

**Report of the investigation into
the accident resulting in one fatality during the
launching of a Personal Water Craft onboard the motor yacht**

VINYDREA

**in the Bay of St Tropez
on 04 July 2010.**

Maritime Authority of the Cayman Islands

Strathvale House
North Church Street
PO Box 2256, George Town
Cayman Islands
KY1-1104

Casualty 01/2012

NOTE

The fundamental purpose of investigating an accident under the Cayman Islands Merchant Shipping Law, as amended, is to determine its circumstances and the cause 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.

This report is not written with liability in mind and is not intended to be used in court for the purpose of litigation. It endeavours to identify and analyse the relevant safety issues pertaining to the specific accident, and to make recommendations aimed at preventing similar accidents in future.

Report of the investigation into the accident resulting in one fatality during the launching of a Personal Water Craft onboard the motor yacht VINYDREA

SYNOPSIS



On 04 July 2010, the yacht VINYDREA was on charter in the South of France with 12 passengers onboard. At approximately 12:40h local time the yacht's Personal Water Craft (PWC) were prepared for launching for the use of the passengers.

As part of the launching routine, the first PWC was lowered to the main deck level on the starboard side of VINYDREA. With the PWC at main deck level, a crewmember boarded the PWC with the intention of riding it to sea level and then bringing it to the stern of the yacht. At this time the PWC was suspended approximately 2m above the sea.

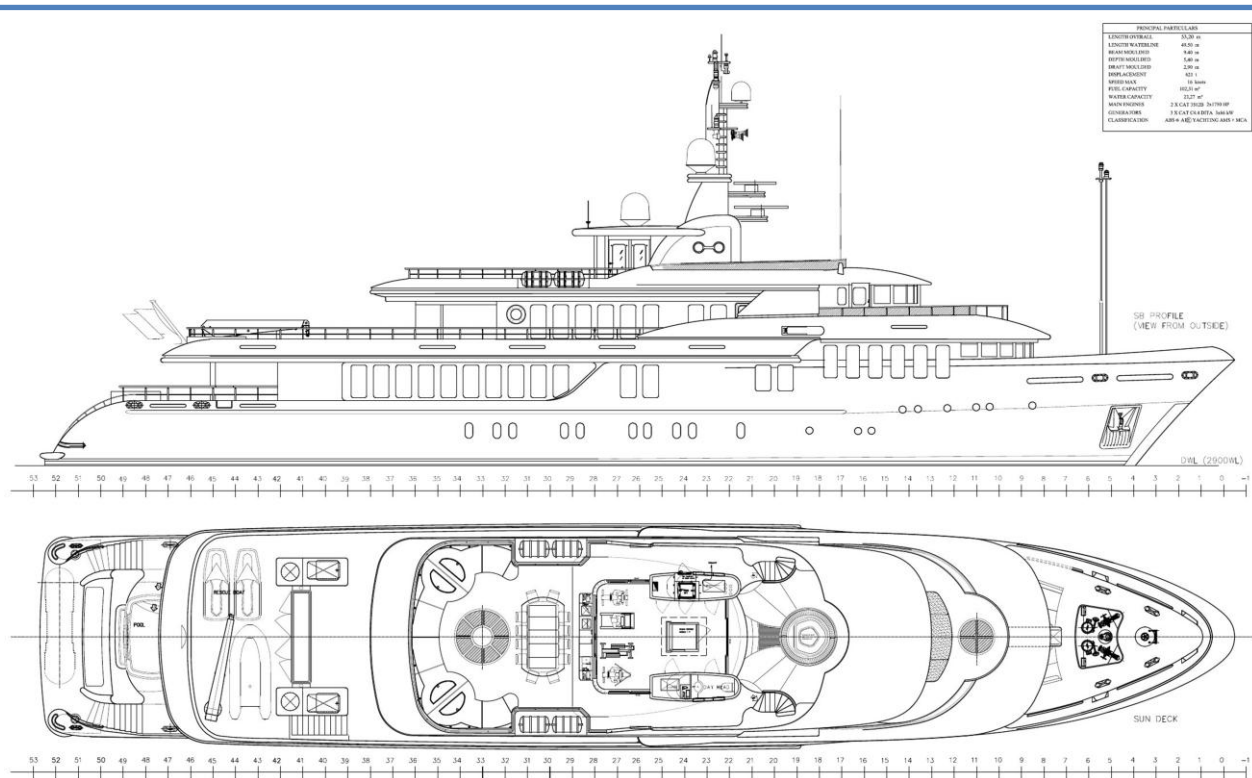
When the lowering of the PWC re-commenced at 13:00h the lifting harness failed and both the PWC and the crew member fell into the sea. The PWC landed on its side and righted itself and the crewmember landed on top of the PWC and fell into the water. He remained conscious but was in severe pain. After being retrieved from the water the crewmember was transferred to a local hospital for treatment. On 23 July 2010, the crewmember died from internal injuries received during the accident.

The investigation into the accident found that a combination of a failure to follow operational procedures, a lack of onboard maintenance and inspection and a failure to act on identified deficiencies in maintenance all contributed to this accident.

As a result of this investigation recommendations have been made to VINYDREA's managers, Edmiston Yacht Management, aimed at addressing the effective implementation of ISM Code requirements and ensuring an effective maintenance regime onboard.



VINYDREA (July 2010)



VINYDREA General Arrangement

Glossary of Abbreviations, Definitions and Acronyms

| | |
|------------|--|
| Company | The owner of the ship or any other organization or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the owner of the ship and on assuming such responsibilities has agreed to take over all the duties and responsibilities imposed by the ISM Code ¹ . |
| CISR | Cayman Islands Shipping Registry, a Division of MACI |
| COSWP | The Code of Safe Working Practices for Merchant Seamen |
| DOC | Document of Compliance |
| EYM | Edmiston Yacht Management Ltd. |
| IMO | International Maritime Organization |
| ISM Code | International Safety Management Code. |
| Load Lines | The International Convention on Load Lines, 1966 (as amended) |
| LSA Code | The International Life-Saving Appliances Code |
| MACI | The Maritime Authority of the Cayman Islands |
| MSMD | Minimum Safe Manning Document |
| PWC | Personal Water Craft |
| SMS | Safety Management System, a documented management system describing policies, plans and procedures for compliance with the ISM Code. |
| SOLAS | The International Convention for the Safety of Life at Sea, 1974 (as amended). |
| STCW | The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (as amended) |
| “Toys” | An informal term used in yachting to describe items of equipment onboard for the recreational use of passengers. The term encompasses PWC, small tenders, “Banana Floats”, kayaks, etc. |

¹ SOLAS IX/1.2

SECTION 1 – Factual Information**INCIDENT PARTICULARS****Vessel details:**

| | | |
|------------------|---|-------------------------------|
| Vessel Name | : | VINYDREA |
| Vessel Type | : | Commercial Yacht ² |
| IMO Number | : | 9559286 |
| Ship Manager | : | Edmiston Yacht Management |
| Registered Owner | : | Nicole Marine Ltd. |
| Port of registry | : | George Town |
| Flag | : | Cayman Islands |
| Year of build | : | Keel Laid 2005 |
| Delivered | : | July 2008 |
| Classification | : | American Bureau of Shipping |
| Length (overall) | : | 52.3m |
| Gross Tonnage | : | 746 |

Accident details:

| | | |
|-----------------------|---|------------------------------|
| Time and date | : | 1300 (Local) on 04 July 2010 |
| Location | : | Bay of St Tropez, France |
| Fatalities / injuries | : | One fatality |
| Damage | : | None |

² Registered as a vessel eligible to engage in commercial activities and complying with the Cayman Islands *Merchant Shipping (Vessels in commercial use for sport and pleasure) Regulations, 2002*.

[Intentionally Blank]

NARRATIVE

(all times are "local".)

Prior to the accident

During the summer of 2010, VINYDREA was based on the Cote d'Azur and undertook a total of eleven charters between 21 May 2010 and the accident on 04 July 2010. The majority of these charters were of two to four days in duration, with the principal charterer being the beneficial owner of the yacht.

On 04 July 2010, the yacht was again on charter to the beneficial owner as part of a family birthday celebration. Twelve passengers (or "guests") were onboard and the yacht was in the St Tropez area in the South of France. The day began with the yacht anchored in the Bay of St Tropez. After spending the night ashore, the guests joined the yacht at approximately 11 am, and the yacht moved closer to the St Tropez beach area where it again anchored. At around 12:40 pm, the charterer requested that the yacht's PWC were to be launched for use by the passengers that afternoon. The PWC were two Yamaha WaveRunners³ that had been supplied to the yacht during its construction and delivered onboard in June 2008.

The accident

To launch the PWC, the master and four crewmembers assembled by the PWC stowage area on the upper deck level and prepared the first PWC for launching. The four crewmembers consisted of the chief engineer, the assistant engineer and both deck hands. With the master at the crane controls, the PWC was lifted clear of its cradle, swung over the starboard side of the yacht and lowered to the main deck. The PWC at main deck level was approximately two metres above sea level. During this operation one deckhand holding a "tag line" that was attached to the port side of the PWC steadied the PWC.

With the master still controlling the crane movements, the chief engineer and both deck hands moved to the main deck level to receive the PWC. The assistant engineer left the operation at this point to attend to an unrelated alarm in the engine room. The tag line was passed to the chief engineer and one of the deckhands held the PWC clear of the hull of the yacht by hand. The other deckhand transferred from the yacht to the PWC with the intention of riding the PWC to the water. Once in the water, this deckhand would release the crane fall and take the PWC to the stern of the yacht.

The deckhand was standing on the PWC and steadying himself by holding onto the crane fall above the hook. When lowering recommenced two of the lifting slings used to transport the PWC failed. The port aft sling was the first to fail closely followed by the port forward sling. This caused the PWC to fall to the water, landing on its side and righting itself. Without the support of the PWC, the deckhand was unable to prevent also falling to the sea. The falling deckhand hit the PWC in the water. He landed on the PWC face down with his chest striking the seat of the now free floating PWC. The deckhand entered the water and then regained the surface. The deckhand was conscious and talking but in obvious pain.

³ "WaveRunner" is a trademarked name and type of PWC produced by the Yamaha Motor Company.



Lifting PWC from cradle



PWC swung over side of yacht



Lowering PWC to Main Deck Level



PWC at Main Deck Level where boarded by Deckhand



PWC at Main Deck Level where boarded by Deckhand

The immediate response to the accident

The distress and pain of the deckhand were obvious to those involved in the launching operation and the master and one other went to the deckhand's aid in the yacht's tender. This tender was already in the water and moored at the stern of the yacht. When the tender reached the deckhand it was apparent that any attempt to remove him from the water and into the tender would cause additional pain and discomfort, possibly aggravating any injuries sustained in the fall. Without removing the deckhand from the water, he was taken to the "swim platform" at the stern of the yacht. At this point the local emergency services were called. While awaiting the arrival of the emergency services, the yacht's passerelle was lowered into the water to provide additional support to the deckhand. The attending emergency services removed the deckhand from the water with the aid of a spine board and the yacht's passerelle. The deckhand was then taken to a local hospital for evaluation and treatment for injuries to ribs and internal organs.

Despite the best efforts of the hospital and the attending medical staff, the deckhand died as a result of his injuries on 23 July 2010.

THE VESSEL AND COMPANY.

The company

At the request of the beneficial owner, Edmiston Yacht Management (EYM) first became associated with VINYDREA to assist the master with registration and certification at the time of delivery. EYM were not involved in either the building of the yacht itself or with equipment procurement. These matters were dealt with directly by the master and beneficial owner.

When the yacht delivered as a "Pleasure Yacht", it was not required to comply with the ISM Code and EYM's continued involvement was for providing financial management services only. It was decided to change to yacht's registration to "Commercial Vessel" during the winter of 2009 – 2010. When the yacht changed registration to a Commercial Vessel, EYM became the ISM Company.

In accordance with section 3.1 of the ISM Code, EYM had assumed the responsibility for the operation of the yacht from its owner and had, on assuming such responsibility, agreed to take over all duties and responsibilities imposed by the ISM Code. EYM holds an ISM Document of Compliance issued by the Cayman Islands Shipping Registry (CISR). Prior to the accident, EYM had last been audited by CISR on 28 October 2009. This audit had resulted in the identification of nine non conformities against the requirements of the ISM Code. There was also insufficient objective evidence of effective corrective action having been implemented for all non conformities identified at the previous audit. As such, five non conformities identified at the 2008 audit remained open at the conclusion of the 2009 audit.

CISR re-attended at EYM for a follow up audit on 23 March 2010. At this audit CISR closed the nine non conformities raised at the October 2009 audit.

The vessel

VINYDREA was built by the *Proteksan Turkuaz Yat San* shipyard in Turkey. VINYDREA was delivered in July 2008 and was registered in the Cayman Islands as a “Pleasure Yacht” at that time. The yacht was designed and built to comply with the United Kingdom’s Large Yacht Code, as an equivalent standard to SOLAS, Load Line, and STCW. After delivery, VINYDREA operated as a “Pleasure Yacht” and was not required to comply with the ISM Code until changing registration to a “Commercial Vessel”. At the time of the accident the yacht was subject to the ISM Code and held a Safety Management Certificate issued by CISR with EYM named as the Company. The yacht was first audited for compliance with the ISM Code by CISR during April 2009.

VINYDREA was also subject to periodic surveys under the Large Yacht Code. At the time of the accident the yacht held valid certification under this Code.

The PWC and associated equipment

The PWC being launched at the time of the accident was a Yamaha “WaveRunner” which was supplied to the yacht in Turkey during construction. The PWC weighed approximately 300 kg.

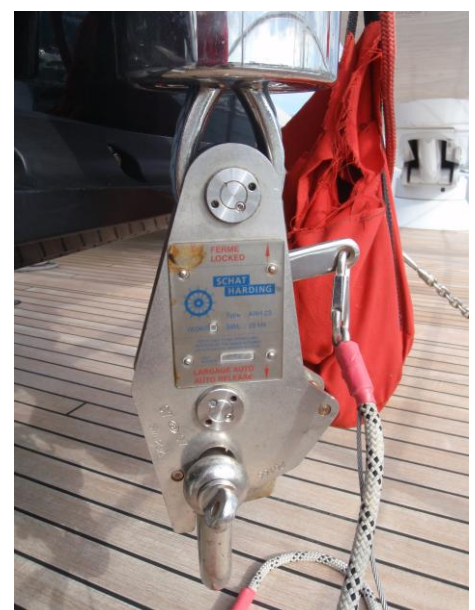
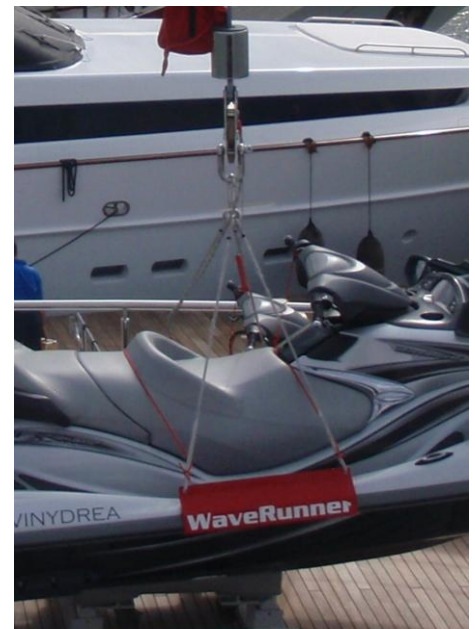
The crane for launching the PWC was a *Nautical Structures EZZ500/4400-EX*, which had been designed and tested in accordance with the IMO LSA Code. The fall wire consisted of a 12mm synthetic rope with a design breaking strain of 14,799 kg.

The release gear was a *Schat Harding ARH 23* release hook complying with the LSA Code for use with davit launched liferafts.

From the release gear, the PWC was supported by a lifting harness consisting of two aluminium spreaders which hooked onto each side of the PWC. These spreaders were connected to a lifting ring by four steel wire rope slings attached to each end of the spreaders.

Two lifting harnesses were supplied to the yacht, along with the PWC, during construction in Turkey by *Horizon Deniz Ve Yat* in Istanbul. The harnesses were not identified as to manufacturer, safe working load or any design/approval standards. The harnesses were conspicuously marked “WaveRunner” but they did not resemble any lifting harnesses being produced by Yamaha at the time of the accident, despite “WaveRunner” being an official trademark of the Yamaha Motor Company.

After the accident the failed harness was recovered, although one of the spreaders was lost. The slings attached to the



port spreader indicated failure caused by corrosion of the steel wire rope slings. The slings were attached to the spreaders by swaged wire thimbles. To prevent damage by the metal swage, these had been covered by soft tape⁴. The slings failed in way of the soft tape covering the metal swage on each thimble.



Recovered Harness



Sling Failure



Metal Swage on Sling from Recovered Harness (Soft Tape removed)



Close up of sling failure



“Soft Tape” used to prevent damage from metal swage with corrosion of wire visible

⁴ Identified as “Self Amalgamating Tape” which is primarily used for producing weather proof seals in electrical applications.

SMS Procedures for Launching PWC and “Accepted Practice” onboard

To comply with the ISM Code, VINYDREA operated a documented SMS containing procedures covering key shipboard operations. Such plans and procedures are required by Clause 7 of the ISM Code. As French was the predominant “working language” onboard the yacht, these procedures were provided in both English (as the official language) and French (as the working language).

SMS Procedure DP 3⁵ “Jet Ski Launching” covers the launching of PWC. In this procedure it is clear that persons are only to board the PWC after it has reached the water. From DP 3 (French):

“Des que le tender touché l’eau, le marin monte a son bord et larque le croc, recupere le bout arriere et demarre le moteur. Il informe verbalement l’equipe que tout est clair.”

The translation of this is given in DP 3 (English) as:

“Once the tender (sic) touch water, deckhand climbs on and and (sic) releases the hook, get the rear end and start the engine. He verbally informed the team that everything is clear.”

During the development process for this procedure, the master asked whether crew could board the PWC during launching. This was expressly forbidden by the DPA, leading to the approved procedure of boarding PWC only when waterborne.

However, it had become standard practice onboard for someone to ride the first PWC to be launched from main deck level to the sea. When the deckhand boarded the PWC at Main Deck Level, the master was in overall charge of operations and was driving the crane.



Normal Boarding Position of PWC

⁵ Version 2 dated 01 October 2009

Onboard risk assessments

On 01 July 2010, amendments to the ISM Code entered into force which, inter alia, clarified the requirements for conducting risk assessments as part of the ISM Code compliance process. In the 2002 Edition of the ISM Code (in force prior to 01 July 2010) the requirements for risk assessments are implied, rather than specified.

In this edition of the Code, the “Safety Management System Objectives” include:

1.2.2.2 *“Establish safeguards against all identified risks.”*

In the amendments that entered into force in July 2010, this requirement was clarified as:

1.2.2.2 *“Assess all identified risks to its ships, personnel and the environment and establish appropriate safeguards.”*

Eight months prior to the entry into force of the ISM Code amendments, EYM issued a notice to all managed yachts on the need for risk assessments and guidance on their completion. In the Company’s SMS risk assessments are required by Section 7.17.3. Extensive guidance on conducting shipboard risk assessments is also available in the COSWP.

A number of risk assessments were carried out on VINYDREA, including one covering “Launching of Rescue Tender and Jet Ski”. This risk assessment was conducted on 15 May 2009 by the Chief Mate (as the yacht’s Safety Officer) and is included in this report as Appendix 3.

This risk assessment identified the following hazards associated with these operations:

- “Risk of Hook Breaking”;
- “Movement of items being launched”; and
- “Crew Injury”.

Against “What risks have been identified?”, the risk assessment notes:

- “Crew member to wear harness”; and
- “Procedure amended”.

SMS Maintenance Requirements for Lifting Appliances and Loose Gear

Under the SMS being implemented onboard, maintenance of all lifting appliances fell to the engineering department. Although the SMS does not provide detailed instruction and guidance on the maintenance of lifting appliances or a definitive list of equipment and loose gear to be checked, SMS Section 10.8.2 requires that the condition of this equipment is to be reported in the “ISM Monthly Report”.

Lifting appliances are not specifically mentioned in either the “VINYDREA LSA Monthly Checklist”, “Maintenance monthly check” form or the “Chief Engineers Technical Monthly Report Form⁶”. The closest reference is found on the “Chief Engineers Technical Monthly Report” under “Additional Auxiliary Equipment – Tenders, Toys and Other”.

Prior to the accident, the “Chief Engineers Technical Monthly Report” was last completed on 28 June 2010 by the “full time engineer” onboard (see next section). Under “Tenders, Toys and Other” the comment “OK” had been recorded.

During interviews with crewmembers it was stated that the lifting harnesses for the PWC were “visually inspected before each use” and “rinsed with fresh water after each use”. A visual inspection of the recovered harness showed strong evidence of corrosion of the steel wires under the clear plastic coating and in way of the thimble attachments to the spreaders, as shown below.



Manning and qualification requirements for maintenance personnel

CISR issues Minimum Safe Manning Documents (MSMD) to all yachts it certifies under the Large Yacht Code. The MSMD in force onboard VINYDREA at the time of the accident required the carriage of two qualified engineers⁷, specifically:

Chief Engineer holding an STCW III/3 or III/2(Y3) qualification; and

Assistant Engineer holding a MEOL(Y) qualification.

CISR only required these minimum manning levels to be maintained while a yacht is on charter or otherwise engaged in commercial activities. While the yacht was in “private use”, the manning levels specified in the MSMD were recommendatory, not mandatory. The master of VINYDREA was advised of this policy during the Interim ISM Audit carried out by CISR on 15 April 2009.

The yacht carried one “full time” engineer when the yacht was in private use. This engineer held a III/3 (Y4) qualification which did not qualify him to serve as chief engineer during charters. When the yacht was to charter, it was the practice to engage the services of a suitably qualified chief engineer for the duration of the charter, with the “full time” engineer serving as the Assistant Engineer.

In previous charters during 2010, a single engineer had been engaged to fulfil the requirement of a properly qualified chief engineer onboard VINYDREA. Although this engineer held the appropriate Certificate of Competency for VINYDREA, he did not hold a valid “Cayman Islands Endorsement” during his service onboard the yacht. He had held a “Cayman Islands Endorsement” in the past, but this had expired on 25 November 2008. This engineer was not available for the charter when the

⁶ Identified as “SMS 09.0 Chief Engineers Technical Monthly Report – December 2009-Rev2.0)”

⁷ See Appendix 1 for a comparison of UK MCA Yacht Specific Qualification and STCW Qualifications.

accident occurred and another engineer was engaged to take on this role. The replacement engineer joined VINYDREA five days prior to the accident. This engineer held both an appropriate Certificate of Competency and a valid Cayman Islands Endorsement for service onboard VINYDREA. The manning levels onboard VINYDREA were in accordance with the requirements of the MSMD at the time of the accident.

ISM AUDIT HISTORY PRIOR TO THE ACCIDENT

VINYDREA was first audited for compliance with the ISM Code by way of an Interim Audit on 15 April 2009. On completion of this audit, CISR issued an Interim Safety Management Certificate (SMC) valid until 13 October 2009.

An initial audit was conducted by CISR on 07 October 2009. During this audit it was not possible to gather sufficient objective evidence to show that all ISM Code requirements had been effectively addressed onboard the yacht. As a result of this audit, the Interim SMC was extended to allow the yacht and company further time to demonstrate full compliance with the ISM Code.

CISR again attended the yacht on 05 February 2010 to monitor progress towards full compliance with the ISM Code requirements. Again there were a number of outstanding items which would preclude the issue of a full term SMC. At this audit, the Interim SMC was further extended until 14 April 2010, a total validity of 12 months from first issue. This is the maximum validity of an Interim Safety Management Certificate permitted by the ISM Code.

On 15 February 2010, CISR were content that sufficient progress had been made by EYM and the yacht for a full SMC to be issued. A Safety Management Certificate valid until 06 November 2010 was issued by CISR on 25 March 2010. The relatively short validity of this certificate was to allow CISR to closely monitor ISM performance onboard and to allow an additional ISM audit to be conducted in parallel with the next round of annual surveys.

During the attendance on 05 February 2010, CISR made a number of recommendations relating to both ISM Code compliance and general observations on providing a safe working environment onboard. One of these recommendations related directly to lifting appliances and related loose gear.

“2. All onboard lifting equipment is to be included in the planned maintenance program. Wires are to be inspected and load tests completed on a regular schedule. Include the tender crane and passerelle in addition to the rescue boat crane.”

On 23 February 2010 EYM raised this matter with the Safety Officer onboard VINYDREA by email asking him to confirm that lifting equipment had been included in the planned maintenance checks. The Safety Officer replied the same day saying that that lifting equipment was already part of the engineer's monthly checks and expressing the opinion that this was sufficient. As previously discussed, the extent of specific requirements for lifting equipment in the engineer's monthly checks was in the "Chief Engineers Technical Monthly Report" where "Tenders, Toys and Other" is included for checking.

The March 2010 edition of “EYM Fleet News”⁸, the company newsletter, makes mention of loose gear, as follows:

“TECHNICAL NEWS, Additional Checks

Lifting strops, shackles and mooring lines are not generally under inspection by Flagstate but should still be incorporated in the planned maintenance schedules for the deck. In addition to existing Flagstate annual inspections for safety equipment, various companies provide catalogued annual Lifting Equipment testing & verification.”

No such program of identifying, inspecting and testing of lifting appliances and all associated loose gear had been implemented onboard VINYDREA prior to the accident. Only the rescue boat launching appliance and its release gear⁹ were subject to annual inspection and test in accordance with IMO Circular MSC.1/Circ.1206 Rev.1¹⁰.

STANDARDS, REGULATIONS AND GUIDANCE

The Cayman Islands does not have specific regulations governing the provision and use of lifting appliances and associated equipment onboard ships.

However, Section 183(1)(a) of Merchant Shipping Law (2008 Revision) requires that the owner and master of every ship ensures that:

“the condition of the ship, including its structure, machinery and equipment, is maintained so as to comply with the relevant provisions of this Part applicable to the ship and that the ship in all respects will remain fit to proceed to sea without danger to the ship or persons on board;”

In 2004, the Cayman Islands Shipping Registry published a Shipping Notice (No 13/2004) giving advice on complying with the Merchant Shipping (Carriage of Nautical Publications) Regulations 2004. Under the section entitled “Other Statutorily Required Publications, Log Books and Manuals”, this Shipping Notice requires the carriage the United Kingdom Code of Safe Working Practices for Merchant Seamen. In particular, Chapters 7 and 21 of COSWP addresses the need for maintenance and regular inspection of lifting equipment, including “loose gear”. See also the detailed references to COSWP in the Analysis section of this report.

SOLAS Regulation IX/3.1 requires that EYM and VINYDREA comply with the requirements of the ISM Code and, that for the purposes of that regulation, the requirements of the Code shall be treated as mandatory.

The ISM Code contains several requirements which are relevant to this accident. Under the ISM Code the responsibility for ensuring compliance rests with the Company itself. The relevant clauses are:

⁸ See Appendix 2

⁹ Launching Appliance: Nautical Structures Crane; Release Gear: Schat Harding ARH 23 Release Hook (Both used for PWC launching)

¹⁰ MSC.1/Circ.1206 Rev.1: “Measures to prevent accidents with lifeboats”, IMO, 11 June 2009

| <u>ISM Clause</u> | <u>Requirement</u> |
|-------------------|---|
| 1.2.2.1 | The Company's safety management objectives are required to provide for safe practices in ship operation and a safe working environment. |
| 1.2.2.2 | These safety management objectives should ensure the Company assess all identified risks to its ships, personnel and the environment and establish appropriate safeguards. |
| 1.2.3.2 | The Company's safety management system is to ensure that applicable codes, guidelines and standards recommended by IMO, Administrations, classification societies and maritime industry organizations are taken into account. |
| 5.1.4 | The master is responsible for verifying specified requirements are observed. |
| 6.1.2 | The Company is to ensure that the master is fully conversant with the Company's safety management system. |
| 6.2 | The Company is to ensure that new personnel are given proper familiarisation with their duties. |
| 7 | The Company is to establish procedures, plans and instructions, as appropriate, for key shipboard operations concerning the safety of the personnel and ship. |
| 10.1 | The Company is to ensure that the ship and its equipment are maintained in conformity with the provisions of relevant rules, regulations and any additional requirements established by the Company. |
| 12.1 | The Company shall verify, through internal audits, that safety activities comply with the safety management system. |

Additionally, Section 22.3.2 of the Large Yacht Code requires the mandatory use of safety harnesses when working aloft or for working over the side.

[Intentionally Blank]

SECTION 2 – Analysis

AIM

The purpose of the analysis is to determine the contributory causes and circumstances of the accident as a basis for making recommendations to prevent similar accidents occurring in the future.

CONSIDERATION OF CONTRIBUTORY EVENTS

Why was the deckhand riding the PWC at the time of the accident?

Although SMS procedures required the unmanned launching of PWC, with boarding only after the PWC was waterborne, it had become standard practice onboard to “ride” the first launched PWC from Main Deck Level to the water. The master had full knowledge of this deviation from SMS requirements and was actively involved in the launching operation when the accident happened. As the master was driving the crane, it is reasonable to conclude that this practice had his full approval.

Had the master and crew followed procedure DP 3 (Jet Ski Launching) during the launching and recovery of the PWC, there is no indication that this would have prevented the failure of the lifting harness. However, even if the harness had failed, adherence to DP 3 would have prevented the deckhand from riding the PWC at the time of failure. The failure by the master to follow DP3 undoubtedly cost the deckhand his life.

Why did the lifting sling fail catastrophically?

The lifting harness in use was supplied in June 2008 to the yacht during construction by a yacht chandler in Istanbul. As the harness was not accompanied by any manufacturer’s paper work and bore no markings as to either manufacturer or test, it is reasonable to conclude that the harness was neither manufactured nor approved for use by the Yamaha Motor Company. Yamaha manufactured lifting harnesses are made from webbing and vinyl coated fabricated brackets and have only a passing resemblance to the lifting harness in use onboard.



Lifting Harness from Yamaha



Lifting Harness in use

Although the Cayman Islands Government does not have specific regulations for lifting appliance and loose gear onboard ships, guidance on providing safe systems of work are contained in the COSWP.

Chapter 7 of COSWP provides guidance based on the UK Merchant Shipping (Provision and Use of Work Equipment) Regulations, 2006 (PUWER). This Chapter recommends, inter alia, that all lifting equipment:

- Complies with recognised standards;
- Be fit for the intended purpose;
- Capable of being used without any risks to the health and safety of any worker;
- Be maintained in efficient working order;
- Meet the specific recommendations in Chapter 21 of COSWP.

Chapter 21 of COSWP provides further guidance for lifting equipment (including loose gear) based on the UK Merchant Shipping (Lifting Operations and Lifting Equipment Regulations), 2006 (LOLER). In addition to the recommendations in Chapter 7, this chapter recommends that loose gear to be:

- Of good construction, of adequate strength for the purpose for which it is to be used and free from defects.
- Tested and certificated before first use, and regularly tested thereafter.
- Regularly maintained by a “competent person”.
- Subject to a thorough examination by a “competent person” every six months.

Whereas the “*Testing and certification of loose gear, lifting strops and wires*” does form part of the engineering syllabi for UK yacht specific qualifications¹¹, this topic is introduced at the R.III/2 (Y2)¹² Level. As the “full time” engineer onboard VINYDREA was the holder of a UK R.III/3 (Y4), he cannot be considered as a suitable “competent person” for the examination of such equipment based on this qualification alone. Nevertheless, any person with even limited experience in using lifting slings and the like should have easily been able to recognise the level of corrosion which was clearly apparent at the ends of the steel wire rope slings of the lifting harness. The level of corrosion was apparent despite the application of the protective tape to the swages.

Beyond very general references in the SMS, the lifting appliances and loose gear onboard VINYDREA cannot be considered as meeting either the recommendations in COSWP or of being effectively incorporated into a planned maintenance and inspection program. This had been brought to the attention of EYM and the master of VINYDREA by CISR during the ISM audit conducted during February 2010.

On 23 February 2010 EYM raised this matter with the Safety Officer onboard VINYDREA by email asking him to confirm that lifting equipment had been included in the planned maintenance checks. The Safety Officer replied the same day saying that that lifting equipment was already part of the

¹¹ <http://www.dft.gov.uk/mca/mcga07-home/workingatsea/mcga-trainingandcert/mcga-yachts/stc-syllabuses-yacht/ds-stc-syllabuses-engwritten.htm>

¹² See Appendix 1

engineer's monthly checks and expressing the opinion that this was sufficient. This was accepted by EYM and no modifications were made to the maintenance regime onboard VINYDREA as a result of the recommendations made during the ISM Audit.

However, EYM raised awareness of this issue in the "EYM Fleet News" for March 2010 which was distributed to all managed yachts.

Due to the lack of specific requirements for lifting appliances either in the SMS or the planned maintenance system with regard to inspection and reporting, this equipment onboard was not properly maintained. There was no formal inspection beyond the user spotting any gross deficiencies before use. This lack of regular effective inspection and maintenance of this equipment greatly increased the probability of failure in service. As it is extremely unlikely that this equipment was manufactured by or approved for use by the PWC manufacturer, this would also have increased the possibilities of a failure in service.

Whilst there is an apparent lacuna in the Cayman Islands legislation relating to the maintenance, certification, inspection and use of lifting appliances and associated equipment, this in no way absolves the Company or those onboard the yacht from their duties and responsibilities under the ISM Code provisions relating to these matters. Nor does it provide any basis for not adhering to the provisions of the COSWP.

FATIGUE

Fatigue has been shown to be a contributory factor in many accidents. Chapter VIII of the Code to the STCW Convention requires that all persons should suitably rested so as to be fit for duty.

The hours of work and rest of the crew onboard VINYDREA for the period leading up to the accident were examined and found to comply with the STCW requirements. There is no indication that fatigue on the part of any of VINYDREA's crew was contributory factor in the cause of the accident.

COMPLIANCE WITH THE ISM CODE (VINYDREA AND EYM)

Given the findings of previous ISM audits of VINYDREA and EYM, there are many indications that the SMS in use onboard had failed to meet the ISM Code objectives for providing *safe practices in ship operations and a safe working environment*.

Risk Assessments and SMS Procedures

The purpose of any onboard risk assessment is to be a careful examination of what, in the nature of operations, could cause harm, so that decisions can be made as to whether enough precautions have been taken or whether more should be done to prevent harm. Their aim is to minimize accidents and ill health onboard ships.¹³

¹³ COSWP Section 1.3.1.

The risk assessment carried out on 15 May 2009 on the launching and recovery of PWC¹⁴, identified the risk of crew members being injured as a result of equipment failure during the launching of PWC. The risk assessment recommended that crew members should wear safety harnesses during launching and that the launching procedure should be amended accordingly. Although not specified in the risk assessment, it is reasonable to conclude that this provision would apply only to crew members riding the PWC during launching as others involved in the operation would not be at risk of falling from height due to equipment failure.

The procedure DP3 (Jet Ski Launching) at the time of the accident was dated 01 October 2009 (Version 2), some five months after the completion of the above risk assessment. In this version of DP 3 there is no mention of the need for safety harnesses as procedural controls were in place to eliminate the risk of a crew member falling from height as a result of equipment failure. This is because the procedure is clear in that persons are only to board the PWC once the tender is waterborne. This effectively eliminates the risk by removing the person at risk from the potentially hazardous situation.

The risk had been identified, assessed and procedural controls identified to eliminate it. Despite these controls being documented in a written procedure, they were not being implemented onboard either when the accident occurred or, according to the accounts of crew members, at any routine launching of the PWC.

To compound these shortcomings, at the time of the accident the deckhand was not wearing a safety harness as indicated in the risk assessment of May 2009 or as required by Section 22.3.2 of the Large Yacht Code for all work over the side of the yacht.

Qualification and manning levels.

Under the ISM Code, Companies are required to:

- Ensure that each ship is manned with qualified, certificated and medically fit seafarers in accordance with national and international requirements;
- Ensure all personnel involved in the Company's SMS have an adequate understanding of relevant rules, regulations, codes and guidelines;
- Establish and maintain procedures for identifying any training which may be required in support of the SMS and ensure that such training is provided;
- Ensure that the master is fully conversant with the Company's SMS; and
- Ensure new personnel are given proper familiarisation with their duties.

In traditional commercial shipping, the Company has complete control over appointment of masters, officers and crew. In yachting it is common for the master to be appointed by the beneficial owner of the yacht and for the master to appoint the other crew members. This imposes additional difficulties on yacht Companies as they have to keep track of persons onboard appointed by others and ensure that such persons meet the applicable requirements. However, these difficulties do not relieve the Company of their duties and responsibilities to see that such requirements are met.

¹⁴ See Appendix 3

It was the policy of CISR to only require the minimum manning levels specified in the MSMD to be maintained while a yacht was on charter or otherwise engaged on commercial activities. At the time of the accident, VINYDREA met CISR manning requirements for when the yacht was engaged in commercial activities. However, during previous charters in 2010 the “additional engineer” engaged to meet MSMD requirements did not have the required Cayman Islands endorsement of his Certificate of Competency. During periods between charters, the manning of the engineering department fell below that specified on the MSMD as follows:

| <u>Manning as per MSMD</u> | <u>Actual Provision</u> |
|-----------------------------------|-----------------------------|
| 1 X Chief Engineer (R.III/2 (Y3)) | 1 X Engineer (R.III/3 (Y4)) |
| 1 X Assistant Engineer (MEOL (Y)) | |

This reduced manning of the yacht when not in commercial service was also in line with the CISR minimum requirements on yacht manning, although CISR does recommend maintaining the MSMD manning levels at all times.

Although the additional engineers employed during charters did bring the manning levels up to those indicated in the MSMD, the practice of hiring the required “Certificate” on a short term basis cannot be seen as enhancing the safety of the yacht or those onboard in any meaningful way. Maintenance is a continual process on any ship or yacht and requires sufficient qualified persons to undertake the necessary tasks. The CISR minimum requirements of only requiring commercially registered yachts to comply with the manning levels specified in the MSMD when engaged in commercial activities does not promote an appropriate maintenance regime onboard commercial yachts which spend a significant proportion of the year in “non-commercial service”. However, this does not absolve the Company of their duties under the ISM Code to ensure the ship and its equipment are properly maintained or their duty to provide a safe working environment onboard.

ISM Audits at EYM

At the annual Document of Compliance audit of EYM conducted in October 2009, CISR raised nine non conformities against the ISM Code. These non conformities related to:

- 01/09 Shore based drills related to emergency preparedness;
- 02/09 Following up on management review outcomes;
- 03/09 Records relating to crew qualification;
- 04/09 Corrective actions following internal audit;
- 05/09 Approval of the Safety and Environmental Protection Policy;
- 06/09 Assignment of ISM responsibilities;
- 07/09 Conduct of master’s review activities;
- 08/09 Control of sludge under MARPOL Annex I; and
- 09/09 Control of fuel oil quality under MARPOL Annex VI and EU Sulphur Directives.

During the audit, the effectiveness of the corrective actions taken against non conformities identified during the 2008 annual audit were examined. During the 2008 audit a total of eight non conformities were raised. Of these three could be closed out in 2009, however there was insufficient objective evidence of effective corrective action to close five of the non conformities. The non conformities unable to be closed related to:

- 04/08 Crew medicals and records of familiarisation training;
- 05/08 Lack of drills on a managed yacht (Not VINYDREA);
- 06/08 Shortcomings in the emergency response plan;
- 07/08 Follow up action in relation to reported defects; and
- 08/08 Control of statutory and classification society surveys.

On conclusion of the 2009 annual audit there were a total of thirteen non conformities open against the EYM SMS and its implementation both ashore and onboard managed yachts. None of these non conformities was considered to pose a serious threat to the safety of personnel or the ship or a serious risk to the environment. Rather these were observed situations where objective evidence indicated the non-fulfilment of a specified requirement. None relate directly to the causation of this accident, however they can be seen as an indicator of the general effectiveness of the SMS as implemented.

CISR attended at EYM during March 2010 for an additional ISM audit. During this audit the nine non conformities raised at the October 2010 audit were closed. An examination of audit records indicates that the closure of these non conformities was premature. Whereas there was objective evidence of corrective action being applied to “the evidence of non conformity”, there was less evidence of the corrective action tackling the underlying non conformity itself. In many cases the five months between the audits would be insufficient to demonstrate the effectiveness of any corrective action. For example, it is difficult to demonstrate how effective corrective action relating to management review or internal audit findings has been until at least the next audit or review cycle has been completed. The premature closure of these non conformities may well have given rise to EYM being under the impression that its levels of compliance and implementation were higher than was actually the case at that time.

ISM Compliance onboard VINYDREA

Since VINYDREA was issued with Interim ISM Certification on 15 April 2009, the yacht had been subject to three separate audits against the ISM Code prior to the accident. These were:

19 September 2009 – **Internal Audit** conducted by EYM resulting in 4 non conformities and 15 “Observations”. The closing meeting for this audit was conducted on 29 September 2009.

07 October 2009 - **Initial Audit** conducted by CISR resulting in a single major non conformity relating to the Internal Audit process. This internal audit was not conducted within time period required by ISM Code Clause 14.4.3. With less than 10 days between the

closing meeting for the internal audit and the external audit conducted by CISR, there was insufficient time to evaluate the effectiveness of the internal audit process.

05 February 2010 – **Follow Up Audit** by CISR to complete the audit of 07 October 2009.

During the internal audit conducted by EYM, non conformities were identified with regard to “Crew knowledge of the Safety Management System” and “Crew not involved with Safety Management”.

It is clear that EYM attempted to raise the level of compliance onboard VINYDREA and attended onboard for approximately one day per month following the CISR audit of 07 October 2009. During these visits the yacht manager regularly conducted safety meetings onboard with all crew.

Whereas crucial decisions and actions may have been taken by the master and crew without the knowledge or approval of EYM, the responsibility for compliance with ISM Code requirements remains with the Company.

The ISM Code requires that the SMS contains a clear statement emphasizing the master’s authority onboard. This reiterates that the master has the overriding authority and responsibility to make decisions with respect to safety and pollution prevention and to request the Company’s assistance as may be required. However, this overriding authority cannot be equated to not having to comply with ISM Code requirements or a failure to observe operational procedures aimed at the protection of personnel.

SECTION 3 – Conclusions and Actions Taken

SAFETY ISSUES DIRECTLY CONTRIBUTING TO THE ACCIDENT

As with most accidents, it is not possible to cite a single event or action as the “cause”. Rather a sequence of events and circumstances ultimately led to the accident occurring and the severity of its consequences.

1. The failure of the master to implement procedure DP3 onboard VINYDREA was the primary cause of the deckhand losing his life in this accident.
2. The use of non-approved or tested lifting harnesses, coupled with an ineffective inspection and maintenance regime contributed significantly to the failure of the lifting harness, thus causing the accident to occur.
3. The risk assessment carried out on the “Launching of Rescue Tender and Jet Ski” in May 2009 failed in the primary objectives of any risk assessment. The risk of injury was identified, protective measures to eliminate the risk were documented in both the risk assessment form and in written procedures, but these measures were not implemented onboard.
4. EYM's actions on the findings of CISR relating to lifting appliances and loose gear in February 2009 were insufficient to address the ineffective maintenance and inspection regime identified by CISR.
5. The level of compliance with the ISM Code requirements onboard VINYDREA had fallen below that required by both Edmiston Yacht Management and the ISM Code itself.

SAFETY ISSUES NOT DIRECTLY CONTRIBUTING TO THE ACCIDENT BUT NOTEWORTHY

- 6 The lack of specific Cayman Islands legislation for lifting equipment onboard ships may encourage a belief in the industry that Companies are meeting all obligations because “no law is being broken”.
- 7 The CISR policy of not requiring commercial yachts to be manned in accordance with the MSMD when not engaged in commercial activities does not ensure the conduct and supervision of routine maintenance activities are undertaken by a sufficient number of properly qualified personnel.
- 8 A similar conclusion to that above regarding maintenance could also be drawn regarding other shipboard operations including the safe navigation of the yacht.
- 9 The premature closure of ISM non conformities by CISR in March 2010 may have given EYM the impression that their SMS and its implementation were more compliant with ISM requirements than they were actually were.

ACTIONS TAKEN

Following the accident, **Edmiston Yacht Management (EYM)** have:

1. Immediately following the accident, EYM issued a Fleet Notice¹⁵ to all managed yachts highlighting:
 - a. The suspect origin of the lifting harness in use at the time of the accident;
 - b. The prohibition of riding PWC during launching; and
 - c. The importance of proper maintenance and the need to replace equipment showing signs of deterioration.
2. Prioritised checks on the condition of lifting equipment and strops, etc, during all technical inspections.
3. Amended the Technical Inspection template in use to include checks on the condition of lifting equipment and strops, etc.

Following the accident **The Cayman Islands Shipping Registry (CISR)** has:

1. Adopted a policy to require that the manning levels contained in the MSMD are to be complied with at all times onboard yachts when registered as a "Commercial Vessel". A Shipping Notice has been issued to promulgate this policy.
2. Drafted legislation in line with the UK Merchant Shipping (Lifting Operations and Lifting Equipment Regulations), 2006 (LOLER) to be made statute as part of an on-going thorough review of Cayman Islands merchant shipping legislation.
3. Carried out a review of ISM audit processes and scheduled ISM refresher training for all auditors and other technical staff. This training is to focus on the correct management of non-conformities and the necessary corrective action to allow close out.

¹⁵ See Appendix 4

SECTION 4 – Recommendations

Edmiston Yacht Management (EYM) is recommended to:

1. Carry out a comprehensive review of its Safety Management System which should:
 - a. Ensure the SMS contains sufficient detail, guidance and instruction to achieve the general safety management objectives as defined in sections 1.2.2 and 1.2.3 of the ISM Code;
 - b. Ensure that the Safety Management System is properly and effectively implemented at all levels throughout the Company, both ashore and onboard managed vessels.
2. Take steps to ensure that yachts are manned with sufficient qualified personnel so that yachts and their equipment are properly maintained and remain fit to proceed to sea without danger to the yacht or to persons onboard. Such manning levels should take account of the operational profile of each yacht as well as the levels specified by the Administration, whether mandatory or recommendatory.

Appendices

- Appendix 1: Comparison of UK MAC yacht specific qualifications and qualifications issued under the STCW Convention.
- Appendix 2: EYM Fleet News, March 2010
- Appendix 3: Risk Assessment for PWC Launching onboard VINYDREA.
- Appendix 4: Edmiston Yacht Management "Fleet Notice 2010-01"

Comparison of UK MAC yacht specific qualifications and qualifications issued under the STCW Convention.

| <u>CERTIFICATE</u> | <u>EXPLANATION OF GRADE</u> |
|---|--|
| <i>(Full STCW Certificates)</i> | |
| R.II/1 | Reg. II/1, Officer in charge of a navigational watch of vessels over 500 GT |
| R.II/2 | Reg. II/2, Master and Chief Mate of vessels from 500 to 3000 GT & over 3000 GT |
| R.II/3 | Reg. II/3, Master & Officers of vessels less than 500 Gross Tonnage |
| R.II/4 | Reg. II/4, Ratings forming part of a navigational watch |
| R.III/1 | Reg.III/1, Officer in charge of an engineering watch of vessels over 750 kW |
| R.III/2 | Reg.III/2, Chief Engineer and Second Engineer of vessels over 3000 kW |
| R.III/3 | Reg.III/3, Chief Engineer and Second Engineer of vessels less than 3000 kW |
| R.III/4 | Reg.III/4, Ratings forming part of an engineering watch |
| <i>(Yacht certificate system introduced by the MCA)</i> | |
| R.II/2 (Y) | STCW 95 Reg.II/2, Officer of the Watch (Yacht) of vessels less than 3000 GT (MSN 1802 (M)) |
| R.II/2 (Y) | STCW 95 Reg.II/2, Chief Mate (Yacht) of vessels less than 3000 GT (MSN 1802 (M)) |
| R.II/2 (Y) | STCW 95 Reg.II/2, Master (Yacht) of vessels less than 500 GT (MSN 1802 (M)) |
| R.II/2 (Y) | STCW 95 Reg.II/2, Master (Yacht) of vessels less than 3000 GT (MSN 1802 (M)) |
| R.II/2 (Y) | STCW 95 Reg.II/2, Master Code vessels less than 200 GT, 150 M from a safe haven (MSN 1802 (M)) |
| R.II/2 (Y) | STCW 95 Reg.II/2, Master Code vessels less than 200 GT, unlimited (MSN 1802 (M)) |
| R.III/3 (Y4) | STCW 95 Reg.III/3, Chief Engineer (Yacht 4) (MGN 156 (M)) |
| R.III/2 (Y3) | STCW 95 Reg.III/2, Chief Engineer (Yacht 3) (Chief Engineer "Service Endorsement") (MGN 156 (M)) |
| R.III/2 (Y2) | STCW 95 Reg.III/2, Chief Engineer (Yacht 2) (MGN 156 (M)) |
| R.III/2 (Y1) | STCW 95 Reg.III/2, Chief Engineer (Yacht 1) ("Large Yacht Endorsement") (MGN 156 (M)) |
| Yacht Rating | STCW 95 Reg. II/4 or III/4 Navigational or Engineering Watch Rating (MGN 270 (M)) |
| <i>(Non-STCW yacht certificates of competence)</i> | |
| YM Offshore | Yachtmaster Offshore (with Commercial Endorsement, where appropriate) |
| YM Ocean | Yachtmaster Ocean (with Commercial Endorsement, where appropriate) |
| AEC | Approved Engine Course |
| MEOL(Y) | Marine Engine Operator Licence |
| SMEOL | Senior Marine engine Operator Licence |



EYM FLEET NEWS

EDMISTON YACHT MANAGEMENT NEWS

FLEET NEWS FEEDBACK

We would like to thank our fleet for sharing with us items of interest as this helps us share with everyone.

EYM GOING INTO SECOND AUDIT FOR THE YEAR

EYM will be undergoing Internal and External audits during March in order to ensure we are still meeting the Flag State requirements and improving our operational safety management of the fleet.

YACHT VISITS

Phil Clark, new Head of the Technical Division will be in contact to arrange visits with various crew and Captain to introduce himself in order to put a face to the name.

SAFETY & ISM NEWS

ECDIS - NAVIGATION WARNING

Guidance to Captain and Officers of the watch on Yachts running ECDIS. 'ECDIS may not display some isolated shoal depths when operating in "base or standard display" mode. Route planning and monitoring alarms for these shoal depths may not always be activated. To ensure safe navigation and to confirm that a planned route is clear of such dangers, mariners should visually inspect the planned route and any deviations from it using ECDIS configured to display "all data". The automated voyage planning check function should not be solely relied upon. The International Hydrographic Organization (IHO) is leading technical action to resolve this matter. Further information will be made available through Notices to Mariners, posted on the EYM Portal & emailed to the Fleet".

SAT-NAV DANGERS

Navigators should be aware of two highlighted dangers to GPS accuracy: Irregular solar activity and signal hacking:
 ± Due to the Sun's increase and decline in activity over the next few years, producing solar flares and changes in the composition of the ionosphere, signal speed and timings for GPS receivers are being affected. Since GPS receivers work on a constant speed for calculations, signals passing through the ionosphere at different speeds, calculations of positions will vary
 ± Hacking too is a very real danger, though not wide spread. It is now possible to buy jamming devices for relatively little money that emit signals on the same frequency as GPS and can throw ships off position by tens of miles. The dangers vary from type of ship, area of operation and type of receiver used but it is a very real danger and should serve to remind us that reliance on GPS navigation alone is never wise!

TECHNICAL NEWS

ADDITIONAL CHECKS

Lifting strops, shackles and mooring lines are not generally under inspection by Flagstate but should still be incorporated in the planned maintenance schedules for the deck. In addition to existing Flagstate annual surveys for safety equipment, various companies provide catalogued annual Lifting Equipment testing & verification.

CREW RELATED NEWS

STAYING ALERT AT ALL TIMES

The off season gives crews some kind of normality and social life ashore. However there have been recent serious injuries and accidents involving loss of life while off duty. Crews are reminded of the general dangers of coming home alone, late nights ashore and to look after each other.

POINTS OF INTEREST

DANGERS OF LEAVING BOTTLED WATER IN THE SUN

It has been recently advised to avoid reusing plastic bottles for drinking water. Approved mineral water bottles will start to bio degrade when reused several times. Other plastic bottles which are not approved for drinkable liquids can release toxins into the water which interferes with our endocrine system "System of glands that secrete hormones in order for our body to function" and may lead to an increase in the risk of cancers. These problems are increased by leaving these bottles in a warm car or in direct sunlight.



RISK ASSESSMENT FORM

| | |
|-----------------------|-----------|
| YACHT | VINYDREA. |
| SAFETY OFFICER | SEB. |
| DATE | 15-05-09 |

| REQUIREMENTS | RESPONSE |
|--|---|
| Which work area is being assessed? | LAUNCHING OF RESCUE TENDER JESKY |
| What work activity is to be undertaken in the area? | " |
| What hazards have been identified with the activity? | RISK OF HOOK BREAKING, MOVEMENT OF ITEMS BEING LAUNCHED + CREW INJURY |
| Are people at risk? | YES. |
| What controls are already in place? | PROCEDURE FOR LAUNCHING. |
| What risks have been identified? | CREW MEMBER TO WEAR HARNESS. + PROCEDURE AMEND |

| WHAT CONTROL MEASURES ARE REQUIRED? | |
|-------------------------------------|-----------------|
| For Tolerable Risk | |
| For Moderate Risk | |
| For Substantial Risk | WEARING HARNESS |
| For Intolerable Risk | |
| ASSESSMENT REVIEW DATE | |

Signed by
(Safety Officer)

Date... 15-05-09

File in Records File
©Edmiston Yacht Management
SMS 05.0 Risk Assessment

February 2009 - Rev 1.0
Page 1 of 1



Notice to EYM Fleet Vessels

Following a serious accident aboard one of our yachts earlier this month involving the launching of personal watercraft (Jetski, Wave Runner, SeeDoo etc.), this Fleet Notice aims to review launching procedures and to greatly reduce the risk of a recurrence.

PWC LAUNCHING AND RECOVERY EQUIPMENT

The lifting harness consisted of clear rubber coated galvanised steel cables that had swaged eyes at each end joining to the lifting ring at the top and the rail grips at the bottom.

At the point of failure of the cables there was significant corrosion of the steel.

Although the equipment was marked Wave Runner it is not the current Wave Runner lifting harness which has webbing straps instead of cables.

PWC LAUNCHING AND RECOVERY PROCEDURES

At no point during launching or lifting should crew be sat on PWC. Swimmers, for fixing and unfixing of the harness, should be only be near the PCW while it is in the water and well clear while PWC is airborne.

If conditions are too rough to complete launching this way PWCs should not be launched.

PWC EQUIPMENT MAINTENANCE

PWC lifting harnesses, like all marine water sports equipment require regular inspection and maintenance. The minimum expected would be a thorough rinse in fresh water after each use and periodic maintenance of protective coatings.

Any sign of deterioration should result in the part or item being replaced.

CONFIRMATION OF RECEIPT

Captains/Safety Officers of EYM yachts are required confirm this notice has been distributed to their crew involved with the launching and recovery and maintenance of PCWs.

24th July 2010


DPA CSO
Edmiston Yacht Management