

Isle of Man Ship Registry

Casualty Investigation Report No. CA 125

"Meamina"

**Fatality** 

on the 29<sup>th</sup> August 2016

#### **Extract from**

# The Isle of Man Merchant Shipping

### (Accident Reporting and Investigation)

# Regulations 2001 – Regulation 4:

"The fundamental purpose of investigating a casualty, an accident, or an incident under these Regulations is to determine its circumstances and the causes with the aim of improving the safety of life at sea and the avoidance of accidents in the future.

It is not the purpose to apportion liability, nor, except so far as is necessary to achieve the fundamental purpose, to apportion blame"

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# **Acknowledgements**

The author would like to acknowledge the following for their valuable help and assistance during this investigation;

- Nigel Burgess Limited (ISM Company)
- Master, Officers and crew of the Meamina



# 1 Ship Particulars

Flag Isle of Man Port of Registry Douglas

Ship Type Commercial Yacht, steel construction, twin screw

 Official No.
 739370

 IMO No.
 9525247

 Year of Build
 2008

 Call Sign
 2AMK7

ISM Company
Owner
Olassification Society
Nigel Burgess Limited
Blenheim Shipping UK Ltd
American Bureau of Shipping

Length 59.30 (overall)

Breath 10.4m
Moulded Depth 5.45m
Moulded Draught 3.09m
Gross Tonnage 996
Net Tonnage 298
Crew 16
Guests 12

# 2 Summary

- 2.1 On Monday the 29<sup>th</sup> of August 2016, a Deck Rating serving on board the commercial motor yacht MEAMINA failed to report for duty after having gone swimming from the vessel while it was lying at anchor off Cannes, France.
- 2.2 The Chief Officer and Deck Rating whilst off duty performed a series of exercises on the foredeck. They then proceeded to dive from the bow of the vessel and swim to the stern. Both men then completed a number of free dives under the stern of the vessel and on completion of such, the Chief Officer left the water. The Deck Rating remained in the water alone and he was observed to complete a series of breathing exercises before proceeding to free dive under the length of vessel.
- 2.3 The Deck Rating was required to be back on duty at 20:00 hrs and his absence was noted at about 20:20 hrs when he failed to respond to radio calls. This consequently led to the vessel being searched to ascertain his whereabouts.
- 2.4 About 20:45 the vessels Master was informed that the Deck Rating could not be located on board and that there were concerns that he had not returned after having gone swimming earlier that evening. The Master ordered a detailed search of the vessel, informed the local Emergency Services and contacted the vessels ISM Management Company using the 24h emergency telephone number.
- 2.5 Local search and rescue authorities conducted a search of the area using a search and rescue helicopter and other vessels. An underwater search was also carried out but poor visibility hampered the operation. The search was suspended about 02:00 hrs on Tuesday morning,
- 2.6 A further underwater search was conducted and at 15:50 hrs on 01<sup>st</sup> September the Deck Ratings body was found on the seabed by divers searching in the vicinity of where the vessel had been at anchor.
- 2.7 An autopsy was completed by French authorities and it was determined that the probable cause of death was drowning.

### **3** Preceding Events

- 3.1 On the 13<sup>th</sup> of July 2016 the Deck Rating conducted a dive under the hull to clear a line that had become tangled around the stabiliser. As a result he suffered an injury to his hand. Part of a sharp object which had been attached to the hull had become lodged in his hand. Medical treatment was given on completion of the dive and the majority of the foreign object was removed. Furthermore he attended two further medical consultations ashore and on the second visit on the 15<sup>th</sup> of July a doctor performed minor surgery to remove the remainder of the foreign body.
- 3.2 The learning lesson was that crew should wear stronger gloves when diving on the hull.
- 3.3 Subsequently the vessels Manager recommended that the crew diving policy needed to be reviewed. The inference being that the policy needed to be reviewed in relation to the diving policy as set in the Safety Management Manual, Section 4.2.4. This recommendation was interpreted on-board to mean that they needed to check the crew insurance policy.
- 3.4 Safety Management Manual, Section 4.2.4 Diving Operations is in two parts.
- 3.5 Part 1. Diving that involves work. Crew are not permitted to perform diving if it involves work on a vessel. Diving that involves work activities should be performed by professional divers.
- 3.6 Part 2. Diving that does not involve work is a simple underwater inspection and may be performed as a recreational dive by volunteers. They must hold an appropriate and valid recreational SCUBA diving qualification. Divers should normally operate in pairs.
  - See Appendix 2.
- 3.7 The arrangements for diving on the 13th July 2016 were not completed as per the requirements of the Company's safety management system.
- 3.8 On or about the 22<sup>nd</sup> of August a conversation was had between the vessels Master and Chief Officer with regard to crew recreational swimming. This resulted from a situation where it was observed that a member of the crew did swim ashore directly from the yacht, a distance of approximately 500 meters across open water.

#### 4 Narrative of Events

All times are approximate.

- 4.1 At 17:00 hrs on Monday 29<sup>th</sup> August the Deck Rating completed his afternoon duties. Shortly after this he proceeded to the vessels foredeck where he met the Chief Officer who had been relaxing there since approximately 15:30 hrs. Both men then completed a series of exercises described by the Chief Officer as a 'heavy workout'.
- 4.2 At 18:10 hrs having completed exercising on board, they both decided to jump off the bow and exercise in the water. They completed some pull ups on the anchor chain scrubber line and then proceeded to swim to the stern, while what was described as joking around and chatting. During this swim the Deck Rating asked the Chief Officer if he could swim the length of the boat underwater, to which he replied "no, I'd need some training". The Deck Rating then went on to explain that he could, having been able to swim a distance of 70-80m underwater when he was aged 17.
- 4.3 Having reached the aft swim platform the Chief Officer asked the Deck Hand who was at the platform to confirm if there were any guests on board. It was confirmed that there were none on board. He then got two pairs of swimming goggles. The Deck Rating proceeded to show the Chief Officer some areas of damage that needed to be repaired under the swim platform door. The inspection consisted of both men holding their breath while underwater for a period of 30-40 seconds.
- 4.4 At 18:25 the underwater inspection was completed. The Chief Officer was due to resume duty so he left the water and hosed himself off at the swim platform shower. The Deck Rating remained in the water and informed the Chief Officer that he intended to swim under the length of the boat.
- 4.5 The Deck Hand was collecting the Stewardess/Personal trainer from the yacht to go and meet a guest with whom she was going swimming with. He was in the yachts tender waiting off the stern. The Chief Officer informed the Deck Hand of the Deck Rating's plan to swim the length of the boat underwater. The Deck Hand expressed his incredulity and it is reported that he also told the Chief Officer that he would follow him up the side in the tender and check him coming up.
- 4.6 Prior to commencing the planned free dive the Deck Rating held on to the swim ladder and preformed breathing exercises in preparation for the dive. During this time the yachts tender came alongside the stern platform. Shortly after the Chief Officer watched the Deck Rating take a deep breath and commence his swim under the starboard side of the hull. This was the last time his location can be positively established.

- 4.7 At 18:30 hrs The Stewardess/Personal trainer had embarked the tender and the Chief Officer signalled to the Deck Hand to go. The tender departed the yachts swim platform heading off slowly from the starboard side and then proceeding towards the shore and away from the yacht.
- 4.8 The Stewardess/Personal trainer while in the tender and pulling away from the yacht, heading to the shore, may have seen the Deck Rating surface near the anchor chain. However she could not confirm this as a definite sighting. Stating that "it was just a glance and not a fact that I am sure of but I thought that I had seen his head and hand movement towards his mask".
- 4.9 The Chief Officer at this time was of the belief that the tender had remained in the vicinity of the yacht, monitoring the Deck Rating and confirming that he had surfaced. This belief was based on the brief conversation had earlier with the Deck Hand in the tender, about going along the side of the vessel in the tender. Also as the Chief Officer dried himself off on the swim platform, he could hear the noise from the tenders engine change as he heard it speed up approximately 30-40 seconds later.
- 4.10 Shortly afterwards the Chief Officer proceeded to walk up the starboard side of the main deck and out onto the side boarding ladder, to have a better view up to the bow. He did not see the Deck Rating at this time. He further recalled that the current was favouring the port side when swimming so presumed he was swimming back to the stern on the port side. The time was now 18:32 hrs and he was due to be on duty. He continued to the bow, collected his possessions, went into the accommodation to get changed into his night uniform and have dinner.
- 4.11 At 20:00 hrs The Deck Rating was required to be on duty.
- 4.12 At 20:20 hrs the Chief Stewardess made a call over the radio, asking for the sundeck to be cleaned up. The Chief Officer responded to this call and proceeded to call the Deck Rating on the radio to complete the task. He received no response. The Second Officer also confirmed that he had not seen him yet. The Chief Officer then went to the bow and found the Deck Rating's exercise equipment. He then proceeded to the accommodation to check on his whereabouts with no success.
- 4.13 At 20:45 hrs the Chief Officer informed the vessels Master that the Deck Rating could not be located on board.
- 4.14 At 20:46 hrs The Master immediately ordered a detailed search of the entire vessel.
- 4.15 At 21:00 hrs the search was completed without success.

- 4.16 At 21:05 hrs the Master agreed that the Chief Officer and Second Engineer should undertake a SCUBA dive to ascertain if the Deck Rating was under the hull or in the water in the vicinity of the yacht.
- 4.17 At 21:07 hrs the Master made contact with local Emergency Services by telephone to report a missing crew member who had last been seen swimming at the stern of the yacht.
- 4.18 At 21:15 hrs the dive was completed and it was reported that there was no sign of the Deck Rating. The dive did not consist of a search of the seabed as the as the depth of water was approximately 40 meters.
- 4.19 At 21:35 hrs the Master made a Pan Pan call on VHF channel 16. A number of vessels in the area offered assistance. The Search and Rescue operation was co-ordinated by French Coastguard Cross Med.
- 4.20 At 21:40 hrs a Search and Rescue helicopter arrived on scene and commenced a search pattern.
- 4.21 At 21:55 hrs the Master made contact with the vessels ISM Management Company via the 24 hour emergency number and was advised that he would be called back straight away.
- 4.22 At 22:00 hrs the Master received a call from the vessels management company offering all assistance.
- 4.23 At 02:00 hrs on Tuesday 30<sup>th</sup> August the Search and Rescue operation was suspended. It was resumed later that morning and included a search of the seabed where the vessel had been anchored.
- 4.24 At 15:50 hrs on the 1<sup>st</sup> September the Deck Hands body was discovered on the sea bed by divers conducting a further search of the area.

### 5 Comment and Analysis

### 5.1 Location where the incident occurred

In the vicinity of Cannes, France, anchored 500m off Is. St. Margueritte Position: 43° 31′.7N 007° 03′.3E Depth of water: Approximately 45m

### 5.2 **External Conditions**

Monday 29 August 2016 Sunset 19:16 Civil twilight 19:45 Tuesday 30 August 2016 Civil Twilight 07:00 Sunrise 07:29

Air temperature 26°C Sea temperature 24°C

Barometric pressure 1014mb – Steady

Current Estimated to be setting from NE to SW at 1.5kts

Wind: 18:00hrs - South 3.0 m/s 19:00hrs - South 1.5 m/s

# 5.3 **Details of the Casualty**

Rank: Deck Rating Age: 24 yrs.

Qualifications: Fully qualified to perform the duties required of a deck

rating on board the vessel.

# 5.4 **Crew Familiarisation Training**

Part 1 completed 22 July 2016. Burgess Safety Management Manual, Section 6.4 requires this to be completed within 24 hours of joining. The BY-03A form was signed 25 days after joining.

Part 2 completed 22 July 2016. Burgess Safety Management Manual, Section 6.4 requires this to be completed within 14 days of joining. The BY-03B form was signed 25 days after joining.

See Appendix 1.

### 5.5 **Meamina Underwater Gear**

Fitting	Description	Frame location
Rudders	Twin spade	0
Propellers	Twin shafts, each supported by an A frame	2
Stabilisers	Zero Speed, extending from the hull	13 – 15
Bow Thruster	Mounted in tunnel	39-40
Bulbous Bow		44-47

# 5.6 **Recreational Swimming**

- About the 22<sup>nd</sup> of August a conversation was had between the vessels Master and Chief Officer with regard to crew recreational swimming. The Master stated that the result of this conversation was that it was agreed with the Chief Officer that, in future crew recreational swimming would only be permitted in limited circumstances. Specifically when diving from the bow, crew must swim directly to the stern where they would leave the water. The Master also States that the Chief Officer was instructed to inform the crew of this change in policy.
- 5.8 Also present when this conversation took place was the Deck Hand who was in charge of the tender when the incident occurred. He was completing chart corrections at the time. In his statement he recounts the conversation being that the Master did not like one of the crew swimming to shore because they were on charter. The Chief Officer confirmed to the Master that he had been swimming from the bow to the stern in uniform the past few days. The Master confirmed that this was acceptable because "it looks like you were doing work".
- 5.9 It could not be independently verified that the outcome of the conversation was that a restriction on recreational swimming had been put in place. This was due to the fact that the Chief Officer and the Deck Hand were no longer on board the vessel and could not be interviewed further about their statements.
- 5.10 Investigations carried out subsequent to the incident confirmed that not all the crew were aware of the requirements and restrictions of the on board recreational swimming policy. Furthermore the Stewardess/Personal trainer stated that she was not aware if there were any policies regarding this. It is unknown if the Deck Rating was aware of the restrictions imposed by the Master. If the Deck Rating was aware of such restrictions, he may not have attempted his swim. Had the Stewardess/Personal trainer been aware of such restrictions it may have prompted her to question the Deck Ratings intended actions.

#### 6 Conclusions

- 6.1 It is concluded there were recreational swimming restrictions put in place by the vessels Master. This is based on the Masters description of events, statement and interview along with confirmation from the Deck Hand that a conversation was had about recreational swimming.
- The recreational swimming policy was not implemented formally. The Chief Officer was fully aware of the restrictions imposed by the Master with regard to recreational swimming. However he did not take action to stop the Deck Rating from completing his swim from aft to forward.
- 6.3 The Deck Hand in charge of the tender was present on the bridge when the conversation between the Master and Chief Officer took place about recreational swimming. He would have been aware of the restrictions imposed by the Master with regard to crew recreational swimming. He failed to challenge the Deck Rating's intended actions.
- The Chief Officer informed the Deck Hand in charge of the tender that the Deck Rating was going to swim the length of the boat underwater. The Chief Officer further stated that the Deck Hand told him that he would follow him up the side and check him coming up. It is concluded that the Chief Officer was of the belief that Deck Rating's swim would be monitored.
- 6.5 The conversation between the Chief Officer and the Deck Hand in the tender was informal. It lacked certainty with regard to monitoring the Deck Rating and positively confirming that he resurfaced safely at the bow.
- 6.6 The Deck Hand did not specifically follow the Deck Rating up the side in the tender to check he had surfaced at the bow.
- 6.7 The Chief Officer failed to inform all of the crew about the restrictions in place with regard to recreational swimming.
- 6.8 The recreational swimming policy with restrictions was introduced. It was either not understood and or disseminated to all crew.

# **7** Recommendations

# 7.1 Action taken by Burgess as follows has been acknowledged and agreed as follows:

- 7.2 Practical and proportionate requirements covering work related swimming have been written for inclusion in the Company's Safety Management Manual. These can be expressly offered as guidance to any crew members who choose to engage in recreational swimming.
- 7.3 The arrangements for Crew Familiarisation training were reviewed to ensure that MEAMINA crew are correctly trained within the prescribed time scale after joining.
- 7.4 A follow up ISM internal audit and safety inspection was performed within 2 months.

# 7.4 The Isle of Man Ship Registry is recommended to:-

7.5 Distribute this report to owners and ship managers alike to advise of the dangers associated with swimming from a vessel, if it is not properly controlled.

# Appendix 1.

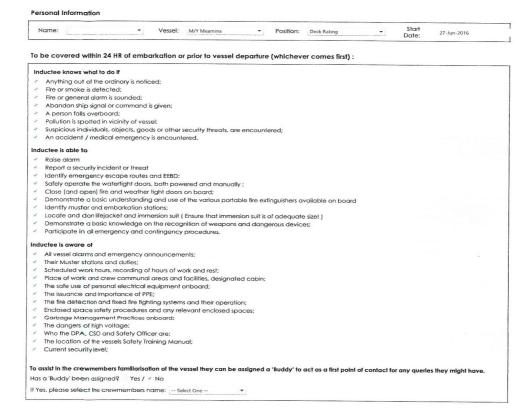
# **Deck Rating Familiarisation**



BURGESS

FORM NO: BY-03A

#### **CREW FAMILIARISATION - PART 1**



BY-03B Crew Familiarisation Part 2 -

on Friday, July 22, 2016 12:12:04 PM on Friday, July 22, 2016 12:12:04 PM

Attachments

**BURGESS** 

FORM NO: BY-03B

#### **CREW FAMILIARISATION - PART 2**

#### Inductee Information



#### To be covered within 14 days of embarkation:

#### Inductee is able to

- Fulfil their assigned role and duties in an emergency party as per the Muster List;
   Conduct key duties relevant to rank and key responsibilities
- Log on to BURGESS MANAGE

#### Inductee received instruction and is confirmed to be competent in:

- Inductee received instruction and is confirmed to be competent in:

  Having appropriate knowledge of the location and use of both portable and fixed fire lightling appliances as well as both personal and general life saving appliances:

  Communicating with other persons on board on elementary safety matters and understand safety information symbols, signs and alarm signals.

  Showing due regard for own and fellow crewmembers' personal heath and safety (prevention of common slips, trips and falls, application of safe lifting methods, working at height or overboard, hot work, enclosed space, COSHH matters, etc)

#### Inductee knows the location of the following static

- Oil spill response equipmentMedical equipment

#### Inductee is familiar with:

- Relevant parts of the Code of Safe Working Practices

- Relevant parts of the Code of Safe Working Practices
  Principles of ISM (key policies, DPA, Safety Officer and Committee, environment, Code of Conduct, etc)
  The sections of the Safety Management Manual relevant to their rank
  Safe work principles (use of risk assessment, permits to work, awareness of hazardous activities such as enclosed space entry and working over-side or at height)
  ISM requirements appropriate to their rank
  Principles of ISPS (key policy, CSO, SSO, MARSEC levels, etc)
  Company Standing Orders
  Captain's Standing Orders
  Chief Engineer's Standing Orders

- Captain's Standing Orders.
  Chief Engineer's Standing Orders, as applicable
  Fleet Circulars relevant to rank and department
  SOLAS Training Manual
  Relevant Risk Assessments and resulting Operating Instructions / Procedures pertaining to crewmember's responsibilities
  Material Safety Data Sheets relevant to department
- Garbage Collection Points throughout the vessel Garbage processing and treatment equipment Where to store garbage onboard The Disposal of garbage according to MARPOL Annex V

#### Inductee, if designated with security duties:

- Received instruction and understands their security duties
   Understands the requirements and procedures for drills and
- Received instruction and understands their security duties. Understands the requirements and procedures for diffs and exercises to be carried out Understands the requirements and procedures for institution and the requirements and procedures for monitoring security activities. Has a working knowledge of techniques used to circumvent security measures has a working knowledge of crowd management and control techniques is competent in physical security search methods and non-intrusive inspections is able to adequately respond to security threats or breaches of security.

### Appendix 2.

### **Diving Operations**

#### 4.2.4 Diving Operations

Account Name: MEAMINA Version: 2

Created by

on Sunday, February 23, 2014 8:58:43 AM on Friday, June 5, 2015 12:06:10 PM

### BURGESS

#### SMS MANUAL

Crew are not permitted to perform diving if it involves doing work on a vessel.

#### Diving that involves work

Activities such as hull scrubbing and sea chest cleaning should be performed by professional divers who hold the appropriate technical diving qualifications and who are employed by a diving contractor. The diving contractor will ensure that their divers operate with a safe system of work.

Contractors should be insured against the liabilities arising from their activities and for the divers they employ or engage to perform the work. This should be verified before contract.

Activities which involve divers performing work should be planned and conducted in accordance with UK Health & Safety Executive guidance INDG 266 - Are you involved in a diving project at work? This can be downloaded <a href="https://executive.org/nc/health/">https://executive.org/nc/health/</a>

The guidance in INDG 266 refers to a number of Approved Codes of Practice. The most appropriate ACOP for underwater work on yachts is L104 - Commercial diving projects inland/offshore. This can be downloaded  $\underline{\text{here}}$ 

Masters should ensure that the diving contractors activities are safely co-ordinated with the operation of the vessel and are the subject of a BY-19 permit to work.

#### Diving that does not involve work

A simple underwater inspection which does not involve work may be performed as a recreational dive by volunteers. They must hold an appropriate and valid recreational SCUBA diving qualification. This must be at least equivalent to PADI advanced open water diver. Divers should normally operate in pairs.

In cases where an inspection is performed by a single diver they must hold a valid qualification equivalent to PADI solo advanced open water diver.

Divers must be suitably equipped for each dive.

Masters should ensure that formal permission is granted for each dive. This should be based on a current assessment of the risks and provide co-ordination with the operation of the vessel. Particular care should be taken to consider the need to de-activate underwater equipment such as rudders, propellors, thrusters, echo sounders and stabilisers.

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