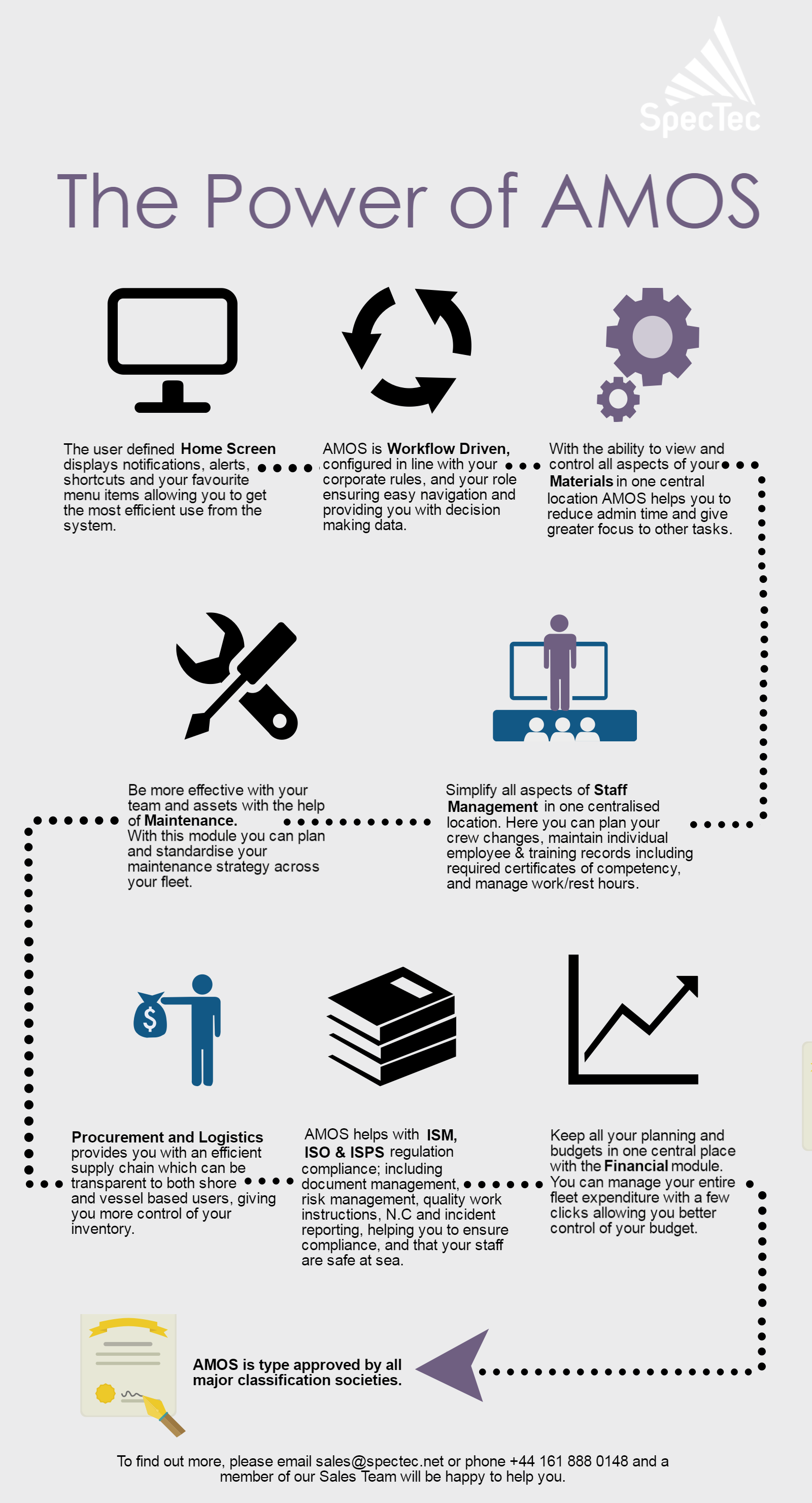
University, N. (2015). *Developing and testing an internal audit tool of the psychosocial work environment in the oil and gas industry.* Nottingham: ScienceDirect. Retrieved from http://www.sciencedirect.com/science/article/pii/S0925753515001459

# Attachments

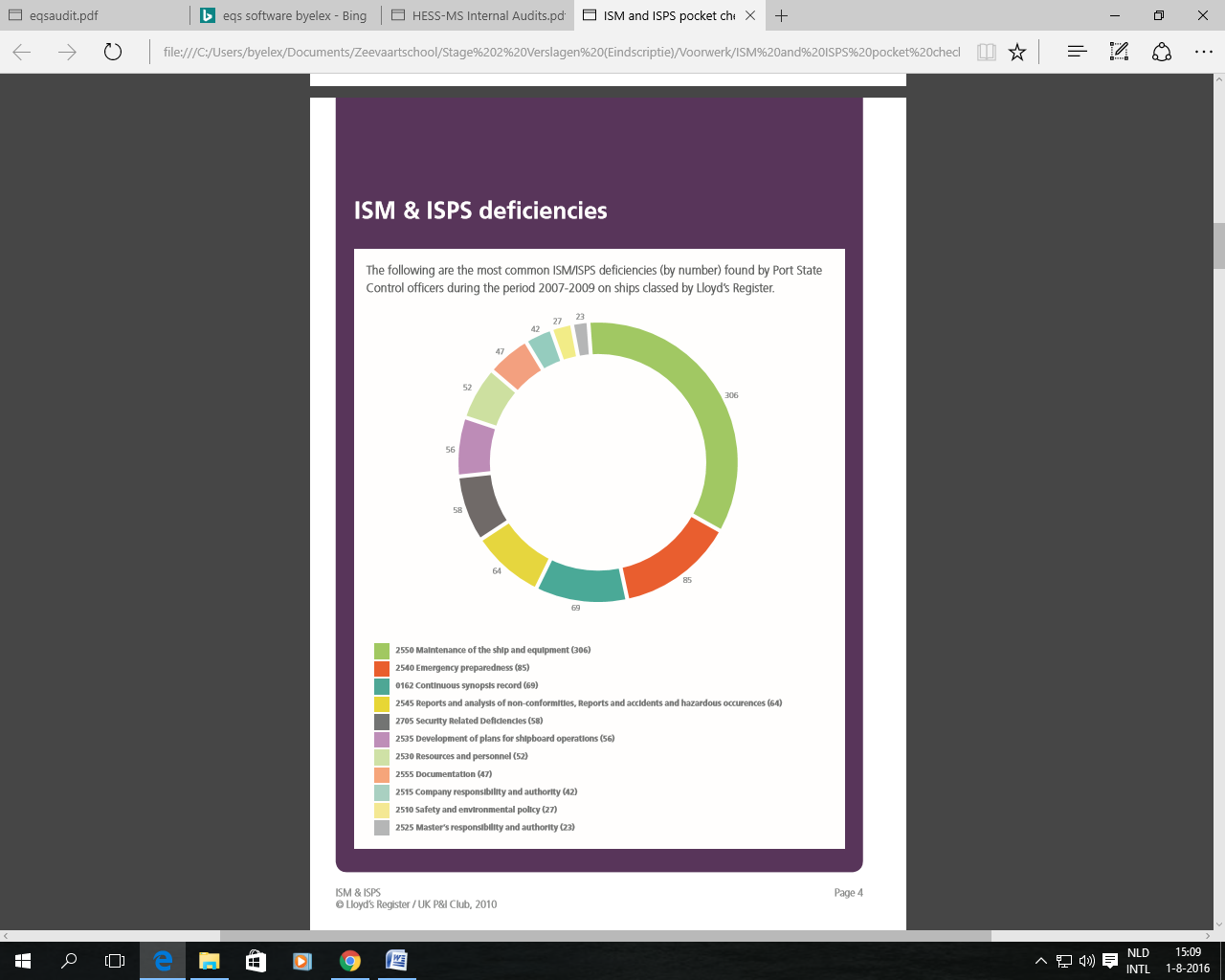
## Attachment 1: Data analysis RAAS-results 2016



## Attachment 2: The Power of AMOS



## Attachment 3: ISM & ISPS Deficiencies



## Attachment 4: Basis of the questionnaire interview

1. What is the meaning of a RAAS-audit according to you?
2. What does a RAAS-audit consist of?
3. Do you know which people are involved when a RAAS-audit is held? Also from other departments and which items belong to which people?
4. When do the / your preparations start regarding RAAS?
5. How do you currently prepare for a RAAS-audit?
6. Do you feel you’re well enough prepared to pass the audit with a positive result if the auditors would walk in right now?
7. Do you feel relaxed or stressed when you’re preparing for the RAAS-audit? Why yes / no?
8. Do you have the feeling you can talk to every rank (or department) about the things you need to do before the audit takes place? If not, why not?
9. Would you like to see a different way of preparing for the RAAS-audit or do you like the way it is done now? If not, what solution would be working best for you and why?
10. Do you feel / think all departments that are involved for this audit, keep each other ‘up to date’ about the preparations they make for the audit? (A.k.a. communication?)
11. When the audit takes place, do you feel stressed or do you observe that certain ranks are not entirely comfortable? If yes, why do you think that is, how do you notice and what do you do about it to solve it?
12. Do you feel comfortable to answer any question the surveyors might ask you?
13. How do you feel when you’re not capable of answering those questions?
14. Can you keep up with all the changes regarding HESS-MS (company & standard) procedures?
15. How do you figure out what the result was of the audit and what do you do with it yourself when you find out?
16. When the auditors find items that aren’t sufficient enough, what do you do about it to make sure they are next time?
17. As a person that has a supervisory role you need to know the job descriptions and standards that come with every person falling under your department, how do you realise this and how do you realise that you’re people know this and know how to find it?
18. What is according to you now the best possible way to make sure the HESS- MS becomes a well-oiled machine?
19. What is according to you the best possible way for every crewmember to prepare him/herself for the RAAS-audit (or any audit for that matter) and why do you think that is the best solution?
20. Looking at the analysis of the RAAS-results from 2016 we see two major factors in findings: procedures not followed correctly and a lack of oversight. Why do you think those two are the biggest factors and what can we expect in 2017?